COLLEGE CATALOG

2025-26

SAINT VINCENT COLLEGE

Accreditations

Accreditation Council for Business Schools and Programs
Council on Accreditation of Nurse Anesthesia Educational Programs
Engineering Accreditation Commission of ABET
Pennsylvania Department of Education
Middle States Commission on Higher Education

Approvals

American Chemical Society

Memberships

American Association of Colleges of Nursing (AACN)
American Association of Collegiate Registrars and Admissions Officers
American Student Government Association (ASGA)
Association of Benedictine Colleges and Universities (ABCU)
Association of Catholic Colleges and Universities
Association of Governing Boards of Universities and Colleges
Association of Higher Education Parent/Family Program Professionals (AHEPPP)
Association of Independent Colleges and Universities of Pennsylvania
Association for Orientation, Transition and Retention in Higher Education (NODA)
Association for Student Affairs at Catholic Colleges and Universities (ASACCU)
C-Cue, Inc. (Consortium for Computing in Undergraduate Education, Inc.)
Catholic Campus Ministry Association (CCMA)
College Band Directors National Association (CBDNA)
College Board
CFP Certified College
Cooperative Education Association of Pennsylvania
Council for the Advancement and Support of Education (CASE)
Council of Independent Colleges
Council on International Education Exchange's (CIEE's) Academic Consortium
Council for Six Sigma Certification
Economic Growth Connection of Westmoreland County
Greater Latrobe-Laurel Valley Chamber of Commerce Laurel Highlands, Inc.
Institute on International Education
International Student Exchange Program (ISEP)
Ligonier Valley Chamber of Commerce
Middle Atlantic Association of Colleges of Business Administration
Middle States Association of Collegiate Registrars and Officers of Admissions
National Association of International Educators (NAFSA)
National Association of Campus Activities (NACA)
National Association of College Admissions Counselors
National Association of College and University Business Officers
National Association of Colleges and Employers (NACE)
National Association of Independent Colleges and Universities
National Association of Student Financial Aid Administrators
National Catholic Educational Association
National Collegiate Athletic Association (NCAA)
Pennsylvania Association of College Admissions Counselors
Pennsylvania Association of Colleges and Employers
Pennsylvania Association of Student Financial Aid Administrators
Pennsylvania Association of Colleges for Teacher Education
Pennsylvania Higher Education Nursing Schools Association (PHENSA)
Westmoreland County Music Educators Association (WCMEA)

Affiliations and Agreements

China
Beijing Normal University
East China Normal University
Ministry of Education of the People's Republic of China
Sanda University
Shandong University
Shanghai University of Electric Power
Shanghai University of Finance and Economics
Southwestern University of Finance and Economics
Wuhan University

France
Ircom-Institu Albert Le Grand

Georgia
International Black Sea University

Netherlands
Erasmus University College
Hanzehogeschool Groningen/Hanze University of Applied Sciences, Groningen

The Philippines
San Beda University

South Korea
Sogang University

Spain
Universidad Pontificia Comillas, Madrid, Spain

Taiwan
FuJen Catholic University
Providence University

United States
Butler County Community College
Carlow University
Chatham University
Duquesne University
Lake Erie College of Osteopathic Medicine
Lake Erie College, School of Dental Medicine
Ohio College of Podiatric Medicine
Pennsylvania College of Podiatric Medicine
Pennsylvania State University
Robert Morris University
Seton Hill University
The Catholic University of America
University of Pittsburgh
Westmoreland County Community College

Participation

Advanced Placement Program (AP)
Air Force Reserve Officer Training Corps (at University of Pittsburgh)
Army Reserve Officer Training Corps (at University of Pittsburgh at Greensburg)
Bureau of Vocational Rehabilitation
College Level Examination Program (CLEP)
Direct Student Loan Program
Pell Grant Program
Pennsylvania Higher Education Assistance Agency
Supplemental Educational Opportunity Grants

The statements in this Catalog are for information only and do not constitute a contract between the student and Saint Vincent College. The College reserves the right to change any policy, requirement, course offering, or fee; and also reserves the right to exclude students whose conduct or academic standing is deemed by the College not to be in accord with the requirements set forth in this Catalog.

Saint Vincent College subscribes to a policy of equal opportunity. In so doing, Saint Vincent does not discriminate against any individual on the basis of race, color, sex, religion, age, veteran status, ethnic origin, or handicap in any of its programs, activities, or employment decisions.

In accordance with the requirements of title IX of the Education Amendments of 1972, Saint Vincent College provides this notice of nondiscrimination and states the Saint Vincent College does not discriminate on the basis of sex in its education programs and activities, including with respect to admission and employment.

The Director of Human Resources, Saint Vincent College, Latrobe, Pennsylvania 15650-2690 is the officer with responsibility for overseeing the implementation of this equal opportunity policy and the affirmative action plan. Questions regarding Title IX may be referred to the Saint Vincent College Title IX Coordinator, Saint Vincent College, Latrobe, Pennsylvania 15650-2690 (titleix@stvincent.edu; 724-805-2897), or the Office for Civil Rights at the United States Department of Education. To contact the United States Department of Civil Rights, visit www2.ed.gov/about/offices/list/ocr/complaintintro.html or call 800-421-3481.

Saint Vincent College is accredited by the Middle States Commission on Higher Education, 1007 North Orange Street, Fourth Floor, MB#166, Wilmington, DE 19801, 267-284- 5000, info@msche.org. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

SAINT VINCENT COLLEGE

FOR INFORMATION about undergraduate admission, contact: Office of Admission and Financial Aid
Saint Vincent College
300 Fraser Purchase Road
Latrobe, Pennsylvania 15650-2690
Phone 724-805-2500
1-800-782-5549
e-mail: admission@stvincent.edu
home page: www.stvincent.edu

FOR INFORMATION about graduate admission, contact: Office of Graduate and Continuing Education
Saint Vincent College
300 Fraser Purchase Road
Latrobe, PA 15650-2690
Phone 724-805-2933
e-mail: gradadmission@stvincent.edu
homepage: http://www.stvincent.edu/ academics/graduate-programs

2025 – 2026 Academic Calendar

Fall 2025	
August 25th	Classes begin for full-semester undergraduate and graduate courses
	Classes begin for 1st 7-Week graduate courses
September 1st	**Labor Day**
September 2nd	Last day to add courses
	Last day to drop 1st 7-Week graduate courses without a permanent record
September 4th	Withdrawals from 1st 7-Week graduate courses receive a "W" (until September 8th)
September 8th	Last day to drop a full-semester undergraduate/graduate course without a permanent record
September 9th	Withdrawals from full-semester courses receive a "W" (until November 16th)
	Withdrawals from 1st 7-Week graduate courses receive a "WF"
September 12th	Graduation Applications for December 2025 due
September 19th	Last day to change to P/F designation
September 23rd	Last day to withdraw for a 40% refund (no refunds after this date)
September 25th	Spring/Summer 2025 incomplete grades not completed become an "F"
September 26th	Last day to add internship credit for Fall semester without Registrar approval
October 3rd-5th	Family Weekend
October 8th	Early Performance grades due at noon
October 13th-14th	Extended Weekend for undergraduates
October 14th	Classes begin for 2nd 7-Week graduate courses
October 15th	Undergraduate classes resume
October 21st	Last day to drop 2nd 7-Week graduate courses without a permanent record
	Final grades for 1st 7-Week graduate courses due at noon
October 22nd	Withdrawals from 2nd 7-Week graduate courses receive a "W" (until October 28th)
October 28th	Last day to withdraw from a 2nd 7-Week course for a 95% refund
October 28th-November 4th	Registration for Winter 2026 and Spring 2026
October 29th	Withdrawals from 2nd 7-Week graduate courses receive a "WF"
November 12th	Last day to withdraw from a 2nd 7-Week graduate course for a 40% refund (no refunds after this date)
November 14th	Graduation Applications for May 2026 due
November 17th	Withdrawals receive a "WF"
November 20th	Founders' Day (classes cancelled from 3:00pm - 7:00pm)
November 26th-30th	**Thanksgiving Vacation**
December 1st	Classes resume
December 5th	Last day of full-semester undergraduate and graduate courses
	Last day of 2nd 7-Week graduate courses
December 6th-7th	Reading Days
December 8th-11th	Final Examination Week
December 11th	Final Grades for Graduating Seniors due at noon
December 13th	December Commencement Ceremony
December 16th	Final Fall 2025 grades due at noon

Winter 2026	
December 15th	Classes begin
December 21st	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)
December 22nd	Withdrawals receive a "W" (until December 31st)
December 25th	**Christmas Day**
January 1st	Withdrawals receive a "WF"
January 9th	Last day of classes
January 13th	Final Winter 2026 grades due at noon

Spring 2026	
January 12th	Classes begin for full-semester undergraduate and graduate courses Classes begin for 1st 7-Week graduate courses
January 19th	Last day to add courses Last day to drop 1st 7-Week graduate courses without a permanent record
January 20th	Withdrawals from 1st 7-Week graduate courses receive a "W" (until January 26th)
January 26th	Last day to drop a full-semester undergraduate/graduate course without a permanent record Last day to withdraw for a 95% refund
January 27th	Withdrawals receive a "W" (until April 12th) Withdrawals from 1st 7-Week graduate courses receive a "WF"
February 6th	Last day to change to P/F designation Last day to change to Audit
February 10th	Last day to withdraw for a 40% refund (no refunds after this date)
February 11th	Last day to add internship credit for Fall semester without Registrar approval
February 12th	Fall 2025/Winter 2026 incomplete grades not completed become an "F"
February 25th	Early Performance grades due at noon
February 28th-March 8th	Spring Break for undergraduates
March 9th	Undergraduate classes resume Classes begin for 2nd 7-Week graduate courses
March 10th	Final grades for 1st 7-Week graduate courses due at noon
March 16th	Last day to drop 2nd 7-Week graduate courses without a permanent record
March 17th	Withdrawals from 2nd 7-Week graduate courses receive a "W" (until March 23rd)
March 23rd	Last day to withdraw from a 2nd 7-Week course for a 95% refund
March 24th	Withdrawals from 2nd 7-Week graduate courses receive a "WF"
April 2nd-6th	**Easter Vacation**
April 7th	Last day to withdraw from a 2nd 7-Week graduate course for a 40% refund (no refunds after this date)

April 7th-14th	Registration for Summer 2026 and Fall 2026
April 13th	Withdrawals receive a "WF"
April 22nd	Honors Convocation and Academic Conference (classes cancelled from 11:00am - 7:00pm)
May 1st	Last day of full-semester undergraduate and graduate courses Last day of 2nd 7-Week graduate courses
May 2nd-3rd	Reading Days
May 4th-7th	Final Examination Week
May 7th	Final Grades for Graduating Seniors due at noon
May 9th	May Commencement Ceremony
May 12th	Final Spring 2026 grades due at noon

Summer 2026	
Session 1 (May 18th - June 25th)	
May 18th	Classes begin
May 24th	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)
May 25th	**Memorial Day**
May 25th	Withdrawals receive a "W" (until June 14th)
June 15th	Withdrawals receive a "WF"
June 25th	Last day of classes
June 30th	Final Summer Session 1 grades due at noon
Session 2 (May 18th - June 11th)	
May 18th	Classes begin
May 24th	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)
May 25th	**Memorial Day**
May 25th	Withdrawals receive a "W" (until June 4th)
June 5th	Withdrawals receive a "WF"
June 11th	Last day of classes
June 16th	Final Summer Session 2 grades due at noon
Session 3 (June 29th – August 6th)	
June 29th	Classes begin
July 4th	**Independence Day**
July 5th	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)

July 6th	Withdrawals receive a "W" (until July 26th)
July 27th	Withdrawals receive a "WF"
August 6th	Last day of classes
August 11th	Final Summer Session 3 grades due at noon
Session 4 (June 29th – July 23rd)	
June 29th	Classes begin
July 4th	**Independence Day**
July 5th	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)
July 6th	Withdrawals receive a "W" (until July 16th)
July 17th	Withdrawals receive a "WF"
July 23rd	Last day of classes
July 28th	Final Summer Session 4 grades due at noon
Session 5 (May 18th – August 6th)	
May 18th	Classes begin
May 24th	Last day to drop a course without a permanent record Last day to withdraw for a 95% refund (no refunds after this date)
May 25th	**Memorial Day**
May 25th	Withdrawals receive a "W" (until July 13th)
July 4th	**Independence Day**
July 14h	Withdrawals receive a "WF"
August 6th	Last day of classes
August 11th	Final Summer Session 5 grades due at noon

Introduction to the College

Mission Statement

Saint Vincent College is an educational community rooted in the tradition of the Catholic faith, the heritage of Benedictine monasticism, and the love of values inherent in the liberal approach to life and learning. Its mission is to provide quality undergraduate and graduate education for men and women to enable them to integrate their professional aims with the broader purposes of human life. The programs, activities, and encounters that make up student life at Saint Vincent College encourage the intellectual gifts, professional aptitudes, and personal aspirations of students to mature harmoniously.

Catholic, Benedictine and Liberal Arts Values

Central to the Mission of the College are its Catholic tradition, its Benedictine heritage, and its commitment to liberal arts education. Outlined below are some of the values of a Catholic, Benedictine, liberal arts education as defined and operated upon by the Saint Vincent College community.

Catholic

Saint Vincent College seeks to provide an understanding of the positive contributions which the Catholic Church has made, and continues to make, to human progress. Faculty, administrators, staff, and students of all faiths work together in a common search for truth in an environment that does the following:

- Affirms that the love of God and faith in Jesus Christ are authentic values for believers. The life of faith and the life of learning are regarded as inclusive and mutually compatible; as expressed in the College motto, veri justique scientia vindex, "learning is the best advocate of truth and justice."
- Represents a sacramental view which consecrates all visible creation as a pledge, reminder, and active instrument of God's invisible presence and grace.
- Supports the integration of religious and temporal values in everyday life.
- Promotes appreciation for the positive contributions of all peoples and cultures to world civilization. In this sense, Saint Vincent is truly "catholic," ecumenical, and international.

Benedictine

The traditional Benedictine apostolate of education is characterized by an appreciation of truth wherever it is found and by respect for the unique person and talents of every student. In an authentic Benedictine environment, students are not just objects of an educational enterprise; they are valued partners in a common search for truth and beauty. Saint Vincent College is grounded in the following core values of Benedictine tradition:

- Hospitality, as exemplified by a tolerant spirit that recognizes the mystery of God's presence in all creation and the sacred dignity of each person.
- Commitment to a concept of community that advocates tranquility and order and is nourished by mutual respect, appreciation, and charity. Even in times of historical and personal upheaval, Benedictine life seeks to preserve peace and solidarity, maintained by the communal effort of prayer and work.
- Care and concern for each individual as evidenced in personal interactions that anticipate the needs of others, bear patiently with others, and promote the personal growth of others.
- Stewardship for all workspaces, living spaces, and the natural environment

Liberal Arts and Sciences

Liberal arts education is integrative, challenging students to explore the principles, perspectives, and goals of many different disciplines and modes of learning. Saint Vincent's particular approach to liberal arts education, undergirded by the values of its Catholic, Benedictine heritage, provides an education for life and for lifelong learning. It espouses a love of learning and a belief in the intrinsic worth of higher education. The College seeks to instill the following educational virtues:

- Facility to comprehend phenomena conceptually and to look for patterns and regularities in experience.
- Ability to evaluate ranges of evidence and to revise previous theory or hypotheses accordingly.
- Skill in discovering relationships between seemingly divergent phenomena.
- Ability to be an independent learner rather than a mere consumer of others' interpretations.
- Facility to articulate and express one's thoughts clearly.
- Self-assurance in adhering to mature social and ethical values, coupled with tolerance for alternate values in others.
- Skill in making informed decisions and courage to act on them.
- Appreciation for the fine arts, especially art, music, and literature.
- Receptivity to uncommon opinions and unfamiliar cultures.

Campus Ministry

In founding Saint Vincent College, Catholic Benedictine monks established an academic tradition in which religion plays a vital role. Students are encouraged to search for personal religious faith in the context of community life. The College attempts to guide and help students of all faiths in their search for authentic religious values. The mission of Campus Ministry is to enable the college community, especially the students, of all faith traditions, by providing opportunities to explore, celebrate, act on, and live their faith through prayer, education, service, Christian living, and Leadership Formation. The staff of Campus Ministry is charged with promoting and encouraging religious life and values. The staff members are available for conversation and/or counsel at appointed hours and upon request. A variety of events such as lectures, Bible Studies, discussions, retreats, and Gospel-oriented services to the needy through interaction with community agencies are sponsored by the campus ministers. Catholic religious services are conducted

daily and ecumenical services on a regular basis on campus. In addition to the traditional Catholic Sacraments, Eucharistic Adoration takes place several times a week. Praise and Worship gatherings take place weekly. Students may also participate in the liturgical functions of the monastic community and Saint Vincent Parish. These services are held in the Basilica. Congregations of various faiths in surrounding communities welcome students to their religious services.

An Invitation to Learning

During your college years, you as a student are faced with some important decisions. One of them is to determine your approach to education—your own "aims and objectives." You will have to determine whether your objective is merely to fulfill the minimum requirements in order "to get a degree," or whether it is to become more creatively engaged in learning as an integral part of your life.

This ***Catalog*** concerns itself for the most part with the less significant objective, which is the first. It contains the basic information about courses, procedures, and requirements necessary for obtaining a degree: it is your responsibility to have and to use this information. If you have problems or questions about this part of college life, be sure to ask your faculty advisor for help. If you are in the process of changing majors or career plans, a thorough discussion with your faculty advisor and with a member of the Career and Professional Development Center staff is more imperative. Finally, if you have unresolved problems and don't know where to turn, contact the office of Vice President for Academic Affairs. The Vice President for Academic Affairs may know resources at the College or elsewhere with which you are not familiar.

The more significant objective, which touches upon a personal commitment to learning, is more difficult to deal with than information about degree requirements. Your openness to new experiences, your friendships with faculty and fellow students are more essential to the realization of this objective than the information contained in any college Catalog.

As a preamble, faculty members will tell you that if you wish to be serious about learning, you must practice critical reading and listening in all your courses: you must be able to tell the difference between essentials and non-essentials. And you must be able to express yourself well, both verbally and in writing. Few people have been able to achieve these essential skills for learning without diligently working at them over a long period of time.

In your college experience try to learn as much as you can about change: your personal and spiritual developmental change, social change, change we call failure, even the change we call death. Many of the courses of the core curriculum are designed to help you think about change—from a chemical reaction to a political revolution or a religious experience. Secondly, it is important to have possible careers in mind in determining what you will learn, and it is important to gain a reasonable mastery in some field while at college. However, it would be a mistake to think of your college education exclusively in terms of the work you want to do. The much larger part of your waking hours, even before retirement, will be taken up by self-directed activities. Courses in the core curriculum outside your major are important for developing meaningful self-directed activities outside the world of paid work. In addition, social service, religious activities, art, meditation, dance, drama, music, sports, and friendships are all elements of a good college experience. The *Rule of Saint Benedict* is a classic text about achieving a peaceful balance between work and other activities and values of life. Finally, your personal philosophy about learning should take cognizance of the fact that human beings must live in the context of a variety of systems. Your college education will help you learn about systems: how they work, and how to make them work justly for you and your neighbor. To achieve this, however, it is not sufficient to learn about political, economic, and social systems only in class. First-hand experience through participation in clubs and organizations seems necessary to learn how to negotiate with other interest groups, and how to get things done in an effective and morally acceptable way. You may be able to start a new organization to meet a need, many extracurricular activities at Saint Vincent were begun and are run by students.

These dimensions of learning which touch upon a person's relation to the basic realities of life are also suggested when the College describes its "viewpoint and tendencies" as Catholic, Benedictine, and liberal. A college education at Saint Vincent provides the opportunity for a student to come to grips with some of the basic questions of life in company with faculty and fellow students.

History and Heritage

Saint Vincent Archabbey and College was founded in 1846 by Boniface Wimmer, a monk from the Benedictine Abbey of Metten in Bavaria. Wimmer came to America with the intention of educating the sons of German immigrants and training a native clergy for the German-speaking peoples of the United States. He settled on the site of a parish established for English and Irish Catholics in 1789, and very quickly learned that his monks would not be able to limit their attention to Germans alone. With the aid of several American bishops, friends, and benefactors in Europe, and a strong community of Benedictine monks at the monastery of Saint Vincent, he established the first Benedictine college in the United States. From modest beginnings the college grew rapidly, and on 18 April 1870 the State Legislature of Pennsylvania incorporated the school, empowering it "to grant and confer degrees in the arts and sciences as are granted in other colleges and universities in the United States, and to grant to graduates, or persons on whom such degrees may be conferred, diplomas or certificates as is usual in colleges and universities."

From its earliest days, Saint Vincent College has striven to embody the ideals and character of the 1,500-year-old heritage of Benedictine education and scholarship. Based firmly on the ideal of Christian community, this heritage has contributed to both the survival and dissemination of Western culture. It has been an enduring heritage because of its capacity to adjust to the exigencies of successive ages. For more than 150 years the monks of Saint Vincent have worked to exemplify and to carry on this tradition. From their ranks, men have established Benedictine colleges and schools in Minnesota, Kansas, North Carolina, New Jersey, Illinois, and Georgia, among other places.

In the words of a college catalogue of the 1850s, Saint Vincent is located in an "elevated and healthy" area. Situated on a foothill of the Alleghenies, the school commands a

panoramic view of the countryside. In January of 1963 a fire destroyed part of the campus and in the years that have followed a new age in the history of the college has begun. Out of the ashes of the past a new Saint Vincent has emerged. With a deep awareness of the heritage and tradition that is its foundation, the community has once again turned its face toward the future. And perhaps no better image of this dynamic commitment to a creative relationship between old and new exists than the campus itself, whose newly constructed and aesthetically pleasing modern buildings blend harmoniously with the older structures built by the pioneer monks themselves.

Saint Vincent College became coeducational in 1983 as a major step to strengthen all aspects of the community life and educational services of the College. The decision was based on a belief that the College was in a strong position to offer men and women the opportunity of personal development and solid career preparation in a wholesome environment grounded in the time-tested Benedictine educational and religious tradition.

Saint Vincent College, along with the other units of the Saint Vincent Community — Archabbey, Seminary and Parish — observed the 150th anniversary of its founding in 1996 with an 18-month series of activities and events which recognized the rich history and heritage of Saint Vincent while focusing attention on planning and preparing for the future.

The Campus

In a pattern characteristic of many Benedictine communities, the first buildings were grouped in a quadrangle. At least ten of the original buildings were "homemade." That is, the architects and workmen were Benedictines who cut the trees, sawed the timber, and fashioned clay into bricks.

Alfred Hall (1907) houses the administration offices and also provides space for language laboratories, computer labs, classrooms, and some faculty offices.

Andrew Hall (1905) extends from the Archabbey Basilica and contains the monastic refectory.

Anselm Hall (1875-1879) connecting Andrew Hall with Placid Hall provides space for small dining-meeting rooms.

Aquinas Hall (1952) connects Wimmer Hall with the Archabbey Basilica and provides classrooms for the seminary.

Archabbey Basilica (1892-1905) dominates the campus at Saint Vincent. The cornerstone was laid in 1892, and the consecration took place August 24, 1905. Beneath the Basilica is the Crypt, which contains altars and many works of modern art in glass, wood, stone, and acrylic and oil paintings. The Basilica was completely restored in 1996.

Aurelius Hall (1923) served as a College residence hall until 2002 and traditionally housed freshmen. Today, Aurelius Hall houses the McKenna School of Business, Economics, and Government and serves as a residence hall.

Chapel of St. Gregory the Great (1998) is the Seminary chapel.

Community Center (1979) adjoins Anselm, Benedict, and Placid Halls. It houses the main student dining room and food preparation facilities.

Elizabeth J. Roderick Center (1998) houses Seminary and Archabbey offices, seminary residence rooms, and guest rooms.

Fred M. Rogers Center (2008) is a LEED® Gold Certified building where the Department of Event and Conference Services is located. Additionally, the Center houses the Fred Rogers Institute including the Fred Rogers Archive of multimedia materials from Mister Rogers' Neighborhood and other work by and about Fred Rogers. The Foster and Muriel McCarl Coverlet Gallery is also located on the ground floor of the building featuring more than 400 coverlets.

Gerard and Bonaventure Halls (1963) are residence halls providing accommodations for 459 students in double rooms.

Headmasters Hall and Placid Hall (built in sections from 1855-1877) house the post office, dining and conference rooms, academic affairs, the faculty commons, faculty offices, and classrooms for the School of Arts, Humanities, and Social Sciences.

Leander Hall (1913) is a residence hall for seminary students and monastic guests.

Mary, Mother of Wisdom Student Chapel (2003) is the College Student Chapel.

Monastery (1967) is the residence of the Benedictine monks.

Parish Center (1997) provides a gathering space for parish activities, parish offices, and the Basilica Gift Shop.

Prep Hall (1998), named in honor of all of the alumni of the former Saint Vincent Preparatory School and in thanksgiving for the leadership of Prep alumni in providing the funding necessary to make the building a reality. It houses "smart" classrooms, a multimedia laboratory and media suite, and communication; and education faculty offices.

Robert S. Carey Student Center (1952- 1954; The Frank and Elizabeth Resnik Swimming Pool, 1993; Student Union, 1996, 2003) covering more than an acre of ground, contains the gymnasium, Performing Arts Center; swimming pool; Mary, Mother of Wisdom Student Chapel; Campus Ministry; wellness center; bookstore; The Shack; student union; classrooms; game room; fitness center with free weights, weight machines, and cardiovascular machines; art studios; music practice rooms; and the fine arts department and education faculty offices and classrooms.

Rooney Hall (1995) is a College residence hall that houses 125 students in double rooms and 50 students in 15 apartments.

Saint Benedict Hall (2002) is the residence hall for first-year students. The hall accommodates 368 students in double rooms.

The Sis and Herman Dupré Science Pavilion (2013) houses the Herbert W. Boyer School of Natural Sciences, Mathematics, and Computing and was completed in January 2013. The project renovated nearly 60,000 square feet of space and added another 45,000 square feet of new construction to the original Science Center built in 1969. All the disciplines — natural sciences, mathematics, and computing — share classrooms, lab space, computer labs, conference rooms, lounges, and a 75-seat lecture hall. A three story all-glass atrium serves as a window to the natural world and a welcoming gateway into the building.

Student Activities Center (1964) is used for social affairs and recreation and features a glass wall that provides a dramatic view of the College athletic fields and the mountains to the east.

Verostko Center for the Arts, housed on the second floor of the Dale P. Latimer Library, hosts rotating exhibitions that present work by contemporary artists as well as selections from Saint Vincent's impressive holdings. The Center cares for over 4,000 objects ranging from ancient to contemporary in a variety of media that form the permanent art collections of Saint Vincent College and Saint Vincent Archabbey.

Wimmer Hall (1952) is a College residence hall. It has 135 private rooms. The names of most of the buildings honor early Benedictine educators and deceased abbots who served the College as president.

The Dale P. Latimer Library

The Dale P. Latimer Library provides a climate-controlled repository of the institution's bibliographic holdings and a growing resource in support of the College's teaching mission.

Borrowing privileges are available to enrolled students, faculty, administrators, and staff members of the College. The Saint Vincent identification card serves as the Library card. The Library services are available to patrons 35-40 hours each week when school is in session. Special hours are in effect during vacation periods and holidays; schedule changes are posted in the Library, distributed to the offices of the College, and available on the College website.

The Library collection includes nearly 210,000 print volumes, audio CDs and DVDs, and approximately 16,000 microforms. The Library currently receives 69 print periodicals plus 41 e-journals and has subscriptions to 27 databases. The Library houses unique collections in theology and special collections of Pennsylvania and Benedictina. The Library is also a repository for a collection of rare books which is housed in a newly renovated climate-controlled area. Access to this collection is available through special request.

The whole collection is classified according to the Library of Congress (LC) system. The Library utilizes a fully automated public access catalog (OPAC) through EBSCO Discovery Service and FOLIO . Electronic resources are available through a variety of databases including EBSCO Discovery Services, EBSCOHost, Lexis-Nexis Nexis Uni, and JSTOR. The Library provides full wi-fi connectivity to the local area network for use with laptop computers and other portable devices. Two WEPA printer stations are available on the ground floor for student printing.

Materials not available at the Library may be requested from other libraries through Interlibrary Loan service (ILL); this service is available through the Public Services Librarian at the Circulation Desk or by completing the online ILL request form on the Saint Vincent College Library Portal page. The Library participates in the Westmoreland County Libraries Reciprocal Borrowing program that affords members of the Saint Vincent Community borrowing privileges at three local colleges.

New classrooms and a makerspace, as well as offices for academic support services and special programs are found on the ground floor. Several group study rooms intended for 2-6 students are found throughout the building. A number of them contain state-of the- art interactive computer/video capability.

A barista is located on the ground floor. A number of variable seating arrangements are available for reading, study and quiet conversation in the greatly expanded open floor plan of the building. Many of these spaces have abundant natural lighting due to the extensive use of glass in the new construction. The Library also houses the Verostko Center for the Arts Gallery and the John N. Deely/Jacques Maritain Center for Semiotics.

Admission

The Office of Admission and Financial Aid encourages students to come to campus and experience firsthand the environment and the spirit of Saint Vincent College.

The Admission Office is open from 8:30 a.m. to 4:30 p.m. on weekdays and by appointment for special events on many Saturdays. Admission Ambassadors are available for tours of the campus.

Visits can be scheduled through the website at https://www.stvincent.edu/admission-aid/visit-campus.html in advance to arrange an appointment. Admission counselors will be better able to advise prospective students whose test records, secondary school grade reports, or college transcripts are available for reference.

Undergraduate Admissions

Admission Policy

Saint Vincent College has a rolling admission policy; that is, the applicant is notified of the decision of the Admission Committee soon after all credentials are received.

After acceptance, the applicant may reserve space in the class at Saint Vincent College by making a deposit of $200 required of all students who plan to attend. This deposit will be credited to the applicant's account, but it is not refundable.

Philosophy of Application Review

The Office of Admission at Saint Vincent College reviews each applicant from a holistic perspective assessing each student for academic performance, fit with the mission of SVC, meaningful engagement in school and/or community, personal story and potential for success at Saint Vincent. We commit to a human being reading and reviewing every material submitted with an application so that we make the most informed decision we can on every application.

If a student is denied admission to Saint Vincent upon first application, we counsel the student on alternative pathways to success and to potentially apply to Saint Vincent in the future.

Freshman Applicants

An applicant for the freshman class should submit the following to the Office of Admission and Financial Aid:

1. A completed application form.
2. An official transcript sent directly to Saint Vincent College from the guidance office at the secondary school of graduation. Unofficial transcripts may be accepted for initial application review but official copies will be required and verified prior to enrollment.
3. Optional test results from the Scholastic Assessment Test (SAT), the American College Testing Program (ACT), or the Classic Learning Test (CLT).

For Test-Optional Applicants

Applicants who did not take the SAT/ ACT may be required to submit one of the following items to aid in the application review process:

- Personal statement of no more than 3 printed pages or video of no more than 5 minutes responding to the provided prompt: *Saint Vincent is a learning community based in academic rigor, service and personal/spiritual growth. How do you plan to contribute to our community during your time as a student?*
- Virtual interview with an admission representative.

Each applicant will be evaluated on academic performance, rigor of high school curriculum, class rank (when provided), one or more of the test-optional additional requirements in lieu of test scores, extracurricular activities/ involvement, letters of recommendation (optional), motivation, character, and potential for success at Saint Vincent College.

International Undergraduate Applicants

An international applicant should submit the following to the Office of Admission and Financial Aid:

1. A completed application form.
2. Official secondary school transcript or academic record. (This must be translated into English with a grading scale included.)
3. SAT or ACT scores (if available).
4. Copy of passport photo page to confirm citizenship
5. English proficiency exam scores. Minimum scores required: TOEFL (80), IELTS (6.0) or Duolingo (120) or PTE (52).
6. Supplemental Application Form with certificate of financial responsibility. This form and financial information is required for issuance of immigration documents and must be submitted and approved by Dean of Admission upon payment of reservation deposit.

Transfer Applicants

An applicant who is transferring from another post-secondary school should submit the following to the Office of Admission and Financial Aid:

1. A completed application form.
2. An official transcript sent directly to Saint Vincent College from all of the postsecondary schools previously attended.
3. A secondary school transcript sent directly to Saint Vincent College from the secondary school from which they graduated.
4. A completed Dean of Students Reference Form from all post-secondary schools attended is required. This form is available through the Office of Admission.

The applicant's academic achievement and personal history at the post-secondary schools previously attended are of primary importance in the decision for admission. The secondary school record is requested as background information for academic counseling.

Faculty members are available for interviews, course advisement, and class scheduling through the Office of Admission and Financial Aid.

A personal interview is preferred by the Office of Admission and Financial Aid.

Subjects Required for Admission

Adequate preparation is an important determinant for a successful college education. Sixteen secondary school academic units are required for admission to Saint Vincent College. These 16 units must include 4 units of English, 3 or more units of college preparatory mathematics, 1 unit of laboratory science, and 3 units of social science; 2 units of a foreign language are preferred among 5 elective units.

Engineering students should have 1 unit of chemistry with lab, 1 unit of physics with lab and 4 units of mathematics, including geometry, intermediate algebra, and trigonometry.

Nursing students must have a minimum high school GPA of 3.0 and a minimum SAT score of 1060/21 ACT score to be considered for Nursing admission. Applicants must also have a cumulative GPA of 3.2 in all academic science courses. High school curriculum requirements must include 2 units of math (one unit must be algebra) and 2 units of lab science (one unit must be chemistry). Nursing admission is competitive and space in the program is limited. Test optional Nursing applicants are required to complete a personal interview with an admission representative or the Director of Nursing.

Music and Music Performance students must audition for acceptance. Art students must submit a portfolio for acceptance to the Fine Arts Department.

If an applicant's secondary school program differs significantly from that outlined above, the Office of Admission and Financial Aid should be consulted.

Transfer Credit Evaluation

Transfer credit evaluation is completed by the Registrar's Office and based on course content regardless of mode of delivery (onsite, hybrid, or online). A log of previously evaluated courses from various accredited colleges and universities is maintained and updated on a regular basis with school Deans and Department Chairpersons. Assessment of new courses may require that the student provide a course description and/or course syllabus. This information is reviewed by the Transfer Credit Coordinator, school Dean and/or Department Chairperson to determine whether the course will transfer as equivalent to a Saint Vincent course or as elective credit only. Final determination of acceptance or denial of transfer credit is the responsibility of the Registrar in conjunction with relevant faculty leadership. A written record of this review will be maintained in the student's file.

Credit by Examination and Credit for Experiential Learning General Policy

A maximum 62 credits for Advanced Standing may be earned through programs such as Advanced Placement Tests, CLEP, Armed Forces Course Equivalencies, Credit for Experiential Learning, and all other such evaluating mechanisms.

Advanced Placement Credits

Saint Vincent College awards Advanced Standing Credit to students who achieve scores of 4 or 5 on any Advanced Placement Test of the College Board. Test scores must be sent directly to the Office of Admission and Financial Aid from the College Board within the first year of enrollment as a matriculated student at Saint Vincent College.

Faculty advisors will contact first-year students who earn AP credit in Chemistry and/ or Calculus to see if they would rather take the course at Saint Vincent; the AP credits will not be recorded on the Saint Vincent Transcript. In order to receive AP credit for Biology II, students must successfully complete BL 150 General Biology I.

CLEP

Saint Vincent College awards Advanced Standing Credit to students who achieve scores on CLEP tests according to the schedule published by the Office of Admission and Financial Aid.

Students anticipating taking CLEP tests should check the Consumer Information page of the SVC website for a list of CLEP tests to determine which tests are acceptable at the College. Test scores must be sent directly to the Saint Vincent College Office of Admission and Financial Aid from the College Board.

Credit for Experiential Learning

Applications for credit for learning gained in non-academic settings are available in the Registrar's Office. The Registrar will arrange evaluation of the application by appropriate faculty members.

International Baccalaureate Programs

Saint Vincent College awards Advanced Standing Credit to students who participate in the International Baccalaureate Programs. Official test scores and transcripts must be sent to the Office of Admission and Financial Aid for evaluation. Credit is awarded according to a standing policy in the college.

Articulation Agreements

Please refer to the Saint Vincent College website (www.stvincent.edu) for the most up-to-date information regarding articulation agreements.

Advanced Standing for Credits Earned at Other Colleges and Universities

Regulations used by Saint Vincent College regarding the acceptance of credits earned at other colleges and universities are as follows:

1. Credits earned by a student at another accredited institution will be accepted if the quality of the credits earned is a C- grade (1.70) or better and if the number of credits in a given course does not exceed the number granted in a comparable course at Saint Vincent College. The College reserves the right to accept or reject courses for transfer credit on the basis of course objectives and content. All transfer credits must be submitted within

the first year of enrollment as a matriculated student at Saint Vincent College.
2. For graduation from Saint Vincent College a minimum of 34 credits, including 18 in the major, must be earned at Saint Vincent College. If a student elects a minor or concentration, nine credits must be earned at Saint Vincent College.
3. A maximum of 90 credits earned at accredited four-year institutions will be accepted for transfer. A maximum of 62 credits earned at accredited two-year institutions will be accepted for transfer.
4. Transfer course grades are not used in the computation of the student's grade point average at Saint Vincent College.
5. For registration purposes for currently enrolled students, transfer credits must be received by March 15 to be included in credits completed for the following Summer/Fall registration; transfer credits must be received by October 15 to be included in credits completed for the following Winters/Spring registration.
6. Situations not adequately covered by these regulations are resolved by the Registrar.

Early Admission
A student with an exceptional record may be accepted to begin a degree program at Saint Vincent College after the completion of the junior year in high school. The student should be in the upper tenth of the class and have the assurance in writing that the high school will grant a diploma after the successful completion of one year in college. An interview with the Vice President for Enrollment and Student Success is required.

Pre-College Credit
High school juniors and seniors are invited to take courses at Saint Vincent College for college credit. Such credits will be applied toward a degree at Saint Vincent College upon acceptance as a matriculated student or reported on an official transcript for transfer to other colleges and universities.

Continuing Education
Students not necessarily pursuing a degree may enroll in credit courses for personal or professional advancement. They should complete a Continuing Education Application when registering. Persons 30 years of age or older may audit any course at half-price tuition, and persons 65 or older may audit credit courses tuition free. The registration fee for each reduced-rate course audit is $5. For information, contact the Office of the Coordinator of Graduate and Continuing Education.

Non-Degree Seeking Students
A person who wishes to pursue studies at Saint Vincent College without becoming a candidate for a bachelor's degree may take courses for credit as a non-degree seeking student. A non-degree student is expected to conform to the general regulations of the College, to fulfill the same requirements, and to meet the same scholarship standards for each course pursued as are demanded of candidates for a degree. A maximum of 30 credits will be accepted from a non-matriculated student toward a degree program.

Special Admission Policy – Summer Bridge Program
Some students may be granted conditional admission to the College and are required to complete the Summer Bridge program. Placement in the Summer Bridge program is determined by the Admission Office, which evaluates the applicant's grades, test scores, and all other application materials. Participants are required to successfully complete a three-week, credit-bearing summer program to be admitted to the College as a freshman for the fall semester. During the Summer Bridge program, tutoring, coaching, and mentoring are provided. In addition, a fall transitional semester is an added benefit for those that complete the Summer Bridge program. The fall semester consists of weekly academic coaching meeting. The Student Academic Success Office provides ongoing academic counseling to Summer Bridge students throughout their college years.

Readmission
A student who has withdrawn from Saint Vincent College must reapply according to the ordinary application procedures.

The student may be readmitted only after a review by Academic Affairs, Financial Aid, Student Accounts and the Business Office.

If the student has attended other postsecondary schools, an official transcript must be sent directly to the Saint Vincent College Office of Admission from all of the post-secondary schools attended.

Graduate Admissions
Admission To Graduate Study
Admission requirements for all graduate programs have been established by Saint Vincent College. Specific graduate programs may require additional items to the admission process of any individual program of study.

Regular Admission
(Please see specific application requirements for each program as they vary.)

- Possess an earned bachelor's degree from an accredited institution. Official transcripts must be submitted from each institution attended.
- Have a minimum undergraduate grade point average of 3.0.
- Three letters of recommendation attesting to the applicant's capacity and commitment to graduate study.
- Scores on the Graduate Record Examination, the Graduate Management Aptitude Test or the Miller Analogies Test, as appropriate to the program, may be required if the undergraduate grade point average was below 3.00 and may be requested in other cases at the discretion of the program director.

- Programs require a personal statement for all applicants and an interview for certain applicants at the discretion of the program director.
- For international applicants, a TOEFL score of 79, a IELTS score of 6.5, or a Duolingo score of 105, or higher is required to be admitted to a graduate program.

Graduate Admission Policy

Saint Vincent College has a rolling admission policy; that is, the applicant is notified of the decision of the Graduate Committee soon after all credentials are received. *(Acceptance of applicants into the graduate programs of nurse anesthesia is the sole responsibility of the Independence Health School of Anesthesia).*

Application Deadlines

Completed applications must be submitted two weeks prior to the first day of class to be admitted for that semester. If the application is not complete by the deadline, the candidate will be reviewed for admission for the following term. *(Applications, along with complete submission of all required documentation for the graduate programs in nurse anesthesia, must be sent directly to the Independence Health School of Anesthesia, and be received no later than Jan. 15 of the year prior to the year of prospective matriculation).*

Admission to Program

Graduate students are admitted to a specific program of study. Graduate students who wish to shift from one graduate program to another must complete a Graduate Change of Program form and obtain signatures from their advisors and program director. The graduate program director reviews applications for admission to their respective programs.

Graduate Applicants

An applicant for graduate programs should submit the following to the Office of Graduate and Continuing Education:

- A completed application form.
- An official transcript from each undergraduate institution attended sent directly to Saint Vincent College.
- All other required materials as stated by the graduate program of choice. (See specific program requirements.) Applications will not be reviewed until all materials are received and completed.

***Graduate applicants must have a bachelor's degree prior to official acceptance into the program.*

Provisional Acceptance

An applicant not meeting the specified requirements for the graduate program may be offered a provisional acceptance.

(Not applicable to the graduate programs in nurse anesthesia). The candidate can take up to nine (9) credits in the graduate program and must receive a 3.0 or higher-grade point average.

Once the nine (9) credits have been earned, the program director must review the student's status. The program director may: a) allow the student to become a regular, degree- seeking graduate student; b) refuse further enrollment if the grade point average was not met.

Appeals of admission decisions are made to the school deans. Applicant is eligible for financial aid.

Non-Degree Students

A person who wishes to pursue graduate studies at Saint Vincent College without becoming a candidate for a master's degree may take up to nine (9) credits as a graduate non-degree student. (Not applicable to the graduate programs in nurse anesthesia).

Non-degree students must complete and return the graduate non-degree application for admission and send official undergraduate transcripts to the Office of Graduate and Continuing Education in order to register for classes. The non-degree student must follow the same policies and procedures as a degree-seeking graduate student. Non-degree students are ineligible for financial aid.

If a non-degree student wishes to become a candidate for the graduate program, the applicant must officially apply to the graduate program and must follow the graduate application requirements.

Transfer Credits

Certain programs may allow applicants to transfer up to nine (9) credits toward graduate-level courses into the program. The applicant must submit graduate transcripts to the Office of Graduate and Continuing Education. The program director will evaluate the courses and make a decision on whether the credits will be transferred. Credits earned by another accredited institution must be graded as a B- or better in order to be considered. Applicants will be notified of credits transferred upon acceptance into the graduate program. (Transfer credits are not accepted for the graduate programs in nurse anesthesia).

Second Graduate Degree

A student who wishes to attain a second graduate degree after their first graduate degree from Saint Vincent College must apply through the Office of Graduate and Continuing Education and complete a program of study that includes:

a) Have taken 18 or more credits beyond the graduation date of their first master's degree;
b) Completed all of the required courses for the second master's program;
c) Passed the comprehensive exam (if applicable) for the second master's program Financial Information

Financial Information

TUITION AND FEES FOR 2025-2026 Students Enrolled Fall 2025 and Spring 2026:

Undergraduate Program

Tuition- (per semester, 12-19 credits)	$21,208
Tuition- Undergraduate (per credit)	$1,330
Tuition- Summer Undergraduate (per credit)	TBD
Tuition- ESL (per credit)	$402
Regular Rooms	
Bonaventure Hall	$3,443
Bonaventure-premium single (3rd Floor)	$4,866
Gerard Hall	$3,443
Saint Benedict Hall-double	$3, 790
Saint Benedict Hall-single	$4,161
Saint Benedict-premium single	$4,820
Wimmer-single	$4,018
Wimmer-premium single (6th Floor)	$4,820
Rooney-double	$4,829
Rooney-apartments	$5,741
Aurelius Double Suites	$4,496
Private Rooms, surcharge	$2,500
Board	
19 meal plus $125 flex	$3,510
15 meal plus $175 flex	$3,419
12 meal plus $200 flex	$3,193
200 Block plus $175 flex	$3,507
5 meal plus $75 flex	$1,154
Apartment meal plan	$2,773
International Welcome Week Fee	$315
Student Activities Fee (undergraduate students taking 6 or more credits)	$177
Technology Fee ($129 for part time students under 6 credits)	$294
Health Services Fee (Residents and full-time undergraduate students) *Of this fee $10 is directed toward fitness equipment*	$164
Bandwidth fee	$216
Laundry fee	$52
Post Office Maintenance Fee (FT)	$5
Special Course and Lab Fees (per course unless noted)	
Science Lab Fee	$140
Cadaver Dissection Lab Fee (BL 290, HSCI 223/225)	$309
Experimental Psychology (PY 341)	$129
Applied Music (MU 125 - PER CREDIT)	$371
Applied Music (MU 525 - PER CREDIT)	$258
Senior Art Exhibit (AR 405)	$130
Junior Recital (MU 330)	$88
Senior Recital (MU 430)	$88
Student Teaching Fee (ED 410)	$371
Student Teaching Orientation Fee (ED 400/401)	$180
Teacher observation fee (ED101/102/103)	$77
Teacher observation fee (ED207/307)	$77
Art lab fee (AR 130,131,135 ,175, 218,225,230,233,234, 236, 238, 334, 337, 368, 386,388,404, 405, DA 180/220/280)	$130
Outdoor Leadership fee (PL-263)	$500

SVC Nursing Fees - BSN

Nursing Fee (NUR 211/213/414)	$200
Nursing Fee (NUR 221)	$311
Nursing Fee (NUR 212)	$77
Nursing Fee (NUR 223)	$480
Nursing Fee (NUR 311/413)	$82
Nursing Fee (NUR 321)	$511
Nursing Fee (NUR 322/324/325/422)	$400
Nursing Fee (NUR 421)	$411
Nursing Fee (NUR 416)	$199
Nursing Fee (NUR 423)	$600

SVC Nursing Fees - DE-MSN

Nursing Fee (NUR 5213)	$1,200
Nursing Fee (NUR 5223)	$391
Nursing Fee (NUR 5321/5324/ 5325/5422)	$200
Nursing Fee (NUR 5322/5421/ 603/621)	$100
Nursing Fee (NUR 616)	$199
Nursing Fee (NUR 6423)	$1,611

Carlow Nursing Fees – set by Carlow

Nursing Fee (NUR 106)	$95
Nursing Fee (NUR 2161)	$1,091
Nursing Fee (NUR 2162/3182)	$256
Nursing Fee (NUR 2172/3162/3172/ 3122/3192/4182)	$245
Nursing Fee (NUR 3161/3171/ 3121/4181)	$735
Nursing Fee (NUR 3181/3191/4211)	$830
Nursing Fee (NUR-4111)	$924
Nursing Fee (NUR-4112)	$490
Nursing Fee (NUR-4212)	$501

CCBC Aviation Fees – set by CCBC

Tuition (per credit)	$491
Aviation Fee (AVIP 170/220/225)	$225
Aviation Fee (AVIP 190/280/285/288)	$150
Aviation Fee (AVIP 250)	$100

Payment Plan Fee	$40
Audit Fees	
Course Audit (per credit)	$1,330
High School Credit Fee	$98
Norwin & Franklin Regional	$95
Diocese of Greensburg	$88
Miscellaneous Fees	
Freshman/Transfer Orientation Fee (first semester only)	$269
Reservation Deposits for First Time FR/ Transfers/Re-admits/Second Degree ONLY	
Registration Deposit	$100
Housing reservation (for resident students only)	$100
Late Payment Fee	$67
Graduation Fee (Nonrefundable)	$100
Graduation Fee for Certificate Programs (ND 00C)	$15
Transcript of credits ($2.50 surcharge For mailed copies)	$5
Independent Study Abroad Program	
Enrollment in third party programs (STAB 100 & STAB 200)	$541
Enrollment in faculty led programs (AN 295, BA 525, BLS 300 ED 340, ND 289, NSCI 275, PY 399, SP 450/451)	$67
Tuition - Paid directly to abroad school	
Cooperative Education – per semester	
Non Credit internship or cooperative education	$124
Tuition	$1,330
Parking and Vehicle Registration - annual payment	$103

Continuing Education Fees

Parking and Vehicle Registration (Per year)	$103
Tuition	$665

Graduate Program

Graduate tuition-Business (per credit hour)	$840
Graduate tuition- MAHealth/ DE-MSN (per credit hour)	$1,000
Graduate tuition-Criminology/ Education (per credit hour)	$809
Graduation Fee (Nonrefundable)	$100
Insurance Fee - MA Health FA & SP only	$247
Technology ($129 for students carrying fewer than 6 credits)	$294
Health Services Fee - full-time student (does not apply to DNAP students)	$72

DNAP Program

DNAP Tuition (per credit)	$1,262
Insurance Fee - FA & SP only	$247
Technology Fee - PT	$129

BEARCAT B.E.S.T. Program

Tuition - per semester	$18,531
Tuition - SU	$4,118

Financial Assistance and Payment

Saint Vincent College makes every effort to provide financial assistance to students who have been admitted.

At Saint Vincent College the cost is kept at the lowest possible level consistent with a financially responsible operation. The payment of the student's bill is due before the beginning of classes each semester or session. The student must obtain financial clearance from the Business Office indicating that satisfactory arrangements have been made for payment of financial obligations to the College.

Students who do not receive this financial clearance will not be officially enrolled at the College. Students may not enroll for a successive semester until their accounts have been completely satisfied; no diplomas, transcripts, or records will be issued until all financial obligations have been settled.

If checks returned by the bank are because of insufficient funds, the issuer of the check will be charged a service charge of $25 plus 3 percent of the amount of the check. All checks must be drawn on a U.S. bank. The College reserves the right to change any of the fees whenever increasing costs may require such change.

Second Degree/Continuing Education Discount

A Saint Vincent College discount equal to ½ tuition is available to students who hold a Bachelor of Arts or Science degree from any accredited college or university and who are enrolled at Saint Vincent College in classes for academic credit.

Refund Policy

The policy for refund of tuition and fees upon withdrawal from individual courses or from Saint Vincent College applies only to withdrawal processed on the Portal or on official College withdrawal forms. A 95 percent refund will be given in the fall and spring semesters within the first 15 calendar days of the course. A 40 percent refund will be granted between days 16-30 of the course. On the 31st day of each course no tuition or fees will be granted. A 95 percent refund will be given in the summer within the first seven calendar days of the course. Beginning the eighth day, no refund will be granted. Note that refunds, if any, depend on the dates noted on the official withdrawal forms. A student who feels that special circumstances warrant an exception from established policy may present an appeal to the Assistant VP for Academic Affairs. At the end of the first full week of classes of full week of class of fall, spring, and summer

semesters, all residence hall fees are non-refundable for either voluntary or involuntary withdrawals.

Financial Aid

Saint Vincent College offers a comprehensive program of financial aid in the form of scholarships, grants, loans, and part-time employment and coordinates programs from federal, state, and outside agencies. The yearly estimated cost of attending Saint Vincent College is based upon Tuition and fees; books, course materials, supplies and equipment, living expenses, transportation, miscellaneous personal expenses, federal student loan fees, professional licensure, certification, or a first professional credential costs. Saint Vincent College expects that the family of a financial aid applicant will assist the student to the greatest extent permitted by their resources and that the student will help by means of summer and college employment and college savings. All students are strongly encouraged to seek scholarship aid from outside sources.

Application for Financial Aid

The application for federal and state aid is the Free Application for Federal Student Aid (FAFSA) and requires a yearly renewal. Applications are available each year on Oct. 1. While May 1 is the priority filing deadline for filing the FAFSA, some programs such as the Bearcat Advantage may require an earlier date. Applications processed after this date will be processed on a funds-available basis for campus-based aid programs. The information on this federal form will be sent to the student's state agency. Students who do not file the FAFSA will not be eligible to receive federal or state aid but may qualify for most institutional aid programs and outside scholarships. Some institutional funds require the FAFSA to be filed to determine a student's need.

Financial Aid Questions

The Financial Aid Office is located on the first floor of Alfred Hall. Normal hours of operation are Monday-Friday, 8:30 a.m. – 4:30 p.m. Correspondence should be addressed to 300 Fraser Purchase Road, Latrobe, PA 15650-2690. Phone: 724-805-2555, 800-782- 5549. Fax: 724-805-2063. Email: financialaid@stvincent.edu.

Office of Vocational Rehabilitation

Students who have disabilities may receive educational benefits through the Office of Vocational Rehabilitation (OVR). To be eligible, students must satisfy the disability and financial requirements of the OVR. For further information regarding this assistance, the student should contact the Office of Vocational Rehabilitation at the local CareerLink office.

Academic Scholarships and Saint Vincent College Awards

Saint Vincent College awards academic scholarships and grants to full-time degree-seeking freshmen for excellence in academic achievement based upon the high school record and scores from the SAT or ACT. All candidates must be a graduate of an accredited secondary high school. Saint Vincent College scholarships and awards are granted for a maximum of eight semesters and are available in the fall and spring semesters.

Benedictine Pastor's Award

First-time freshmen and transfer students who are registered members (at least one year prior to the start date at Saint Vincent College) of parishes staffed by Benedictine monks of Saint Vincent Archabbey are eligible for this award. A Benedictine Pastor's Award form or letter from the Pastor verifying membership is required by May 1.

Catholic High School Graduate Grants

The Catholic High School Grant is awarded to students who are Roman Catholic high school graduates enrolling full-time in the fall semester immediately following high school graduation.

Transfer Grants

Transfer Grants are awarded to students who are transferring to Saint Vincent College from another college or university. The award is based on academic achievement at the previous school.

Endowed Scholarships

Endowed scholarships are generally need based and are supported by the generosity of alumni and private donors to the Saint Vincent College Scholarship Endowment Fund. Completion of the FAFSA is required. Restrictions may apply.

Specialized Scholarships

Aurelius Scholarship

The Aurelius Scholarship is awarded on the basis of superior academic credentials and potential, including high school performance, test scores, declared major, and interest in the program. Administered by the Alex G. McKenna School of Business, Economics, and Government, the program is offered to motivated students interested in Western intellectual tradition and awards a limited number of competitive scholarships.

The Fred Rogers Scholars Program

The Fred Rogers Scholars Program is a merit based scholarship program that gives Saint Vincent College students opportunities to connect their particular area of interest to the work of Fred Rogers and consider how to carry his principles and approach forward. Fred Rogers Scholars have opportunities to engage with researchers, professionals, and leaders within child and youth development, children's media, music, children's health, and more. Undergraduate students from across all majors have an opportunity to work with Fred Rogers Institute faculty and staff to engage with materials from the Archive to extend Fred Rogers' approach to supporting children, families, and their helpers. The goal of the program is that courses of study and future career plans. Students are encouraged to connect their particular area of interest with the work of Fred Rogers in efforts to develop specialized knowledge in how Fred's legacy integrates with their areas of study. Applications for the Fred Rogers Scholars Program open each spring semester for students across Saint Vincent College who maintain a GPA of 3.5 or higher.

Wimmer Scholarship
The Wimmer Scholarship competition is a general knowledge examination open to graduating high school seniors. Seniors must have applied for admission by the date of the exam and have a cumulative high school QPA of at least 3.5 to be eligible for the competition. The first-place winner will receive a full tuition, room and board scholarship for eight semesters. The second through fifth-place winners will receive a full tuition scholarship for eight semesters.

STEP Scholarships
The Science, Technology, Engineering, and Math Talent Expansion Program awards five four-year scholarships to incoming freshmen majoring in Data Science, Biochemistry, or minoring in Biotechnology.

Palmer Scholars Program
The Arnold D. and Winifred W. Palmer Scholars Program was established through the generous support from the Palmer Family and the Arnold D. and Winifred W. Palmer Foundation to provide opportunities for graduates of Greater Latrobe Senior High School with exemplary academic and leadership skills.

National Guard Educational Assistance Program
Pennsylvania students who have enlisted in the PA National Guard may be eligible for annual grants from the Department of Military Affairs.

Federal Pell Grant
The federal Pell grant is awarded as a result of the FAFSA and is based on the Expected Family Contribution (EFC) as determined by the Department of Education.

Federal Supplemental Educational Opportunity Grant
The SEOG grant is awarded to those with the highest need based on the results of the FAFSA. Each school receives limited funding for this award and those with the lowest EFC are considered on a first-come, first-served basis.

Federal Student Aid for Graduate Students Direct Unsubsidized Loans and Graduate Plus Loans
Requirement: 3.0 cumulative GPA Credits Earned Requirement: All students must have earned at least 67% of the cumulative number of credits attempted, including all credits attempted at Saint Vincent and all credits transferred in from other institutions that count toward the degree.

Total credits attempted cannot exceed 150% of the credits required of the published length of the program. All courses with a grade designated as G, IP, W, and WF and repeated courses are considered attempted.

PA State Grant Awarded Through The Pennsylvania Higher Education Assistance Agency (PHEAA)
The PHEAA grant is awarded to eligible residents of Pennsylvania. Students must complete the FAFSA yearly by May 1 for consideration.

State Grant Aid
A number of states offer grants to students attending college outside of their home state. Eligibility and application requirements differ from state to state. Students should check with their state agency.

Federal Direct Student Loans
Subsidized and unsubsidized loans are awarded to students who wish to borrow. The maximum yearly amount for a dependent student is $5,500 for freshmen, $6,500 for sophomores, and $7,500 for juniors and seniors. Dependent undergraduate students also have a $31,000 aggregate limit.

Federal Direct Parent Plus Loans
The PLUS loan is a credit-based loan available to parents of dependent undergraduate students to help cover the remaining cost of attendance after other forms of financial aid have been applied.

Private Alternative Loans
Private alternative credit-based loans are available to students or parents to help cover the remaining cost of attendance after other forms of financial aid have been applied. Student borrowers will typically require a credit-worthy co-signer.

Tuition Waivers
A tuition waiver may be granted to Saint Vincent College eligible faculty and staff members, their spouses, and dependents, through the Human Resources Office. Saint Vincent College also participates with the Council of Independent Colleges and The Tuition Exchange for first-time freshmen from families of full-time employees of other participating institutions. This program is administered by the Admission and Financial Aid Offices. The number of waivers available each year for these programs may be limited according to funds availability and number of applicants incoming to and outgoing from Saint Vincent College.

Withdrawals and Title IV Refund Policy
The federal government mandates that students who withdraw from all classes may only keep the federal financial aid (i.e., Title IV funds) they have "earned" up to the time of withdrawal. Title IV funds that have been disbursed in excess of the earned amount must be returned by the college and/or the student to the federal government. Thus, the student could owe aid funds to the college, the federal government, or both.

The Financial Aid Office is notified when a student has officially withdrawn from the college by the Office of Academic Affairs. The calculation for Return of Title IV funds is based upon the date on which a student initiates the withdrawal process by indicating intent to withdraw. Students

who unofficially withdraw by ceasing to attend classes, or students who do not complete all modules in a semester, are also subject to the Title IV Refund Policy. Students who fail to earn a passing grade in at least one class for a term may also be subject to the Title IV Refund Policy.

To determine the amount of aid the student has earned up to the time of withdrawal, the Financial Aid Office divides the number of calendar days the student has attended classes by the total number of calendar days in the semester (minus any scheduled breaks of five days or more). The resulting percentage is then multiplied by the total federal funds that were disbursed to the student account for the semester.

This calculation determines the amount of aid earned by the student that he or she may keep. The unearned amount must be returned to the Department of Education by the college and/or the student. The Financial Aid Office will notify and provide instructions to students who are required to return funds to the Department of Education.

Funds are returned to the following Title IV source in this order:

Unsubsidized Federal Direct Loans
Subsidized Federal Direct Loans
Federal Direct Graduate PLUS loans
Federal Direct PLUS (parent) loans
Federal Pell Grants
Federal SEOG

Reduced Enrollment

Students dropping from full-time to part-time up to and including the 31st day of the class may become ineligible for or eligible for a lesser amount of institutional and endowed funds awarded for that semester regardless of the tuition refund policy. Eligibility for financial aid from federal, state, or private sources may also be adjusted in accordance with the regulation pertaining to each source, which could result in a balance due to the College. In addition, dropping from full-time to part-time after the add/drop period may affect eligibility for future aid if the student does not meet the minimum satisfactory academic progress requirements.

Satisfactory Academic Progress

In compliance with the Department of Education's policy for receiving financial aid, academic performance will be reviewed annually to ensure students are maintaining Satisfactory Academic Progress (SAP). All students will be measured at the end of each spring semester. Components of the SAP requirement include a measure of cumulative GPA, pace of completion, and total attempted credits.

Students who are determined to have not met the minimum SAP requirements will be denied federal and institutional financial aid. An appeal process is available to students who have experienced personal illness or accident, death of an immediate family member, or other extraordinary circumstances that have prevented the student from attending classes and successfully completing course work. Documentation of such extraordinary circumstances will be required. A student whose financial aid has been terminated and for whom an appeal is not granted may regain eligibility for financial aid only after the student has corrected the deficiency in credits earned and minimum cumulative GPA by completing required course work at SVC without the benefit of federal or institutional aid, or by transfer of credits from another institution.

- Minimum Cumulative GPA Requirement – 1.50 at the end of the freshman year, 2.0 at the end of the sophomore and subsequent years. Certain Saint Vincent College awards require a cumulative GPA greater than 2.0 which is noted upon notification of the award.
- Pace of Completion – all students must have successfully completed at least 67 percent of cumulative credits attempted.
- Total Attempted Credits – Attempted credits cannot exceed 150 percent of the credits required as defined by the College's published length of the specific program.
    - Grades of F* are not counted in SAP calculation as these are grades that pertain to a major that the student has transferred out of and are not a requirement of the current program.
    - Overall cumulative credits attempted/earned, cumulative GPA are used in the SAP review. Students seeking a second degree or who changed majors can appeal to receive aid based on the major change or second degree.
    - Transfer credits accepted from another institution count as both attempted and completed.
    - Grades of W or WF are considered attempted but not completed and can/will adversely affect the cumulative GPA requirement, pace of completion, and the total attempted credit limit.
    - Incompletes (G and IP), if not completed within the noted time frame below will become an F and can/will adversely affect the cumulative GPA requirement, pace of completion, and the total attempted credit limit. At the end of the noted time frame, a reevaluation of each component will occur.
        - G — Incomplete. An incomplete course must be completed within one month of the beginning of the following semester or the grade becomes an F. Under extenuating circumstances, the Registrar upon the request of the instructor may grant an extension of time up to the end of the following semester.
        - IP — Course in Progress. Only issued to students who are unable to complete course work in one semester due to the nature of the research, data collection, field work, or internship. Students have three semesters to complete IP work.

Students who are determined to have not met the minimum SAP requirements will be denied federal and institutional financial aid. An appeal process is available to students based

on extenuating circumstances including but not limited to injury or illness to the student or immediate family member, mental ailment, disability or undue hardship related to the student, or death of an immediate family member. Documentation of the extenuating circumstance must be provided and can be in the form of a letter from a third-party health provider, counselor, clergy, obituary etc.

Students granted an appeal approval will be placed on an Academic Plan for Financial Aid and will receive financial aid for one semester following the appeal approval. To receive aid for the second semester of the Academic Plan for Financial Aid the student must show a positive progression of the completion rate and grade point average at the end of the first semester. Students who do not show a progression after the first semester and those for whom it is not mathematically possible to achieve the minimum SAP requirements by the end of the second semester, will not be awarded aid for the second semester and may not be eligible for a second appeal.

Students awarded aid for the second semester must continue to meet the specific requirements of the Academic Plan for Financial Aid. Students must meet the minimum SAP requirements (2.0 cumulative GPA and 67% completion rate) at the end of the second semester to continue to receive aid for future semesters. Those that do not meet the minimum requirements at the end of the second semester may not be eligible for a second appeal.

An appeal approval will not be granted if it is not mathematically possible for SAP to be met based on attempted credits not exceeding 150% of the credits required as defined by the College's published length of the specific program. An appeal approval does not supersede academic dismissal by the college. An appeal approval does not cover aid awarded by other agencies, such as the PHEAA state grant. Students not making progress for PHEAA and other agencies must appeal directly to that agency. A second appeal may only be granted in instances where the student significantly progressed during the academic plan, but due to documented circumstances was unable to meet the minimum SAP requirements. Students who are denied an appeal may regain eligibility by meeting the minimum SAP requirements by attending St. Vincent College without the benefit of federal or institutional financial aid, or by transfer credits. Students may wish also to consider the college's payment plan and/or private alternative loan funding.

Full-time students receiving the PA State Grant are required to complete 24 credits per year, not including repeated course work. Students receiving aid from other outside agencies are bound by the academic progress policy of the awarding agency.

Veteran Educational Benefits and Satisfactory Academic Progress

Federal law and Veterans Administration (VA) regulations specify the conditions under which student veterans, eligible dependents, and reservists are paid VA educational benefits. The law requires that educational assistance benefits to Veterans and other eligible persons be discontinued when the student ceases to make satisfactory progress toward completion of his or her training objective. Benefits can be resumed if the student reenrolls in the same educational institution and in the same program. In other cases, benefits cannot be resumed unless VA finds that the cause of the unsatisfactory attendance, conduct or progress has been removed and the program of education or training to be pursued by the student is suitable to his or her aptitudes, interests, and abilities.

Saint Vincent College is required by law to have and to enforce standards of progress and conduct in order for their programs to be approved for VA benefits.

When a student has failed to maintain prescribed standards of progress, the VA must be informed promptly so that benefit payments can be discontinued in accordance with the law. The termination date assigned by the school will be the last day of the term or other evaluation period in which the student's progress became unsatisfactory. Schools that provide a period of academic probation may not continue to certify a Veteran or eligible person (who remains in a probationary status) for an indefinite period of time. It is reasonable to expect that an institution will report a termination due to unsatisfactory progress if a student remains on academic probation beyond two terms, quarters, or semesters.

Termination for Unsatisfactory Progress
Unsatisfactory progress (Academic Suspension) must be reported to VA as a termination. Termination will be reported as of the semester the student is suspended.

If a student successfully petitions the dismissal, is readmitted, and is already certified the subsequent term, or if they reestablish VA eligibility, the VA certification will not be terminated.

Recertification of VA Claimant
A school's standards of progress must include specific conditions a Veteran or eligible person is required to satisfy to permit recertification for VA benefits after being terminated (for benefit purposes) because of unsatisfactory progress or conduct. When a school recertifies a student's enrollment to VA after a termination due to unsatisfactory progress or conduct, it is presumed the school has established that there is a reasonable likelihood that the student will be able to maintain satisfactory progress and conduct in the future.

Covered Individuals
Saint Vincent College adheres to specific policies set forth under the Veterans Benefits and Transition Act of 2018 regarding Covered Individuals. A Covered Individual is defined as any individual who is entitled to educational assistance under chapter 31, Veteran Readiness and Employment, or chapter 33, Post-9/11 GI Bill® benefits. Covered individuals may attend or participate in the course of education during the period beginning on the date that the individual provides to the educational institution a

certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website e-Benefit, or VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:

- The date on which payment from VA is made to the institution.
- 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

Assessment of Late Fees
Saint Vincent College will not impose any penalty, including the assessment of late fees, and/or the denial of access to classes, because of the individual's ability to meet his or her financial obligations to the institution due to the delayed disbursement of funding by the VA.

Priority Registration
Veterans, active duty, and reservists are given priority registration at Saint Vincent College. Specific dates and details will be made available to students prior to the registration period each semester by the Office of the Registrar.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

Annual Review

A review of financial aid awards is made during and at the close of each academic year by the Committee on Scholarships and Financial Aid of Saint Vincent College. The termination/or correction to any financial aid award is made by this committee as a result of this process.

Academic Information, Processes, and Guidelines

Knowledge of Requirements

Although advisors will assist the student about matters such as course and program selection, the ultimate responsibility for knowledge of requirements, course prerequisites, and for verification of the accuracy of records maintained by the Registrar remains with the student. Consequently, students should be familiar with the contents of this ***Catalog***, and monitor their progress toward graduation.

General Academic Information

Academic Years and Terms

The academic year is separated into Fall, Winters, Spring, and Summer semesters. The Academic Year begins the first day of the Fall term and ends the last day of the Summer term.

Fall and Spring Terms

Typically, Fall and Spring are 15 weeks in length with an additional week for final examinations. Summer classes are typically four, six, or twelve weeks in length. All courses adhere to the college credit hour policy as verified by the Registrar.

Summer and Winter Terms

The College offers a variety of courses during its Summer program as well as limited options during the Winter. This includes four-, six-, and twelve-week sessions. Classes are held both during the day and in the evening. Campus residence is available. Information may be obtained by contacting the Coordinator of Graduate Admissions and Continuing Education or the Registrar's Office.

Changes of Degree Requirements

Academic requirements in effect at the time a student enrolls in the college generally remain applicable to that student. However, the college maintains discretion to modify programs and to add or delete courses at any time. When such a change is made, work done toward the fulfillment of a requirement that was completed before the change was made will continue to be recognized. New courses or requirements may, however, be applied to the uncompleted portion of a student's program.

If a student is readmitted to the College, requirements for graduation are determined by the ***Catalog*** in effect at the time of entry as a readmitted degree student.

Credit Hour Calculations

All courses are recorded in terms of semester credit hours. A semester credit hour at Saint Vincent College is calculated using the following guidance based on the delivery method(s) for that course section.

General Credit Hour Calculation

One credit hour is awarded for the equivalent of 15 hours of direct faculty instruction and a minimum of 30 hours of out-of-class student work, totaling 45 hours per credit over a 15-week semester.

Guidance For Asynchronous Online Courses

Faculty must design courses to include instructional materials, learning activities, and assessments that collectively equate to the time and effort of direct faculty instruction in a face-to-face course. Student engagement through discussion boards, group projects, and other interactive activities should be incorporated to foster a learning community. Regular and substantive interaction between faculty and students must be demonstrated through various means, such as feedback on assignments, participation in online discussions, and virtual office hours.

Guidance for Synchronous Online Courses

Live sessions should account for the equivalent of face-to-face instructional time. Additional asynchronous activities and assignments should be included to ensure the total student workload meets the credit hour requirements. Recordings of synchronous sessions should be made available for students who cannot attend due to extenuating circumstances.

Guidance for Hybrid Courses

The combination of face-to-face and online components must equal the total required hours for the course credits. The division of time between online and in-person instruction should be clearly communicated in the course syllabus.

Definition of Online and Hybrid Courses

Online courses are delivered completely online either synchronously, asynchronously, or a mixture of both.

Hybrid courses have in-person, on-campus components as well as synchronous and/or asynchronous online components.

Please refer to VPAA 1-001 for further information about Online Credit Hour calculations and guidelines.

The Dean's List

A semester grade point average of 3.50 places the full-time matriculated student on the Dean's List. A minimum of 12 credits of completed courses is required during a semester in order for a student to be eligible for the Dean's List.

Because averages will be computed before the period for removal of incompletes, students requesting incompletes waive their right to be named to the Dean's List for that semester.

Majors and Minors

Major requirements are specified by the departments in the section titled **Majors.** Students have the option of completing a double major. In addition, students also have the option of completing a minor or minors. For successful completion of a minor, a grade point average of 2.0 in the minor is required.

Additional information about requirements for minors is given under the departments in the section titled **Minors.**

Registration for Courses

Registration information is announced by the Registrar's Office and dates are published in the Academic Calendar.

Information concerning registration for courses at Saint Vincent College is available via MySV so that students may plan course sequence and properly register for desired courses. Students will not receive credit for classes for which they are not properly registered. All students are expected to register for themselves. Students entering their first semester are registered by either the Registrar's Office or the Director of Graduate and Continuing Education.

Academic registration is concluded for a student when the schedule has been approved by a faculty advisor, registration has been processed via Self Service, and financial clearance is obtained through the Business Office.

Registration changes must be processed by posted deadlines. Non-attendance of a course for which a student has registered does not constitute official withdrawal. Students may not attend a course for which they have not registered.

Auditing a Course

Students may audit courses. An audit signifies that the student will not be asked to meet the course requirements such as written assignments or examinations, but that he or she has the privilege of class attendance and participation. No credits toward graduation can be earned for audited courses and no grade can be given (an "X" is assigned on the transcript). Students who have taken a course and received a grade should not register for the course again as an audit. By auditing a course that was already taken for credit (including transfer and AP credits), the credits will be lost. Tuition for an audited course is identical to the tuition for students below the age of 29. Course audit for persons over 30 years of age up to 64 years of age is one half of the regular tuition. For persons 65 years of age and older, course audit is free of charge. Registration for each reduced rate credit course is $5. The student is responsible for any fees associated with a course to cover the cost of materials.

Taking a Course Pass/Fail

The pass-fail option is available to encourage the motivated student to engage in more challenging course work without jeopardizing the overall grade point average. Students may elect *one* course each semester on a pass-fail basis. Pass-fail courses do not satisfy core curriculum, major, or minor requirements. The course will carry credit toward graduation, but it will not be used in the computation of the student's grade point average, if a P is earned. An F is computed as a failing grade in the student's GPA.

In order to earn a P, the student must earn the grade of C- or better (1.7 or 70-72). A grade of D+ or lower will be recorded as an F. Students may elect to take a course on a pass-fail basis up to the date indicated on the academic calendar. Once the student has declared the pass-fail option, a change back to the letter grade is not permitted.

Repetition of Courses

A student may repeat an undergraduate course in which a C-, 1.70 or lower has been earned if the student registers for the same course number a second time. The last grade shall replace the first in computing the grade point average even if the second grade is lower. The previous grade received is not removed from the transcript, but noted as a repeat. Only the credits earned in the repeated courses count toward graduation.

A student may repeat a graduate course in which a C+, 2.30, or lower, has been earned if the student registers for the same course number a second time. The last grade shall replace the first in computing the grade point average even if the second grade is lower. The previous grade remains on the transcript, but noted as a repeat. Only the credits earned in the repeated course count toward completion of the graduate program requirements.

Taking a Graduate Course While an Undergraduate

Undergraduate students may enroll in graduate level courses with the approval of the program director(s) and provided they are taken as electives in excess of the 124 credits required for graduation.

In the event that an undergraduate enrolls in a graduate course, the course will appear on both the undergraduate and graduate transcripts. If students choose to matriculate into a graduate program at the College, the credits from the graduate courses taken at the College previously will then be applied to their graduate program, if applicable. The grades of these classes will be included in the students' cumulative GPA for both the undergraduate and graduate programs.

Graduate courses taken as an undergraduate student are subject to the policies outlined in the Graduate Catalog, including probationary academic status and dismissal, and the approval of the program director(s).

Student Identity Verification

Upon paid commitment to enroll in the College, each student is issued a unique ID, username, and password by the Information Technology Office. Students are encouraged to change their password upon the first login. This information is required to access the campus network which includes the portal, email, and the learning management system. This process is followed for enrollment in onsite, hybrid, and online courses. There are no additional fees for student identity verification.

Saint Vincent College requires students in online courses to login through our Learning Management System (LMS) using secure credentials. The credentials are provided to students after enrollment occurs and relevant identification information has been received. At that point, students are given instructions on how to establish a secure password for their official university email address.

Personally identifiable information collected by the College may be used, at the discretion of the institution, as the basis for identity verification. A student requesting a password

reset, for example, may be asked to provide multiple examples of information for comparison with data on file.

The College, at its discretion, may modify its identity verification requirements as new technologies and approaches become available.

Please refer to VPAA 1-003 for more information about Online Student Identity Verification.

Systems of Grading

Undergraduate System of Grading

Grades are recorded by letter using a plus (+), minus (–) system; grade points are used to compute averages.

Letter Grade	Grade Points (per credit hour)	Number Grade
A	4.00	93-100
A–	3.70	90-92
B+	3.30	87-89
B	3.00	83-86
B–	2.70	80-82
C+	2.30	77-79
C	2.00	73-76
C–	1.70	70-72
D+	1.30	67-69
D	1.00	60-66
F	0.00	0-59

Grade Point Average

Records are evaluated through a grade-point average. This average is obtained by dividing the total number of credits taken into the grade points earned.

Other Grading Symbols

AP — Advanced Placement Award. Credit is given, but grade points are not.
CL — CLEP Examination. Credit is given, but grade points are not.
EX — Experiential Learning. Credit is given, but grade points are not.
G — Incomplete. An incomplete course must be completed within one month of the beginning of the following semester or the grade becomes an F. Under extenuating circumstances, the Registrar, upon the request of the instructor, may grant an extension of time up to the end of the following semester.
IP — Course In Progress. Only issued to students who are unable to complete course work in one semester due to the nature of the research, data collection, field work, or internship. Students have three semesters to complete IP work.
P — Pass. The student passed the course with at least the equivalent of a "C-" (1.70 or 70- 72) or higher. Credit is given, but grade points are not.
T — Transfer course. Credit is given for transfer work from another accredited institution, but grade points are not.
X — Audit. No credit or grade points are given for auditing a course.
W — Withdrawal. No credit given and no effect on grade point average.
WF — Withdrew Failing. No credit given, but is computed in grade point average.

Withdrawal from courses is official only if processed appropriately via the Portal or in the Registrar's office. Deadlines on withdrawals are indicated on the academic calendar. Failure to withdraw from a course officially will result in the student receiving a failing grade in the course. Refunds are based on the date the withdrawal is processed.

Undergraduate Class Standing

The number of credits a student has earned toward graduation determines class standing.

Freshmen	0-23 credits
Sophomores	24-53 credits
Juniors	54-86 credits
Seniors	87+ credits

Graduate System of Grading

Letter Grade	Grade Points (per credit hour)	Descriptive Meaning
A	4.00	Exceptional performance
A-	3.70	Excellent work
B+	3.30	Very good work
B	3.00	Good work
B-	2.70	Fair Work
C+	2.30	Below average for a graduate degree
C	2.00	Inferior work for a graduate degree
C-	1.70	Poor work for a graduate degree
F	0.00	Failure

Grade Point Average

Records are evaluated through a grade-point average. This average is obtained by dividing the total number of credits taken into the grade points earned.

Other Graduate Grading Symbols

G- Incomplete (Graduate) An incomplete course must be completed within 30 calendar days or the grade becomes an F. An extension of time may be granted by the Registrar after consultation with the instructor.

P - Acceptable work for courses graded on the pass-fail basis.

W - Withdrawal

Undergraduate Transfer of Credit

Prior to taking a course at another accredited institution, a student must work with their faculty advisor to complete a Transfer Course Approval and submit it to the Registrar's Office for final approval.

Courses taken at other accredited institutions in which a grade of C- or better, a 1.70 grade point average, or a 70 number grade or above will be accepted by Saint Vincent College toward a student's graduation.

Students may only transfer in one (1) course per Core SLO at Tier I. Courses transferred for Tier II must be an equivalent of an approved SVC course.

Once matriculated, students may transfer credit for no more than a total of five (5) courses.

In order for the transfer work to be documented on a student's record, an official transcript must be sent to the Registrar's Office as soon as possible upon completion of the course. Courses will be documented with the grade of "T," which will not count toward the student's GPA.

For registration purposes for currently enrolled students, transfer credits must be received by March 15 to be included in credits completed for the following Summer/Fall registration; transfer credits must be received by October 15 to be included in credits completed for the following Winter/Spring registration.

Academic Processes & Guidelines

Absences From Classes

Absence from Class and Make-Up Exams

Attendance is expected in all courses. Absences are strongly discouraged because they are detrimental to the successful completion of a course. Absences, as well as make-up exams, are handled at the discretion of the individual faculty member. Instructors may choose to consider attendance in assigning grades. For the attendance policy and penalties for absence or lateness in a particular course, consult the instructor and course syllabus.

Excused Absences for participation in Intercollegiate Sports and Other College Activities

The College officially sponsors the following intercollegiate sports: cross country, swimming, football, volleyball, track, lacrosse, baseball, golf, basketball, soccer, softball, tennis, and bowling. Before deciding to participate in a sport which necessitates absence from class, the student should carefully weigh the consequences of absences—even though officially excused— upon academic performance. Absences from class for participation in events in these sports will be considered excused absences provided proper procedures are followed. Although an excused absence will not be counted by the professor as a class missed, it does not relieve the student from the responsibility of learning course material. An excused absence simply means that the absence will not be counted by the professor as a missed class cut. Furthermore, any absence prevents a student from participating fully in the "process" of a course.

If a student determines that participation in athletics seriously interferes with academic performance, the student would be well advised not to participate. When planning registration, athletes should consult game schedules so that no more than four class sessions will be missed for intercollegiate competition. The student should rely heavily on the judgment of the professor and faculty advisor in cases where athletic participation appears to be jeopardizing academic progress. If a student's grade point average falls below the required minimum as stated in the Academic Warning System section, the student is prevented by College policy from participating in intercollegiate sports.

As soon as a student is placed on the official roster, the student will inform each professor regarding participation in an intercollegiate sport, and will provide a schedule of games which may conflict with the class schedule. The student will make provisions for make-up exams and the like in advance of the examination date so that the student is not penalized for the excused absence.

For each absence, the student will present an official excuse signed by the coach for the particular game which necessitates the absence. The policy and procedures outlined are for official intercollegiate sports.

Excused Absences for Commuter Students Due to Inclement Weather

Commuter students should exercise good judgment about driving to campus for classes during inclement weather. If a student determines that travel conditions are hazardous, they should remain at home. However, the student must notify the instructor in advance of the scheduled class meeting.

Academic Integrity and Student Concerns

Saint Vincent College recognizes that it is not uncommon in an academic environment for misunderstandings or disagreements to occur between students and faculty in conjunction with classes, projects, or other academic activities. Saint Vincent College provides processes for students and faculty to follow in such disagreements. Such processes are outlined in the Saint Vincent College Bulletin/Catalog. This policy on documentation does not alter those processes – it is intended to provide guidance on how complaints are to be documented, which will ensure consistency across Saint Vincent's schools.

Required Approach:

When a complaint arises, students are required to discuss the matter with the involved faculty member in virtually all cases. Exceptions are noted in the College Bulletin. While we encourage faculty to document in writing any resolutions achieved with students, there is no need to provide specific documentation to department, school, or college levels in these instances.

Documentation is required when a complaint properly reaches a Department Chair or higher-level administrator. Based on the notion of subsidiarity, complaints should be discussed from lower levels to higher levels (i.e., department chairs to deans to VPAA), with preference given to resolutions at lower levels.

Complaints shall be documented in a spreadsheet shared between the Department Chair and the School Dean. The spreadsheet template includes columns to record the following information:

- Date complaint was received
- Individual documenting complaint and role
- Semester/ Term relevant to complaint
- Individual raising complaint
- Subject area/Course/Instructor Faculty Involved
- Description of Complaint (please specify)
- Indicate how you handled the complaint and any decision/resolution

If a complaint is not resolved by the Department Chair or Dean, information in the spreadsheet will be shared with the VPAA. The VPAA has final authority regarding the resolution of complaints.

Please refer to VPAA 1-002 for more information

Academic Honesty

Saint Vincent College assumes that all students come for a serious purpose and expects them to be responsible individuals who demand of themselves high standards of honesty and personal conduct. Therefore, it is college policy to have as few rules and regulations as are consistent with efficient administration and general welfare.

Fundamental to the principle of independent learning and professional growth is the requirement of honesty and integrity in the performance of academic assignments, both in the classroom and outside, and in the conduct of personal life. Accordingly, Saint Vincent College holds its students to the highest standards of intellectual integrity and thus the attempt of any student to present as his or her own work which he or she has not performed or to pass any examinations by improper means is regarded by the faculty as a most serious offense. In any case of academic dishonesty, the faculty member together with the Assistant Vice President for Academic Affairs, who confers with the student, decide on the appropriate sanction. Depending on the seriousness of the offense, possible sanctions are failure for the assignment, failure for the course, suspension, or expulsion. If a student receives the sanction of a failure for the course during the withdrawal period and drops the course, a WF will be recorded on the transcript.

In the event of academic dishonesty involving a student in the graduate program for nurse anesthesia, the professor of the involved class will confer with the Excela Health School of Anesthesia program director. Appropriate disciplinary action will be taken based on the seriousness of the occurrence. Actions taken are not limited to, but may include failure for the assignment, failure for the course, suspension, or expulsion

Grade Appeals

The instructor has jurisdiction in determining grades; however, the student has the right to appeal a final grade that the student believes to be in error. The appeal process may involve the following:

1. The student confers with the instructor involved.
2. The student and instructor (preferably together) confer with the chairperson of the department.
3. The student and instructor (preferably together) confer with the Dean of the School to which the department is attached.
4. In rare cases, when the foregoing steps do not resolve the issue, the student may initiate a formal written appeal to the Vice President for Academic Affairs.

Normally, the Vice President for Academic Affairs will forward such appeal to the appropriate committee for its review and recommendation. A formal appeal should not be entered upon lightly by a student, nor lightly dismissed by an instructor. A formal written grade appeal may be made no later than the fourth week of the following semester.

Program Adjustments and Additions

A Program Adjustment form must be filed with the Registrar's Office by a faculty advisor and/or Department Chairperson in order to add, change, or remove a major, minor, or certificate program (including major concentrations).

Students pursuing majors that include concentrations should declare the concentration as soon as one has been identified. If a student changes a major/minor, including changing from an undeclared major, a C-, 1.70 or lower received in previous courses and not required by the new major/minor will not be used in the computation of the GPA if the student so requests. Undeclared students must demonstrate that a course was taken when considering a major. This information must be verified in writing by the Director of Undeclared Students. The student must request the change in computation on a form available from the Registrar while currently enrolled, not post-graduation. Credit for these courses cannot be claimed in the future including for graduation.

Although these grades are not computed in the grade point average, they remain on the transcript.

Records Policy and Directory Information

The College makes available a statement informing students and parents of their rights under the "Family Educational Rights and Privacy Act of 1974" (the Buckley Amendment). The purpose of this act is to establish procedures which govern access to and release of student records kept by the College. Questions about the access to and release of student records should be directed to the Registrar and/or the Office of Student Affairs. Copies of the Buckley Amendment together with the College statement are made available in the offices of the Registrar and the Office of Student Affairs. Students have the right to file a complaint with the Department of Health, Education, and Welfare concerning failure of the College to comply with the Act.

Academic transcripts, grade reports, and other correspondence concerned with the student's status at Saint Vincent are sent directly to the students. Therefore, the parts of the ***Catalog*** and/or the *Student Handbook* entitle "Academic Warning System," "Academic Dismissal," and "Corrective Action" should be carefully noted by the students as well as parents and other persons financially responsible for the education of students. Students and other interested parties outlined in the Act as entitled to access to the students' records will be requested by the College to follow ordinary request procedures established by the offices involved. Access to or release of student records under circumstances other than those provided for in the Act will not be permitted by the College without a signed waiver of the student.

Because academic transcripts, grade reports, and other correspondence concerning a student's status are forwarded directly to the student, it is strongly advised that parents or others financially responsible for the education of the student

anticipate this arrangement by working out a satisfactory agreement between themselves and the student relative to records and correspondence from Saint Vincent College.

A student's record maintained in the Registrar's Office will be kept intact for five (5) years after the student graduates, withdraws, or is dismissed. At the end of the five years, the files will be purged with the exception of the academic transcript.

According to the Family Educational Rights and Privacy Act, a student has the right to refuse disclosure of personally identifiable information. That includes name; address (local, home, and e-mail); telephone number (local and home); place and date of birth; dates of attendance; major field of study and class level; degrees, honors, and awards; previous institutions attended; past and present participation in officially recognized activities and sports; and height and weight of athletic team members. To withhold disclosure of such information, written notification must be received in the Registrar's Office. Students can update this information anytime.

Requesting an Incomplete Grade

Students may request an incomplete grade by contacting the faculty member for the course in question in writing. The faculty member has the discretion to decide whether an Incomplete ("G") grade is warranted.

Generally, students should have at least 50% of the coursework completed and be passing the course at the time of the request.

Faculty approving an incomplete should forward the student's written request to the Registrar's Office, at which point a "G" grade will be entered.

Work to complete the course must be submitted no later than one month into the following Fall or Spring semester.

Satisfactory Progress, Warnings, and Dismissals

Undergraduate Policies

Academic Progress and Warning

The College demands of every student an academic average of 2.0 at each semester grading period. If a student fails to attain this 2.0 average, or a cumulative average of 2.0, the Academic Status Committee issues a letter of academic probation with a copy to the student's advisor and departmental chairperson. A freshman or sophomore student (first through fourth semester) who has not achieved at least a cumulative GPA of 1.75 or higher may not participate in formal extracurricular activities. Junior and senior students (fifth through eighth semesters) must achieve at least a cumulative GPA of 2.0 or higher to participate in formal extracurricular activities. Any transfer student who has junior status or above (by credits) at the end of their first semester at Saint Vincent College must follow the same guidelines as the third- and fourth-year student. Examples of formal extracurricular activities include the student newspaper, intercollegiate sports, student government, and drama.

Academic Dismissal

The Academic Status Committee meets after each semester to review the status of students who have not achieved a grade point average of 2.0 or above. A student may be dismissed by the Academic Status Committee for failing to attain a cumulative average of 2.0 by the end of the fourth semester. In addition, a student may be dismissed before the fourth semester if extraordinary academic circumstances warrant dismissal. Among the criteria which the committee uses to evaluate a student's progress are the following: number of credits earned, progress within the major and the core curriculum, and evaluations of faculty members contained in progress reports. Special circumstances affecting the performance of an individual student are also considered. If the student is not making satisfactory progress, he or she is dismissed. An academically dismissed student may be readmitted to the College if he or she does acceptable remedial work. Typically, a student is required to complete two semesters of work at another institution and earn a grade point average of 2.50. Once readmitted, the student must maintain the required cumulative average at each grading period. A second dismissal is final.

Standards of Satisfactory Academic Progress for Financial Aid

To be eligible for financial aid, a student must meet specific minimal academic standards. See "Standards of Satisfactory Academic Progress for Financial Aid" in the Financial Aid section of this ***Catalog***.

Graduate Policies

Probation

Students will be placed on probation whenever their cumulative grade point average falls below a 3.00, when the student fails a course, or when the student has accumulated six credit hours of coursework with C grades or lower (including + or – grades). When students fall below the minimum standards for satisfactory academic progress, they will be placed on probation. If they fail to achieve satisfactory standards for academic progress by the following semester, they will be considered for academic dismissal. There will be six probation checkpoints during the academic school year to notify the student if they fell below the standard. If a student falls below the standard, they will receive notice from the

Academic Affairs office. Students who are on probation are encouraged to work closely with their faculty advisor. Probation Checkpoints (Dismissal consideration noted by*):

- July
- August*
- October
- December*
- March
- May*

Dismissal

Dismissal will be considered if students have been on probation for longer than two graduate sessions with no progress, or if there is no pathway toward successful completion of the graduate program. A committee of all graduate program directors will review students for dismissal when identified by Vice President for Enrollment Student Success. There will be three dismissal checkpoints during the academic school year for dismissal consideration for any student that is not progressing while on probation. If a student is at risk of being academically dismissed, they will receive notice from the Academic Affairs office. A student may be dismissed for academic honesty violations whether on probation or not. *Any student in the graduate programs of nurse anesthesia will be dismissed from the program when he/she has accumulated greater than six credit hours of C grades +/-, or failure of a course. Graduate students in the nurse anesthesia programs may also be dismissed for clinical reasons.*

Appeal of Dismissal

A student who is dismissed has a right to appeal. The appeal shall be filed with the Vice President for Enrollment and Student Success. The College's Graduate Study Committee reviews all appeals of dismissals and may recommend readmission to the Vice President for Enrollment and Student Success. *Appeal of dismissal in the graduate programs for nurse anesthetists will follow the policies of the Excela Health School of Anesthesia.*

Continuing Activity

Students are expected to be continuously active in their graduate program and must complete all course requirements within five (5) years of his or her first graduate course at Saint Vincent College. To remain continuously active, a student must be registered for at least one course within a 12-month period. Otherwise, he/she will be dropped from the program.

Inactivity/Withdrawal

If a student is not registered for courses by the add/drop date of each graduate session, the registrar's office will provide a report of enrolled students who are not registered and send it to the program directors. Program directors will contact students noting that they will be moved to inactive status if they do not respond within one week and outlining the re-enrollment policy. Graduate students who are moved to inactive status have up to one calendar year to re-enroll with the program before they must be considered for full re-admission. Students who wish to withdraw should contact the Assistant Vice President for Academic Affairs.

Transcript Requests

Unofficial Transcripts

Only currently enrolled students may receive a copy of their unofficial transcript. Current students can download a copy of their unofficial transcript directly from the online Self Service feature accessible from the MySV portal or they may make a request in person and present a validated identification card. No fee is involved.

In compliance with "The Family Educational Rights and Privacy Act of 1974" (FERPA), officials of Saint Vincent College who have a legitimate educational interest in a student may have unofficial copies of a student's transcript for their use only; parents, or those who can prove financial responsibility for a student, may receive an unofficial copy for their use only; no one else may receive or view a student's transcript without a written waiver from that student.

Official Transcripts

Saint Vincent College has partnered with Parchment to provide and electronic transcript request and fulfillment process. This online process, available 24/7, offers advanced security features and improved efficiency that includes access to real-time, end-to-end tracking.

To order a transcript, go to www.stvincent.edu and click on the Menu at the top left of the page. Select "Current Students" from the resulting drop-down menu. Scroll down to "Order a Transcript" under tools. This link will connect to Parchment's transcript ordering service where you will submit your request and payment and receive tracking information. Transcript orders to electronic destinations are $5 and requests fulfilled by physical, mailed copies are $7.50. Additional fees for expedited requests may apply.

Saint Vincent College and Seminary will withhold portions of an official transcript only in cases where the student's balance exceeds $10,000. The withheld portion of an official transcript will correspond to the term(s) in which the balance was accrued.

Withdrawal from the College

Students who withdraw from the College are required to contact the Student Academic Success Office and complete an official withdrawal form and exit survey. This is especially important if the withdrawal is during the period when the student is entitled to a refund.

Refunds are based on the date the withdrawal is processed. Students must wait one year before reapplying for admission. Upon withdrawal from the College, grades for any incomplete coursework will be changed to an "F" (failure). Students wishing to return to SVC should refer to the section on "Readmission" for details on that process.

Graduation Information

Graduation Requirements

- Complete a minimum of 124 credits;
- Satisfy the requirements of the core curriculum;
- Fulfill the requirements for the major(s) as specified by the department(s);
- Achieve an overall grade point average of 2.0 as well as a grade point average of 2.0 in the major at Saint Vincent College;
- Satisfy the capstone requirement as specified by the major department(s); and
- Obtain financial clearance from the Business Office.

Graduation Applications

Students who plan to graduate must file an application for graduation during their senior year. Students can apply for graduation online from the Self-Service portal accessible from MySV. Relevant application deadlines are posted in MySV under Registration & Records.

Upon receipt of the completed application, the Registrar will register the graduating student in an exit interview course (zero credits, pass/fail).

Students who have special permission to take a course away from Saint Vincent during their final semester must make sure that the Office of the Registrar receives a final, official transcript from the other institution or a grade from the instructor by noon the Thursday before the graduation date.

Students in the Mathematics/Engineering Program must have an official transcript reflecting the successful completion of credits from the cooperative school sent to the Office of the Registrar before the graduation date. These students will need to transfer back enough engineering coursework from the cooperative institution to Saint Vincent College in order to reach the minimum 124 credits to graduate.

Commencement Participation

To participate in Commencement (graduation) ceremonies, students must be in good academic standing, must have fulfilled all financial obligations, and must have completed degree requirements listed above or be within six credits of the overall number of credits required for graduation given their major degree program. Only those who have fulfilled all degree requirements and have no financial obligations to the College will receive a diploma.

Latin Graduation Honors (Undergraduates Only)

To graduate with honors (cum laude) a student must have a cumulative grade point average of 3.50 to 3.69; with high honors (magna cum laude), 3.70 to 3.89; with highest honors (summa cum laude), 3.90 to 4.00.

Special Programs

Army and Air Force Reserve Officer Training Corps (ROTC)

Saint Vincent College students may participate in a military officer training program in either the U.S. Army (through the University of Pittsburgh-Greensburg) or the U.S. Air Force (through the University of Pittsburgh-Main Campus). Transportation is provided to the University of Pittsburgh-Greensburg for the Army program but is not for the Air Force program at the University of Pittsburgh-Main Campus. All credits of the Professional Officers Course or Advanced Military Science may be applied as electives at Saint Vincent, but no credit is granted for general military courses. Interested students should contact the ARMY ROTC representative at ccb24@pitt.edu or the Air Force ROTC representative at 412-624-6396.

Campus Writing Program

Through the Campus Writing Program, trained faculty members provide students with concerted writing instruction in writing across the curriculum and writing within disciplinary programs. In these Writing-Designated (WD) courses, students practically apply both the cross-curricular principles for producing good writing as well as discipline-specific conventions for the specific course. Thus, students learn how to write like professionals in their fields while adhering to Saint Vincent College's Six Principles of Good Writing that span all rhetorical situations. WD courses may combine a measure of informal and formal writing, asking students to write to learn and write to communicate. In a typical WD course, students may respond to reading assignments, integrate ideas and information from various sources, complete sequenced assignments, and revise papers based on peer reviews or instructor feedback. Students are required to take Core 1500, and CORE-3401, which are all writing designated. Students are strongly encouraged to take more WD courses in the core and their programs of study because WD courses sharpen students' thinking and writing in the sciences, social sciences, business fields, as well as in the humanities. All students are encouraged to use the Writing Center for resources and schedule sessions with trained writing consultants.

Certificate Programs

The College offers undergraduate certificate programs in Addiction Specialist Training, Benedictine Leadership Studies, Biotechnology, Entrepreneurial Success, Global Engagement, Hospitality, Legal Practice, Non-Profit Studies, Operational Excellence, Organizational Leadership, Project Management, Reading Specialist, SAP University Alliance, Science Foundations for Health Professions, and Supply Chain.

These programs meet the needs of people whose career situation would benefit from a structured training program in the area of certification.

For successful completion of a certificate, a grade point average of 2.0 is required for the undergraduate certificate. Specific course requirements are found under the particular department concerned. For further information, contact the Office of Admission and Financial Aid.

Cross-Registration via Seton Hill University

In order to present wider opportunities to the students of Saint Vincent College and Seton Hill University, an academic cross registration program exists between the two institutions

during the fall and spring terms. Library facilities at both institutions are available to all students and members of faculties at both colleges. This program has been designed to give the students of each institution every opportunity to advance academically, at moderate costs, within the common perspectives of these two Catholic institutions. Grades earned for cross-registered courses are included in the calculation of the GPA. For information, please contact the Registrar's Office.

Duquesne University and Saint Vincent College Cooperative Program

Duquesne University and Saint Vincent College offer a cooperative program in Pharmacy. This collaboration allows individuals to pursue an undergraduate liberal arts education in preparation for graduate studies in a professional field. Additional information is available in the Catalog in the Allied Health Professions section.

The Fred Rogers Institute

Planned under Fred's guidance and established in 2003 at Saint Vincent College in his hometown of Latrobe, Pennsylvania, the Fred Rogers Institute advances the legacy of Fred Rogers by investing in the strengths of families and caring adults to support the healthy development of children. Fred Rogers famously encouraged children to look to the helpers. During his time on television as a beloved neighbor, and in his public service, he showcased the importance of those helpers — the adults who serve children with their lives and careers. Fred envisioned a place where aspiring and current educators, medical professionals, business owners, researchers, and more, could "think of the children first" in their pursuits. He found a home for his Archive and this vision at Saint Vincent College in his childhood hometown of Latrobe. Since 2003, our work has grown and deepened in the small town Fred called home, in the western Pennsylvania region, and across the United States and world. At the Fred Rogers Institute, our core values drive what we do. We value human relationships as the foundation of learning and growing; a sense of belonging for every child and grown-up; the essential role that families and caring adults play in the lives of children; and the importance of childhood, where children are cherished for who they are here and now. Guided by these core values, the Fred Rogers Institute is home to internationally-recognized initiatives and research fellowships that encourage and empower adults in their support of the healthy development of children.

Fred Rogers Scholars

The Fred Rogers Scholars Program is a merit based scholarship program that gives Saint Vincent College students opportunities to connect their particular area of interest to the work of Fred Rogers and consider how to carry his principles and approach forward. Fred Rogers Scholars have opportunities to engage with researchers, professionals, and leaders within child and youth development, children's media, music, children's health, and more. Undergraduate students from across all majors have an opportunity to work with Fred Rogers Institute faculty and staff to engage with materials from the Archive to extend Fred Rogers' approach to supporting children, families, and their helpers. The goal of the program is that courses of study and future career plans. Students are encouraged to connect their particular area of interest with the work of Fred Rogers in efforts to develop specialized knowledge in how Fred's legacy integrates with their areas of study. Applications for the Fred Rogers Scholars Program open each spring semester for students across Saint Vincent College who maintain a GPA of 3.5 or higher.

Independent Study

A student who wishes to pursue a special project in an area not sufficiently covered by the regular courses may request a faculty member to direct and supervise independent work. If accepted by the faculty member for independent study, the student should register for an independent study course in the department. Credits are determined by the faculty member and the school dean. The Independent Study Program is restricted to juniors and seniors. A course required for the major, a minor, or the College core curriculum may not be taken as an independent study.

Internships

Internships taken through Saint Vincent College are subject to approval by departmental faculty and the Career and Professional Development Center, with the registration being processed by the Registrar's Office. Students planning to complete an internship, whether as a required part of their program or as an additional enhancement to their graduation requirements, will need to complete paperwork for their internship and submit it prior to the deadline of the semester in which the internship began. Paperwork must be approved by the appropriate Faculty and the Career and Professional Development Center before it will be added to the students' registration for that semester. Failure to complete the paperwork by the stipulated deadlines in the Academic Calendar will result in the internship being unable to be added to the student's registration. Internships will only be recorded in the semester in which they begin. If an internship extends beyond the end of that semester, the student will receive an in-progress (IP) grade until the experience is completed and faculty have reviewed the student's performance in order to assign a final grade. Internships can be taken for 0 credits or, if desired, for academic credit. Students registering for an internship during the summer term will either need to complete it for 0 credits or pay per-credit for the number of credits requested. If an internship is required for a program, a 0 credit option must be available for students to complete the requirement in any term or a for-credit option must be factored into the student's academic plan so that the internship does not place them into a credit overload.

Pre-College Program

High school students may take courses in the regular college curriculum with approval of their high school guidance counselor and the Coordinator of Graduate and Continuing Education. A list of appropriate courses will be decided upon by the coordinator and the student's guidance counselor. Students must complete a Pre-College Application along with a letter signed by their high school guidance counselor to be eligible. Pre-College students will receive half-price tuition.

Service Learning and Community Outreach

Saint Vincent College students have the opportunity to enroll in a diversity of courses that integrate service into the curriculum. Through academic course work and service opportunities, faculty and students build partnerships with community organizations committed to serving the marginalized. Faculty challenge students to reflect, write, and discuss their experiences, using course content to enhance student understanding of how the service experience expands classroom learning. Service Learning courses provide students with transformative experiences that create a foundation of compassion, reflection, and problem-solving for future opportunities.

Study Abroad

The mission of the SVC Office of International Education is to provide students of all majors and backgrounds with access to high-quality, affordable study abroad programs. Students can take classes in their major, earn credit toward the Core, complete an internship, engage in service projects or study a foreign language. Program length varies from one-two weeks, summer session, full semester, to academic year. From initial advising and program matching through predeparture orientation and return to campus, the SVC Office of International Education is committed to communicating openly and sharing resources that help students make informed decisions about their international education experience.

Students seeking short-term, for-credit study abroad opportunities can choose from one to two-week programs offered each academic year. Such programs allow for structured discipline-specific group travel led by a Saint Vincent College faculty member. The travel portion of most faculty led programs occurs over spring and summer breaks. Cost varies; financial assistance is available for some programs.

Students wishing to study abroad for a full semester or a four-week or more summer program choose between exchange universities and approved third-party organizations. All financial aid is transferrable for exchange programs. While institutional aid does not transfer to third-party study abroad programs, all federal, state, and noninstitutional aid may be applied. Students are encouraged to apply for scholarship funding through the SVC Endowment for Study Abroad for four-week or more education abroad programs. Students may be eligible to apply for additional funding, as well. Students participating in four-week or more study abroad programs are required to enroll in a pre-departure orientation course the semester prior to travel. While abroad, students maintain access to online advising tools and resources.

Student Services and Activities

This section of the ***Catalog*** describes student services and activities.

Academic Honor Societies

The College sponsors chapters of national or international academic honor societies to recognize students' academic excellence. Membership in an academic honor society stimulates professional growth and provides practical and leadership experience to enhance one's academic pursuits. Currently the College sponsors two general academic honor societies: Alpha Lambda Delta recognizes excellence among students in their first year of study in higher education; Alpha Chi recognizes academic excellence among college juniors and seniors. In addition there are honor societies in the following disciplines: Anthropology (Lambda Alpha); Biology (Beta Beta Beta); Physics (Sigma Pi Sigma); Economics (Omicron Delta Epsilon); Political Science (Pi Sigma Alpha); History (Phi Alpha Theta); Psychology (Psi Chi); Education (Kappa Delta Pi); Business (Delta Mu Delta); English (Sigma Tau Delta); Communication (Lambda Pi Eta); International Foreign Language (Phi Sigma Iota); Theology (Theta Alpha Kappa); Computing and Information Systems (Alpha Iota Mu); Mathematics (Pi Mu Epsilon); Criminology (Alpha Phi Sigma); Chemistry (Gamma Sigma Epsilon).

Advising

The College, recognizing the value of the faculty-student relationship, considers the academic advising of students to be an important element of education. Each student is assigned a faculty advisor by name. Students must meet with their faculty advisor on a regular basis.

Athletics

Physical activity is an essential aspect of a well-rounded college education. Saint Vincent College has intercollegiate teams in baseball, men's and women's basketball, women's bowling, men's and women's cross country, football, men's and women's golf, men's and women's lacrosse, men's and women's soccer, softball, men's and women's swimming, men's and women's tennis, men's and women's indoor track, men's and women's outdoor track, and women's volleyball. The college is a member of the National Collegiate Athletic Association and follows the rules of NCAA.

The intramural program provides a wide variety of sports to meet the needs, demands, and interests of Saint Vincent College students. An invitation is extended to all students, faculty, and staff to take part in the program. Leagues and/or tournaments are operated in basketball, flag football, volleyball, softball, deck hockey, and tennis. Some popular non-traditional sports are also offered such as Ultimate Frisbee, kick ball, and dodge ball. Aerobics is a very popular part of the intramural program. Saint Vincent College is a member of the National Intramural-Recreational Sports Association (NIRSA) and has participated in regional flag football championships.

Facilities on campus are available for those interested in weight lifting, basketball, swimming, and physical conditioning. A soccer field, lacrosse field, tennis courts, baseball field, softball field, football field, and basketball court are utilized by the students for outdoor sports.

Career and Professional Development Center

The Career and Professional Development Center is here throughout the student's entire four-year experience offering assistance with résumé and cover letter writing, career planning, job searching, internship programs, graduate school preparation, and interviewing techniques. A Career Consultant will also assist in the career exploration process by administering instruments that can help students use the information to focus on a major or career. In addition to meeting one-on-one with a consultant, students are encouraged to attend Career and Professional Development Center events which offer advice on various career topics presented by the consultants, Saint Vincent College alumni and local employers. We offer opportunities to network with alumni and employers through on-campus events as well as off-campus job fairs. We also encourage students to use Handshake which promotes hundreds of positions including campus jobs, internships, and full-time opportunities. The Career and Professional Development Center also provides students with several resources on all career-related topics which can be found on our website or portal pages.

Clubs and Organizations

The College affords the opportunity for students to participate in a variety of extracurricular activities. More than 60 clubs and organizations are available encompassing students' broad curricular and co-curricular interests. In addition to clubs affiliated with many academic majors, the Student Affairs Department supports clubs that complement a variety of student interests. A sampling of these clubs covers interests such as politics, service, theatre, health and fitness, and the outdoors. The College recognizes the diverse, changing interests of the students and provides support and assistance to students who choose to develop a club not currently organized on campus. Information about clubs and organizations may be obtained from the Office of Campus Life.

Disability Support Services

Students with physical, learning, or psychological disabilities who submit the appropriate documentation to the Assistant Dean of Studies may be eligible to receive reasonable academic accommodations. Disability support services within the office of Academic Affairs works closely with each student to assess individual needs and implement the appropriate accommodations. Qualified students with disabilities have an equal opportunity to fully participate in all aspects of the educational environment at Saint Vincent College. Confidentiality of student records is strictly maintained. Reasonable academic accommodations do not alter course requirements. The Notification of Approved Academic Accommodations indicates the effective date of all approved accommodations and is not retroactive. Grievances against academic accommodations and disability support

services should be made in writing within four weeks of the incident and submitted to the Director of Assessment and Institutional Research. Saint Vincent College acts in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

Residence Life

Housing on campus is available in six residence halls for approximately 1,283 students. All students must sign the Residence Hall Contract that is binding for one academic year. First-year students under the age of 21 and living more than 50 miles from Saint Vincent College must reside on campus.

Saint Benedict Hall serves as the center for the first-year student population. Upper class students are housed in double-occupancy rooms in Bonaventure and Gerard Halls, single- and double-occupancy rooms in Wimmer Hall, apartments and two-room suites housing four persons in Rooney Hall, and two-room suites housing two persons in Aurelius Hall. Housing in most residence halls is single sex by floor. Students may be consolidated if they are living alone in a double-occupancy room and do not wish to purchase the room as a single.

A student taking fewer than 12 credit hours per semester, a registered student not attending classes, or a non-matriculated student may not reside on campus. Exceptions to the residence rule may be made by the Director of Residence Life. Fifth-year, continuing education, and part-time students are housed based on availability once all other students are housed. Additional information and housing policies are contained in the Student Handbook.

Within each residence hall, each floor, neighborhood, or living area is led by at least one student para-professional (Prefect). Prefects are selected on the basis of maturity, leadership qualities, and the ability to create community. The Prefect works to maintain community within the residence hall as well as plans, promotes, and fosters programs of interest to the residents. Each residence hall is supervised by a Residence Hall Director (RHD) and Assistant Residence Hall Director(s) (ARHD). These staff members are post Baccalaureate adults who have experience in student life issues and student life management. The Residence Hall Director sets the tone for the residential building and is the chief operations officer of that area.

The Director of Residence Life is responsible for the overall operations and development of the residence halls and oversees the housing assignment process.

Student Academic Success

The Student Academic Success Office provides academic coaching, helps students identify personal goals, and encourages them to achieve their highest potential. In addition, the Student Academic Success Office is available to assist students with academic strategies, time management and test-taking. A student may contact the Student Academic Support Office to meet with an Academic Coach.

ND 178 Principles of Academic Success

Principles of Academic Success is designed to assist students in developing the academic skills necessary for success in college. Topics will include note taking, test preparation, and time management. The instructor, occasional guest lecturers and other support service personnel on campus, will present information to the students. One credit.

Tutoring

Tutoring is provided by the academic departments. Information about tutoring availability may be obtained from the departmental chairperson, Schoology, the SVC portal, and/or the Tutorial Bulletin.

Student Accident and Sickness Insurance

Saint Vincent College Health Insurance Policy Saint Vincent College prioritizes the health and welfare of its students. While attending the College, medical situations such as hospitalization, surgery, or specialty care may arise, and Saint Vincent wants to ensure its students are adequately prepared. Saint Vincent College sponsors a Student Health Insurance Plan (SHIP) that offers full-time undergraduate students and international students access to a full comprehensive, ACA compliant plan. The SHIP is term health insurance available for purchase annually. All full-time undergraduate students living on campus must have health insurance coverage that meets SVC's Criteria. The SHIP is available for those students who do not have current insurance coverage that meets the Waiver Criteria. These students must enroll in the SHIP unless proof can be furnished that comparable insurance is carried by the student while they are attending Saint Vincent College. All international students are automatically enrolled in the SHIP. No exceptions will be made for travel policies or other waivers.

The College requires international students to have insurance coverage that includes repatriation and medical evacuation. Within the first week of the fall semester, all international students must demonstrate that such coverage exists. If the student does not have insurance coverage or if the terms of the coverage do not include repatriation and medical evacuation, then the student must enroll in an insurance plan that covers such contingencies. Students may contact the Office of Global and Community Engagement for more information.

Also, all athletes are required to have health insurance prior to participating in any athletic event.

Student Associations

Student clubs and committees on campus are coordinated through the Office of Campus Life, the Club Advisor, and the Student Government Association. Leadership ability and energy are made evident in the daily operation of these organizations' array of activities. These activities range from the academic to the social, encompassing hobbies, athletics, politics, and society at large, as well as the Saint Vincent College community. Membership in College organizations is available to all Saint Vincent College students.

Student Employment Opportunities

Saint Vincent College offers part-time, seasonal, and career-related employment on-campus making every effort to provide opportunities which are both educationally valuable and financially rewarding. Wages are paid directly to the student on a monthly basis. To learn more about the student employment program, please visit the Career and Professional Development Center.

Writing Center

The Saint Vincent College Writing Center is an interdisciplinary resource that seeks to provide students the opportunity to become more confident, independent, and capable writers. The writing consultants, a diverse group of students who have been trained to facilitate 1:1 tutorials, group sessions, and workshops, will guide and support students of all writing abilities through each stage of the writing process, from formulating ideas, to applying the Six Principles of Good Writing, to developing voice and proofreading. Rooted in the Benedictine Hallmarks, the Writing Center provides a welcoming, nonjudgmental, and constructive environment in which students improve their writing habits and skills. By celebrating individuality, equality, and collaboration, the Writer Center is committed to each unique individual and the Saint Vincent community overall.

The Writing Center is located on the ground floor of Latimer Family Library, room 106, and is open Monday-Thursday for in-person writing consultation. Walk-ins are welcome, but appointments can be made through the Writing Center's portal page. The Writing Center is also available to graduate students.

Wellness Center: Health and Counseling Services

The Wellness Center, located on the first floor of the Carey Student Center, is a resource for both health and counseling issues. Counseling service helps students get the most out of their college experience by providing support in dealing with the choices and challenges that are part of college life. Individual counseling, mental health screening programs, and educational workshops are available to all students. All counseling services are free and confidential.

Saint Vincent operates a well-equipped outpatient healthcare facility staffed by two registered nurse, under the supervision of two family practice physicians. The physicians offer on-campus visits twice a week. Over the counter and in-stock prescription medications are provided to the student at no additional charge.

The Wellness Center sponsors and promotes many wellness events that are both educational and fun. The Wellness Center espouses a holistic philosophy and attitude which fosters the importance of balance in the college experience. Office hours are available from 8:30 a.m. – 4:30 p.m., Monday through Friday.

MAJORS & PROGRAMS

Major | Minor | Certificate | Graduate Program | Professional/Career Preparation | Joint Program*

* Cooperative agreements with programs at respected colleges and universities

ADMISSION CRITERIA

When we review your application, our foremost consideration is your academic potential. We'll look also at your extracurricular achievement — as well as information that will help us evaluate your character and motivation.

Some things we take into account:

- Level and number of academic courses
- Grade point average
- Class ranking (if available)
- Standardized test scores: SAT, ACT, or CLT
- Personal essay and/or letters of recommendation

APPLICATION CHECKLIST

When you apply for admission to Saint Vincent, please include the items listed below. Test-optional admission is available, and you may be asked to submit one or more items in place of test scores.

- ☐ Your completed application form (www.stvincent.edu/admission or www.commonapp.org)
- ☐ Your official high school transcripts
- ☐ If not on your high school transcript, official score report for the SAT (code: 2808), the ACT (code: 3686) or CLT
- ☐ Transcripts from all colleges you've attended (transfer applicants only)
  - If you have college credit as a high school student, you will be asked to submit college transcripts prior to enrollment

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ALEX G. MCKENNA SCHOOL OF BUSINESS, ECONOMICS AND GOVERNMENT

- Accounting
- Aviation Management - Advanced Piloting
- Aviation Management - Professional Pilot
- Business Administration
- Business Data Analytics
- Business Economics
- Criminology, Law and Society
- Economics
- Economics and Mathematics
- Entrepreneurial Success
- Entrepreneurship
- Finance
  - Behavioral
  - Computational
  - Corporate
  - Investment Management
- Finance and Mathematics
- Forensic Studies
  - Cyber Security
  - Financial Investigations
  - Natural Science
- Global Security
- Hospitality
- International Business
- Legal Practice
- Legal Studies
- Management
- Management: Operational Excellence
- Marketing
- Non-Profit Studies
- Organizational Leadership
- Political Science
- Pre-Law
- Project Management
- Public Administration
- Public Policy
- SAP
- Sports Management
- Supply Chain

HERBERT W. BOYER SCHOOL OF NATURAL SCIENCES, MATHEMATICS AND COMPUTING

- Accelerated Osteopathic Medicine
- Accelerated Podiatric Medicine
- Biochemistry
- Biology
  - Cell and Molecular
  - Organisimal
  - Population
- Biotechnology
- Chemical and Biological Analysis
- Chemistry
- Computer Science
- Cybersecurity
- Data Analytics
- Data Science
- Dental Medicine
- Engineering
  - Engineering - Chemical
  - Engineering - Environmental
  - Engineering - Materials
  - Engineering - Mechanical
- Environmental Chemistry
- Environmental Science
- Exercise Science
- Health Science
  - Pharmacy (2+4)
- Information Systems
- Mathematics
- Mathematics/Actuarial Science
- Mathematics/Engineering
- Nursing BSN
- Nurse of Anesthesia Practice DNAP
- Nursing—Direct Entry MSN
- Physical Therapy
- Physician Assistant
- Physics
- Pre-Med
- Science Foundations for Health Professionals
- Sustainablity and Intergral Ecology

SCHOOL OF ARTS, HUMANITIES AND SOCIAL SCIENCES

- Addiction Specialist
- Anthropology
- Art History
- Benedictine Leadership Studies
- Biological Psychology
- Children's Literature
- Children's Studies
- Classical Thought
- Communication and Media Studies
  - Public Relations
  - Sports Communication
- Creative Writing
- Digital Art and Media
- Education
  - Counselor Education
  - Curriculum & Instruction
  - Early Childhood: PreK-4
  - Middle Grades 4-8
    - Language Arts
    - Mathematics
    - Science
    - Social Studies
  - K-12 Certification
    - Art
    - Spanish
    - Health and Physical Education
  - Disability Studies
  - Secondary Grades 7-12 Certification
    - Biology
    - Chemistry
    - Educational Leadership
    - English
    - Mathematics
    - Physics
    - Reading Specialist PreK-12
    - Social Studies
- English
  - English-Literature
  - Literary Translation
  - Publishing
- Global Engagement
- History
- International Studies
- Liberal Arts (Interdisciplinary Program)
- Literary Translation
- Medieval Studies
- Music Studies
- Music Performance
- Peace and Justice Studies
- Philosophy
- Psychology
- Psychology - Mental Health
- Psychology - Education
- Public Health
- Public History
- Sanctity of Life
- Sociology
- Spanish
- Studio Art
- Theology
- Undecided

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11813-12M-8/2024

Department Structure

The Alex G. McKenna School of Business, Economics, and Government was established in July 2001 and is organized into the following departments: Management and Administration; Marketing, Analytics, and Global Commerce; Finance and Accounting; Economics; Political Science; and Criminology, Law, and Society. The following are some of the majors in the McKenna School: Accounting, Business Administration, Business Data Analytics, Economics, Economics and Mathematics, Business Economics, Business Education, Criminology Law and Society, Finance, Finance and Mathematics, International Business, Management, Marketing, Sports Management, Political Science, and Public Policy. Finance tracks are available in behavioral, corporate, computational, and investment management. The McKenna School also houses graduate programs in Management: Operational Excellence and Criminology.

The *School of Arts, Humanities, and Social Sciences* was established in July 2018. The School includes the departments of Communication, Education, English, Visual and Digital Art + Media Design, Music and Performing Arts, History, Liberal Arts, Modern and Classical Languages, Philosophy, Psychological Sciences, Sociology, and Theology. The Verostko Center for the Arts, McCarl Coverlet Gallery, Marching Band, Saint Vincent Singers, and the College's Stage and Theatre programs are also part of the School; the Saint Vincent College Drug and Alcohol Prevention Projects and Bearcat B.E.S.T. are associated with the School.

Formed in 2004, the *Herbert W. Boyer School of Natural Sciences, Mathematics, and Computing* houses the departments of Biology, Chemistry, Computing and Information Systems, Engineering, Interdisciplinary Science, Mathematics, and Physics. In addition to the majors of these departments, the School offers majors in Biochemistry, Health Sciences, and Environmental Science and Nursing.

Teacher certification may be obtained in Biology, Chemistry, Science Education, Mathematics, and Physics. Cooperative programs with other institutions of higher education enable students to pursue degrees in specific engineering discipline, occupational therapy, pharmacy, physical therapy, and physician assistant.

The SVC Core Curriculum

The Saint Vincent College mission statement proclaims that our aim is to educate "men and women to enable them to integrate their professional aims with the broader purposes of human life." It recognizes the necessity of worldly employment for our students but refuses to concede that such employment or its financial rewards constitute the broader purposes of human life.

To fulfill the mission, the College has designed a core curriculum that emphasizes its Catholic, Benedictine, and liberal arts foundation. The core also allows students to build on that foundation through upper level electives. All of this is integrated through two seminars: The Listening Seminar, which students take their first semester at SVC, and the Capstone Seminar, which students take closer to graduation.

CORE Student Learning Outcomes

The core curriculum is organized by six Student Learning Outcomes (SLO).

1. **Theological Foundations:** Students will critically articulate the theological foundations of the Catholic Benedictine tradition.
2. **History, Culture, and Politics:** Students will demonstrate an informed understanding of their historical, cultural, and political location within a global context.
3. **Investigating and Reasoning:** Students will practice methods appropriate to the arts and sciences to question, investigate, and reason.
4. **Integrated Perspective:** Students will develop an integrated perspective on liberal education and its relationship to their disciplinary concentration.
5. **Effective and Charitable Expression:** Students will express themselves effectively and charitably as artists, speakers, and writers.
6. **Ethics and Service:** Students will rationally defend ethical commitments for the service of self, neighbors, and creation.

Core Curriculum Tiers

The core is built upon three tiers. The first tier consists of introductory courses in several liberal arts disciplines. This is meant to provide students with the foundation of our Catholic, Benedictine, liberal education. The second tier allows students to explore with greater depth elements of that education by choosing electives across five categories. The third tier is represented by a single class, the Capstone Seminar, which allows students the chance to integrate the Core with their major area of study. The basic structure is as follows:

Tier One – Introduction

- CORE 1400 Listening Seminar
- CORE 1500 Core Writing
- TH 231 Biblical Foundations or TH 240 Basics of Catholic Faith
- PL 214 Love, Dignity, and Justice or PL 215 Ethics
- PS 100 Introduction to American Government
- Approved History Course
- Approved Literature Course
- Approved Language Course (Elementary II and higher)
- Approved Social Science Course
- Approved Natural Science Course and Lab
- Approved Mathematics Course

Tier Two – Exploration

- 1 Theological Foundations Course
- 1 History, Culture, Politics Course
- 1 Investigating and Reason Course
- 1 Effective and Charitable Expression Course
- 1 Ethics and Service Course

Tier Three – Integration

- CORE-3401: Capstone Seminar

Total Typical Credits for the Core Curriculum: 52 credits / 17 classes

The Honors Program

In concert with the mission of the College and the goals of the core curriculum, the Honors Program at Saint Vincent College strives to bring together accomplished students who share a commitment to excellence and a love of learning and to provide these students with academic challenges and enriching experiences that nurture and enhance rigorous intellectual development.

The Honors Experience

Faculty of the Honors Program design special courses exclusively available to students in the Honors Program. By design, Honors courses challenge and reward students who seek engaging academic work and substantial intellectual development. Students in an Honors course tend to play a more active role in the learning process through, for example, discussions, presentations, and projects. The quality of assignments, not the quantity, distinguishes an Honors course.

The Honors seminar, the culminating experience in the Honors curriculum, challenges students to integrate the various disciplines they have studied to address a particular issue or theme.

In addition to the Honors curriculum, the Honors Program sponsors on-campus colloquia, forums for discussion of current cultural or political events, opportunities for service, and enriching off-campus excursions. Honors students play an important role in the Saint Vincent Student Research Conference and are strongly encouraged to present their scholarly or creative work at regional and national professional conferences.

The Honors Curriculum Disciplinary Seminars

Students seeking to graduate as Honors Scholars must complete the requirements listed below. Students may remain in the program if their GPA remains above 3.0 and they continue to participate in Honors classes and at least one major Honors Program event per year.

Students who enter the program as sophomores or juniors would still need to complete the full 15 credits of the Honors Curriculum.

Honors Program Student Learning Outcomes

- Students will articular an understanding of community in a variety of contexts, including the intellectual.
- Students will convey the story of their own intellectual awakenings.
- Student will explain a means of putting their own intellectual paths in service to community.

Honors Program Curriculum

Each student will complete seven courses (15 credits):

HP-100 1 credit	Honors Gateway Seminar (taken in the first year of study)
HP-3** 3 credits	Honors Disciplinary Seminar 1 (may be taken any time after HP-100)
HP-3** 3 credits	Honors Disciplinary Seminar 2 (may be taken any time after HP-100)
HP-3** 3 credits	Honors Disciplinary Seminar 3 (may be taken any time after HP-100)
HP-3** 3 credits	Honors Disciplinary Seminar 4 (may be taken any time after HP-100)
HP-400 3 credits	Honors Capstone Seminar (taken after the three disciplinary seminar)

TOTAL: 16 credits

Honors Gateway Seminar Course Learning Objectives

- The Honors Gateway Seminar will ask students to engage texts that address the ways that humans have understood and tried to create and live in communities. They will generate texts (essays, videos, etc.) in which they convey their understanding of community.
- The Honors Gateway Seminar students will analyze and present their understanding of their own intellectual journeys.
- The Honors Gateway Seminar students will communicate their understanding of how they have or might serve their communities with their own intellectual development.

Honors Program Course Descriptions

HP-100 Honors Gateway Seminar

Honors Gateway Seminar serves as the entry point for the honors program and is required of all Honors Program students who began their studies at Saint Vincent College in the fall 2021 semester or later. It will orient students to the Honors Program, introduce them to the Honors Program student learning outcomes, initiate them into the Honors Program community, and provide an interdisciplinary experience that helps students to see the broad scope of liberal arts studies at Saint Vincent College. One credit.

HP-3** Honors Disciplinary Seminar 1, 2, And 3

These seminars are based in a discipline and can be used to satisfy major, minor, or other requirements as well as the honors program. Three credits each.

HP-400 Honors Capstone Seminar

This is the capstone course of the flagship honors experience at Saint Vincent College, namely, The Saint Vincent College Honors Scholars Program. The capstone seminar sits at the apex of the Honors Program seminar sequence. The goal of the capstone seminar is to acknowledge the work that the honors student has done in their undergraduate career through topical readings and the writing of a 15-page capstone essay, while also preparing the honors student for a lifetime of study and inquiry into the life of the mind and the human condition.

This course is designed to be comparable to a graduate school liberal arts seminar. The onus for the work and reading and hosting of the class is placed upon the honors seniors. The instructor will choose appropriate readings and experiences that will serve as a foundation for the capstone essay. Lastly, this course seeks to refine the honor's students' intellectual skills through reading, writing, and discussion. The culmination of the seminar will be an original essay of at least 15 pages composed by each honors student. This course is mandatory for completion of the honors program and may be taken in the spring of the junior or senior year of study. Three credits.

Formal Recognition of Honors

Students who successfully complete the Honors Curriculum receive recognition at graduation and a special designation on the transcript as a College Scholar of the Honors Program. The Honors Program Committee will review the records of the Honors Program students based on published criteria of grades and participation in Honors events.

Application Process

Entry to the program will be based on the student's academic work and evidence of the student's motivation to pursue challenging course work. Students who are not accepted to the program may reapply at a later date using additional materials.

Entering First-Year Students

Entering first-year students are invited to apply to the Honors Program as an extension of their Application for Admission to the College by submitting the application materials listed below. The Honors Program Admission Committee will also review the high school transcript and the ACT or SAT scores that are part of the general application to the College.

Students Currently Enrolled at Saint Vincent College

Students currently at Saint Vincent are invited to apply to the program by submitting the application materials listed below. The Honors Program committee will obtain student transcripts for each applicant from the Registrar.

Honors Program Application Materials (Required Of All Applicants)

Student name must appear on each item.

- Two letters of recommendation.
- A short essay (maximum 600 words) that explains why the student would like to be part of the Honors Program. The essay should focus on personal experience with and interest in:
  – exploring and discussing original works and commentary.
  – sharing a commitment to a vigorous intellectual life by investing a significant effort in research, writing, and other forms of creative expression.
  – integrating cultural events and independent scholarly work.
- A sample of original, individual work, which represents a student's knowledge, ability, and creativity. This should be an academic essay that demonstrates the student's writing ability. Projects that primarily string together quoted sources and do not include substantial portions of original writing by the applicant are not appropriate. Work created as part of a collaborative project is also not appropriate.

Deadline For Submission

Incoming First-Year Students:
March 1 or until the program is filled.

Students Currently Enrolled at SVC:
Students currently enrolled at Saint Vincent College are invited to apply to the Honors Program anytime during the year. However, students must submit their application three weeks prior to registration if they wish to enroll in Honors courses the following semester.

MAJORS

Allied Health Professions

The Allied Health professions refers to undergraduate preparation for study in physician assistant, pharmacy, physical therapy, occupational therapy, and many others. Students interested in these areas can major in Health Science or they can also choose to major in one of the traditional science majors such as biology, biochemistry or chemistry. Students then apply to the professional school of their choice.

Admission to professional schools is highly competitive and the Allied Health Committee, composed of faculty from within and outside the natural sciences, works closely with individual students to determine where abilities and interests should be directed. The Committee aids students in course selection, guides them toward extracurricular experiences necessary to be competitive, and provides opportunities for students to learn about admissions, schools, and careers.

Cooperative Programs in the Health Professions with Chatham University

Through a cooperative agreement between Saint Vincent College and Chatham University, students have the opportunity to complete four years of study at Saint Vincent College, and then transfer to Chatham University to complete a degree in Physical Therapy or Physician Assistant. Both programs require students to maintain a 3.5 GPA and to take the General Graduate Record Exam (GRE) and to have the scores sent to Chatham University. Students applying to the Physician Assistant Program must submit a completed application through the Centralized Application Service for Physician Assistant (CASPA) by Oct. 1 of their senior year. All PA candidates will have an on-campus interview. Students applying to the Physical Therapy Program must provide evidence of volunteer hours in a physical therapy facility and three letters of reference (at least one letter must be from a physical therapist and one from an academic). In addition, students must submit a completed application through Physical Therapy Centralized Application Services (PTCAS) by Oct. 1 of their senior year. All PT candidates will have an on campus interview, and must submit a writing sample. Course requirements for both programs are given below.

Pre-Requisites for Admission to: Master of Physician Assistant Studies (MPAS) at Chatham University

Required Courses

General Biology I and II with Lab	8
General Chemistry I and II with Lab	8
Anatomy and Physiology with Labs	8
Microbiology with Lab	4
Introduction to Psychological Science	3
Medical Terminology	1

Recommended Courses

Molecular Genetics with Lab	4
Biostatistics	3
Lifespan Development Psychology	3

Pre-Physical Therapy Curriculum for Direct Entry into the Doctor of Physical Therapy (DPT) Studies at Chatham University

Required Courses

General Biology I and II with Lab 8
General Chemistry I and II with Lab 8
Anatomy and Physiology with Labs 8
College Physics I and II with Lab 8
Introduction to Psychological Science 3
Biostatistics 3
Lifespan Development Psychology 3

Cooperative Programs in the Health Professions with Duquesne University

Through a cooperative agreement between Saint Vincent College and Duquesne University, students have the opportunity to complete two to three years of study at Saint Vincent College, and then transfer to Duquesne University to complete a degree in Pharmacy. This unique program allows students to begin their college education in the friendly educational community of Saint Vincent College which is known for its small class sizes and individualized attention. It is here that a student will gain a strong background in the sciences coupled with a liberal arts foundation that features the strong Catholic, Benedictine values of our institution. Many of our students hone their athletic and leadership skills by participating in collegiate athletics, intramural sports, student government, clubs, and services activities. At Duquesne University, a student will complete his/her formal education in the urban setting of Pittsburgh that is known for its world-class health care. Upon completing this course of study, students are prepared to enter the dynamic health care industry with an education that is firmly grounded in Catholic ideals. These programs of study are both rigorous and rewarding, allowing students to enter the health professions with a world-class education.

Eligibility

Students seeking admission to the Duquesne-SVC cooperative program in Pharmacy must maintain at least a 3.0 cumulative GPA and a 3.0 or higher in their science courses at Saint Vincent College. Duquesne will accept college credits from two-year schools for nonscience courses, but all science courses must be taken at a four-year college or university.

Application

The Duquesne-SVC cooperative programs are competitive and have limited seats available. As such, maintaining the required academic GPA does not guarantee that a student is selected for one of the available seats — admission to Duquesne is not guaranteed. Students submit an application the fall semester before transferring to Duquesne. Students interested in the Pharmacy program should see the Pharmacy program advisor for additional information regarding the application process to that program.

NOTE: Duquesne University reserves the right to make modifications to admission requirements while this ***Catalog*** is still in publication. For the current admission requirements

please contact your advisor. The program advisors will inform current students of any changes and work with them to modify their course of study. In order to receive a recommendation from the committee, students should clearly demonstrate that they are able to be enrolled full time in course work that includes multiple science and math courses and maintain a grade point average as specified for the specific programs. Students should enroll in a minimum of 16-18 credit hours each semester.

While credits from other institutions may be transferred to Saint Vincent College, once a student is matriculated, taking additional courses off campus is discouraged. Taking science courses at Saint Vincent during summer school is discouraged. A third option available to students interested in these professions is to complete a four-year degree at Saint Vincent and study the health-related profession of their choice in graduate school. Each year Saint Vincent has a number of students who initially enroll in these cooperative programs elect to stay at Saint Vincent and complete a Bachelor's Degree in a course of study such as Biology, Biochemistry, or Health Sciences. After completion of their degree from Saint Vincent, the students are eligible to transfer to any of the regional universities and complete a course of study in a health-related field which includes Pharmacy, Physician Assistant, Physical Therapy, and Occupational Therapy.

Pharmacy

The cooperative program between Saint Vincent College and Duquesne University School of Pharmacy is a six-year doctorate program leading to the Doctor of Pharmacy (Pharm.D.) degree. To practice pharmacy, students must pass a state licensure examination. Duquesne University requires that all students who wish to transfer into their program complete the PCAT exam and interview as part of the application process. All students who apply to Duquesne's Pharmacy school will be required to submit scores for the Pharmacy College Admission Test (PCAT). An interview will also be required for admission.

Biology

The biology program, housed in the Biological Sciences Department, lays a foundation for graduate study in biology, and for training in the professions and technologies based upon the biological sciences. It is the philosophy of the department that as undergraduates, students should be broadly trained, should be knowledgeable in an area of specialization, should understand the process by which scientists ask and pursue the answers to questions, and should be acquainted with ethical principles and issues as they relate to the field of biology.

Both the B.A. and B.S. degrees are awarded in biology. Bachelor of Science students must complete 36 credits in biology while Bachelor of Arts students must complete 33 credits. Students begin with General Biology (BL 150-153) where cellular, organismal, and population biology are introduced. Subsequently, they select one of these three sub-disciplines as an area of concentration. During the following semesters, they complete Cell Biology, one advanced course with lab in each of the three areas of concentration, and an additional advanced course with lab in their chosen concentration. Additionally, during the last semester of the junior year and through the senior year, students plan and complete a capstone experience called the senior research project under the supervision of individual faculty. To begin the capstone experience, students are required to have completed two upper-level Biology courses and be in good academic standing within the program (at least a 2.0 GPA in the major and no more than one lecture course below a C-).

Students are also required to complete one year of General Chemistry, one year of Organic Chemistry, and one year of College Physics. B.S. students must complete up through Calculus II while students electing the B.A. degree only need to complete through Calculus I. It is strongly recommended that all students complete one semester of Statistics before their senior year. Further, since questions of an ethical and moral nature often arise in biology and related fields, students are encouraged to include a bioethics course.

General Biology is a prerequisite for all advanced courses and, with the exception of General Biology, only courses above BL 200 may be applied toward the total biology credits required.

In individual circumstances and with permission of the chairperson, a course may be substituted for one of the required courses listed under the cellular, organismal, and population concentrations. Students should work closely with their advisors and are cautioned to give careful and serious consideration to the selection of courses because requirements and recommended courses may differ among professional and graduate schools.

Biology Student Learning Outcomes:

Upon completion from the Saint Vincent College Biology program, graduates will be able:

1. to learn and apply biological concepts from the perspective of cellular and molecular biology, organismal biology, and population biology;
2. to recall and integrate concepts within our three subdisciplines: cellular/molecular, organismal, and population biology;
3. to read and critically interpret scientific literature in a biological context;
4. to effectively communicate biological information both orally and in writing;
5. to develop scientific lab skills and field techniques; and
6. to collect, analyze, and interpret scientific data in a biological context.

Teacher Certification

For Teacher Certification in Biology (7-12) the candidate must satisfy the following:

NSCI 150	Earth Systems Science	3
NSCI 151	Earth Systems Science Lab	1

See Education Department guidelines to plan the core classes and other courses required for certification. See page **275** for the recommended semester program plan. *

Requirements for a Bachelor of Arts Degree in Biology

(See core curriculum requirements.)

Major Requirements (61 credits):

BL 150, 152	General Biology I and II	6
BL 151, 153	General Biology Laboratory I and II	2
BL 208	Cell Biology	3
BL 209	Cell Biology Laboratory	1
BL 301	Junior Research Seminar	2
BL 302	Research Project	2
BL 303	Research Thesis	1
CH 101, 102	General Chemistry I and II	6
CH 103, 104	General Chemistry Lab I and II	2
CH 221, 222	Organic Chemistry I and II	6
CH 223, 224	Organic Chemistry Lab I and II	2
PH 109, 110	College Physics I and II	6
PH 113, 114	General Physics Lab I and II	2
MA 109 or 111	Calculus with Applications I	4*

**MA-102 and MA-103 can be taken in place of MA-109*

Fulfill the requirements for one area of concentration:

Cell and Molecular Biology Concentration:

BL 212	Microbiology	3
BL 213	Microbiology Laboratory	1
or		
BL 216	Biotechnology	3
BL 217	Biotechnology Laboratory	1
or		
BL 222	Developmental Biology	3
BL 223	Developmental Biology Laboratory	1
and		
BL 214	Molecular Genetics	3
BL 215	Molecular Genetics Laboratory	1
One course with laboratory from each of the organismal and population biology areas.		8

See page **269** for typical eight semester degree plan. *

Organismal Biology Concentration:

BL 220	Comparative Vertebrate Anatomy	3
BL 221	Comparative Vertebrate Anatomy Laboratory	1
or		
BL 226	Neuroscience	3
BL 227	Neuroscience Laboratory	1
or		
BL 228	Wildlife Biology	3
BL 229	Wildlife Biology Laboratory	1
and		
BL 224	Physiology	3
BL 225	Physiology Laboratory	1

One course with laboratory from each of the cellular and population areas.		8

See page **271** for typical eight semester degree plan. *

Population Biology Concentration:

BL 232	Ecology	3
BL 233	Ecology Laboratory	1
or		
BL 252	Invertebrate Zoology	3
BL 253	Invertebrate Zoology Laboratory	1
or		
BL 240	Conservation Biology	3
BL 241	Conservation Biology Laboratory 1	
and		
BL 234	Evolution and Systematics	3
BL 235	Evolution and Systematics Laboratory	1
One course with laboratory from each of the cellular and organismal areas.		8

See page **273** for typical eight semester degree plan. *

Strongly Recommended:

BL 260	Biostatistics	3
or		
PY 203	Statistics I	3
and		
TH 280	Catholic Bioethics	3
or		
PL 218	Bioethics	3

Requirements for a Bachelor of Science Degree in Biology

(See core curriculum requirements.)

Major Requirements (68 credits):

BL 150, 152	General Biology I and II	6
BL 151, 153	General Biology Lab I and II	2
BL 208	Cell Biology	3
BL 209	Cell Biology Laboratory	1
BL 301	Junior Research Seminar	2
BL 302	Research Project	2
BL 303	Research Thesis	1
CH 101, 102	General Chemistry I and II	6
CH 103, 104	General Chemistry Lab I and II	2
CH 221, 222	Organic Chemistry I and II	6
CH 223, 224	Organic Chemistry Lab I and II	2
PH 109, 110	College Physics I and II	6
PH 113, 114	General Physics Lab I and II	2
MA 109*, 110	Calculus with Applications I and II	8
**MA-102 and MA-103 can be taken in place of MA-109*		
Elective Course in Biology		3
(Any three-credit, 200-level biology course, CH 251, CH 252, CH-276, ES-220, or ES-245 qualify as an elective course in biology)		

Fulfill the requirements for one area of concentration:

Cell and Molecular Biology Concentration:

BL 212	Microbiology	3
BL 213	Microbiology Laboratory	1
or		
BL 216	Biotechnology	3
BL 217	Biotechnology Laboratory	1
or		
BL 222	Developmental Biology	3
BL 223	Developmental Biology Laboratory	1
and		
BL 214	Molecular Genetics	3
BL 215	Molecular Genetics Laboratory	1
One course with laboratory from each of the organismal and population areas.		8

See page **270** for typical eight semester degree plan. *

Organismal Biology Concentration:

BL 220	Comparative Vertebrate Anatomy	3
BL 221	Comparative Vertebrate Anatomy Laboratory	1
or		
BL 226	Neuroscience	3
BL 227	Neuroscience Laboratory	1
or		
BL 228	Wildlife Biology	3
BL 229	Wildlife Biology Laboratory	1
and		
BL 224	Physiology	3
BL 225	Physiology Laboratory	1
One course with laboratory from each of the cellular and population areas.		8

See page **272** for typical eight semester degree plan. *

Population Biology Concentration:

BL 232	Ecology	3
BL 233	Ecology Laboratory	1
or		
BL 252	Invertebrate Zoology	3
BL 253	Invertebrate Zoology Laboratory	1
or		
BL 240	Conservation Biology	3
BL 241	Conservation Biology Laboratory	1
and		
BL 234	Evolution and Systematics	3
BL 235	Evolution and Systematics Laboratory	1
One course with laboratory from each of the cellular and organismal areas.		8

See page **274** for typical eight semester degree plan. *

Strongly Recommended:

BL 260	Biostatistics	3
or		
PY 203	Statistics I	3
and		
TH 280	Catholic Bioethics	3
or		
PL 218	Bioethics	3

Minors are listed in alphabetical order beginning on page **104**. For information on **Biology**, **Exercise Science**, and **Sustainability and Integral Ecology** minors, please refer to that section.

Business Administration

The McKenna School has seven undergraduate programs and one graduate program accredited by the Accreditation Council for Business Schools and Programs (ACBSP): Accounting, Business Economics, Finance, International Business, Management, and Marketing. The graduate program is a master's degree in Management: Operational Excellence. Business Administration, Business Data Analytics, and Sports Management majors are in candidacy for accreditation with ACBSP. The Economics, Criminology, and Politics programs are not accredited through the ACBSP; however, all programs in the McKenna School have regional accreditation through the Middle States Association. The ACBSP is one of the top two premier accrediting agencies for business schools worldwide. With a requirement for faculty professional development (e.g., publications and research) and courses primarily taught by faculty holding doctorates, ACBSP is the leading business accreditation program devoted to teaching excellence and service to students. The McKenna School has seven certificates available to both current students at the college and continuing education non-degree seeking learnings that would like additional credentials. Certificate programs include: entrepreneurial success, hospitality, nonprofit studies, organizational leadership, project management, SAP university alliance and supply chain.

The Business program of the McKenna School of Business, Economics, and Government is designed to provide a thorough academic and professional education in the study of business principles, practices, and systems. The McKenna School's business curriculum combines theoretical, quantitative, technical, and case studies and simulations in order to understand business life and activity within a dynamic market economy. The program delineates the nature and functions of the firm and private enterprise and the relationship of business to society as a whole. It seeks to help students learn to apply analytical skills and sound judgment to managerial operations and to solve business problems. Accordingly, the curriculum integrates the scientific method with the functional areas of business, providing students with the methodological tools to describe, predict, and explain the varied phenomena surrounding business problems.

The Business program combined with the College's liberal arts curriculum helps students integrate professional goals with an educational foundation for life-long learning and the pursuit of a responsible and rewarding way of life. To further facilitate the development of the written communication skills needed in business settings, there is a writing component requirement in many of the business courses. To improve reasoning, judgment, and decision making under uncertainty, students are exposed to data analytic methods and statistical software. Development of teamwork and oral
presentation skills are also part of the curriculum.

The McKenna School encourages internships and other work experiences, which may be sought through the College's Career and Professional Development Center. The capstone experience for all business majors is achieved through the Business Policy and Strategy course. Basic civic knowledge, as well as economics, is part of the mission of the McKenna School: all business majors must take The American Regime. In these ways and by working closely with its students, the goal of the business major is to help prepare students for successful professional careers or graduate studies in business and related fields.

The McKenna School offers the Bachelor of Science degrees in areas including the following: Accounting, Business Administration, Business Data Analytics, Business Economics, Finance, International Business Management, Marketing, Sports Management. Dual majoring in business is possible, but you must complete a minimum of 21 non- overlapping credits from the first business major.

Accounting: 150-Credit Four-Year Plan

For those students interested in pursuing professional certification as a CPA, the classes and sequence must be carefully chosen. By working closely with the academic advisor (i.e., an accounting professor), the student will optimize the preparation for the CPA exam at graduation and work to meet the 150-credit CPA licensure requirement during his/her four years at Saint Vincent College. Saint Vincent has been a leader in presenting an option for students to meet the 150-credit requirement, an option recognized in hiring by public accounting firms.

Transfer Credit

The College reserves absolute discretion with regard to the transferability of work done at other institutions, and in unusual individual circumstances, waiving an academic requirement. When, in its discretion, and due to the individual circumstances involved, the College elects to make an exception in an individual case, such a waiver shall not be considered to establish a precedent applicable to any other individual. No transfer credit is awarded for any Business course at the 300 level or above unless the credit is from an accredited four-year degree-granting institution. Transfer credits for BA 200 Intermediate Accounting I and BA 201 Intermediate Accounting II require a challenge exam.

In addition to any College-wide policy that allows for course transfers (such as for the College Core), the McKenna School has the following additional policies for any business degree (i.e. BA degrees offered by the Management and Administration; Finance and Accounting; and Marketing, Analytics, and Global Commerce departments or degrees requiring taking the Business Core).

Students transferring into Saint Vincent from another university can transfer up to 38 applicable business (BA or EC) credits in total.

Committed degree-seeking Saint Vincent students can transfer up to 19 applicable credits of non-major Business Core courses. All major-specific courses must be taken at Saint Vincent except under special circumstances at the discretion of the chair of the student's major with the McKenna dean's approval.
For all students except under special circumstances at the discretion of the chair of the student's major with the McKenna dean's approval:

- Students seeking to transfer BA100 Financial Accounting I or BA320 Corporate Finance must pass a proficiency exam.
- Saint Vincent does not accept transfer credits for BA102 Financial Accounting II or BA351/A Business Statistics II/Lab.
- Students cannot transfer in both EC101 Principles of Microeconomics and EC102 Principles of Macroeconomics.
- BA495 Business Policy and Strategy must be taken at Saint Vincent.
- All courses counting toward a business certificate must be taken at Saint Vincent.

For all students except under special circumstances at the discretion of the chair of the student's minor with the McKenna dean's approval, at least two courses counting toward a business minor must be taken at Saint Vincent.

The BAXXX Professional and Career Development Component may be waived by petitioning the dean if the student has significant professional work experience.

Student Guide to Internship Procedures and Requirements

All students are encouraged to take advantage of the opportunity to undertake an internship. The purpose of an internship is to allow the student to gain hands-on experience in practical settings. This provides for the application of classroom knowledge and assists students in making career-related decisions.

It is understood that the student is in a professional setting and should adhere to the highest standards of professional and ethical conduct. This includes, but is not limited to, seeking and following the direction of the site supervisor, as well as the theoretical expectations of the professor. Students will be required to complete the Student Internship Code of Conduct document that provides them with the necessary instructions in upholding the mission of the college, while performing internship functions.

A vital part of the internship experience includes finding a position. The student is encouraged and expected to find a suitable internship site based on expressed interests, the availability and willingness of the site to supervise a student, and stated career goals. Personnel from the Career and Professional Development Center can assist students in all aspects of their internship search. The student's academic advisor, other McKenna School faculty, and the Dean are available for letters of recommendation and helpful suggestions, but securing the internship is the student's responsibility.

Scheduling an Internship

Students should start thinking about internships during sophomore or junior year, or at least one full semester prior to beginning the internship. Students should consider the types of internships available, when and where the internship might be, etc. This allows time to explore options, prepare a résumé, plan to arrange class or work schedules, etc.

Credit Hours

Each student should meet with his/her academic advisor before setting up an internship to determine the number of credits required in the program of study. The number of work hours required per credit may vary depending upon the nature of the work. However, as a general rule, 135 hours of work for a period of 15 weeks earns three (3) credits. There is a four-credit maximum per internship. Students are limited to 12 credits of internship. Credits are based on the evaluation of the learning experience associated with the internship by the supervising McKenna professor.

Credit/Grade

A student should register for credit if he/she would like to have the internship appear on his/her transcript. In all cases, the student will receive credit for the internship, but never a grade. McKenna School policy is that internships are graded on a pass-fail basis —in no case are letter grades (i.e., A, B, …) to be given for internships. To receive credit, the student must communicate all details of the internship with his/her advisor for approval before beginning the internship.

McKenna School Internship Deadlines

All paperwork is coordinated and filed through the Career and Professional Development Center. Internships are recorded on the academic transcript only in the term in which they begin. For Summer Semester internships, all paperwork must be filed by July 15 with the faculty advisor and dean signing off. For fall semester internships, all paperwork must be filed by Sept. 30 with the faculty advisor and dean signing off. For spring semester internships, all paperwork must be filed by Feb. 15 with the faculty advisor and dean signing off.

Academic Requirements for Internships

These are the general academic suggestions for internships for credit, but the specifics are to be determined by the academic advisor:

- a short synthesis paper evaluating the experience in light of the goals and objectives established on the Student/Faculty Agreement form completed as part of the application process
- a more in-depth paper or PowerPoint presentation, including evaluating the experience with relevant course work

Completed materials must be submitted a minimum of two weeks prior to the end of the term in which a student is registered for credit to assure the credits will be granted. For summer internships, it is strongly recommended that the student turn in his/her materials soon after completing the internship while the experience is fresh in his/her mind.

Synthesis Paper

The synthesis paper serves as the final statement of the internship experience and consists of two sections:

Description of the placement: The first section details the particulars of the placement site. It tells about the agency, business, or site, what the functions of the organization are, who the clients or customers are, how the facility is staffed, and other related questions. Also use this section to describe how a student chose this particular organization and the position, department, or function that the student did during the internship.

Summary reflection: The second section of the paper is the most important and should be emphasized during the writing process. The purpose of this section is to describe what was learned and the effect of the experience on current studies and future plans. This section should also be used to evaluate the goals and objectives from the original student/faculty agreement form. Did the internship experience provide the student with insights about his/ her major and incorporate relevant course work?

Double Majors

Students pursuing a double major within the McKenna school must fulfill all academic requirements for both majors as outlined in their official program evaluation. To ensure academic breadth and depth, a minimum of six unique courses must be completed in each major that are not counted toward the other major.

Exceptions to this requirement may be granted only with a waiver from the Department Chair and approval by the Dean.

Business Student Learning Outcomes

Business Core Student Learning Outcomes

1. Students will have significant knowledge in the 12 core areas of: 1) Accounting; 2) Economics; 3) Finance; 4) Management; 5) Marketing; 6) Management Information Systems; 7) International Business; 8) Legal Environment of Business; 9) Statistics; 10) Quantitative Skills; 11) Strategic Management; and 12) Business Ethics.

Accounting Student Learning Outcomes:

1. Students will interpret financial statements in making business decisions with organizations.
2. Students will pass the CPA exam
3. Students will create financial statements according to GAAP
4. Students will demonstrate critical thinking skills allowing them to ethically address complex real-world challenges and opportunities.

Aviation Management Student Learning Outcomes:

1. Students will demonstrate knowledge of the functional areas of business including Accounting, Finance, Marketing, Management, and International Business.
2. Students will demonstrate knowledge of aeronautical theory.
3. Students will demonstrate a proficiency in piloting commercial aircraft.

Business Administration Student Learning Outcomes

1. Students will create comprehensive strategic plans for organizations utilizing all the functional areas of business.
2. Students will demonstrate advanced knowledge of the function of areas of Accounting, Finance, Marketing, Management, and International Business.
3. Students will demonstrate ethical decision-making by reflecting on their own- and third-party situations where commercial factors are relevant.
4. Students will demonstrate an ability to work effectively with others in a team setting and demonstrate group leadership.

Business Data Analytics Student Learning Outcomes

1. Students will prepare and manage business data for analysis.
2. Students will use descriptive, predictive, and prescriptive analytics to inform data-driven managerial decisions.
3. Students will clearly interpret and communicate analysis results to both colleagues and clients.
4. Students will work effectively in teams utilizing project-management skills to complete business projects.
5. Students will explain the key ethical questions related to business data analytics applying professional ethical systems and Catholic Benedictine values.

Business Economics Student Learning Outcomes

1. Apply rigorous analysis to economic issues and problems through the use of market-oriented theoretical models, quantitative techniques, and economic reasoning;
2. Deliver a deliver a presentation with an in-depth analysis on an economic topic;
3. Correctly will utilize statistical and econometric techniques to test theoretic models.
4. Complete an original economics research project.

Finance Student Learning Outcomes

1. Students will analyze financial models underscored by a thorough understanding of the "why" and "how" questions in finance.
2. Students will derive equations using the theoretical roots of finance and influential works of finance academics, thinkers and practitioners.
3. Students will demonstrate critical thinking skills allowing them to ethically address complex real-world challenges and opportunities.

International Business Student Learning Outcomes

1. Students will analyze complex real-world international business problems.
2. Students will analyze and apply international business transactions utilized by multinational firms
3. Students will demonstrate critical thinking skills allowing them to ethically address complex real-world challenges and opportunities.

Management Student Learning Outcomes

1. Students will create comprehensive strategic plans for organizations.
2. Students will demonstrate an ability to work effectively with others in a team setting.
3. Students will demonstrate advanced knowledge in the management areas of Organizational Behavior, Human Resources, Leadership, and Project Management.
4. Students will demonstrate ethical reasoning skills by reflecting on their own- and third-party situations where commercial factors are relevant.

Marketing Student Learning Outcomes

1. Students will demonstrate expertise at the use of focus groups, experimental design, observational and survey research.
2. Students will demonstrate expertise in advertising campaigns and sales management.
3. Students will develop and effectively apply data analytic tools relevant to the marketing discipline.
4. Students will demonstrate effective oral and written communication skills.
5. Students will demonstrate critical thinking skills allowing them to ethically address complex real-world marketing challenges.

Sports Management Student Learning Outcomes

1. Students will create comprehensive strategic plans for organizations
2. Students will demonstrate an ability to work effectively with others in a team setting and demonstrate group leadership.
3. Students will demonstrate ethical decisions by reflecting on their own- and third-party situations where commercial factors are relevant.
4. Students will demonstrate knowledge of Sports Management principles.

Core Business Requirements for all Business Majors (40 Credits):

BA 100	Financial Accounting I (freshman year)	3
BA 170	Organizational Behavior (freshman year)	3
BA 199	Professionalism I (sophomore year)	1
BA 220	Principles of Marketing (sophomore year)	3
BA 299	Professionalism II (sophomore year)	1
BA 265	Management Information Systems (sophomore year)	3
BA 305	Business Ethics (junior or senior year)	3
BA 320	Corporate Finance I (sophomore year)	3
BA 340	Business Law (junior year)	3
BA 350	Statistics and Analytics I (sophomore year)	3
and		
BA 350A	Excel I Lab	1
BA 495	Business Policy and Strategy (Capstone Class senior year)	3
EC 101	Principles of Microeconomics (freshman year)	3
EC 102	Principles of Macroeconomics (freshman year)	3
MA 109*/111	Calculus I (freshman year)	4

**MA-102 and MA-103 can be taken in place of MA-109*

Aviation Management requirements:

Students pursuing this program will complete BA-150 Managerial Accounting and BA-250 Global Business as part of the Business Core.

Option 1: Professional Piloting (54 to 55 credits)-

AVIP 160	Private Pilot Flight Theory	7
AVIP 170	Private Pilot Flight Certification	3
AVIP 120	Foundations and Development of Aviation	3
CIST 100	Introduction to Information Technology	3
AVIP 180	Instrument Flight Theory	7
AVIP 190	Instrument Flight Rating	2
AVIP 205	Aircraft Engines & Systems	4
METR 140	Meteorology	4
AVIP 215	Commercial Flight Theory	5
AVIP 220	Commercial Flight Certification I	3
AVIP 225	Commercial Flight Certification II	3
AVIP 260	Human Factors Theory	3
AVIP 270	Aerodynamics of Flight	3
Two of the following:		3-4
AVIP 250	Multi-Engine Flight Rating	
AVPI 280	Certified Flight Instructor – Airplane	
AVIP 285	Certified Flight Instructor – Instruments	

See page **266** for typical eight semester degree plan. *

Option 2: Advanced Piloting (50 credits)-

AVIP 180	Instrument Flight Theory	7
AVIP 190	Instrument Flight Rating	2
AVIP 120	Foundations and Development of Aviation	3
CIST 100	Introduction to Information Technology	3
AVIP 215	Commercial Flight Theory	5
AVIP 220	Commercial Flight Certification I	3
AVIP 202	Aircraft Engines Theory	3
AVIP 204	Aircraft Systems Theory	3
AVIP 225	Commercial Flight Certification II	3
AVPI 280	Certified Flight Instructor – Airplane	2
METR 140	Meteorology	4
AVIP 285	Certified Flight Instructor – Instruments	2
AVIP 260	Human Factors Theory	3
AVIP 270	Aerodynamics of Flight	3
AVIP 250	Multi-Engine Flight Rating	1
AVIP 288	Certified Flight Instructor – Multi-Engine	2

See page **267** for typical eight semester degree plan. *

Accounting major requirements (31 credits) from the following:*

BA 101	Financial Accounting II**	3
BA 200	Intermediate Accounting I**	3
BA 201	Intermediate Accounting II**	3
BA 300	Cost Accounting I**	3
BA 310	Taxes I**	3
BA 400	Advanced Accounting**	3
BA 405	Auditing**	3
BA 470	International Accounting**	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

Take 1 of the following:

BA 311	Taxes II	3
BA 325	Analysis of Financial Statements	3
BA 406	Forensic Auditing	3
BA 420	Accounting Information Systems	3

See page **264** for typical eight semester degree plan. *

**For those students pursuing a CPA, the classes chosen beyond those required must be carefully selected. Your advisor will guide you in the selection of courses to optimize your performance on the CPA exam.*
***Required course*

Business Administration major requirements (61 credits):

Business Core		40
BA 150	Managerial Accounting	3
BA 250	Global Business Management	
or		
BA 251	International Business	3
BA 344	Introduction to Operational Excellence	3

BA 384	Lean Theory and Applications	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **276** for typical eight semester degree plan. *

Business Data Analytics major requirements (36 credits):

BA 107	Relational Databases for Business Analytics	3
CS 190	Programming Language Lab: Python	1
DS 100	Intro to Data Science and Analytics	3
DS 300	Methods of Data Science and Analytics	3
DS 350	Data Mining	3
DS 400	Data Science and Analytics Capstone	3
EC 360	Econometrics	3
EC 361	Econometrics R Lab	1
BA 106	Data Visualization	3
BA 355	Advanced Business Analytics	3
BA ---	Choose one: BA 353 International Finance, BA 395 Global Marketing, BA 251 International Business, or BA 250 Global Business Management	3
BA ---	Choose one: BA 397 Marketing Research, BA 335 Digital Marketing Analytics, CA 344 Sports Analytics, BA 364 Introduction to ERP Systems, BA 368 SAP Business One Program, or BA 420 Accounting Information Systems	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **277** for typical eight semester degree plan. *

Business Economics major requirements (38 credits):

BA 101	Financial Accounting II	3
EC 200	Environmental Economics	3
EC 201	Microeconomic Theory	3
EC 202	Macroeconomic Theory	3
EC 310	Labor Economics	3
EC 331	Public Finance	3
EC 353	International Finance	3
EC 360	Econometrics	3
EC 361	Econometrics Lab I	1
EC 380	Game Theory	3
EC 390	Experimental Economics	3
EC 480	Senior Thesis	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

BUEC students are strongly encouraged to take MA 110/112 Calculus II. EC 353 International Finance cannot be used to satisfy a Finance minor. In addition to the Business Economics major, the Economics Department also offers Bachelor of Science degrees in Economics and in Economics and Mathematics. For more information, please see the Economics section.

See page **278** for typical eight semester degree plan. *

Finance major requirements (27 to 40 credits):

The Finance major offers four possible advisement tracks (and two sub-tracks), which are custom-designed for differing career paths. Finance students work closely with their advisor to determine which path is most suitable and preferable. Students completing one of the four following tracks will graduate with a B.S. in Finance.

Corporate Finance Track (31 credits):

BA 101	Financial Accounting II	3
BA 200	Intermediate Accounting I	3
BA 321	Corporate Finance II	3
BA 324	Advanced Personal Financial Planning	3
BA 325	Analysis of Financial Statements	3
BA/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 385	Financial Institutions	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **308** for typical eight semester degree plan. *

Investment Management CFA Track (31 credits):

BA 101	Financial Accounting II	3
BA 324	Advanced Personal Financial Planning	3
BA/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 367	Investment III: Alternative Assets	3
BA 385	Financial Institutions	3
BA 485	Financial Planning and Analysis	3
BA 488	Portfolio Theory	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **305** for typical eight semester degree plan. *

Investment Management CFP Track (40 credits)

BA 101	Financial Accounting II (Freshman year)	3
BA 310	Taxes I	3
BA 311	Taxes II	3
BA 324	Advanced Personal Financial Planning	3
BA 353/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 367	Investment III: Alternate Assets	3
BA 385	Financial Institutions	3
BA 484	Risk Management	3
BA 485	Financial Planning and Analysis	3
BA 488	Portfolio Theory	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **306** for typical eight semester degree plan. *

Computational Finance Track (+Mathematics Minor) (43 credits):

BA 101	Financial Accounting II	3
BA/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 367	Investment III: Alternative Assets	3
BA 385	Financial Institutions	3
BA 488	Portfolio Theory	3
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4

MA-231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 421	Real Analysis I	4
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **307** for typical eight semester degree plan. *

Finance and Mathematics Major (55 -57 credits):

BA 101	Financial Accounting II	3
BA/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 367	Investment III: Alternative Assets	3
BA 385	Financial Institutions	3
BA 488	Portfolio Theory	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 321	Complex Variables	3
MA 421	Real Analysis I	4
MA 422	Real Analysis II	4
Take one of the following:		
CS 110	C++ Programming I	3
CS 190	Programming Language Lab: Python	1
CS-270	Introduction to Numerical Computation	3
ENGR 115	Intro to Engineering Computation	3

See page **309** for typical eight semester degree plan. *

Behavioral Finance Track (+ Psychology Minor) (46 credits):

BA 101	Financial Accounting II	3
BA 324	Advanced Personal Financial Planning	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4
BA/EC 353	International Finance	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
BA 367	Investment III: Alternative Assets	3
BA 385	Financial Institutions	3
BA 488	Portfolio Theory	3
PY 100	Intro to Psychology	3
PY 243	Abnormal Psychology	3
PY 260	Social Psychology	3
PY 308	Cognitive Psychology	3
PY 309	Learning	3
PY 382	Psychological Assessment	3

See page **304** for typical eight semester degree plan. *

International Business Major Requirements (36-47 credits):

BA 150	Managerial Accounting	3
BA-250	Global Business Management	3
BA 251	International Business	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4
BA/EC 353	International Finance	3
BA 395	Global Marketing	3
Modern Languages: Two courses at the intermediate level or above.		6
Choose 1 of the following:		
BA 470	International Accounting	3
BA 525	Global Experience	2
PS 242	International Politics	3
PS 244	Comparative Politics	3

Students are required to complete a minor in Accounting, Finance, Management, Marketing, Economics, or Operational Excellence. Majors are encouraged, but not required to study abroad for one semester.

See page **315** for typical eight semester degree plan. *

Management Major Requirements (25 credits):

BA 150	Managerial Accounting	3
BA 232	Human Resources Management	3
BA 250	Global Business Management	3
or		
BA 251	International Business	3
BA 280	Leadership	3
BA 398	Project Management I	3
BA 444	Operations Management	3
BA 344	Introduction to Operational Excellence	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4

See page **322** for typical eight semester degree plan. *

Marketing Major Requirements (28 credits):

BA 150	Managerial Accounting	3
BA 351/A	Statistics and Analytics II & Excel II Lab	4
BA 380	Consumer Behavior	3
BA 395	Global Marketing	3
BA 397	Marketing Research	3
BA 425	Strategic Marketing	3
BMAR	(BA 106 Data Visualization, BA 330 Advertising and Promotion, BA-334 Retail Management, BA 335 Digital Marketing Analytics, BA 336 Essentials of Selling, BA 337 Nonprofit and Social Marketing, BA-338 Marketing Planning and Development)	9

See page **323** for typical eight semester degree plan. *

Sports Management Major Requirements (30 credits):

BA 150	Managerial Accounting	3
BA 209	Sports Administration	3
BA 211	Sports Media, Promotion, and Marketing	3
BA 232	Human Resource Management	3
BA 280	Leadership	3
or		
BA 212	Leadership in Sports	
BA 307	Sports Venue and Event Management	3
BA 374	Sports Law	3
BA 398	Project Management I	3
BA 444	Operations Management	3
BA 250	Global Business Management	3
or		
BA 251	International Business	3
or		
BA 395	Global Marketing	3

BA 501 Sports Apprenticeship 3
See page **339** for typical eight semester degree plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minors in Business

The Department recognizes that there are many students who wish to major in other departments of the College, but who would like to complete a minor in business. Most of the courses required for a minor are upper division courses in a particular field, rather than the subjects included within the business core that must be completed by all students majoring within the Department. A student must maintain at least a C (2.0) average in the specific courses required for a minor.. The minor for business majors requires the completion of at least three non-overlapping classes beyond those in your major. If you attempt two or more minors, you must have at least three new non-overlapping classes for each minor. **Minors** are listed in alphabetical order beginning on page **104**. For information on minors in **Accounting, Entrepreneurship, Finance, International Business, Management, Marketing,** and **Operational Excellence**, please refer to that section.

Certificates are listed in alphabetical order beginning on page **119**. For information on certificates in **Entrepreneurial Success, Hospitality, Nonprofit Studies, Organizational Leadership, Project Management, SAP University Alliance,** and **Supply Chain,** please refer to that section.

Chemistry

Undergraduate study in chemistry provides students with the background to pursue numerous career paths and interests. These possibilities include graduate school, employment in a wide variety of industrial research positions, chemical sales and management, professional programs such as medical school and law school, art conservation, science policy, journalism, and forensics. The overall goal of the chemistry curriculum at Saint Vincent is to provide students with a solid foundation in various areas of modern chemistry so that they can pursue a variety of career possibilities. The chemistry program at Saint Vincent is approved by the American Chemical Society.

The Chemistry Department offers students the possibility to earn a B.S. degree in Chemistry, Biochemistry, or Environmental Chemistry. Students receiving the B.S. degree in Chemistry are certified by the American Chemical Society. Minors in Chemistry and Biochemistry are also offered. Specific requirements for each of these programs can be found below.

Students may also obtain certification in secondary education by receiving a major in Chemistry and a minor in Secondary Education. Interested students may consult the "Teacher Preparation" section and the requirements for Secondary Education under the Education Department.

No matter which degree program a student chooses, he or she will find the following features common to all of the programs offered by the Department.

• Our degree programs in Chemistry (including the Chemistry Education track), Biochemistry, and Environmental Chemistry build on a common core of chemistry courses (general, organic, physical, analytical, and biochemical).

• These degree programs differ mainly in the courses taken by students in their junior and senior years. Topics found in these major dependent courses include inorganic, polymer and materials chemistry, physical organic, biochemistry, and environmental chemistry.

• In addition to these majors, which are intended to prepare students either for work in industry or for further post-graduate education, we offer a major in Chemical and Biological Analysis. This major is intended for students who wish to work in an analytical lab, such as a forensics or medical testing lab.

• For all of our majors we focus on writing as a tool for thinking and a critical skill for chemists to develop. All of the Chemistry faculty have participated in the Campus Writing Program at Saint Vincent.

• The Chemistry faculty believe that proficiency in a particular discipline is best accomplished when set in the broad context of liberal arts. Therefore, the degree programs in the Chemistry Department include courses in the humanities, social sciences, and other natural sciences.

• The curriculum strongly emphasizes a laboratory experience that reflects chemistry as it is currently practiced. Several of the upper-level laboratory courses are taught as "integrated labs," providing faculty and students the flexibility to explore the interdisciplinary nature of chemistry.

• The courses in the Chemistry Department build toward the senior research project, which serves as a "capstone experience" for students. In preparation for their senior research project, students prepare a proposal for original research during the spring semester of their junior year. The research project is then conducted by the students in their senior year under the guidance of one of the Chemistry faculty members. The research project provides the student with a first-hand experience of the nature of scientific investigation. Upon completion of their project, the students write a thesis and present their results to an outside audience, typically at a national meeting of the American Chemical Society.

Teacher Certification

Requirements for certification in Chemistry (7-12): The Chemistry Department offers a Chemistry Education track for students wishing to pursue Secondary Education Certification in Chemistry. Please declare this track in the Registrar's Office. See the Education Department for teacher certification requirements in secondary education. Interested students must contact the Chairperson of the Education Department and confer with Dr. Steven Gravelle in the Chemistry department. All programs begin in the first year by registering for ED 100: Foundations of Education.

Chemistry Student Learning Outcomes

- Students graduating with a degree in chemistry will have an understanding of chemical principles in organic, inorganic, physical, and analytical chemistry that allows them to apply those principles to advanced topics.
- Students will be able to perform a variety of modern chemical laboratory techniques and run modern instrumentation.
- Students will be able to communicate in both oral and written forms that are appropriate to the modern practice of chemistry.
- Students should be able to apply the Six Principles of Good
- Writing to their chemistry writing.
- Chemistry students in their junior and senior years will be able to design, develop, conduct, and report on an independent research project.
- Students will develop higher order thinking skills of synthesis, analysis, and applications.

Requirements for a Bachelor of Science Degree in Chemistry

(See core curriculum requirements.)

Chemistry Major Requirements (66/67 credits):

CH 101-102	General Chemistry I, II	6
CH 103-104	General Chemistry Laboratory I, II	2
CH 216	Quantitative Analysis	3
CH 218	Quantitative Analysis Laboratory	1
CH 221-222	Organic Chemistry I, II	6
CH 223-224	Organic Chemistry Laboratory I, II	2
CH 228	Introduction to Biochemistry	3
CH 231-232	Physical Chemistry I, II	6
CH 233	Physical Chemistry I Laboratory	1
CH 241	Inorganic Chemistry	3
CH 242	Instrumental Analysis	3
CH 282	Advanced Physical Methods	2
CH 283	Advanced Chemical Methods	2
CH 301	Research Laboratory	2
CH 300, 302	Research Seminar I, II	2
CH 321	Special Topics	3
MA 111, 112	Analytical Calculus I, II	8
PH 111-112	General Physics I, II	6
PH 113-114	General Physics Laboratory I, II	2

At least 3 credits from the following:

MA 211	Analytical Calculus III	4
BL 260	Biostatistics	3
MA 311	Probability and Statistics I	3
MA 241	Statistics I	3

Electives 9 credits

See page **280** for typical eight semester degree plan. *

Chemistry Education Track Requirements (60/61 Credits Plus Those Required by Secondary Education Certification)

CH 101-102	General Chemistry I, II	6
CH 103-104	General Chemistry Laboratory I, II	2
CH 216	Quantitative Analysis	3
CH 218	Quantitative Analysis Laboratory	1
CH 221-222	Organic Chemistry I, II	6
CH 223-224	Organic Chemistry Laboratory I, II	2
CH 231-232	Physical Chemistry I, II	6
CH 233	Physical Chemistry I Laboratory	1
CH 241	Inorganic Chemistry	3
CH 242	Instrumental Analysis	3
CH 282	Advanced Physical Methods	2
CH 285	Teaching Chemistry	2
CH 301	Research Laboratory	2
CH 300, 302	Research Seminar I, II	2
MA 111, 112	Analytical Calculus I, II	8
PH 111-112	General Physics I, II	6
PH 113-114	General Physics Laboratory I, II	2

At least 3 credits from the following:

MA 211	Analytical Calculus III	4
BL 260	Biostatistics	3
MA 311	Probability and Statistics I	3
MA 241	Statistics I	3

Students are strongly encouraged to take CH 228 Introduction to Biochemistry. See Education Department for teacher certification requirements.

See page **281** for typical eight semester degree plan. *

Requirements for a Bachelor of Science Degree in Biochemistry

(See core curriculum requirements.)

Biochemistry Student Learning Outcomes

- Students graduating with a degree in biochemistry will have an understanding of chemical principles in organic, inorganic, physical, and analytical chemistry that allows them to apply those principles to advanced topics. Students in biochemistry and environmental chemistry will be able to apply principles specific to their disciplines to advanced topics.
- Students will be able to perform a variety of modern chemical laboratory techniques and run modern instrumentation. Students in biochemistry will be able to perform laboratory techniques specific to their discipline.
- Students will be able to communicate in both oral and written forms that are appropriate to the modern practice of chemistry. Students should be able to apply the Six Principles of Good Writing to their chemistry writing.
- Students in their junior and senior years in chemistry will be able to design, develop, conduct, and report on an independent research project.
- Students will develop higher order thinking skills of synthesis, analysis and applications.

Biochemistry Major Requirements:

BL 214	Molecular Genetics	3
BL 215	Molecular Genetics Laboratory	1
CH 101-102	General Chemistry I, II	6
CH 103-104	General Chemistry Laboratory I, II	2
CH 216	Quantitative Analysis	3
CH 218	Quantitative Analysis Lab	1
CH 221-222	Organic Chemistry I, II	6
CH 223-224	Organic Chemistry Laboratory I, II	2
CH 231-232	Physical Chemistry I, II	6
CH 233	Physical Chemistry I Laboratory	1
CH 251	Proteins and Metabolism	3
CH 253	Proteins and Metabolism Laboratory	1
CH 252	Nucleic Acids and Membranes	3
CH 254	Nucleic Acids and Membranes Laboratory	1
CH 282	Advanced Physical Methods	2
CH 301	Research Laboratory	2
CH 300, 302	Research Seminar I, II	2
MA 111, 112	Analytical Calculus I, II	8
PH 111-112	General Physics I, II	6
PH 113-114	General Physics Laboratory I, II	2
BL 150, 152	General Biology I and II	6
BL 151, 153	General Biology I and II Laboratory	2

Four credits from the one of the following lecture/lab combinations:

BL 212	Microbiology	3
BL 213	Microbiology Laboratory	1
or		
BL 222	Developmental Biology	3
BL 223	Developmental Biology Laboratory	1
or		
BL 226	Neuroscience	3
BL 227	Neuroscience Laboratory	1
or		
BL 208	Cell Biology	3
BL 209	Cell Biology Laboratory	1

Electives 5 credits

See page **268** for typical eight semester degree plan. *

Requirements for a Bachelor of Science Degree in Environmental Chemistry

(See core curriculum requirements.)

Environmental Chemistry Student Learning Outcomes

- Students graduating with a degree in environmental chemistry will have an understanding of chemical principles in organic, inorganic, physical, and analytical chemistry that allows them to apply those principles to advanced topics in environmental chemistry and analysis.
- Students will be able to perform a variety of modern chemical laboratory techniques and run modern instrumentation.
- Students will be able to communicate in both oral and written forms that are appropriate to the modern practice of chemistry. Students should be able to apply the Six Principles of Good Writing to their chemistry writing.

- Students in their junior and senior years in chemistry will be able to design, develop, conduct, and report on an independent research project.
- Students will develop higher order thinking skills of synthesis, analysis and applications.

Environmental Chemistry Major Requirements (67/68 credits):

CH 101-102	General Chemistry I, II	6
CH 103-104	General Chemistry Laboratory I, II	2
ES 150	Earth Systems Science	3
ES 152	Earth Systems Science Laboratory	1
CH 216	Quantitative Analysis	3
CH 218	Quantitative Analysis Laboratory	1
CH 221-222	Organic Chemistry I, II	6
CH 223-224	Organic Chemistry Laboratory I, II	2
CH 228	Introduction to Biochemistry	3
CH 231-232	Physical Chemistry I, II	6
CH 233	Physical Chemistry I Laboratory	1
CH 242	Instrumental Analysis	3
CH 276	Advanced Environmental Chemistry	3
CH 277	Methods of Environmental Analysis	2
CH 282	Advanced Physical Methods	2
CH 301	Research Laboratory	2
CH 300, 302	Research Seminar I, II	2
MA 111, 112	Analytical Calculus I, II	8
PH 111-112	General Physics I, II	6
PH 113-114	General Physics Laboratory I, II	2

At least 3 credits from the following:

MA 211	Analytical Calculus III	4
BL 260	Biostatistics	3
MA 311	Probability and Statistics I	3
MA 241	Statistics I	3

Recommended interdepartmental courses:

SO 161	Foundations of Sustainability	3
BA 350/350A	Statistics and Analytics I & Excel I Lab	4
PS 390	Environmental Law and Policy	3
EL 111	Green Writing: Literature and the Environment	3

Electives 11 credits

See page **302** for typical eight semester degree plan. *

Requirements for a Bachelor of Science Degree in Chemical and Biological Analysis

(See core curriculum requirements.)

Foundations (32 credits):

CH 101/103	General Chemistry I and Lab	4
BL150/151	General Biology I and Lab	4
PH 109/113	College Physics I and Lab	4
MA 109 or 111	Calculus I	4
CH 102/104	General Chemistry II and Lab	4
BL 152/153	General Biology II and Lab	4
PH 110/114	College Physics II and Lab	4
MA 110 or 112	Calculus II	4

Required Analysis Courses (15 credits)

CH 216/218	Quantitative Analysis and Lab	4
BL 208/209	Cell Biology and Lab	4
CH 221/223	Organic Chemistry I and Lab	4
BL 260	Biostatistics	3

Electives Choose at least 9 credits (with labs when available)

CH 222/224	Organic Chemistry II and Lab	4
BL 214/215	Molecular Genetics and Lab	4
CH 251/253	Proteins and Metabolism and Lab	4
CH 242	Instrumental Analysis	3
BL 212/213	Microbiology and Lab	4
CH 277	Methods of Environmental Analysis	2
CH 245	Chemical and Forensic Analysis	2
DS 100/CS 190	Intro to Data Science/Python Lab	4

Capstone Experience (4 credits)

CH 550	Internship	2
CH 300	Chemistry Jr. Seminar	1
CH 302	Chemistry Sr. Seminar	1

Electives 13 credits

See page **279** for typical eight semester degree plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Biochemistry** and **Chemistry**, please refer to that section.

Communication and Media Studies

The Department of Communication and Media Studies at Saint Vincent College strives to engage students in theoretical, empirical, humanistic and applied work in human communication. Our field "focuses on how people use messages to generate meanings within and across various contexts, and is the discipline that studies all forms, modes, media, and consequences of communication" (National Communication Association). Students who major and minor in Communication and Media Studies are encouraged to apply theoretical lenses to "real world" issues, critically examining everything from message development to the effects of communication.

Our department embraces and celebrates human diversity, and that is reflected in our department culture and curriculum. In the spirit of the Benedictine Hallmarks of Conversatio, Hospitality, and Community, we welcome people from all walks of life into our classroom, curriculum, and campus neighborhood as we nurture students' unique gifts and goals. Our faculty strives to develop mindful and ethical communicators who embody these values in their interactions with others.

Students graduate from our program with the abilities and confidence to successfully pursue entrance into graduate programs and careers that draw upon skills in creating and interpreting messages, and critically examining human communication. Our graduates have gone on to work in a variety of fields, including print media, broadcast journalism, public relations, sales, video and television production, event planning, sports information, social media management, video game development, non-profit management, web content management, fundraising, education, digital marketing, teaching, and corporate communication. Many of our graduates pursue advanced degrees in fields like communication, public relations, marketing, psychology, video production, media literacy, children and media, graphic design, and integrated marketing communication.

Communication Student Learning Outcomes

- Develop competencies in communication technologies.
- Perform theoretically grounded critiques of mass media artifacts that address diversity and incorporate global perspectives.
- Demonstrate effective public speaking skills.
- Create and evaluate ethical messages for diverse audiences.
- Conduct and evaluate communication research.

Requirements for a Bachelor of Arts Degree in Communication and Media Studies

(See core curriculum requirements.)

Major Requirements (51 credits):
Communication and Media Studies by taking the 10 required courses (30 credits) and 7 elective courses (21 credits) in the major. If interested, students can choose a concentration in public relations or sports communication by taking the 10 required core courses in Communication and Media Studies and 7 courses (21 credits) in that concentration.

Communication and Media Studies Core Classes (30 credits):

CA 100	Introduction to Communication and Media Studies	3
CA 110	Introduction to Organizational Communication	3
CA 120	Public Speaking	3
CA 140	Introduction to Interpersonal Communication	3
CA 201	Research Methods	3
CA 218	Intercultural Communication	3
CA 230	Writing for Media	3
CA 303	Communication Ethics	3
CA 307	Media Literacy	3
CA 451	Senior Capstone	3

Communication and Media Studies Elective Courses (21 credits)

Choose 7 elective courses within the major

CA 221	Communication, Sport, and Society	3
CA 222	Broadcast Journalism	3
CA 236:	Sports Writing	3
CA 240	Public Relations Strategies	3
CA 271	Special Topics in Communication	3
CA 281	Children, Teens, and Media	3
CA 291	Facts, Persuasion, & Argumentation	3
CA 302	Collegiate Athletic Communication	3
CA 304	Social Media Strategies	3
CA 311	Race, Gender, Class and Media	3
CA 321	Sports Media Culture	3
CA 340	Nonprofit Communication	3
CA 344	Sports Analytics	3
CA 351	Media Effects	3
CA 355	Advanced Public Relations	3
CA 385	Advanced Interpersonal Communication	3
CA 401	Communication Projects	3
CA 440	Criticism of Media and Society	3
CA 550	Communication Internship	3

See page **283** for the recommended 8-semester program plan. *

Concentration 1: Public Relations (21 credits)

Required Courses (12 credits)

CA 240	Public Relations Strategies	3
CA 291	Facts, Persuasion, & Argumentation	3
CA 304	Social Media Strategies	3
CA 355	Advanced Public Relations	3

Elective Courses (9 credits)

Choose any of the following 3 elective courses

CA 221	Communication, Sport, and Society	3
CA 222	Broadcast Journalism	3
CA 236	Sports Writing	3
CA 271	Special Topics in Communication Studies	3
CA 281	Children, Teens, & Media	3
CA 302	Collegiate Athletic Communication	3
CA 311	Race, Gender, Class, and Media	3
CA 321	Sports Media Culture	3
CA 325	Digital Deliberation and Remix	3
CA 340	Nonprofit Communication	3
CA 344	Sports Analytics	3
CA 351	Media Effects	3
CA 385	Advanced Interpersonal Communication	3

CA 401	Communication Projects	3
CA 415	Creative Campaigns	3
CA 440	Criticism of Media and Society	3
CA 550	Communication Internship	3
BA 211	Sports Media, Promotion, & Marketing	3
DA 120	Digital Layout & Design	3
DA 150	Digital Video Production	3
DA 190	Web Design	3
DA 350	Advanced Video Editing	3

See page **284** for the recommended 8-semester program plan. *

Concentration 2: Sports Communication (21 credits)

Required Courses (12 credits)

CA 221	Communication, Sport, and Society	3
CA 236	Sports Writing	3
CA 304	Social Media Strategies	3
CA 321	Sports Media Culture	3

Elective Courses. Choose 3 courses (9 credits) from the following:

CA 222	Broadcast Journalism	3
CA 240	Public Relations Strategies	3
CA 271	Special Topics in Communication Studies	3
CA 281	Children, Teens, & Media	3
CA 291	Facts, Persuasion, and Argumentation	3
CA 302	Collegiate Athletic Communication	3
CA 311	Race, Gender, Class, and Media	3
CA 325	Digital Deliberation and Remix	3
CA 340	Nonprofit Communication	3
CA 344	Sports Analytics	3
CA 351	Media Effects	3
CA 355	Advanced Public Relations	3
CA 385	Advanced Interpersonal Communication	3
CA 401	Communication Projects	3
CA 415	Creative Campaigns	3
CA 440	Criticism of Media and Society	3
CA 550	Communication Internship	3
BA 209	Sports Administration	3
BA 211	Sports Media, Promotion, & Marketing	3
DA 120	Digital Layout & Design	3
DA 150	Digital Video Production	3
DA 190	Web Design	3
DA 350	Advanced Video Editing	3

See page **285** for the recommended 8-semester program plan.*

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Communication and Media Studies** and **Public Relations**, please refer to that section.

Computing and Information Systems

Computing and Information Systems (CIS) is concerned with all aspects of computers and information systems. A successful CIS graduate will earn a bachelor of science degree in one of the following majors: Computer Science, Information Systems, or Cybersecurity. The curriculum is based on the guidelines of prominent professional organizations and combines theory with current in-demand technical skills to prepare graduates for continual learning throughout their careers in this fast-paced field. The three CIS majors are designed to prepare the student for employment in a number of positions such as software developer, systems analyst, IT professional, or security analyst or to prepare the student for further studies in graduate school. Real-world projects and working in teams are strongly emphasized. By the end of the sophomore year, CIS majors typically have successfully completed several CIS courses, are proficient in at least one object oriented programming language, and are ready for internship positions. By the end of the senior year, CIS majors have completed a broad range of CIS course work that may include database management, data structures, operating systems, networking, cybersecurity, systems analysis, artificial intelligence, game design, and software engineering. The senior capstone project demonstrates the students' ability to solve problems in teams and to learn new technologies and skills on their own. Because technology contributes meaningfully to almost all aspects of science and society, non-majors may be interested in a CIS minor. The three CIS minors are 18 credits each and reflect the three CIS majors of Computer Science, Information Systems, and Cybersecurity.

The National Security Agency (NSA) and Department of Homeland Security (DHS) have named Saint Vincent College a Center of Academic Excellence (CAE) in Cyber Defense Education for its bachelor of science program in cybersecurity.

Computing and Information Systems Program Objectives

Within two to five years of graduation, graduates of the Computing and Information Systems Programs will:

- Practice the disciplines of Computer Science, Information Systems, or Cybersecurity in industry or graduate school by employing aspects of their broad knowledge of the field in problem-solving and use of technical skills.
- Conduct themselves in a professional, ethical, and responsible manner with respect and awareness for security, social issues, and responsibilities inherent in the field.

Computing and Information Systems Student Learning Outcomes for all Majors

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles guided by the Benedictine Tradition.
5. Function effectively as a member or leader of a team engage in activities appropriate to the program's discipline.

Additional student outcomes for the Computer Science Major:

6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Additional student outcomes for the Information Systems Major:

6. Support the delivery, use, and management of information systems within an information systems environment.

Additional student outcomes for the Cybersecurity Major:

6. Apply security principles to maintain operations in the presence of risks and threats.

Computing and Information Systems Requirements for all Majors

All Computing and Information Systems majors must fulfill the core curriculum requirements as well as the requirements for one of three majors: Computer Science, Information Systems or Cybersecurity. A minor in another discipline such as Mathematics, Business, Communication, Graphic Design or Criminology, Law and Society is a useful complement to the majors.

Requirements for a Bachelor of Science Degree in Computer Science

Major Requirements:

The student must complete the requirements listed in the following categories:

1) CIS Core Courses:

CS 102	Fundamentals of IT and Computing*	3-4
CS 110	C++ Programming I	3
CS 111	C++ Programming II	3
CS 170	Discrete Structures	3
CS 171	Introduction to Computability	3
CS 221	Data Structures	3
CS 225	Cybersecurity	3
CS 292	Engineering and Computing Ethics	2
CS 310	Programming Languages	3
CS 312	Introduction to Algorithms	3
CS 321	Data Communication and Computer Networks	3
CS 330	Operating Systems	3
CS 335	Computer Organization	3
CS 350	Database Concepts and Information Structures	3
CS 355	Software Engineering	3
CS 357	Computing Science Project I	1
CS 358	Computing Science Project II	2

2) CIS Electives (9 credits):

Choose from the following: CS 205 CS 226 CS 214, CS 250, CS 255, CS 270, CS 305, CS 315, CS 322, CS 325, CS326 CS 365, CS 366, CS 367, CS 375

3) CIS Mathematics Requirement (14 credits):

MA 111, 112 Analytical Calculus I and II		8
or		
MA 109, 110 Calculus with Applications I and II		8

Either choice gives an 8-credit sequence, but 4 credits can be used to fulfill the core curriculum mathematics requirement.

MA 241	Statistics I	3
or		
MA 311	Probability and Statistics I	3
MA 251	Linear Algebra	3

4) Science Requirements (8 credits):
Any of the following lecture and lab totaling 8 credits: CH 101, CH 103, CH 102, CH 104, PH 111, PH 113, PH 112, PH 114, BL 150, BL 151, BL 152, BL 153
See page **286** for typical eight semester degree plan. *

Requirements for a Bachelor of Science Degree in Information Systems

Major Requirements:
The student must complete the requirements listed in the following categories:

1) CIS Core Courses:

CS 102	Fundamentals of IT and Computing*	3-4
CS 110	C++ Programming I	3
CS 111	C++ Programming II	3
CS 170	Discrete Structures	3
CS 221	Data Structures	3
CS 225	Cybersecurity	3
CS 265	Information Systems Management	3
CS 292	Engineering Computer Ethics	2
CS 321	Data Communications and Computer Networks	3
CS 322	Advanced Networking	3
CS 350	Database Concepts and Information Structures	3
CS 351	Information Systems Analysis and Design	3
or		
CS 355	Software Engineering	3
CS 357	Computing Science Project I	1
CS 358	Computing Science Project II	2

2) CIS Electives (9 credits):
Take 9 credits of CS electives at 200+ level or above 9

3) CIS Mathematics Requirement (7 credits):

MA 111	Analytical Calculus I	4
or		
MA 109	Calculus with Applications I	4
MA 241	Statistics I	3
or		
MA 311	Probability and Statistics I	3

4) Required Social Science Courses (6 credits):
This major also requires 6 credits chosen from business and/or economics. These credits can be included under the core curriculum social science requirement.

5). Science Requirements (8 credits):
Any lecture and lab totaling 8 credits from the following disciplines: chemistry (CH), physics (PH), biology (BL), natural science (NSCI).
See page **314** for typical eight semester degree plan. *

Requirements for a Bachelor of Science Degree in Cybersecurity

Major Requirements:
The student must complete the requirements listed in the following categories:

1) CIS Core Courses:

CS 102	Fundamentals of IT and Computing*	3-4
CS 110	C++ Programming I	3
CS 111	C++ Programming II	3
CS 170	Discrete Structures	3
CS 221	Data Structures	3
CS 225	Cybersecurity	3
CS 265	Information Systems Management	3
CS 292	Engineering Computer Ethics	2
CS 310	Programming Languages	3
CS 321	Data Communications and Computer Networks	3
CS 322	Advanced Networking	3
CS 325	Advanced Topics in Cybersecurity	3
CS 330	Operating Systems	3
CS 335	Computer Organization	3
CS 350	Database Concepts and Information Structures	3
CS 351	Information Systems Analysis and Design	3
or		
CS 355	Software Engineering	3
CS 357	Computing Science Project I	1
CS 358	Computing Science Project II	2
CS 375	Applied Cryptography	3

2) CIS Electives (6 credits):
Choose from the following: CS 205, CS 214, CS 226 CS 250, CS 255, CS 267, CS 270, CS 305, CS 315, CS 365, CS 366, CS 367

3) CIS Mathematics Requirement (7 credits):

MA 111	Analytical Calculus I	4
or		
MA 109	Calculus with Applications I	4
MA 241	Statistics I	3
or		
MA 311	Probability and Statistics I	3

4). Science Requirements (8 credits):
Any lecture and lab totaling 8 credits from the following disciplines: chemistry (CH), physics (PH), biology (BL), natural science (NSCI).
See page **287** for typical eight semester degree plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Computer Science, Information Systems,** and **Cybersecurity**, please refer to that section.

Criminology, Law and Society

The Criminology Department at Saint Vincent College is dedicated to providing students with a rigorous liberal arts curriculum that will prepare them for a wide variety of educational and career options upon their graduation.

The curriculum of the Department insists that the students become familiar with both the theory and the practice of the criminal law and the larger social, economic, and psychological forces that affect decision-making in the criminal justice system at the state and federal level. Since 2011 when the Department was formed, its graduates have succeeded in law schools and graduate schools in Criminology and national security studies. Other graduates have gone directly into positions in the criminal justice system in organizations such as the Pennsylvania State Police, various probation and parole positions, juvenile counseling careers and related law enforcement posts.

The Department recognizes that every person working within the criminal justice system in the coming decades must appreciate the broader dimension of issues impacting the system and, by that appreciation, to utilize his or her depth of knowledge to effect the changes needed in order to produce for society a just and effective process within the framework of the Constitution.

Students in this major are expected to work at a master's level of proficiency by the time of their senior year. A master's program is an option for qualified students.

Students in the major have enjoyed a wide variety of internships with legal, judicial and law enforcement organizations. The Department encourages students to undertake these internships at a point at which they may relate the practicalities of those internships to the academic foundation their course work has afforded them.

The Department also oversees four minors, one under the general umbrella of forensics and another in global security, and allows for a concentration in legal studies.

The Forensics minor allows a student to concentrate in natural sciences, computer security or financial investigations. The minor allows students to appreciate the contributions that experts in these fields can make to the efforts of law enforcement to solve crimes by properly identifying the perpetrators regardless of how sophisticated the offenses may be.

The Global Security minor seeks to give students a true liberal arts perspective on the critical decision-making done by the intelligence community in matters that often define our national character and values.

Finally, the major gives students the option to concentrate on Legal Studies, taking advantage of many outstanding courses on various aspects of the law taught by the department and related departments in the school. Those who undertake this concentration will be significantly advanced in their efforts to obtain a law degree and become participating members of the justice system at that critical level. A legal studies minor is also available.

Throughout all aspects of the Criminology curriculum, the ethical dimensions of the issues professionals face are emphasized. A concentrated effort is also made to improve the communication skills of each student so that he or she may write and advocate effectively in positions she or he will undertake in a system which is based on an adversarial model. The Department welcomes any student willing to accept the challenge of this study with the hope of someday becoming a champion of justice.

Criminology Student Learning Outcomes

The Student Learning Objectives of the major are:

1. Administration of Justice - Differentiate among the components of the criminal justice system, contrasting the role of legislatures, courts, police, and system administrators, explaining the different processes used for the adjudication of juveniles as compared with adult offenders.

2. Corrections - Explain current correction practices in terms of their historical antecedents and the legal and political influences which affect them; relate incarceration to alternative means of treatment of offenders in community-based mental health and other venues.

3. Criminological Theories - Identify the major criminological theories, apply them to specific types of crimes and illustrate how those theories explain the interaction between offender and victim behavior in each model.

4. Law Adjudication - Analyze the structure of criminal law, its Constitutional basis, the relative burdens of proof, the importance of elemental analysis of criminal statutes, and demonstrate the intertwining of Constitutional criminal procedure in the decision-making process of the courts at the focal point of the system.

5. Research and Analytical Methods - Contrast quantitative and qualitative methodology and synthesize current research to inform decision-making with respect to best practices in criminology and the criminal justice system.

6. Development of Skills - Generate the capacity to critically analyze different points of view, create effective arguments that are empirically supported, express those arguments in clear and concise terms, apply modern technological skills in aid of such reasoning and analysis, and demonstrate a sensitivity to the ethical issues that underlie each phase of the criminal process.

Requirements for Bachelor of Arts Degree in Criminology, Law, and Society

B.A. Criminology, Law, and Society Requirements: (51 credits)

CLS 101	Introduction to Criminology	3
CLS 160	Research Writing and Advocacy[1]	3
CLS 215	Juvenile Justice	3
CLS 227	Criminal Law and Process	3
CLS 230	Constitutional Criminal Procedure	3
CLS 245	Corrections, Probation, and Parole	3
CLS 315	Criminological Statistics[2]	3
CLS 356	Quantitative Research Methods	3
CLS 504	Ethical Decisions and Dilemmas in Criminal Justice	3
CLS 510	Criminological Theories	3
CLS 590	Capstone Project	3
PS 100	Introduction to American Government	3

[1] This is a required course for all freshman students beginning 2018 and must be completed by the end of their sophomore year.

[2] PY 203 or BA 350 may be substituted but majors are strongly encouraged to take Criminological Statistics.

Five of the following (15 credits)

CLS 155	American Judicial System	3
CLS 205	Criminal Trial Evidence	3
CLS 250	The Police: A History	3
CLS 266	The Death Penalty	3
CLS 269	Agency Management	3
CLS 270	21st-Century Issues in Criminology	3
CLS 275	Patterns of Criminal Behavior	3
CLS 290	Mental Illness and the Criminal Process	3
CLS 305	Violence and Victimology	3
CLS 316	Strategic/Tactical Leadership	3
CLS 320	White Collar Crime	3
CLS 325	Crime Rates in America	3
CLS 340	Principles of Homeland Security	3
CLS 344	Financing Criminal Organizations	3
CLS 350	Criminology Independent Study	3
CLS 360	Prediction and Prevention of Criminal Conduct	3
CLS 361	Urban Street Gang Prosecution	3
CLS 367	Gender and Crime	3
CLS 375	International Criminal Law	3
CLS 376	Federal Criminal Law	3
CLS 377	Addiction and Crime	3
CLS 380	Criminology of Firearms	3
CLS 385	Organized Crime in America	3
CLS 399	Criminal Analytics	3
CLS 420	Criminology of Hate	3
CLS 425	Survey of Cybercrime	3
CLS 440	Constitutional Litigation & Analysis	3
CLS 550	Internship	3
PS 341	Global Terrorism	3
SO 200	Race and Ethnicity	3
SO 204	Sociology of Crime	3
SO 235	Inequality and Social Problems	3

Internships with various social service/criminal justice agencies are available for qualified students.

See pages **282** for the recommended 8-semester program plan for the Criminology, Law and Society major. This plan is designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Concentration: Legal Studies

Many students adopting the CLS major are interested in pursuing a career in law school. If this is the case, a student may, at the end of his or her freshman year, declare a concentration in legal studies within the CLS major. To satisfy the requirements of the concentration, the student must take four of the following CLS courses in addition to the core requirements of the CLS major. These courses may be used to satisfy the 12 credits of CLS electives required of each major. While students may take this concentration, they are strongly encouraged to take the Legal Studies minor otherwise set forth in this Catalog.

CLS 205	Criminal Trial Evidence
CLS 320	White Collar Crime
CLS 344	Financing Criminal Organizations
CLS 375	International Criminal Law
CLS 376	Federal Criminal Law
CLS 440	Constitution Litigation/ Analysis

Additional recommended courses:

PS 339,369	Constitutional Law I and II
PS 375	International Law
GCLS 660	Professional Seminar
PS 390	Environmental Law
BA 340	Business Law
EL 108	Technical Writing
EL 109	Business Communications

Teacher Certification

Criminology, Law, and Society majors interested in obtaining a teaching certificate should consult the requirements of the Education Department of Saint Vincent College in the ***Catalog***.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Criminal, Law, and Society, Forensic Studies - Natural Science, Forensic Studies - Cybersecurity, Forensic Studies - Financial Investigations,** and **Global Security**, please refer to that section.

Data Science

Advances in technology have caused an explosion of data in multiple areas from business, to health care, to history. Organizations need employees who can extract information from structured or unstructured data, organize, clean, and analyze these data to build knowledge and insight that can be useful in predicting trends or in decision-making. These data scientists also need to put the data into context to better present it and understand the ramifications of the decisions being made based upon it.

Many industries, government agencies, health care companies and non-profit organizations utilize data to inform their decision making. Data scientists are problem solvers. They create algorithms, and computer programs to gather and clean data, then develop processes and models to analyze the data, and finally they present the data to provide insights to solve problems. The skills necessary for data careers include computer programming, mathematics, modeling, statistics, and representation of data. Data scientists also need to be creative, be able to communicate with colleagues and clients, and collaborate with team members to develop innovative solutions.

The Saint Vincent degree is a comprehensive curriculum that gives students appropriate background in mathematics, computer science, and statistics. It then builds on that rich base to develop skills in data analysis and data science. The capstone experience is a semester-long group project that requires students to complete the full cycle of data analysis with real-world data. Students also apply their data science skills in a specific context such as business, health care, biology, or public health.

Data Science Student Learning Outcomes

- Students will prepare and manage data for analysis.
- Students will utilize computer programming, statistical analysis, and machine learning models to analyze data.
- Students will communicate their analysis and conclusions effectively to both colleagues and clients.
- Students will work effectively in teams to complete projects.
- Students will explain the key ethical questions related to data science applying Catholic Benedictine values.

Requirements for a Bachelor of Science Degree in Data Science

Data Science Major Requirements (57 Credits)

DS 100	Intro to Data Science and Analytics	3
CS 190	Programming Lang Lab: Python	1
DS 300	Methods of Data Science & Analytics	3
DS 350	Data Mining	3
DS 370	Deep Learning & Other Advanced Data Science Algorithms	3
DS 400	Data Science and Analytics Capstone	3

Math Required Courses

MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 241	Statistics I	
or BA 350	Statistics and Analytics I	3
MA 242	Statistics II	3

Computer Science Required Courses

CS 110	C++ Programming I	3
CS 111	C++ Programming II	3
CS 170	Discrete Structures I	3
CS 221	Data Structures	3
CS 350	Database Concepts	3
CS 355	Software Engineering	3

Application Electives (9 credits)

Choose 3 courses from the following

BA 106	Data Visualization	3
BA 355	Advanced Business Analytics	3
CA 344	Comm. & Int. of Sports Analytics	3
ES 220	Intro to GIS	3
HSCI 230	Health Analytics	3
CS 255	Artificial Intelligence	3
MA 251	Linear Algebra	3
SO 248	Fundamentals of Epidemiology	3

See page **288** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on a minor in **Data Analytics**, please refer to that section.

Economics

Given a close collaboration with an excellent mathematics department at Saint Vincent College, the McKenna School's Economics Department is nationally ranked and is known for offering one of the best Ph.D. undergraduate preparations in the United States. The curriculum of the Economics Department is designed to provide a comprehensive education in both theoretical and applied economics. The economics program seeks to provide a strong academic foundation for understanding the complexities of economic activity and decision-making within both the private and public sectors and for understanding the relationship between the economy and society as a whole. It seeks to enable students to apply rigorous analysis to economic issues and problems through the use of market-oriented theoretical models, quantitative techniques, and economic reasoning.

The study of economics, as part of the liberal arts and sciences approach to learning, helps students understand one of the most fundamental facets of human life in civil society — economic activity — and helps prepare them to effectively address the socioeconomic challenges and opportunities of contemporary public life. In addition to general economic theory and analysis, the special strengths of the Department include international finance, game theory, econometrics, labor theory, and experimental economics. In conjunction with the Center for Political and Economic Thought, the Department also seeks to provide exceptional educational experiences in the study of contemporary public policy and major issues in public life. Through these approaches and by working closely with its students, the goal of the Department's economics major is to help students achieve as strong academic background for successful graduate studies or professional employment.

The Department of Economics awards the following degrees: Bachelor of Science in Economics, Bachelor of Science in Economics and Mathematics, and Bachelor of Science in Business Economics (See Business Majors section of this Catalog) degrees. The B.S. in Economics degree is designed for students who intend to pursue a Master's degree in Economics, M.B.A. programs, Law School, or other professional-oriented graduate programs. The B.S. in Economics and Mathematics is designed for students who intend to pursue a Ph.D. in Economics or Finance. The B.S. in Business Economics is designed for students who seek immediate employment in business, government, or the nonprofit sector. (For more information on the Business Economics major, please see the Business Administration section.)

The major's capstone requirement is a senior thesis that incorporates original research efforts. The thesis is written in conjunction with EC 480 and is taken during the senior or junior year.

Students are encouraged to join the staff of the Center for Political and Economic Thought, which sponsors various lecture series, conferences, and publications; the Economics Club; and Mock Trial Team. The Economics Department is the Delta Sigma branch of Omicron Delta Epsilon, which is the national honor society for outstanding economics students.

Economics Student Learning Outcomes

- Apply rigorous analysis to economic issues and problems through the use of market-oriented theoretical models, quantitative techniques, and economic reasoning;
- Deliver a presentation with an in-depth analysis on an economic topic;
- Correctly utilize statistical and econometric techniques to test theoretic models;
- Complete an original economics research project.

For more information on the Business Economics major, please see the Business Administration Section.

Requirements for B.S. Degree in Economics (55 Credits):

(See core curriculum requirements.)

BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1
BA 351	Statistics and Analytics II	3
BA 351A	Excel II Lab	1
EC 101	Principles of Microeconomics	3
EC 102	Principles of Macroeconomics	3
EC 200	Environmental Economics	3
EC 201	Microeconomic Theory	3
EC 202	Macroeconomic Theory	3
EC 310	Labor Economics	3
EC 331	Public Finance	3
EC/BA 353	International Finance	3
EC 360	Econometrics	3
EC 361	Econometrics Lab	1
EC 380	Game Theory	3
EC 390	Experimental Economics	3
EC 480	Senior Thesis	3
MA 109/111	Calculus I	4
MA 110/112	Calculus II	4
PS 100	Introduction to American Government	3

Candidates for the B.S. degree who plan to pursue graduate work in economics, finance, or related disciplines are strongly encouraged to complete, at minimum, MA 211 Analytical Calculus III, MA 212 Ordinary and Partial Differential Equations, and MA 251 Linear Algebra. Consult with a member of the departmental faculty for further assistance in planning course work.

See page **291** for the recommended 8-semester program plan. utilized in consultation with their Academic Advisor.*

Major in Economics and Mathematics

For those students who will pursue upon graduation an advanced degree (Master's or Ph.D. level) in finance or economics.

Requirements for B.S. Degree in Economics and Mathematics (81-82 Credits in Majors):

(See core curriculum requirements.)

BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1
BA 351	Statistics and Analytics II	3
BA 351A	Excel II Lab	1
PS 100	Intro to American Government	3
EC 101	Principles of Microeconomics	3
EC 102	Principles of Macroeconomics	3
EC 200	Environmental Economics	3

EC 201	Microeconomic Theory	3
EC 202	Macroeconomic Theory	3
EC 310	Labor Economics	3
EC 331	Public Finance	3
EC 360	Econometrics	3
EC 361	Econometrics Lab	1
EC 380	Game Theory	3
EC 390	Experimental Economics	3
EC 480	Senior Thesis	3
MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 321	Complex Variables	3
MA 421	Real Analysis I	4
MA 422	Real Analysis II	4
Take 1 of the following:		3
EC 353	International Finance	
EC 400	Advanced Topics in Economics	

See **292** for the recommended 8-semester program plan. *

*These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on a minor in **Economics**, please refer to that section.

Education

The Education Department at Saint Vincent College Offers the Following Degree Programs:

Bachelor of Science in Early Childhood Education, grades PreK-4
Bachelor of Science in Middle Grade Education, grades 4-8
Bachelor of Science in Health and Physical Education, grades PreK-12
Bachelor of Arts in Psychology Education

The Education Department Additionally Offers the Following Public School Certification Programs:

Art, grades PreK-12
Biology, grades 7-12
Chemistry, grades 7-12
English, grades 7-12
Mathematics, grades 7-12
Physics, grades 7-12
Social Studies, grades 7-12
Spanish, grades PreK-12
Special Education, grades PreK-12

The philosophy of the Department is to provide education students with experiences that develop both depth and breadth in professional skills and knowledge. This is accomplished by combining instruction in basic pedagogy with pertinent field experiences and courses in psychological foundations in education.

The goals of these endeavors include grounding students in the scientific and artistic bases of the teaching profession; preparing them for the roles of the instructor, mentor, caregiver, advocate, and change agent; and refining their skills in the areas of organization, critical thinking, self-reflection, academic and personal integrity, responsible decision-making, and creativity.

To prepare for the PreK-12 classroom, students engage in a variety of field-based activities throughout their study in the Education Department. These activities include observations, tutoring, classroom demonstrations, and teaching lessons in their fields. The culminating activity is a 14-week student teaching assignment in a school and classroom appropriate to the certification area.

Education Student Learning Outcomes:

• Graduate/student-teacher candidates will achieve passing scores and successfully complete the teacher certification exams for each teaching area.
• Graduate/student-teacher candidates will demonstrate thorough knowledge of content and pedagogical skills in planning and preparation for teaching.
• Graduate/student-teacher candidates will establish and maintain a purposeful and equitable classroom environment for learning, in which pupils feel safe, valued, and respected, by instituting routines and setting clear expectations for pupil behavior.
• Graduate/student-teacher candidates, through knowledge of content, pedagogy, and skill in delivering and evaluating instruction, will effectively engage students in learning by using a variety of instructional strategies.
• Graduate/student-teacher candidates will demonstrate the desired qualities that characterize a professional person in aspects that occur in and beyond the classroom.

Education Minor and PreK-12 Or 7-12 Secondary Education Certification

All students desiring to minor in Education for the PreK-12 and 7-12 certification areas listed above should declare their minor upon acceptance to Saint Vincent College or as early in their college career as possible.

All undergraduate education minors are required to have a major in an academic discipline. In addition to the major, other course requirements include: 1. General studies requirements (usually fulfilled through the Core Curriculum), 2. Required courses in psychology, 3. Studies in education and 4. Student teaching fieldwork. Students should consult other departmental listings and/or their major advisors to learn about requirements in their fields of study.

Requirements for Education Minor/Teacher Certification in PreK-12 Areas or 7-12 Secondary Education

In addition to the courses listed below, candidates for certification in secondary education must satisfy the requirements for a major in an academic degree program related to their area of certification. Pennsylvania Department of Education also requires all education certification students to have a minimum of six (6) credits in English [one (1) composition fulfilled by Core 1500, one (1) literature], and six (6) credits in college mathematics (100-level or above). ED 142 Mathematics for Teachers and ED 155 Geometric and Measurement Theory will meet the six-credit requirement. ED142 also fulfills Core curriculum requirements.

Courses in Psychology (3 credits)

PY 214	Adolescent Development	3

Courses in basic pedagogy (27 credits)

ED 100	Foundations of Education*	3
ED 115	Educational Psychology	3
ED 205	Strategies and Techniques of Instruction	3
ED 208	Classroom Partnerships and Inclusion	3
ED 220	Reading, Writing, and Differentiation in the Content Areas	3
ED 290	Psychology/Education of the Exceptional Student*	3
ED 300 -306	Teaching in the Content Area	3
ED 381	Educational Testing	3
ED 390	Promoting Youth Cultural Competence and Diversity	3

Field experiences (16-17 credits)

ED 102 /103/ or 207	Field Experience 1: 4-8/7-12/PK-12	1
ED 206	Field Experience II: Strategies and Techniques of Instruction	1
ED 322	Field Experience III: K-12 and Secondary Instruction and Theory	1
ED 400	Field Experience IV: Pre-Student Teaching Practicum	2
ED 401	Pre-Student Teaching Seminar	3
ED 410	Field Experience V: Student Teaching Internship	8-9
ED 411	Professional Seminar	3

** Also fulfills Core Curriculum requirements.*

Minor in Disability Studies: Special Education with or without Certification

The Minor in Disability Studies: Special Education is designed for undergraduate students who plan to pursue a teaching career in general or special education, who want to work in non-school settings with individuals who have disabilities, or to investigate issues concerning disabilities. At this time, the requests for courses are coming primarily from the Early Childhood and Middle Grade Education majors as well as certification students in PreK-12 areas. However, the minor is developed to be attainable by both education and non-education majors.

Requirements for Disability Studies Minor/Special Education Certification in Prek-12 Areas

Students planning a career in teaching will benefit from the minor in Disability Studies with certification in Special Education. As the federal and state governments are requiring students with disabilities to be included, to the greatest extent appropriate, into regular education classes, teachers in general education will work, on a daily basis, with students with disabilities. Having certification in Special Education will provide teacher candidates with additional skills to address the diversity of needs within their classrooms. Candidates will earn certification in their major field, as well as a certification in Special Education PreK-12. For these education majors, the 12 credits of Special Education courses would be offered one at a time during the junior and senior semesters. During the student teaching semester, education majors would student teach in a Special Education setting for seven weeks, and in a general education setting, according to their area of certification, for seven weeks.

Prerequisite Courses for Education Majors:

ED 115	Educational Psychology	3
ED 100	Foundations of Education	3
ED 290	Psychology and Education of Exceptional Students	3
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1
ED-250	Reading & Writing for Early and Special Learners	3

Minor in STEM (Science, Technology, Engineering, and Mathematics) Education

This minor study in STEM Education is designed to assist interested candidates in implementing effective approaches for improving STEM teaching; facilitating the dissemination and adoption of effective STEM learning practices; and promoting education experiences that prioritize collaborative, hands-on, and active learning to help others succeed in STEM fields. The minor is open to both education majors and non-education majors. The Education Department recognizes that students in other majors may be interested in this minor as part of their credentials when working with adults or youth in informal educational settings related to STEM.

Requirements for STEM Education Minor

The minor is designed to focus on teaching education and/or related-area candidates interested in STEM how to transfer skills that grow with scientific and technological advancements in professions unforeseen at the current moment to educational settings. The 18-20 credit course of study combines content-specific classes in STEM fields with teaching and learning course work specific to STEM education. Candidates seeking teacher education certification will be eligible for the PA Integrative STEM Education endorsement upon completion of their initial certification.

Prerequisites for Education Majors (already present)

ED 100	Foundations of Education	3
ED 115	Educational Psychology	3
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1

Prerequisites for Non-education Majors

ED 205	Strategies and Techniques of Instruction	3

Required STEM Introduction Courses (4 credits)

INTS 101	Introduction to Integrated Science	1
ENGR 100	Introduction to Engineering	3

Required STEM Education Courses (9 credits)

ED 214	Interdisciplinary STEM Approaches and Connections	3
ED 319	Inquiry Investigation, Design, and Assessment in STEM Education	3
ED 385	Applied Practicum in STEM Learning	3

STEM Content Electives (6 credits) – See STEM minor advisor for options.

Clearances

All students taking Education courses are required to have obtained current Criminal History Record (Act 34), Child Abuse (Act 151) clearances, and a tuberculosis test prior to the start of class. These clearances must be renewed in accordance with department regulations. Students will also have to obtain a one-time FBI clearance. The FBI fingerprint clearance will be good for your entire four or more years of study. Last, all candidates must adhere to the state laws regarding participating in the Mandated Reporter Training and Act 124.

Formal Admission to the Undergraduate Teacher Certification Program: Teacher Candidacy

To gain formal admission to the teacher certification program, students must be enrolled in the B.S. in Early Childhood Education, B.S. in Middle Grade Education, B.S. in Health and Physical Education or PreK-12 or 7-12 Education Minor with earned 48 credits with a minimum cumulative grade point average of 3.0. In addition, students must have successfully completed ED 205 Strategies and Techniques of Instruction with a grade of B- and have demonstrated appropriate dispositions

necessary for teaching. Students must have a P grade in **ED 00A Formal Education Admission**. Since the Pennsylvania Department of Education requires a 3.0 GPA, ED205 Strategies and Techniques may be repeated one (1) time if a student has earned a grade lower than a B-.

Application for Pre-Student Teaching and Advanced Standing

All students who have successfully completed the requirements necessary for teacher candidacy, obtained the 3.0 GPA, and maintain a good standing in the department will be permitted into pre-student teaching upon their application and advisor recommendation. This application must be submitted one week after the Town Hall meeting of the semester prior to desired pre-student teaching term. Failure to meet this deadline could postpone your placement and progress. See the Director of Field Experience for more information.

Students denied acceptance into the pre-student teaching program may appeal the decision to a review board composed of members of the Education Department and the College Teacher Education Committee. An alternative admissions procedure is available for students who do not meet the required grade point average but who have demonstrated potential to become successful K-12 teachers and have worked with children. See the Education Department for more information on the alternative admissions procedure.

Since the Pennsylvania Department of Education requires a 3.0 GPA, the following courses may be repeated one (1) time if a student has earned a grade lower than a B-: ED205; all 200-level methods for early childhood education, middle grade education, and K-12/secondary education.

Formal Admission to the Post-Baccalaureate Teacher Certification Program

Saint Vincent College offers post-baccalaureate students from any accredited institution to each certification through continuing education. All post-baccalaureate students applying for teacher certification must show evidence of an undergraduate degree, no criminal record, and meet the GPA requirements as stated here. For unconditional enrollment, students must have a minimum overall GPA of 3.0 in their undergraduate bachelor's degree bearing program, based on the most current 40 credits or a combination of graduate credits. For provisional enrollment, students must have earned a GPA between 2.5-2.99 based on the most current 40 credits or a combination of graduate credits. Candidates that are provisionally admitted into the program can take up to nine (9) credits in the post-baccalaureate program and must receive a 3.0 or higher GPA. Once the nine (9) credits have been earned, the program advisor will review the student's status. The program advisor may: a) allow the student to become enrolled unconditionally; b) refuse further enrollment if the grade point average was not met. Students with an undergraduate GPA between 2.0 and 2.49 based on the most current 40 credits or a combination of graduate credits may be conditionally admitted to the post- baccalaureate program if they meet the following requirements: 1. Three or more years must have elapsed between the completion of a bachelor's degree. 2. Once admitted, to become unconditionally accepted, the candidate must take and pass 12 credits with no grades lower than a "B" while maintaining a minimum GPA of 3.0 for these 12 credits. Once the twelve (12) credits have been earned, the program advisor will review the student's status. The program advisor may: a) allow the student to become enrolled unconditionally; b) refuse further enrollment if the grade point average was not met. In all cases, students must have successfully completed ED 205 Strategies and Techniques of Instruction with a grade of B- or higher and have demonstrated appropriate dispositions needed for teaching. Since the Pennsylvania Department of Education requires a 3.0 GPA, ED205 Strategies and Techniques of Instruction may be repeated one (1) time if a student has earned a grade lower than a B-. Students must have a P grade in ED 00A Formal Education Admission. Formal admissions is followed an application for pre-student teaching that will include a completed form, official transcripts of all college course work, and three completed recommendations (at least two from college faculty members).

Bachelor of Science in Early Childhood Education, Prek-4

Saint Vincent College offers a four-year Bachelor of Science in Early Childhood Education degree. With this degree, students will fully meet all current Pennsylvania Department of Education early childhood guidelines. The curriculum is designed to offer candidates a full preparation from infants through fourth grade. Students enrolled in this degree program will greatly benefit from the Fred Rogers Institute that provides unique opportunities for research, resources, and outreach. In addition, early childhood students are given ample opportunities for fieldwork in a variety of settings. Saint Vincent College partners with preschools and elementary schools in the area that are accredited and recognized statewide as a premiere model for early learning, as well as work at the Winnie Palmer Nature Reserve. The purpose of this major is to prepare each student for a variety of settings to maximize his/her employment opportunities.

Requirements for Bachelor of Science in Early Childhood Education (PreK-4): General studies requirements for early childhood certification (96 credits):

All candidates for a B.S. in Early Childhood must meet the following general studies requirements:

HI 107	Topics in U.S. History*	3
CORE 1500	Core Writing *	3
CL 130	Children's Literature*	3
NSCI 125	Introduction to Environmental Science with Lab*	4

** Also fulfills Core Curriculum requirements.*

Required Studies in Psychology (3 credits)

All candidates for early childhood teacher certification must take the following courses in Psychology:

PY 212	Child Development	3

Required Studies in Mathematics (6 credits PDE requirement)

ED 142	Mathematics for Teachers *	3
ED 155	Geometric and Measurement Theory	3

** Also fulfills Core Curriculum requirements.*

Required Studies in Education (74 credits Early Childhood Education PreK-4)

ED 100	Educational Foundations *	3

ED 101 or 207	Field Experience: PreK-4	1
ED 115	Educational Psychology	3
ED 122	Curriculum, Projects, and Play for the Developing Child	3
ED 200	Comprehension & Vocabulary Essentials for Early and Special Learners	3
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1
ED 208	Classroom Partnerships and Inclusion	3
ED 230	Social Studies for Early/Special Learners	3
ED 242	Numerical and Manipulative Math for Early/Special Learners	3
ED 244	Science and the Environment for Early/Special Learners	3
ED 250	Reading and Writing for Early/Special Learners	3
ED 290	Psychology and Education for Exceptional Students*	3
ED 308	Performance and Visual Arts for Early/Special Learners	3
ED 317	Program Development for Infants and Toddlers	3
ED 318	Field Experience III: Early Childhood Instruction and Theory	1
ED 320	Composition and Language Arts for Upper Elementary	3
ED 325	Physical Health/Wellness for Early Education	3
ED 330	Early Childhood Leadership and Community Advocacy	3
ED381	Educational Testing	3
ED 390	Promoting Youth Cultural Competence and Diversity	3
ED 400	Field Experience IV: Pre-Student Teaching Practicum	2
ED401	Pre-Student Teaching Seminar	3
ED 410	Field Experience V: Student Teaching	9
ED 411	Professional Seminar	3

** Also fulfills Core Curriculum requirements.*

See page **290** for typical eight semester degree plan. **

Bachelor of Science in Middle Grade Education 4-8

Saint Vincent College also offers a four-year Bachelor of Science in Middle Grade Education degree. This program meets and exceeds all Pennsylvania Department of Education guidelines for Option 1: Middle-Level Certification. The program provides a wide perspective of teaching young adolescent children in grades four through eight. Candidates are required to select an area of expertise in which they can take coursework to teach as a single subject on middle school. Candidates may select from four options: Mathematics. Language Arts, Social Studies, or Science. The Education Department has partnered with many local school districts for unique experiences working with alternative education. The Department also offers the Challenge Enrichment Program each summer. Through it, middle school candidates have an opportunity to explore advanced content by leading and teaching the program to children attending from grades four through eight. All students are encouraged to participate in fieldwork that offers opportunities to practice teaching.

Requirements for Bachelor of Science in Middle Grade Education (4-8): General studies requirements for middle grade certification (96 credits)

Specified content courses to be taken:

HI 106 or 107	Topics in U.S. History*	3
HI 258	Pennsylvania History	3
PS 100	American Government	3
CL 129	Young Adult Literature*	3

Required Studies in Psychology (3 credits)

All candidates for middle grade teacher certification must take the following foundation courses in Psychology:

PY 214	Adolescent Development	3

Required Studies in Mathematics (6 additional credits than general studies)

ED 142	Mathematics for Teachers*	3
ED 155	Geometric and Measurement Theory	3

Required Studies in Science (4 additional credits than general studies)

NSCI XXX	Any Natural Science with Lab*	4

Required Studies in Education (53 credits Middle Grade Education 4-8)

ED 100	Educational Foundations*	3
ED 102/103 Or 207	Field Experience:	1
ED 115	Educational Psychology	3
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1
ED 208	Classroom Partnerships and Inclusion	3
ED 234	Teaching of Science for Middle and Special Learners	3
ED 235	Teaching of Mathematics for Middle and Special Learners	3
ED 237	Teaching of Humanities for Middle/Special Learners	3
ED 290	Psychology and Education for Exceptional Students*	3
ED 311 or 322	Field Experience III	1
ED 320	Composition and Language Arts for Upper Elementary	3
ED 381	Educational Testing	3
ED 390	Promoting Youth Cultural Competence and Diversity	3
ED 400	Field Experience IV: Pre-Student Teaching	2
ED 401	Pre-Student Teaching Seminar	3
ED 410	Field Experience V: Student Teaching Internship	9
ED 411	Professional Seminar	3

** Also fulfills Core Curriculum requirements*

Required Additional Studies in one (1) content area:

Language Arts, Social Studies, Science, Mathematics (18 credits)
Students enrolled in the B.S. in Middle Grade Education (4-8) are required to take 18 credits in one (1) concentration area in addition to the above requirements. Below are the courses that students should take in one of the areas selected. Please be advised that none of the above courses can count.

Language Arts [six (6) courses must include at least one (1) communication course, one (1) writing course, and one (1) literature course]:

EL 110	Introduction to Creative Writing
EL 131	American Literature
EL 142	Poetry in Public
CA 100	Introduction to Mass Media
CA 120	Public Presentation
CL 130	Children's Literature

Social Studies [six (6) courses must include at least one (1) Social Studies [five (5) courses must include at least one (1) Economics course, one (1) Political Science course, one (1) Sociology course, and (1) History course]:

HI 123	Global History I
HI 228	Twentieth Century America 1941-1980
EC 101/102	Micro or Macro Economics
PS 222	State and Local Government (or PS 336 or CLS 227)
SO 106	Sociology and Global

Science [five (5) courses not more than two (2) Biology, Chemistry, Environmental Science courses]:

CH 101/103	General Chemistry I and Lab
BL 150/151	General Biology and Lab
NSCI 260	Understanding Biotechnology
NSCI 130/131	Introduction to Physics and Lab
NSCI 150/152	Earth Systems Science and Lab

Mathematics [five (5) courses] Recommended courses:

MA 106	Intro to Mathematical Thinking
MA 109 or MA 111	Calculus I
MA 110 or MA 112	Calculus II
PY 203	Statistics I
MA 301	History of Mathematics

See page **324** for typical eight semester degree plan. **

Bachelor of Arts in Health and Physical Education

Saint Vincent College also offers a four-year Bachelor of Science in Health and Physical Education degree. This program meets and exceeds all Pennsylvania Department of Education guidelines for PreK-12 Health and Physical Education certification. This program prepares candidates to teach grades PreK-12 or to work in several fields not limited to teaching, including coaching, private youth programs, aquatics, specialized physical education, health and wellness programs, and correctional settings for youth health and physical fitness. The health and physical education majors will have the opportunities to combine athletics and academics on campus in a manner that will make them marketable to hold positions in any youth-related educational setting.

Requirements for Bachelor of Science in Health and Physical Education Requirements: General studies for health and physical education certification (102 credits):
All candidates for a B.S. in Health and Physical Education must meet the following requirements:

Health & Management (20 credits)

BL 140	Intro to Exercise Sci Lec/Lab	3
BL 245	Exercise Physiology	3
HPE 270	Personal & Community Health	3
BL 150 /151	General Biology I and Lab	4
NSCI 235	Human Biology & Kinesiology	4*

Take one approved elective courses from the list below(see advisor for recommended elective course selection):

BA 209	Sports Administration	3
BA 374	Sports Law	3
HSCI-250	Wellness and Nutrition Course	3
PY 322	Health Psychology	3
PY 250	Addictive Behaviors	3
PY 275	Sport Psychology	3

Physical Education (20 credits)

HPE 120	Emerg. Care & Prev. of Injury	3
HPE 130	Swimming & Water Safety (7 week)	1
HPE 150	Team Sports I	3
HPE 250	Team Sports II	3
HPE 260	Comprehensive Movement & Fitness Activities for HPE	3
HPE 325	Adaptive Physical Education	3
HPE 340	Custom. Training & Assessment	4

Teacher Certification (59 credits)

ED 100	Foundations of Education	3*
CL 129 or 130	Young Adult Literature	3*
HPE/ ED 103 or ED 207	Field Experience: 7-12/K-12	1
ED 115	Educational Psychology	3
ED 142	Mathematics for Teachers	3*
ED 155	Geometric/Measurement Theory	3
ED 205	Strat & Techniques of Instruc.	3
ED 206	Field Experience II:	1
ED 208	Classroom Partner & Inclusion	3
ED 220	Read, Write & Dif. in Con Area	3
ED 290	Ed & Py of Exceptional. Stud.	3*
ED 307	Teach. of Health & Phys. Ed.	3
ED 322	Field Experience III: K-12	1
ED 381	Educational Testing	3
ED 390	Promoting Youth Cul. Comp.	3
ED 400	Field Experience IV	2
ED 401	Pre-Student Teaching Seminar	3
ED 410	Field Experience V	9
ED 411	Professional Seminar	3
PY 214	Adolescent Development	3

*Courses noted above with asterisk count towards fulfilling both major and CORE requirements.

See page **312** for typical eight semester degree plan. **

Bachelor of Arts in Psychology Education with or without PK-12 Special Education Certification

The Bachelor of Arts degree in Psychology Education is designed to meet the needs of a diverse group of students. It is an ideal option for undergraduates who wish to earn a degree while also obtaining PK-12 Special Education certification. Additionally, this major offers a pathway for students who begin their studies in Education but later decide not to pursue teaching or are unable to meet the requirements of the Education program. These students can still complete a relevant degree that supports careers in education-related fields, with or without PK-12 Special Education certification.

Psychology Education Major Requirements (61-62 credits)

Specified Psychology Courses (15 credits)

PY 212	Child Development	3
PY 214	Adolescent Development	3
PY 251	Family Systems	3
PY 260	Social Psychology	3
PY XXX or ED XXX		3

Specified Education Courses (46 – 47 credits)

ED 100	Foundations of Education	3
ED 115	Educational Psychology	3
ED 205	Strat & Techniques of Instruct.	3
ED 206	Field Experience II: Strat.	1
ED 208	Classroom Partner & Inclusion	3
ED 290	Ed & PY of Exceptional Study	3
ED 333/PY 219	Intro to School Counseling and Family Services	3
ED 381	Educational Testing	3
CL 130 or CL 129	Children's Literature or Young Adult Literature	3
Complete ED 101, ED 102 or ED 103, or ED 207		1
Take 3 credits 100 level ED Course		3
Complete 12 credits of ED courses (reading and math methods for specified cert.)		12
Complete ED 550 or ED 400		2-3

See page **333** for typical eight semester degree plan. **

** The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Students Electing to Add the PK-12 Special Education Certification (must have 3.0 GPA) new section

ED 355	Instructional Interventions/Student w High Incid Disabilities	3
ED360	Strategies and Assessment/Students w Sign &Multi Disabilities	3
ED 362	Class Approaches/Students w Beh & Autism Support	3
ED 412	Special Education Consultation Transition and Law	3
ED400	Field Experience IV: Pre-student Teaching or Sp Ed Internship	2
ED401	Pre-student Teaching Seminar	3
ED410	Field Experience V: Student Teaching	8-9
ED 411	Professional Seminar	
2 college mathematics courses are needed for teacher certification (Recommend taking ED142 and ED155).		6

Engineering

Saint Vincent College offers two degree programs in engineering, a four-year Bachelor of Science in Engineering program and a Bachelor of Arts in Mathematics/Engineering program. These two engineering programs are designed to complement each other and provide different opportunities to students in building a growing community of engineers at Saint Vincent College. The programs are described below.

Engineering

The Bachelor of Science in Engineering program at Saint Vincent College is a general engineering program. **The engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the Commission's General Criteria with no applicable program criteria.**

The program provides not only a strong foundation in science, mathematics, and general engineering concepts but also depth in a selected engineering discipline through upper-level engineering courses and a year-long senior capstone project.

This program provides excellent preparation for employment or graduate school in engineering or a related field. The liberal arts core common to all Saint Vincent College degrees ensures that our students will be able to design ethical engineering solutions to local, national, and global problems with an understanding of the global and societal impact of the solutions. The Engineering program provides excellent preparation for a variety of post-graduate opportunities, including immediate employment in an engineering field, enrollment in a graduate engineering program, and entry in another field such as medicine, law, or business, where the engineering education provides transferrable skills such as creative problem-solving and ethical decision-making

Students in the Engineering program are required to select an engineering concentration to fulfill the depth requirement. The concentrations that are currently offered are the following:

- Environmental Engineering
- Chemical Engineering
- Materials Engineering
- Mechanical Engineering

In addition, all students must select at least one technical elective from a set of science, mathematics, computer science, and engineering courses. This allows students to broaden their foundational knowledge, such as by taking a course in biology or environmental science for example or by taking an upper-level engineering course in an area outside of their selected concentration.

Following the Catholic and Benedictine liberal arts tradition of Saint Vincent College, the aims of the Engineering programs are:

- to instill in our graduates the values of stewardship, community, and ethical responsibility,
- to cultivate a versatile engineering curriculum, rooted firmly in fundamentals, producing well-rounded, creative graduates equipped with the knowledge and skills to meet modern challenges in engineering and related fields, and
- to provide opportunities for students to engage in meaningful research in the pursuit of Truth and to practice the human-centered design of engineering solutions

Program Educational Objectives

The objectives of the Engineering program are to produce graduates who, within a few years after graduation, will be able to:

1. pursue a career or graduate studies in engineering or a related field that benefits from their leadership and problem-solving mindset,
2. conduct themselves in a professional, ethical, and collaborative manner with respect for and awareness of social and cultural responsibilities, stewardship, and community,
3. pursue a lifestyle of service and active involvement with professional, civic, or religious organizations grounded in the pursuit of Truth that contributes to the greater benefit of society.

Engineering Student Learning Outcomes

To ensure that our graduates attain the program educational objectives, the curriculum of the Engineering program is designed so that students will attain the following outcomes at the time of graduation:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Requirements for the Bachelor of Science degree in Engineering

(See core curriculum requirements.)

Major Requirements (87 credits)

The student must complete the requirements listed in the following categories:

Mathematics Requirements (19 credits)

MA 109	Calculus with Applications I	4
or		
MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 241	Statistics I	3

or

MA 311	Probability and Statistics I	3

Science Requirements (12 credits)

CH 101	General Chemistry I	3
CH 103	General Chemistry I Laboratory	1
PH 111	General Physics I	3
PH 113	General Physics I Laboratory	1
PH 112	General Physics II	3
PH 114	General Physics II Laboratory	1

Engineering Core Requirements (38 credits)

ENGR 100	Introduction to Engineering	3
ENGR 105	Engineering Graphics and Design	3
ENGR 115	Introduction to Engineering Computation	3
ENGR 215	Introduction to Circuits and Measurements	3
ENGR 220	Engineering and Computing Ethics	3
ENGR 223	Statics	3
ENGR 226	Materials Engineering	3
ENGR 228	Materials Engineering Lab	1
ENGR 240	Engineering Design and Lab	4
ENGR 310	Engineering Thermodynamics	3
ENGR 315	Junior Engineering Laboratory	1
ENGR 366	Automatic Control Systems	3
ENGR 450	Junior Capstone Seminar	1
ENGR 451	Capstone Design Project I	2
ENGR 452	Capstone Design Project II	2

Technical Elective (3 credits)

Students pursuing concentrations in chemical engineering, materials engineering, and mechanical engineering must take at least one three-credit course from the following list of science, mathematics, computer science, and engineering courses as a technical elective. Students pursuing the environmental engineering concentration must take an engineering course as a technical elective. Note that students must have the required prerequisites to take any of these courses. In addition, this technical elective cannot be satisfied by AP or IB credit, or by independent study or independent research courses.

Any 100-level or 200-level Biology course

CH 102 (General Chemistry II)

Any 200-level Chemistry course

Any 100-level, 200-level, or 300-level Computer Science course, excluding CS 102, CS 357 and CS 358

Any Data Science course

Any Engineering course not required in the Engineering Core or in the student's selected concentration

Any 100-level or 200-level Environmental Science course

Any 200-level Health Science course

Any 200-level, 300-level, or 400-level Mathematics course, excluding those required in the Engineering core

Any 200-level or 300-level Physics course, excluding PH 214, PH 215, PH 223, PH 224, PH 225, and PH 381

Engineering Concentration Requirements (15 credits)

Students must complete the requirements for one of the following engineering concentrations:

Chemical Engineering Concentration

ENGR 230	Chemical Engineering Fundamentals	3
ENGR 330	Fluid Mechanics	3
ENGR 340	Heat and Mass Transport	3
ENGR 360	Separation Processes	3
ENGR 420	Chemical Reaction Engineering	3

See pages **293** for the typical eight semester degree plan. *

Environmental Engineering Concentration

ENGR 235	Introduction to Environmental Engineering	3
ES 220	Introduction to Geographic Information Systems	3
ENGR 330	Fluid Mechanics	3
ENGR 340	Heat and Mass Transport	3
ENGR 350	Alternative Energy Systems	3

See pages **294** for typical eight semester degree plan. *

Materials Engineering Concentration

ENGR 320	Mechanics of Materials	3
ENGR 327	Soft Materials	3
ENGR 328	Rapid Fabrication	3
ENGR 340	Heat and Mass Transport	3
ENGR	ENGR 200-level or higher class, excluding those required in Engineering Core or in this Concentration	3

See pages **295** for typical eight semester degree plan. *

Mechanical Engineering Concentration

ENGR 224	Dynamics	3
ENGR 320	Mechanics of Materials	3
ENGR 330	Fluid Mechanics	3
ENGR 340	Heat and Mass Transport	3
ENGR XXX	ENGR 200-level or higher class, Excluding those required in Engineering Core or in this concentration.	3

See pages **296** for typical eight semester degree plan. *

Mathematics/Engineering Program

Saint Vincent College offers a cooperative liberal arts and engineering program in conjunction with affiliate institutions including: The Catholic University of America and The University of Pittsburgh. Students enrolled in this program spend the first three years at Saint Vincent College and then transfer to the cooperating engineering institution. The mission of the Mathematics/Engineering Degree Program is to provide students with a solid foundation in mathematics, science, and the liberal arts informed by Benedictine and Catholic values so they may succeed in their engineering education at a partner institution and use their talents to contribute to the greater good.

Students who successfully complete this program receive a Bachelor of Science in a specific engineering discipline from the cooperating institution and a Bachelor of Arts in Mathematics/ Engineering from Saint Vincent College. Students in this program will need to transfer back enough credit from the cooperating engineering institution (excluding co-op

assignments) to reach the 124 credit hour minimum needed to graduate. This degree program is well-suited for students who want the foundational skills afforded by a liberal arts education rooted in the Catholic and Benedictine tradition but also desire an engineering degree in a specific discipline.

Important considerations for this program are the following:

- A student must have an overall GPA of 3.0 or higher to be considered for transfer by the cooperating institutions with the following exception: for transfer into the bioengineering degree program at The University of Pittsburgh, a student must have an overall GPA of 3.5 or higher to be considered for transfer.
- Only courses in which a student achieves a final grade of C or better can be transferred to the cooperating institution.
- Each cooperating institution establishes which engineering degree programs are open to transferring students.

Program Educational Objectives

The Mathematics/Engineering program provides the initial preparation for students in the following ways:

1. Establish the foundation of liberal arts, mathematics, and science tools at Saint Vincent College to enable a successful engineering education at a partner institution.
2. Expose students to select engineering courses to nurture, support and reinforce their interest in the engineering discipline.
3. Foster well-rounded individuals by uniting math and science with the liberal arts, in preparation for a wide variety of engineering disciplines and vocations.

Mathematics/Engineering Student Learning Outcomes

To ensure that our Mathematics/Engineering students attain the program educational objectives, the curriculum of the program is designed so that students have the following abilities at the time of transfer to the cooperating engineering institution:

1. An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to function effectively on a team whose members together provide leadership, create a collaborative environment, establish goals, plan tasks, and meet objectives.

Requirements for a Bachelor of Arts Degree in Mathematics/Engineering
Major Requirements (at least 64-65 credits)

Mathematics Requirements (19 credits)

MA 111	Analytical Calculus I	4
or		
MA 109	Calculus with Applications I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 311	Probability and Statistics I	3
or		
MA 241	Statistics I	3

Science Requirements (16 credits)

CH 101	General Chemistry I	3
CH 103	General Chemistry I Laboratory	1
CH 102	General Chemistry II	3
CH 104	General Chemistry II Laboratory	1
PH 111	General Physics I	3
PH 113	General Physics I Laboratory	1
PH 112	General Physics II	3
PH 114	General Physics II Laboratory	1

Engineering Core Requirements (13 credits)

ENGR 100	Introduction to Engineering	3
ENGR 115	Introduction to Engineering Computation	3
ENGR 223	Statics	3
ENGR 240	Engineering Design and Laboratory	4

Additional Requirements (18 credits)

The students in the Mathematics/Engineering program are also required to take two engineering electives and four technical electives. An engineering elective is any two-, three-, or four-credit Engineering course not required by the Mathematics/Engineering major. Technical elective courses are defined in the requirements for the Engineering major.

See page **321** for typical eight semester degree plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

English

The Saint Vincent College English Department invites students to join them in the 2,500-year-old conversation about language and literature. To enrich this conversation, students read classic and contemporary texts from a variety of critical perspectives. With this textual basis, students follow a curricular sequence that develops their knowledge and skills from the foundational to the mastery level. Along with the study of literature and writing, English majors may concentrate in areas that suit their interests and career aspirations. Giving direction and resonance to these literary and creative pursuits are the Benedictine values of community, hospitality, stewardship, and care and concern for the individual.

ENGLISH STUDENT LEARNING OUTCOMES

English students will be able to:

- Analyze and interpret literature by recognizing and responding to context, genre, and style.
- Write well, reflecting Saint Vincent College's Six Principles of Good Writing.
- Explain and apply literary theory.
- Produce substantial capstone projects that reveal keen analysis, persistent revision, and thoughtful, responsible, scholarship.

THE ENGLISH MAJOR: 38 CREDITS

Students majoring in English must complete the following requirements:

Take two Literature Survey Courses (choose 2): 6

EL 114	British Literature: Beginnings to Present
EL 118	Global Literature
EL 133	American Literature: Beginning to Present

Take one Critical Theory Course (choose 1): 3

EL200	Ways of Reading: An Intro to Literary Theory

Take two Advanced Literature Courses (choose 2): 6

EL 214	Shakespeare Greatest Hits
EL 216	Satan and Co.: British Renaissance Lit
EL 236	Breaking and Remaking: European Lit From 1800 to present
EL 242	Tortured Genius: Lit of the American Renaissance
El 250	Around the World in 15 weeks: Contemporary World Lit in Translation
EL 256	Sentimental Fictions: 19th C AME Heroines
EL 258	The beautiful and damned: AME Modernist Novels

Take one senior project course (choose 1): 3

EL 400	Literature Capstone
EL 401	Creative Capstone

Take three English Concentration Courses (choose 3) See below * 9

Take three English Elective Courses 9

EL 1xx or 2xx	English elective (choose 2)
EL 2xx	English elective (choose 1)

Complete experiential components 2

EL 550	English Internship
EL 551	English Travel
EL 552	Careers in English

Concentrations*:

By the end of their freshman year, English majors, in consultation with their English advisors, should choose one of the five following concentrations, each of which has required courses and experiential component recommendations:

Literature:
Required courses (in addition to the Introductory and Intermediate required of all concentrations):
• One 100-level literature elective (3 cr.)
• Two 200-level literature Electives (6 cr.)
Recommended experiential component:
• Internships: any internal or external internship
• Travel: Conference travel, travel course, or study abroad
See page **299** for typical eight semester degree plan. *

Teaching Certification:
Required Courses (in addition to the Introductory and Intermediate courses required of all concentrations; no exceptions):
• EL 119: History of the English Language (3 cr.)
• CL 129: Young Adult Literature (3 cr.)
• One Shakespeare course EL 214, 127, or 165 (3 cr.)
• One British Literature or Global Literature Course EL 114 or EL 118 * fulfilled above
• EL 133: American Literature (3 cr.) * fulfilled above
Recommended Experiential Components:
• Internship: Writing Center Writing Consultant or Associate (*EL 205: Advanced Writing prerequisite)
• Travel: Conference Travel, travel course, or Study Abroad
See page **301** for typical eight semester degree plan. *

Creative Writing:
Required Courses:
• EL 110: Introduction to Creative Writing
• Two of the following:
• EL 203: Poetry Workshop (3 cr.)
• EL 204: Fiction Workshop (3 cr.)
• EL 244: Creative Nonfiction Workshop (3 cr.)
Recommended Experiential Components:
• Internship: Generation, Eulalia Books, The Review.
• Travel: Conference Travel or Study Abroad
See page **297** for typical eight semester degree plan. *

Publishing:
Required Courses:
• EL 142: Poetry in Public: Outreach and Curation in the Literary Arts
• EL 185: History of the Book (3 cr.)
• EL 230: Small Press Publishing (3 cr.)
Recommended Experiential Components (4 cr.)
• Internship: *Eulalia Books, Generation, The Review*
• Travel: Conference Travel or Study Abroad
See page **300** for typical eight semester degree plan. *

Literary Translation:
Required courses:
• EL 110: Intro to Creative Writing (3 cr.)
• EL 252: Intro to Literary Translation Workshop (3 cr.)
• EL 236: Modern European Literature (3 cr.) or EL 250: Contemporary World Literatures in Translation (3 cr.)
Recommended Experiential Components (4 cr.):
• Internship: Eulalia Books, Off-campus internship
• Travel: Study Abroad, Conference presentation
Please note that this list of courses is subject to change; majors should consult the English Department's Schoology page during each registration period for updates.
See page **298** for typical eight semester degree plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **English, Creative Writing** and **Literary Translation**, please refer to that section.

Environmental Science

The environmental science program is multidisciplinary in its approach to environmental problems. The philosophy of the program is that environmental problems are best solved through careful scientific investigation within the context of social, political, and ethical structures. To prepare individuals to achieve this goal, the environmental science major is multidisciplinary in its structure. Required course work in general and advanced science gives students a solid foundation for scientific investigations. Courses in the humanities and social sciences broaden students' perspective and allow them to analyze problems for unique solutions. Students have the opportunity to develop field skills in nearby aquatic and terrestrial ecosystems. This combination of courses and field experience provides students with a broad background to understand environmental problems and a strong scientific approach to find answers to those problems.

The environmental science major has been designed to provide students with the background to pursue careers in the environmental field. Students have the flexibility to focus their studies in a specific area such as biology, chemistry, education, public policy, or communication by obtaining a minor in that area. Students could pursue graduate programs in environmental science, environmental law, or education. They may also choose to prepare for careers in environmental monitoring or testing, environmental communication, watershed management, or environmental education.

Since the environmental science major is interdisciplinary there is significant overlap with other programs. A minor should have at least eight credits in addition to those courses in the major.

Environmental Science Student Learning Outcomes

- Scientific Skills. Demonstrate a proficiency in laboratory skills to collect data and technological competency from multiple disciplines.
- Scientific Principles. Apply scientific principles to environmental problems.
- Communication. Express scientific information clearly in both written work and oral communication.
- Data Analysis. Analyze and display scientific data and utilize it as evidence for a conclusion.
- Information Literacy. Find, evaluate and utilize sources of information appropriately and ethically.
- Diverse Perspectives. Consider and evaluate environmental problems from multiple perspectives in the context of our modern society to synthesize and develop a holistic understanding of the key issues linked to these problems.

To accomplish these goals the environmental science major has the following components:

- A strong foundation in math and natural science including advanced environmental science courses.
- A multidisciplinary approach with required credits from the natural sciences, social sciences, and humanities.
- Students have 17-20 elective credits to tailor their education to fit their career goals.
- A strong emphasis in laboratory and field work. Several courses offer extensive opportunities to apply concepts in the laboratory and the field. Field work includes many unique ecosystems near campus including at the Winnie Palmer Nature Reserve.
- Opportunities to expand knowledge through internships, summer research, and programming at the Winnie Palmer Nature Reserve.
- An emphasis on writing throughout the program. Many of the required courses are "writing designated" indicating participation by the professor in the College's Campus Writing Program. Through this program students learn to write within their disciplines following a campus-wide model for good writing.
- All students are required to complete a senior research project, which serves as a capstone experience. In the spring semester of their junior year students prepare a proposal for original research. The student then conducts his/her research and writes a senior thesis under the guidance of an environmental science faculty member. The research project provides the student with first-hand experience investigating and reporting on an environmental problem. To begin the capstone experience, students must be in good academic standing in the major (at least a 2.0 GPA and no more than one lecture course below a C- in the major) and have taken at least two upper-level major courses

Requirements for Environmental Chemistry:
See Chemistry Department.

Environmental Science (B.S.)

Requirements for a Bachelor of Science Degree in Environmental Science
(See core curriculum requirements.)

Environmental Science Major Requirements (69-76 credits):

BL 150-153	General Biology I and II and Labs	8
BL 232, 233	Ecology and Lab	4
CH 101-104	General Chemistry I and II and Labs	8
CH 216, 218	Quantitative Analysis and Lab	4
EL 111	Environmental Literature	3
ES 100	Nature & Sustainable Resources	3
ES 150,152	Earth Systems Science and Lab	4
ES 220	Introduction to Geographic Information Systems	3
ES 300	Research Seminar I	2
ES 301	Research Laboratory	2
ES 302	Research Seminar II	1
ES 550	Environmental Science Internship	0-3
PH 109, 113	College Physics I and Lab	4
PS 390	Environmental Law and Policy	3
SO 161	Foundations of Sustainability	3

Math Requirement:		8-10
MA 102, MA 103 &	Calculus 1 with Review A &B	
MA-110	and Calculus with Applications II	
or		
MA 109-110	Calculus with Applications I and II	
or		
MA 111-112	Analytical Calculus I and II	

Humanities: Choose at least one:		3
HI 226	Society and the Environment:	

	the American Experience
PL 217	Environmental Ethics
PL 219	Ethics and Technology
TH 274	Green Discipleship

Advanced Environmental Courses:
Choose 1 course with Lab if available (3-4 credits)

BL 228, 229	Wildlife Biology and Lab
BL 230, 231	Ornithology and Lab
BL 240-241	Conservation Biology and Lab
BL 252-253	Invertebrate Zoology and Lab

Physical Environmental Science: Choose 1 course with Lab (3-4 credits)

ES 230	Energy and the Environment
ES 240	Geophysics
CH 276, 277	Advanced Environmental Chemistry and Methods of Environmental Analysis
ES 250	Advanced Environmental Mapping
ES 245, 246	Hydrology and Limnology and Lab

See page **303** for the recommended 8-semester program plan.
These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Sustainability and Integral Ecology** and **Environmental Science**, please refer to that section.

Health Science

The major in Health Science at Saint Vincent College provides students with options in the sciences that combine courses from multiple traditional disciplines to meet the needs of students interested in allied health careers. Students will develop basic skills by taking foundational courses in science and mathematics. They then focus on additional science content in advanced courses in a concentration that fulfill the requirements for health programs. Two seminars in the first and fourth year will help students integrate the concepts from multiple disciplines to solve real-world problems through case studies and projects.

The goal of the B.S. degree in Health Science is to educate students so that they may use scientific principles from a multitude of scientific fields in real-world health applications, to train students to work in teams, and to communicate with others in their field as well as society in general.

Students who complete a bachelor's degree in Health Science with the required GPA and appropriate prerequisites may continue on to professional school in areas such as physician assistant, physical therapy, occupational therapy, pharmacy, nursing (second degree and master's degree), athletic training, pathology assistant, chiropractic medicine, and optometry. Students interested in professional schools should consult the requirements for the specific program and school they are interested in attending. Other students may elect to continue their education in graduate programs in areas such as health science, nutrition science, health promotion, health management, and occupational health and safety. Students may also be directly employed in wide variety of sales and technical product specialist positions in the pharmaceutical, medical, instrumental, laboratory, and biotechnological industries.

Health Science Student Learning Outcomes

1. Interdisciplinary Integration. Students will be able to analyze, connect, and integrate knowledge from two or more disciplines to draw conclusions and/or solve complex health-related problems.
2. Scientific Knowledge. Students will be able to demonstrate a proficiency in scientific principles and skills in biology, chemistry and physics.
3. Communication. Students will be able to express themselves clearly in both written and oral communication as appropriate for medical professionals.
4. Data Analysis. Students will be able to analyze scientific and health data and utilize that data as evidence for a conclusion.
5. Information literacy. Students will be able to find, evaluate and utilize sources of scientific and health information appropriately and ethically.
6. Teamwork. Students will be able to work effectively as part of an interprofessional team to accomplish a complex healthcare project.

Requirements for a Bachelor of Science Degree in Health Science

Health Science Major Requirements (59-64 Credits)

Foundations I (21-23 Credits)

CH 101/103	General Chemistry I and Lab	4
BL150/151	General Biology I and Lab	4
HSCI 101	Introduction to Health Science	1
HSCI 222/224	Human Anatomy and Physiology I and Lab	4
PH 109/113	College Physics I and Lab	4
MA 102/3 or MA 109 or 111	Calculus I	4-6

Foundations II (19 credits)

BL 152/153	General Biology II and Lab	4
CH 102/104	General Chemistry II and Lab	4
HSCI 201	Medical Terminology	1
HSCI 210	Healthcare Systems	3
HSCI 223/225	Human Anatomy and Physiology II and Lab	4
BL 260 or PY 203	Biostatistics Statistics I	3

Capstone Experience (3-6 credits)

HSCI 300	Health Science Seminar	3
HSCI 550	Internship	0-3

Science and Social Science Electives (16 Credits)

Choose 16 Credits* (must include labs when available) from the following:

CH 221/223	Organic Chemistry I and Lab	4
CH 222/224	Organic Chemistry II and Lab	4
BL 208/209	Cell Biology and Lab	4
BL 212/213	Microbiology and Lab	4
BL 214/215	Molecular Genetics and Lab	4
BL 224/225	Physiology and Lab	4
BL 220/221	Comparative Vertebrate Anatomy and Lab	4
BL 245/246	Exercise Physiology	3
BL 226/227	Neuroscience and Lab	4
CH 251/253	Proteins and Metabolism & Lab	4
CH 252/254	Nucleic Acids and Membranes and Lab	4
PY 331	Biological Psychology	3
PY 322	Health Psychology	3
PH 110/114	College Physics II and Lab	4
HSCI 250	Wellness and Nutrition	3
HSCI 255	Acute Care and Emergency Response	3
SO 248	Fundamentals of Epidemiology	3

**Carefully explore your post-graduation goals to choose appropriate classes*

NOTES: Elective courses used to satisfy major requirements cannot be used to satisfy a second major. To earn a minor in a related discipline, students must complete the minor requirements with at least two courses (and associated labs if applicable) in addition to the health science major requirements.

See page **313** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

History

Department Philosophy

The philosophy of the Department of History echoes the College Mission which commits to help students acquire a quality liberal arts education and achieve significant career goals. To accomplish this, the Department prepares students for graduate or professional school, or for a wide variety of careers. Department faculty work with students to develop their intellectual understanding of both the facts of historical events and their broader significance, and nurture students' skills in critical thinking and effective oral and written communication.

Department faculty believe that the study of history provides the context necessary to understand our contemporary world. By analyzing historical events, students can more fully appreciate the complexity of human experience. By examining social changes in other times, they develop a broad perspective and the ability to weigh evidence and arguments that are essential for those who live in a rapidly changing world. The Department of History offers the B.A. degree through programs sufficiently structured to guide the student, yet flexible enough to encourage the development of individual interests.

History Student Learning Outcomes

Students will:

- Demonstrate a detailed academic knowledge of history in particular settings.
- Analyze and evaluate primary and secondary sources.
- Place secondary sources in their historiographical context.
- Demonstrate effective academic writing.
- Demonstrate effective academic speaking.

Requirements for a Bachelor of Arts Degree in History

(See core curriculum requirements.)

The History major consists of 43 credits. The balance of the 124 credits required for graduation can be composed of electives or courses required for one or more minors or a second major. Students should choose electives in consultation with their major advisor.

Major Requirements (39 Credits)

A. Area Studies

History majors are required to complete three of the following areas for a total of 18 credits at the 100-level:

HI 102, 103	Ancient Greece and Rome Europe: 500-1700 A.D.	6
HI 104, 105	Contemporary Europe I and II	6
HI 106, 107	Topics in U.S. History	6
HI 110, 111	English History	6
HI 123, 124	Global History I and II	6

B. Upper Division History Classes

History majors must take three courses, or nine credits, from the 200-level offerings.

C. Majors-only courses

History majors will be required to take HI 100 in their first semester as a major; HI 101: the fall of their sophomore year, HI 300: in the spring of their sophomore year; HI 301: in the spring of their junior year; and HI 302 in the fall of their senior year. 15 credits.

D. Non-Western Course Requirement

The History major is required to take one course that is designated non-Western. This is not an additional course, but should be fulfilled by careful selection of either area studies or upper division courses. Courses in this catalog that are designated as non-Western include: HI 123, HI 124, HI 224, HI 232, HI 280, and HI 281. Most non-Western courses will be offered on a two- to four-year rotation, so students should be aware of what is available in any given academic year. For an updated list of non-Western courses, consult with your advisor.

See page **310** for the recommended 8-semester program plan. *

Requirements for a Bachelor of Arts Degree in Public History

(See core curriculum requirements.)

The Public History major consists of 52 credits. The balance of the 124 credits required for graduation can be composed of electives or courses required for one or more minors or a second major. Students should choose electives in consultation with their major advisor.

Major Requirements (48 Credits)

History Requirements

Public History majors are required to complete two of the following area studies courses for a total of 12 credits at the 100 level:

HI 102, 103	Ancient Greece and Rome Europe: 500-1700 A.D.	6
HI 104, 105	Contemporary Europe I and II	6
HI 106, 107	Topics in U.S. History	6
HI 110, 111	English History	6
HI 123, 124	Global History I and II	6

Upper Division History Classes

Public History majors must take two courses, or six credits, from the 200-level offerings. 6

Majors-only courses

Public History majors will be required to take HI 100 in their first semester as a major; HI 101: the fall of their sophomore year, HI 300: in the spring of their sophomore year; HI 301: in the spring of their junior year; and HI 302 in the fall of their senior year. 15 credits. The courses are:

HI 100	Introduction to History Major	3
HI 101	Historical Writing	3
HI 300	The Historian's Profession	3
HI 301	Junior Research Seminar	3
HI 302	Senior Writing Seminar	3

Public History Requirements

Public History majors must complete five courses, 15 credits, in Public History courses. The courses are:

HI 201	Introduction to Public History	3
HI 202	Practicum in Public History	3
HI 293	Museum Studies: An Introduction	3
BA 326	Nonprofit Management	3

HI 550	Internship in History	3

Public History Electives (3 Credits)
Select one from recommended electives:

AN 101	Introduction to Anthropology
AN 222	Cultural Anthropology
AN 230	Archaeology
BA 337	Nonprofit/Social Marketing
BA 398	Project Management
CA 100	Introduction to Comm & Media Studies
CA 230	Writing for Media
CA 304	Social Media Strategies
DA 120	Digital Layout and Design
DA 140	Digital Photography
DA 150	Digital Video Production
DA 190	Interactive Media
EL 107	News Writing
EL 133	American Lit: Beginnings to Present
EL 113	Women's Literature
EL 139	African American Literature
EL 138	Multiethnic Literature of the United States
EL 244	Creative Nonfiction Workshop
SO 200	Race and Ethnicity

Other courses will be considered through consultation with the public history advisor.

See page **311** for the recommended 8-semester program plan. *

Teacher Certification

Requirements for Social Studies Certification and Elementary Education

In addition to a major in History and fulfillment of the Core Curriculum, the certification candidate must satisfy the requirements of the Education Department of Saint Vincent College in this ***Catalog***. See page **311** for the recommended semester program plan. *

Minors

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **History** and **Public History** please refer to that section.

Interdisciplinary Courses

Some semesters, the History Department may offer interdisciplinary or cross-listed courses. Students are urged to consult the course listings for each semester on the availability of these courses.

Pre-Law

History majors interested in pursuing law as a career should consult with their academic advisor in the History Department. In addition, students with a major in History are eligible to participate in a cooperative program between Saint Vincent College and Duquesne Law School that allows students to earn their bachelor's degree and Juris Doctor degree in six years. In this program, qualified students who complete their first three years of study at Saint Vincent, fulfilling the core curriculum requirements and the requirements for the major, may transfer into the Law Program and complete the requirements for the Juris Doctor in three years. For details, see the explanation of this program in the Pre-Law section of the ***Catalog***.

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Liberal Arts

A liberal education gives a clear, conscious view of one's own opinions and judgment, a truth in developing them, an eloquence in expressing them, and a force in urging them. It teaches one to see things as they are, go right to the point, to disentangle a skein of thought, to detect what is sophisticated, and to disregard what is irrelevant. It prepares one to fill any post with credit, and to master any subject with facility.
– St. John Henry Cardinal Newman

Learning Without Borders

The Liberal Arts major offers an interdisciplinary course of study by which students engage timely issues that defy the bounds of a single discipline. By bringing different fields of study into dialogue on a common, culturally relevant issue, the program fosters a broad scope of inquiry and critical thinking that are central to the liberal arts tradition. This tradition views education as environmental (unified and wholistic) rather than compartmental (divided into parts). Conceptual integration provides a better sense of the whole while a sense of the whole in turn provides greater meaning to the component parts. The Liberal Arts degree provides a flexible framework, rigorous coursework, and tailored advising throughout the student's course of study.

Interdisciplinary Tracks (I-Tracks)

There are different sides to every issue. The Liberal Arts scholar, in consultation with their program advisor, decides on an interdisciplinary research area (interdisciplinary track, or "I-Track") and the relevant disciplinary sides. Courses are selected from among the department offerings of typically three different fields of study (three different sides) that give particular attention to the theme or an aspect of the theme. Up to 15 credits from a second major or additional minor can apply to their interdisciplinary curriculum.

Possible interdisciplinary tracks include:

1. Bioethics
2. Business Ethics
3. Citizenship and Globalization
4. Conflict Resolution
5. Digital Humanities
6. Environmental Ethics
7. Faith, Reason, and Science
8. Health, Development, and Wellbeing
9. Human and Artificial Intelligence
10. Information Ethics
11. Language and Culture
12. Sustainability and Integral Ecology

Liberal Arts Pedagogy

The liberal arts historically demarcate a set of seven subject areas: grammar, logic, rhetoric, arithmetic, geometry, astronomy, and music. The septem artes liberales (seven liberal arts) framed educational curricula first in the Roman Empire and later medieval Christian universities. Nowadays, "liberal arts" refer more to a particular educational approach than to a specific set of subjects. Liberal arts pedagogy emphasizes inquiry and interpretation over data collection, breadth over specialization, and synthesis over separation. On the one hand, the liberal arts major invites students to consider connections between humanities and non-humanities disciplines. Creative integration within diverse subject areas is encouraged. On the other hand, the coursework of the major is rooted within the humanities because these subjects assist in the pedagogical practices of inquiry, interpretation, and synthesis that better facilitate discovery of meaningful connections between diverse content areas.

Student Learning Objectives

Liberal Arts majors will:
- Synthesize perspectives across multiple disciplines
- Demonstrate effective written communication skills
- Demonstrate critical thinking and analysis
- Demonstrate information literacy

Requirements for the Bachelor of Arts Degree in Liberal Arts

Liberal Arts Major Requirements (38-39 credits):

LA 225	Truth and Interpretation	3
LA 325	Senior Seminar	3
Interdisciplinary Track*		32-33

**Depending on the track selected.*

See page **316** for the recommended 8-semester program plan for Liberal Arts. This plan is designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Liberal Arts as Second Major

It is advisable, but not required, for the Liberal Arts major to be declared in addition to a second major. When this pairing of majors occurs, up to 15 credits of the additional major (or minor) can contribute toward the interdisciplinary curriculum of the Liberal Arts major (but not to the LA minor). In this way, the second major or minor program constitutes one "side" of the three-sided Liberal Arts curriculum.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on the **Liberal Arts** minor, please refer to that section.

Professional Benefits of a Liberal Arts Degree

"We're now on the cusp of a hybrid model [of hiring] where the most valuable employees are interdisciplinary" (*Forbes*, 2020). Interdisciplinary liberal arts programs provide an important corrective to the trend of hyper-specialization which has led to a growing skill-gap among job candidates (McKinsey Global Survey, 2020). Employers do not only seek candidates with specialized knowledge, but also those who have a disposition for and skill in cross-disciplinary collaboration and integrative thinking. This program promotes facility in broad conceptualization, evaluating and interpreting presented information, clearly communicating one's thinking, receptivity of uncommon ideas and cultures, and awareness of ethical and social responsibilities.

Liberal Arts Capstone Project

During their senior year, students must complete and present a project that concentrates on a specific problem or question relevant to their interdisciplinary track and that demonstrates the benefit of a cross-disciplinary approach to the problem or question. Project identification and research begins in LA 225 Truth and Interpretation and continues in LA 325 Senior Seminar where most of the work is completed. Students must have two project advisors (or thesis readers) in different fields of study. Students will present projects at the Liberal Arts session of the annual Academic Conference in the spring.

General Studies Option

Students who, at the determination of their faculty advisor, faculty overseeing the Liberal Arts program, and/or the Academic Affairs office, need to change their major in order to complete an undergraduate degree at Saint Vincent College may be given the option to complete a Bachelor of Arts in General Studies.

A General Studies program is constructed around a concentration of at least 27 credits in a particular subject or area. Students work with the Liberal Arts program director to identify an appropriate concentration. Students will also complete the Liberal Arts capstone course, LA-325, in addition to their concentration.

Students can only be enrolled in the General Studies pathway with the approval of the Liberal Arts program director and the office of Academic Affairs.

Mathematics

Mathematics, the study of numbers and shapes, and the language of the physical sciences, has emerged from its classical roots as the principal tool for the analysis and comprehension of many current problems. Chaos and fractals, cryptography, data compression algorithms, tomography, and turbulence are only a few of the many areas currently studied by mathematicians. In addition, promising research continues to be done in the fields of analysis, topology, algebra, and number theory. These exciting areas of study all utilize the fundamentals of mathematics within a rigorous logical structure.

The Department of Mathematics prepares the student by teaching the ability to comprehend and use the language of mathematics. Students will come to appreciate the logical structure and beauty of the mathematical development. The student will come to formulate the needed mathematical methods to analyze and solve real problems.

The courses offered prepare mathematics majors for graduate studies, research, engineering, teaching, and positions in industry and government. They also provide the necessary background for students in engineering and the social and physical sciences. Finally, the courses allow for the study of mathematics for its own sake.

Mathematics Student Learning Outcomes

Students earning a degree in mathematics will be able to:

- Use the definitions of fundamental concepts and the major theorems of analysis and algebra to solve problems.
- Construct a rigorous proof of various propositions.
- Demonstrate critical thinking by analyzing and solving problems.

Teacher Certification

All students who are interested in pursuing the teacher certification should contact the chairperson of the Education Department at their earliest possible convenience (see additional information under the Education Department). Students must also declare their Education minor in the Registrar's Office. The required Mathematics courses would be MA 111, MA 112, MA 211, MA 212, MA 231, MA 251, MA 301, MA 311 or MA 241, MA 421, MA 451, and MA 501. Other courses in other disciplines are also required. See page **320** for the recommended semester program plan. *

Requirements for a Bachelor of Arts Degree in Mathematics

Major Requirements (45-47 Credits)

MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 501	Capstone I	1-2

Three other MA courses at 200 or 300 levels (3 credits each)** 9

Two MA courses at 400 level (4 credits each) 8

One of these CS courses:

CS 110	C++ Programming I	3
CS 190	Programming Language Lab: Python	1
CS 270	Introduction to Numerical Computation	3
ENGR 115	Intro to Engineering Computation	3

Take four credits of Natural Science and Lab: 4

BL 150 /151	General Biology I and Lab
BL 152 / 153	General Biology II and Lab
CH 101 / 103	General Chemistry I and Lab
CH 102 /104	General Chemistry II and Lab
PH 111 / 113	General Physics I and Lab
PH 112 / 114	General Physics II and Lab

See page **318** for the recommended semester program plan. *

Requirements for a Bachelor of Science Degree in Mathematics

Major Requirements (58 or 60 credits)

MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 501	Capstone I	1-2
MA 502	Capstone II	1-2

Four other MA courses at 200 or 300 levels (3 credits each) 12

Four MA courses at 400 level (4 credits each) 16

One of these courses:

CS 110	C++ Programming I	3
CS 190	Programming Language Lab: Python	1
CS 270	Introduction to Numerical Computation	3
ENGR 115	Intro to Engineering Computation	3

PH 111/113 General Physics I and Lab 4

Take four credits of Natural Science and Lab: 4

BL 150 / 151	General Biology I and Lab
BL 152 / 153	General Biology II and Lab
CH 101 / 103	General Chemistry I and Lab
CH 102 / 104	General Chemistry II and Lab
PH 112 / 114	General Physics II and Lab

See page **319** for the recommended semester program plan. *

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on the **Mathematics** minor, please refer to that section.

Mathematics/Actuarial Science

Actuarial Science is a discipline that assesses financial risks in the insurance and finance fields using mathematical and statistical methods. It applies probability and statistics to study the financial implications of uncertain future events. The coursework blends rigorous mathematics with an emphasis on probability and statistics along with finance, accounting, and economics. These skills are used to assess and manage risk in areas such as insurance, pensions, investments, and other financial realms.

In order to be an actuary one must pass a series of actuarial exams through the Society of Actuaries professional organization. Courses taken cover content to help prepare students for the introductory exams, namely, Probability (P) Exam and Financial Mathematics (FM) Exam.

The Department of Mathematics prepares the student by teaching them the ability to comprehend and use the language of mathematics. Students will come to appreciate the logical structure and beauty of mathematics and can use these skills to think critically and solve problems.

Mathematics/Actuarial Science Student Learning Outcomes

Students earning a degree in mathematics/actuarial science will be able to:

- Use the definitions of fundamental concepts and the major theorems of analysis and algebra to solve problems.
- Demonstrate understanding of the concepts, theories, and applications essential to actuarial science.
- Construct a rigorous proof of various mathematical propositions.
- Demonstrate critical thinking by analyzing and solving problems.

Major Requirements (60-64 Credits)

MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary and Partial Differential Equations	4
MA 231	Methods of Proof	3
MA 251	Linear Algebra	3
MA 311	Probability and Statistics I	3
MA 312	Probability and Statistics II	3
MA 501	Capstone I	1-2
Two MA courses at 400 level (4 credits each)		8
BA 100	Financial Accounting I	3
BA 101	Financial Accounting II	3
BA 320	Corporate Finance I	3
BA 362	Investments I: Securities	3
BA 367	Investments III: Alternative Assets	3
One Statistics I course:		3 or 4
MA 241	Statistics I	
or		
BA 350/A	Statistics and Analytics I & Excel I Lab	

One of these courses:

CS 110	C++ Programming I	3
CS 190	Programming Language Lab: Python	1
CS 270	Introduction to Numerical Computation	3
ENGR 115	Intro to Engineering Computation	3

Take four credits of Natural Science and Lab:		4
BL 150/151	General Biology I and Lab	
BL 152/153	General Biology II and Lab	
CH 101/ 103	General Chemistry I and Lab	
CH 102 /104	General Chemistry II and Lab	
PH 111 /113	General Physics I and Lab	
PH 112 /114	General Physics II and Lab	

See page **317** for the recommended semester program plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Modern and Classical Languages

The Department offers the Bachelor of Arts degree in Spanish. The Department also offers a minor in Spanish and sponsors the minor in International Studies. The minor in International Studies fulfills requirements for the minor or concentration for the Liberal Arts major. The curriculum in the Department allows students to develop skills in a second language as part of the College's mission to produce a well-rounded graduate who is prepared for life and citizenship as well as for a career. Because today's world is enriched by diversity, faculty strive to cultivate in each student an understanding and appreciation of other cultures. Respect for self and others must be at the basis of any worthwhile communication. It is in this sense that the Department considers the study of other languages integral to a liberal arts education.

All classes foster the skills of communication and understanding in a second language. Listening, speaking, reading, and writing are at each level of study. The program also provides students with the opportunity to develop insights into other cultures through the study of foreign literatures, art, and film.

The Department's offerings are of interest to students preparing for careers in business, education, government, history, law, journalism, and public services. Faculty members in the Department of Modern Languages encourage students to enrich their undergraduate studies through participation in study abroad or internship programs. Information on international studies programs are discussed in this ***Catalog*** under Special Programs.

Modern and Classical Languages Student Learning Outcomes

• Demonstrate skills in speaking and writing the target language in a culturally appropriate manner.
• Demonstrate understanding of spoken and written discourse from a variety of sources.
• Link to other disciplines by analyzing how texts and other cultural artifacts reflect cultural values and religious, historic, political, geographical, and economic elements.
• Compare world cultures through analytical reflection of the connection between cultural perspectives, products, and practices.

Spanish

Requirements for a Bachelor of Arts Degree in Spanish

Major Requirements (36 Credits):

A major in Spanish requires 12 courses. Spanish 203 and Spanish 204 fulfill six (6) credits for the major. In addition, a major in Spanish requires 10 courses above Spanish 204. The following courses are required:

The following 15 credits are required:		
SP 315	Advanced Spanish Grammar & Composition	3
SP 317	Introduction to Spanish Literary Analysis	3
SP 320	Developing Oral Proficiency & Phonetics	3
One course from the following 3 credits:		
SP 321	Panaroma of Peninsular Lit	3
SP 426	Peninsular Short Story	3
One course from the following 3 credits:		
SP 322	Panorama of Latin American Literature	3
SP 327	Panorama of Spanish American Lit II	3
SP 425	Spanish American Short Story	3
SP 444	Peninsular Culture and Civilization	3
SP 445	Spanish American Culture and Civilization	3
Complete 9 electives credits (3 courses) above SP 317		9

Credits earned in approved study abroad programs fulfill requirements for the major. Prior approval of study abroad programs is required from the department chairperson.

Required Core Courses:

One course from the following 3 credits:		
HI 104	Contemporary Europe I	3
HI 105	Contemporary Europe II	3
One course from the following 3 credits:		
AR 100	Art and Music of Western Culture	3
AR 101	Caves to Cathedrals	3
AR 102	Art History II: Baroque to the Present	3
One English course from the following 3 credits:		
EL 118	Global Literature	3
EL 138	Multi-Ethnic Literature of the United States	3
EL 252	Introduction to Translation	3
One course from the following 3 credits:		
AN 222	Cultural Anthropology	3
AN 328	Linguistic Anthropology	3

Spanish majors are required to pursue a second major or a minor. Spanish majors are also required to develop a portfolio and undergo annual assessments of their oral skills. Spanish majors are required to study in a Spanish-speaking country. Students who are not able to study abroad may substitute language study in an immersion setting. All programs must be approved by the department chairperson.

See page **337** for typical eight semester degree plan. ** The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Teacher Certification

Students seeking Spanish certification, grades K-12, will take a minor in Education. Students are directed to read about teacher certification requirements in the Education section of this ***Catalog***. They are also advised to contact the Chairperson of the Education Department for additional guidance. A student should declare an education minor in the Registrar's office. See page **338** for the recommended semester program plan. *

Minors

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Spanish** and **International Studies** please refer to that section.

Music

"I am firmly convinced that a monastic school, which does not strive to advance art as much as science and religion, will be deficient in its work."
—Boniface Wimmer, O.S.B.
The Department of Music offers two majors that lead to the Bachelor of Arts degree. They are Music Studies and Music Performance. The department also offers a minor in Music. Admission to the Department is based on a successful audition for music majors and minors.

Our department hosts art exhibitions, musical concerts and theatrical performances throughout the year. The new Verostko Center for the Arts devotes 5000+ square feet to rotating exhibitions on campus featuring work from Saint Vincent's impressive holdings and work by emerging artists, including the annual Senior Exhibition. The Saint Vincent College Choirs, open to all students, performs at campus liturgies and academic events.

Music Department Mission Statement

The founder of Saint Vincent College, Boniface Wimmer, stated that we will teach our students, "first what is necessary, then what is useful, and finally, that which is beautiful." The goal of the Department of Music follows our founder's goal. The curriculum is designed within a liberal arts structure to give the strongest possible foundation in the history and theory of western music, and its practice and performance through applied music lessons, performance, and ensembles.

Music Student Learning Outcomes

Students will:
• Analyze the musical styles of the Western tradition and at least one style from the non-Western traditions.
• Apply vocabulary related to performing and composing music.
• Play the piano proficiently and play the piano, organ, or another instrument, including voice, at the advanced level.
• Apply standards of performance and portfolio development.

Music

Students must successfully pass an audition to be admitted to this major. Please contact the department chairperson to schedule an and receive audition guidelines. Students may choose their primary instrument from one of the following instruments: voice, piano, organ, violin, viola, guitar (acoustic, classical, jazz, bass), flute, clarinet, saxophone, trumpet, French horn, and trombone.

All Music majors are required to demonstrate piano proficiency before graduation. In addition, all Music majors are expected to participate in an ensemble each semester.

While it is possible to begin work as a musician after having completed the program, it is recommended that graduates continue their musical training by entering a graduate program to pursue a master's or doctoral degree or to begin a professional apprenticeship with an orchestra or an opera company.

Music Studies Student Learning Outcomes

1. Demonstrate proficiency in their main instrument and the keyboard.
2. Hear, identify, and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre, and texture.
3. Demonstrate knowledge of a wide selection of musical literature, the principal eras, genres, and cultural sources. 4. Demonstrate a thorough understanding of music notation, and apply this knowledge to deepen their understanding and appreciation of the music they encounter.
5. Perform at levels and styles consistent with the goals and objectives of the specific liberal arts degree program being followed by the individual student.

Music Studies Major Requirements (48 Credits):

Required each semester (16 credits):

MU 090	Recital Attendance (Every Semester)	0
MU 525	Applied Lessons	2 (16 total)

Required courses (26 credits):

Take Two Music History Courses (6 credits):		
MU 108	Music History I	3
MU 109	Music History II	3
Complete the following:		
MU 205	Aural Skills I	3
MU 206	Aural Skills II	3
MU 208	Harmony I and Keyboard	3
MU 209	Harmony II and Keyboard	3
MU 220	Form and Analysis & Keyboard	3
OR		
MU 115	Fundamentals of Music	3
MU 410	Senior Capstone	2
MU 00X	Piano Proficiency	0
Any combination of ensembles selected from (8 credits):		
MU 172	Concert Band	1
MU 175	Jazz Ensemble	1
MU 180	Saint Vincent College Singers	1
MU 182	Opera Workshop	1
AR 158	Musical Theater Production	1

Take Two Elective Course (6 credits):
MU 243 Music Technology, AR 125 Acting I, 215 Acting II, MU 106 World Music, MU112 MT History, MU 101 Music Appreciation

Additional requirements for voice majors (2 credits):

MU 317	Diction I: Italian and English	1
MU 318	Diction II: German and French	1

See page **325** for the recommended 8-semester program plan.*

Music Minor

Minors are listed in alphabetical order beginning on page **104**. For information on the **Music** minor, please refer to that section.

Music Performance Student Learning Outcomes

Students will:
• Analyze the musical styles of the Western tradition and at least one style from the non-Western traditions.
• Apply vocabulary related to performing and composing music.
• Play the piano proficiently and play the piano, organ, or another instrument, including voice, at the advanced level.

• Apply standards of performance and portfolio development.

Music Performance

Students must successfully pass an audition to be admitted to this major. Please contact the director of music to schedule an audition and receive audition guidelines. The Music Performance major is a select major and is restricted to the following instruments: organ, piano, voice. Only the best students who are single-mindedly resolute to become a professional musician should audition for this major.

All Music Performance majors are required to demonstrate piano proficiency before graduation. In addition, all Music Performance majors are expected to participate in an ensemble each semester.

While it is possible to begin work as a musician after having completed the program, it is recommended that graduates continue their musical training by entering a graduate program to pursue a master's or doctoral degree or an apprenticeship for young artists with an orchestra or opera company.

Music Performance Student Learning Outcomes

1. Demonstrate proficiency in their main instrument and the keyboard
2. Have an overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
3. Place music in historical, cultural, and stylistic contexts
4. Understand the common elements and organizational patterns of music and their interaction and employ this understanding in aural, verbal, written, and visual analyses.
5. Demonstrate a mastery of the written musical language including harmony and counterpoint. The student will apply this knowledge of music theory to deepen their understanding of the music they study and perform.
6. Demonstrate comprehensive capabilities in their main instrument including the ability to work independently to prepare performances at the highest possible level and knowledge of applicable solo and ensemble literature.

Music Performance Major Requirements (65 Credits):

Required each semester (32 credits):

MU 090	Recital Attendance	0
MU 525	Applied Lessons	4

(4 credits for 8 semesters or a total of 32 credits)

Required courses (27 credits):

MU 108	Music History I	3
MU 109	Music History II	
MU106	World Music	3
OR		
MU 112	Music Theater History	3
MU 205	Aural Skills I	3
MU 206	Aural Skills II	3
MU 208	Harmony I and Keyboard	3
MU 209	Harmony II and Keyboard	3
MU 220	Form and Analysis and Keyboard	3
MU 330	Junior Recital	1
MU 430	Senior Recital	2

Any combination of ensembles selected from (8 credits):

MU 172	Concert Band	1
MU 175	Jazz Ensemble	1
MU 180	Saint Vincent College Singers	1
MU 182	Opera Workshop	1
AR 158	Music Theater Production	1

Take One Elective Course (3 credits):

MU 243 Music Technology, AR 125 Acting I, AR 215 Acting II, MU 106 World Music, MU 112 MT History

Additional requirements for voice majors (2 credits):

MU 317	Diction I	
	Italian and English	1
MU 318	Diction II	
	German and French	1

See page **326** for the recommended 8-semester program plan. *

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Nursing

Saint Vincent College currently offers a four-year Bachelor of Science in Nursing (BSN) program and a Doctor of Nurse Anesthesia Practice (DNAP) program. The Saint Vincent College undergraduate Nursing program has received approval for a Professional Pre-licensure Nursing Education Program by the Pennsylvania State Board of Nursing. The Department of Nursing is initiating the process for accreditation through the Commission on Collegiate Nursing Education (CCNE).

The Doctor of Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA).

Overview of the BSN Program

The Bachelor of Science in Nursing program at Saint Vincent College is a four-year pre-licensure nursing program. Students are admitted into the major in the Freshman year or as a transfer student in Year 2.

The BSN Program is rooted in the Catholic Benedictine values expressed as Hallmarks, most specifically the values of humility, community, and service. Catholic Benedictine values are integral to the mission of the Nursing Program, as evidenced by their expression and application in nursing-specific course descriptions, objectives, assignments, and evaluations.

Baccalaureate-prepared nurses graduating from Saint Vincent College are prepared to practice as professionals, clinicians, and leaders immersed in Benedictine and Catholic guiding principles. Critical thinking, clinical reasoning, communication, teamwork, and ethics are embodied by Saint Vincent College nurses as they care for human beings in complex and challenging environments.

BSN Program Goal

The goal of the Saint Vincent College BSN Program is to prepare graduates who:

- are competent, compassionate nurses who provide equitable, evidence-based, culturally sensitive care in the Benedictine tradition to individuals, families, groups, and communities, including vulnerable populations.
- demonstrate knowledge of the context in which professional nurses practice, including the biobehavioral, cultural, political, environmental, economic, ethical, legal, scientific, and spiritual dimensions.
- exhibit commitment to self-development and the advancement of the profession of nursing through participation in educational, community, and organizational activities.
- are eligible to take the National Council Licensure Examination (NCLEX – RN.)
- are prepared for further study and pursuit of graduate education.

Admission

All students applying to the Bachelor of Science in Nursing degree program must apply and be accepted into the Nursing Program. Admission to other schools of the College does not guarantee admission to the Nursing Program.

Prospective nursing candidates must possess a minimum 3.25 cumulative high school GPA; a score of 1060 or higher on the SAT or a score of 21 or higher on the ACT; and have completed science and math courses with a 3.2 GPA.

Test Optional Applicants must submit an essay (750 words or fewer) that addresses: why nursing is chosen as a major and what the applicant can contribute to the nursing profession; participate in an in-person or virtual interview with a College admission representative or nursing faculty; and submit any additional information or testing as deemed necessary.

The Pennsylvania State Board of Nursing requires that applicants accepted into professional nursing programs must have completed, as a minimum, four units of English, three units of Social Sciences, two units of Mathematics (one must be algebra), and two units of science with a related lab, including chemistry.

Admission Deadline

Due to space limitations, high school students are strongly encouraged to complete the application process as soon as possible during their senior year to ensure maximum consideration for admission and scholarships/financial aid.

Off-Campus Clinical Practice Placements

Off-campus clinical practice placements are an essential part of the nursing curriculum. Students are required to complete discipline-specific professional work experiences within four spheres of care: disease prevention/promotion of health and well-being; chronic disease care; acute and regenerative care; and palliative/hospice/supportive care as an integral part of their program.

Students must provide transportation to clinical placement sites.

Specific BSN Program Requirements:

To maintain acceptable academic standing, students are required to earn a minimum final grade of C+ in each nursing course in the Program and a minimum cumulative GPA of 2.75.

Nursing Program Policies

Nursing policies are detailed in the Saint Vincent College Department of Nursing Student Handbook. The Nursing program reserves the right to make policy and curriculum plan changes to address ongoing accreditation standards and/or professional regulations.

In compliance with the Pennsylvania State Board of Nursing regulations and policies of clinical agencies, students are required to pass an annual physical examination. Students must maintain: professional liability insurance coverage; updated required immunizations; current CPR certification; acceptable background checks; fingerprinting, negative drug screen, and/or additional testing required by clinical facilities. Requirements are described in the Department of Nursing Student Handbook.

Students who do not pass the criminal background and/or drug test will not be able to attend clinical courses and therefore will be unable to complete their program of study, resulting in course failure or withdrawal from the Program. Any fees or costs associated with background checks and/or drug testing are the responsibility of the student.

Students who intend to practice in the Commonwealth of Pennsylvania (as well as most other states) are advised that upon application for the National Council Licensure Examination (NCLEX-RN), the Board of Nursing will inquire as to whether the applicant has been convicted of a misdemeanor, felony, felonious act, an illegal act associated with alcohol, or an illegal act associated with substance abuse(s)

BSN Program Student Learning Outcomes

Student learning outcomes are based on the American Association of Colleges of Nursing Essentials: Core Competencies for Professional Nursing Education (2021), the Quality and Safety Education for Nurses (QSEN) competencies (2012), and Saint Vincent College six core Student Learning Outcomes (SLO). At the completion of the BSN Program, students will be able to:

1. integrate knowledge from the biophysical and behavioral sciences, humanities and Benedictine wisdom into the evolving art and science of nursing practice.
2. deliver person-centered nursing care to individuals and families across the life span and spheres of care that is grounded in evidence, compassion, and ethical conduct.
3. participate in community organizations and partnerships to deliver equitable population-based health care that promotes health, diversity, inclusion, and manages disease, while respecting health traditions and choices.
4. apply evidence in nursing care delivery, the translation of evidence into practice and the generation of new evidence to improve health care delivery and nursing practice.
5. collaborate with health care professionals, individuals, families, and others to deliver outcomes-driven care, with attention to diverse, vulnerable and under-served and under- represented populations.
6. demonstrate leadership skills that implement, coordinate, and evaluate safe, equitable, and quality care delivery within a variety of settings.

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BSN Program Requirements

The Saint Vincent BSN nursing major requires 124 credits for graduation. Clinical nursing courses begin in the first semester of Year 2 and are arranged in a sequential manner, with learning experiences evolving in complexity and clinical nursing practice. To be eligible for graduation, students must complete all general education and Nursing Program credits with a minimum cumulative GPA of 2.75.

Required Courses:

PY 218	Life Span Development	3
MA 107	Quantitative Reasoning	3
CH 125	Introduction to General, Organic, and Biological Chemistry	3
CH 127	Introduction to General, Organic, and Biological Chemistry Lab	1
MA 121	Basic Applied Statistics	3
HSCI 222	Human Anatomy and Physiology I	3
HSCI 223	Human Anatomy and Physiology I Lab	1
BL 295	Fundamentals of Microbiology	3
BL 296	Fundamentals of Microbiology Lab	1
HSCI 224	Human Anatomy and Physiology II	3
HSCI 225	Human Anatomy and Physiology II Lab	1
BL 299	Pharmacology	3
BL 297	Pathophysiology Across the Lifespan I	2
BL 298	Pathophysiology Across the Lifespan II	2

Nursing Courses:

NUR 110	Principles of Applied Nutrition	3
NUR 211	Introduction to Clinical Reasoning in Nursing Practice I: Health Assessment	2
NUR 221	Introduction to Clinical Reasoning in Nursing Practice I: Practicum	1
NUR 212	Perspectives on Nursing	2
NUR 213	Introduction to Clinical Reasoning in Nursing Practice II: Fundamentals of Assessment, Nursing Care, and Clinical Practice	2
NUR 223	Introduction to Clinical Reasoning in Nursing Practice II: Practicum	1
NUR 214	Introduction to Evidence Based Practice and Nursing Science	2
NUR 311	Nursing Care of Adults with Acute and Chronic Disorders	3
NUR 321	Clinical Reasoning and Personalized Care in the Nursing Care of Adults with Acute and Chronic Disorders: Practicum	3
NUR 312	Nursing Care of Women, Newborns, and Families	2
NUR 322	Clinical Reasoning and Personalized Care in the Nursing Care of Women, Newborns, and Families: Practicum	2
NUR 313	Genetics and Precision Health	2
NUR 314	Nursing Care of Vulnerable Populations	2
NUR 324	Clinical Reasoning and Personalized Nursing Care in the Nursing Care of Vulnerable Populations: Practicum	2
NUR 315	Nursing Care of Children, Adolescents, and Families	2
NUR 325	Clinical Reasoning and Personalized Nursing Care of Children, Adolescents, and Families: Practicum	2
NUR 316	Applied Epidemiology in Nursing	1
NUR 411	Nursing Care of Individuals with Psychiatric, Behavioral, and Mental Health Conditions	2
NUR 421	Clinical Reasoning and Personalized Care of Individuals with Psychiatric, Behavioral, and Mental Health Conditions: Practicum	2
NUR 412	Nursing Care of Populations	2
NUR 422	Clinical Reasoning that Addresses Population Health: Practicum	2
NUR 413	Leadership in Systems of Care	2
NUR 414	Nursing Care of Adults and Populations with Multiple and Complex Health Disorders	2
NUR 423	Professional Nursing Immersion – Leadership in Systems of Care	8
NUR 415	Application of Data Analytics, Informatics, and Healthcare Technology	1
NUR 416	Senior Capstone	1

Micro-credentials/Seminars: 0

SEMINAR:
Exploring the Nursing Profession
MICRO-CREDENTIALS:
Introduction to System Thinking Science
Medication Mathematics
Medical Terminology
Building Just and Inclusive Environments
TeamSTEPPS (Patient Safety)
Palliative & End-of-Life Care
Emergency Preparedness & Disaster Nursing
Organizational Excellence in Quality & Safety

See page **327** for the recommended 8-semester program plan.
These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Philosophy

In the broadest sense of the word, philosophy is simply the human attempt to understand one's life and place within the cosmos; in a word, it is the love of wisdom. Key to this enterprise is being disciplined in logic, formed in the branches of philosophy, and habituated in the art of conversation. In order to grow in human stature, one must become thoughtful, and must possess a more-than-everyday understanding of one's world, a more-than mechanical image of oneself, and a more-than-routine familiarity with the moral realm.

Considered from this point of view, philosophy is both easy and difficult; easy, as at the outset it only asks that we think; difficult, as sustained, efficacious thinking demands courage, patience, and an almost unlimited degree of openness.

In preparing its majors to receive the Bachelor of Arts Degree, the Department of Philosophy serves a variety of students. Those who earn degrees from our department acquire a strong historical, thematic, and methodological foundation in philosophy, a preparation that equips those who pursue graduate study in philosophy with the skills to excel. However, our horizon is expansive — it further embraces those who seek what the American Philosophical Association calls "a valuable and indeed paradigmatic 'liberal education' major." Our students develop not only sound historical knowledge of the field but are challenged to critically engage their world with solid analytic abilities and imaginative, synthetic solutions to problems which present themselves. They will be prepared to offer both abstract analyses as well as concrete proposals. Our students are well-equipped to go into life as independent learners, as contributors to a wide variety of fields, and to commence graduate studies in the humanities, social sciences, law, and the Church.

While we provide our majors with a rigorous and stimulating undergraduate experience, this is but part of our task. Philosophy plays an integral role in the education of all undergraduates at a Benedictine college. Finally, philosophy is at the heart of the Catholic intellectual tradition, for, as St. John Paul II put it, "faith and reason are like two wings on which the human spirit rises to the contemplation of truth." We gladly work with each student in their core courses in philosophy to develop deeper insights into their personal lives and the cumulative history of humankind. When these initial encounters spur further interest, we invite students to join us in either our major (Philosophy BA) or minor (philosophy, classical thought) programs.

Philosophy Student Learning Outcomes

Upon completion of the philosophy major, students will be able to:

- explain, accurately and charitably, significant philosophical ideas and arguments of particular ancient, medieval, modern, and contemporary philosophers.
- use logic and critical reasoning to analyze and evaluate arguments as well as positions.
- explain ethical theories and apply them to problems of ethical significance.
- integrate philosophical ideas from diverse sources, including other disciplines and their own experience, into original philosophical work; and
- complete independent philosophical scholarship and present this work in writing and in oral presentation.

Requirements for a Bachelor of Arts Degree in Philosophy

(See core curriculum requirements.)

Requirements for the major: (36 credits)

36 credits in Philosophy, structured in the following way:

PL 121	Logic and Theory of Knowledge	3
PL 201	Ancient Philosophy	3
PL 202	Medieval Philosophy	3
PL 203	Modern Philosophy	3
PL 206	19th- and 20th-Century Philosophy	3
PL 214	Love, Dignity & Justice	
or		
PL 215	Ethics	3
PL Course fulfilling Core Curriculum Tier 2, SLO 6		3
6 credits chosen from the following courses: PL 220 Philosophical Anthropology, PL 230 Metaphysics, PL240 Influence of Philosophy on Theology, PL 281 Justice and Charity		6
PL 400 Socratic Seminar		3
PL 440 or 450 Senior Capstone Exam or Thesis		3
PL Elective		3

See page **328** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Yearly Review

Having chosen philosophy as a major, each student will meet with his or her advisor to review the work of the previous academic year. This is done during the first week of classes in the fall semester.

As a part of this review, the student will evaluate his or her own performance in a guided, written statement. This statement functions primarily as a résumé of work in the major, but extradepartmental work may also be assessed. During the review, the student presents two pieces of written work from the previous academic year, at least one of which will be from a philosophy course.

Senior Capstone Project

Each major is required to complete a senior thesis or examination. All philosophy majors will complete a capstone project during their junior and senior years at the college. There are two options for the project: a senior thesis or a senior capstone examination. The student and her or his faculty advisor will decide which of these two options is appropriate based on each student's aims, interests, and plans for after graduation. Students who intend to pursue graduate study in philosophy or some related field should plan to write the thesis, which will both significantly improve their applications to graduate schools and help to prepare them for the work of a graduate program. Students who do not intend to pursue such study in the future may reasonably choose either option.

During the third semester before graduation, each student works with his or her faculty advisor to form a Senior Thesis or Examination Committee and choose a topic for the project. Senior thesis students complete the thesis planning packet by the end of the semester; senior examination students submit a

reading list. The student, with the guidance of the committee, plans the project and carries out the basic research over the break between the third and second semester before graduation. During the second semester before graduation the student enrolls in either PL 440 (Senior Capstone Exam) or PL 450 (Senior Thesis). Students submit their research journal at the first meeting for this class.

Students who choose the capstone exam will take the exam at the end of the semester in which they are enrolled in PL 440. A passing grade completes this project; a failing grade requires the student to retake the course and the exam the following semester. A passing grade on the oral exam will be ranked as "passed," "passed with distinction," or "passed with highest distinction." Students who choose the senior thesis will complete a polished draft of the thesis, to be submitted to the Committee for comments, during the semester in which they are enrolled in PL 450. During the student's final semester any remaining work is completed, with the final draft completed by the ninth week of the semester in which the student expects to graduate. The finished Senior Thesis is evaluated by the Thesis Committee. By the last week of classes before graduation, each student will give an oral presentation of the project to departmental faculty and students, responding to questions and comments. The committee will assess the written thesis and presentation together as having "passed," "passed with distinction," or "passed with highest distinction."

Electives

An appropriate choice of electives in fields outside of philosophy can add considerable focus to the study of philosophy. For this reason the Department requires the choice of electives to be done in close consultation with the student's advisor. Language studies and accompanying foreign study are especially encouraged.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Classical Thought** and **Philosophy**, please refer to that section.

Physics

The mission of the Physics Department works in concert with the mission of the College and begins with the cultivation of a love for learning and an appreciation of the inherent beauty in the study of the natural world. The department serves three populations of students each with specific goals; (1) Physics and Physics Education majors, (2) majors in the departments of Biology, Chemistry, Mathematics, and Computing and Information Systems, Health Science, and (3) non-science majors. The Department's mission is to prepare Physics and Physics Education majors by developing skills in experimental and theoretical physics so that our students are prepared to enter graduate programs in Physics and related fields (for example, Astrophysics, Material Science, and Engineering), obtain a professional and/or technical position in industry, or teach at the high school level.

For students majoring in other departments within the Herbert W. Boyer School of Natural Sciences, Mathematics, and Computing, the Department's mission is to develop the ability to apply the experimental and theoretical principles of Physics to their specific disciplines. The Department's mission is to fulfill the goals of the core curriculum for students who are non-science majors by promoting scientific literacy, developing a familiarity with the scientific method, and creating an awareness of the impact of science on society. For all students, the Department's mission is to stress the conceptual understanding of Physics through discussion, demonstration, and experimentation and to develop the ability of the students to effectively communicate their understanding to others.

Two alternative programs are available. The program leading to a B.S. degree in Physics is for students who wish to continue their education in graduate school or to directly pursue careers in government or the private sector. The Physics Education program prepares students for certification for careers as secondary school physics teachers. Students must contact the Education Department Chairperson for admission to the certification program.

Physics/Physics Education Student Learning Outcomes

Upon completion of the B.S. in Physics or B.S. in Physics Education programs, students will be able to:

- use knowledge of the fundamental theoretical fields of physics to solve problems.
- perform careful physics laboratory experiments.
- interpret physics experimental results.
- explain physical principles to others in both oral and written formats.
- develop independent research.

Culminating Activity

Students in each program must complete the culminating activity listed as course PH 381. This activity consists of a research project under the direction of a faculty member or an approved internship. Several projects in recent years have been awarded student research grants–students have traveled to present their results at regional and national conferences, while some projects have resulted in a publication in a scientific journal. Successful completion of this activity, including a senior thesis, is required.

Requirements for a Bachelor of Science Degree in Physics Major (68 Credits):

PH 100	Physics Seminar	1
PH 111	General Physics I	3
PH 112	General Physics II	3
PH 113	Physics I Laboratory	1
PH 114	Physics II Laboratory	1
PH 211	Modern Physics I	3
PH 213	Modern Physics I Laboratory	1
PH 215	Thermodynamics	3
PH 221	Classical Mechanics	3
PH 241	Optics	3
PH 243	Optics Laboratory	1
PH 244	Advanced Laboratory	1
PH 252	Electromagnetic Fields	3
PH 261	Electronics	3
PH 263	Electronics Laboratory	1
PH 311	Modern Physics II	3
PH 322	Quantum Mechanics	3
PH 341	Condensed Matter Physics	3
PH 370	Mathematical Physics	3
PH 381	Research (Capstone Project)	1
MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary & Partial Differential Equations	4
CH 101, 103	General Chemistry I and Laboratory	4
CH 102, 104	General Chemistry II and Laboratory	4

A thesis is required in the senior year.
See page **329** for the recommended 8-semester program plan. *

Requirements for a Bachelor of Science Degree in Physics Education Major (56 Credits):

PH 100	Physics Seminar	1
PH 111	General Physics I	3
PH 112	General Physics II	3
PH 113	Physics I Laboratory	1
PH 114	Physics II Laboratory	1
PH 211	Modern Physics I	3
PH 213	Modern Physics I Laboratory	1
PH 215	Thermodynamics	3
PH 221	Classical Mechanics	3
PH 241	Optics	3
PH 243	Optics Laboratory	1
PH 244	Advanced Laboratory	1
PH 261	Electronics	3
PH 263	Electronics Laboratory	1
PH 322	Quantum Mechanics	3
PH 381	Research (Capstone Project)	1
MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4
MA 212	Ordinary & Partial Differential Equations	4
CH 101, 103	General Chemistry I and Laboratory	4
CH 102, 104	General Chemistry II and Laboratory	4

A thesis is required in the senior year. See Education Department section of ***Catalog*** for Secondary Education course requirements. See page **330** for the recommended 8-semester program plan*

* The recommended 8-semester program plans are listed at the end of the catalog. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on the **Physics** minor, please refer to that section.

Political Science

"What is government itself, but the greatest of all reflections on human nature? If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself."
—James Madison, The Federalist, 51

Politics has been a subject of study from ancient Greece to the present day. For Socrates, Plato, and Aristotle, the word politics referred to the activities of the city, the polis, which they understood to be a necessary form of association for human flourishing. The study of politics was stimulated by the recognition that some cities are better than others at promoting the good life. No political science is complete, therefore, without consideration of what it means to be human and how political communities contribute to happiness.

The Political Science Department at Saint Vincent College is unique in the extent to which it promotes an understanding of the nature of political phenomena and their relationship to a life not simply lived, but lived well. To this end, the Department offers a curriculum firmly rooted in the Great Books of Western civilization and the great political writings of the American tradition. Along with philosophical grounding, the program seeks to provide analytical competence to understand the contemporary political environment, to address public policy questions, and to contribute intellectually and practically to the sociopolitical challenges of our times. The Department encourages students to see politics whole, recognizing the intimate relationship that exists between wisdom gained through philosophical inquiry and political knowledge gained through empirical and analytical research. The Department thus helps to fulfill the liberal arts mission of the College. It also takes seriously its obligation to provide civic education: to cultivate the well-educated citizens and scholars who are essential to the long-term flourishing of a constitutional republic.

In light of these concerns, the Political Science Department is committed to helping students engage and understand the fundamental ideas that have shaped political life, particularly the political life of Western civilization. We recognize that these ideas often conflict with one another, and we maintain that they are best approached at their source, namely the Great Books of Western civilization.

We also seek to promote patriotic yet analytical citizenship through a close study of the American regime. Courses concentrate on the principles, institutions, and policies under which Americans have lived. A distinctive feature of the Department is its emphasis on American political thought, which requires close study of the principles of the American founding, as well as competing principles.

At the broadest level, we provide students an education in the liberal arts; that is to say, those arts particularly conducive to the cultivation of free citizens and essential to political life in a republic. This includes the abilities and dispositions necessary to engage in public discussions on a variety of topics, both orally and in writing. Such abilities and dispositions include civility and respect for one's interlocutors, analytical tools for assessing arguments, and rhetorical skills to present persuasively one's own views. Responsible use of any education or ability is essential; the Department therefore does not divorce politics from ethics. Last but not least, we prepare students for a variety of careers and professions after graduation, including in law, business, nonprofit organizations, public administration, public office, international affairs, and academia. The Department thus takes an active role in helping students prepare for graduate and professional schools. The Department also actively assists students in finding internships and related experiences.

Political Science Student Learning Outcomes

Political Science courses are designed to promote the following Student Learning Outcomes:

1. Students will be able to identify, explain, apply, and analyze the Great Books of Western civilization and the great political writings of the American tradition and assess how they continue to shape political life.
2. Students will be able to identify, explain, apply, and analyze the principles of the American founding and assess how they continue to shape American political life.
3. Students will be able to identify, explain, apply, and analyze the principles and practices of the U.S. Constitution and American political and legal institutions and interpret and assess these principles and practices.
4. Students will be able to identify, explain, apply, and analyze the principles of international and comparative politics and assess their relationship to American interests.
5. Students will be able to defend, apply, and combine the liberal and civic arts, i.e., those arts conducive to the cultivation of free citizens, in preparation for successful careers, further education, and meaningful lives.

Options

The Department offers a B.A. degree in Political Science as well as minors in Political Science or Public Administration (for the Public Administration minor, see the Public Policy listing in this ***Catalog***).

Requirements for a Bachelor of Arts Degree in Political Science:

Major Requirements (36 credits)

PS 100	Intro to American Government	3
PS 205	Classical Political Thought	3
PS 210	Modern Political Thought	3
PS 242	International Politics	3
or		
PS 244	Comparative Politics	3
PS 295	American Political Thought I	3
or		
PS 298	American Political Thought II	3
PS 335	The U.S. Presidency	3
PS 368	Constitutional Law: National Powers	3
or		
PS 369	Constitutional Law: Civil Liberties	3
PS 345	Congress and Public Policy	3
PS 395	What is Political Science ?	3
PS 480	Senior Capstone	0
	PS Politics electives (Any PS class except PS 550)	9

See page **331** for the recommended 8-semester program plan.
These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on the **Political Science** minor, please refer to that section.

Public Policy Major

Courses from both Economics and Political Science have been combined to create this major. The major emphasizes the analysis of public institutions and policy formulation. See the Public Policy listing in this ***Catalog*** for information concerning this major.

Pre-Law Opportunities

The Political Science Department offers courses by trained lawyers. Students may participate in the Pre-Law Club, where they meet members of the bench and bar including many Saint Vincent College graduates. They may also participate on Saint Vincent's competitive Mock Trial Team. Special opportunities are also available for legal internships with a federal judge. Students interested in law and legal internships should contact the Pre-Law advisor, Dr. Jerome Foss.

Center for Political and Economic Thought

The Political Science Department enjoys a close relationship with the nationally-renowned Center for Political and Economic Thought, an interdisciplinary public affairs institution of the Alex G. McKenna School of Business, Economics, and Government at Saint Vincent College. The Center sponsors research and education programs, primarily in the fields of politics, economics, and moral-cultural affairs. The Center seeks to advance scholarship on philosophical and policy concerns related to freedom, Western civilization, and the American experience. Opportunities abound to attend lectures and conferences, meet speakers, and engage in work-study. Interested students should contact the Center's Co- Director, Dr. Jason Jividen.

Aurelius Scholars in Western Civilization

As part of the Saint Vincent College Honors Community, the Aurelius Scholars program is offered to motivated students interested in the Western intellectual tradition. The program is rooted in a diverse course sequence meant to satisfy part of Saint Vincent's core curriculum. As part of their liberal education, students engage some of the great texts, ideas, and perennial questions of the Western world. In addition to the course sequence, Aurelius Scholars participate in enriching extracurricular opportunities, such as reading groups, campus lectures, and student trips. Many events encourage Aurelius Scholars to engage in thoughtful conversation with students in other Honors Community programs. Interested students should contact the Aurelius Scholars program director, Dr. Jason Jividen.

PI SIGMA ALPHA

Founded in 1920 at the University of Texas, Pi Sigma Alpha is the national political science honor society. Saint Vincent is one of 700 colleges to have a Pi Sigma Alpha Chapter, the purpose of which is to encourage and recognize excellence in the study of politics and government. Membership is restricted to juniors and seniors who have taken at least 10 credits in politics and have demonstrated high academic achievement. Members are eligible for opportunities such as conference attendance, publication, and graduate scholarships. Interested students should contact the chapter advisor, Dr. Jerome Foss.

Graduate Study

Candidates for the B.A. degree who plan to pursue a Ph.D. in Politics, Government, or Political Science generally will have to show competence in one or two foreign languages as well as quantitative skills. We suggest that students contemplating such graduate studies consider taking foreign language at the intermediate level or above. The quantitative skill requirement for graduate school varies.

Public Affairs and Public Administration

For those seeking master's degrees in public policy and public administration, it would be advantageous to complete BA 100, BA 101, EC 201, EC 202, BA 350, and EC 360. Students should have further discussions with their advisors.

International Affairs

For those seeking master's degrees in international relations or allied fields, it would be advantageous to pursue two foreign languages, and to complete EC 201, EC 202, BA 350, EC 360, EC 351, and EC 353.

Internship Programs

Internships in the third and fourth years are possible. Majors are welcome to apply for internships in government, business, law and non-profits. Local part-time internships are also feasible; the Career and Professional Development Center will coordinate and assist in student placement. Political Science students interested in such internships for credit will need the approval of the School Dean. In addition, the Department must be convinced that benefit will accrue to both the student and the cooperating body. The number of credits granted for the internship is decided on an individual basis, not to exceed three credits in a semester. Internships are Pass/Fail and limited to a total of six credits. See the Business Administration section of this ***Catalog*** for a detailed explanation of Internship requirements for McKenna School students. Students must register for PS 550, Internship.

Departmental Activities

Depending on their interest and initiative, students are encouraged to join activities such as the Pre-Law Club, the Aurelius Scholars, the Mock Trial Team, the Republican Club, and the Democrat Club. The SVC Mock Trial team is quickly becoming nationally recognized — it competes against and has defeated numerous nationally competitive teams. Other recommended activities include attending relevant lectures and conferences sponsored by the Center for Political and Economic Thought.

Job Opportunities After Graduation

Political Science majors interested in civil service jobs should take both the federal and state civil examinations. Availability of positions in these areas varies from year to year, depending upon government's hiring practices. Specific federal and state government agencies may have their own entrance examinations. A student going into government service might find it advantageous to complete the B.A. in Political Science with a

minor in Public Administration For other job opportunities in the private sector, please consult the Career and Professional Development Center.

Teacher Certification

See the Education Department requirements in this ***Catalog*** for teacher certification requirements in various fields of education. Interested students should contact the Education Department chairperson and confer with their academic advisors.

Independent Study Course

It is possible, with the approval of the School Dean, to do individual research projects/papers for credit. Students register for PS 500, taking not more than three credits each semester.

Pre-Health Professions

The pre-health professions refers to undergraduate preparation for study in allopathic medicine, chiropractic medicine, dental medicine, osteopathic medicine, optometry, podiatric medicine, and veterinary medicine. Students interested in these areas may choose any undergraduate major, but a solid foundation in biology and chemistry, and a fundamental knowledge of mathematics and physics are necessary.

Admission to professional schools is highly competitive, and the Pre-Professional Health Committee, composed of faculty from within and outside the natural sciences, works closely with individual students to determine where abilities and interests should be directed. During the freshman and sophomore years, the Committee aids students in course selection, guides them toward extracurricular experiences necessary to be competitive, and provides opportunities for students to learn about admissions, schools, and careers. The application process begins in the second semester of the junior year when students ask the Committee to prepare letters of recommendation. The Committee subsequently reviews each applicant. Many factors are weighed, some of which are academic performance, commitment to service, knowledge of the health professions, interpersonal skills, and leadership. Additionally, professional school admission exams are taken near the end of the junior year. Students then complete and submit their professional school applications during the summer between the junior and senior years.

The following courses are required by most health profession schools and the schedule is typical for pre-health students.

First-Year credits

BL 150-153	General Biology	8
CH 101-104	General Chemistry	8

Sophomore Year

MA 109 or 111	Calculus I	4
CH 221-224	Organic Chemistry	8

Junior Year

PH 111-114	General Physics	8

Additionally, it is strongly recommended that Cell Biology (BL 208, 209) be completed by the end of the junior year. If scheduling permits, Physiology (BL 224) should be completed also. Students interested in optometry should note that one semester each of statistics and microbiology are requisites for admission to some optometry schools.

Students should investigate the requirements of the health profession schools in which they are most interested because some have additional requirements such as Biostatistics (BL 260) and Microbiology (BL 212 and 213).

Students interested in medical school must take the Medical College Admissions Test (MCAT). To prepare, the following additional courses should be completed before the end of the junior year:

CH 251	Proteins and Metabolism
PY 100	Introduction to Psychological Sciences
PY 331	Biological Psychology
SO 101	Introduction to Sociology

Early Acceptance Osteopathic Program

Students interested in attending the Lake Erie College of Osteopathic Medicine (LECOM) have the option of applying for early acceptance. Specifically, they spend four years at Saint Vincent College where they complete the requirements for a B.A. or B.S. degree in a major of their choice. They also must complete specified science courses (see below) and may take no fewer than 15 credits in any given semester. Application to LECOM and notification of provisional acceptance are made before the senior year. At the end of successful study at LECOM, students receive the Doctor of Osteopathic Medicine degree.

Independent of Major, The Following Courses are Required:

First-Year Credits

BL 150-153	General Biology with Lab	8
CH 101-104	General Chemistry with Lab	8
MA 109	Calculus with Applications I	4

Sophomore Year

BL 208, 209	Cell Biology with Lab	4
BL 224, 225	Physiology with Lab	4
CH 221-224	Organic Chemistry with Lab	8

Junior Year

PH 111-114	General Physics with Lab	8
CH 251	Proteins and Metabolism	3

Junior or Senior Year

BL 214, 215	Molecular Genetics with Lab	4

Early Acceptance Dental Program

Students interested in attending dental school at the Bradenton, Florida, campus of the Lake Erie College of Osteopathic Medicine (LECOM) have the option of applying for early acceptance. Specifically, they spend four years at Saint Vincent College where they complete the requirements for a B.A. or B.S. degree in a major of their choice. They also must complete specified science courses (see below) and may take no fewer than 15 credits in any given semester. Application to LECOM and notification of provisional acceptance are made before the junior year. At the end of successful study at LECOM, students receive the Doctor of Dental Medicine degree.

Independent of Major, The Following Courses are Required:

First-Year Credits

BL 150-153	General Biology with Lab	8
CH 101-104	General Chemistry with Lab	8
MA 109	Calculus with Applications I	4

Sophomore Year

BL 208, 209	Cell Biology with Lab	4
BL 224, 225	Physiology with Lab	4
CH 221-224	Organic Chemistry with Lab	8

Junior Year

PH 111-114	General Physics with Lab	8

Senior Year

CH 251	Proteins and Metabolism	3

LECOM also recommends that students complete the Following courses:

BL 220, 221	Comparative Anatomy with Lab	4
BL 212, 213	Microbiology with Lab	4
BL 214, 215	Molecular Genetics with Lab	4
BL 242, 243	Histology with Lab	3

Accelerated Podiatric Medicine Program

Students interested in attending the New York, Ohio, or Pennsylvania Colleges of Podiatric Medicine have the option of completing their undergraduate and medical degrees in seven years instead of eight years. The required course of study while at Saint Vincent College follows. Students should consult the chairperson of the Pre-Professional Health Committee for additional information.

History	6 credits
English	6 credits
Philosophy	6 credits
Theology	6 credits
Social Sciences	6 credits
Intermediate Language	6 credits
General Chemistry	8 credits
Organic Chemistry	8 credits
Mathematics	8 credits
Physics	8 credits
General Biology	8 credits
Cell Biology	4 credits

Additionally, 12 credits must be selected from:

BL 214, 215	Molecular Genetics and Laboratory
BL 220, 221	Comparative Vertebrate Anatomy and Laboratory
BL 224, 225	Physiology and Laboratory
BL 242, 243	Histology and Laboratory

All students must take one course designated as a First-Year Seminar.

Total credit hours at Saint Vincent College = 95 hours.

At the end of the second year of successful study at the College of Podiatric Medicine, the student receives the Bachelor of Arts degree with a major in Biology from Saint Vincent College. At the end of the fourth year of successful study at the College of Podiatric Medicine, the student receives the Doctor of Podiatric Medicine degree.

Please see the Allied Health Professions section of the Catalog for information on programs in Allied Health (e.g., Physical Therapy, Occupational Therapy, Physician Assistant, and Pharmacy, among others.)

Pre-Law Program

The road to becoming a lawyer begins in college. At Saint Vincent, we are committed to helping you decide whether to take that road and, if you do, to give you the guidance and wherewithal to travel it successfully.

First, we will help you decide if the law is your vocation. The law is a profession for men and women who feel the calling to dedicate their lives to the pursuit of justice through the study and practice of law. It is not a profession to be pursued casually or by default. These are the realities you will face if you choose the law as a career:

• The study of law is a long, arduous and, quite often, expensive process.
• The job market for new law school graduates is extremely difficult and highly competitive.
• Excellence in the practice of law requires many hours of dedicated work and personal sacrifice.

You will embrace these realities if the law is your vocation; do not undertake them if it is not.

If the law is your vocation, the realities you face require that you focus on the critical moment that lies before you. That moment is not the date on which you are admitted to a law school; rather, it is the date on which you enter the profession as a practicing lawyer. To make that date come to pass as soon as possible after you complete law school, you must begin now to focus on these two goals:

• Attending a law school that excels at preparing students for the practice of law; and,
• Becoming a multidimensional person who will stand out in a crowded field of law graduates applying for the Legal positions then available.

An Undergraduate Curriculum to Ready You for Law School

It is very important for you to realize that there is no one major in college that best prepares you for success in law school or best positions you to succeed in the practice of law. Overall, what will best serve you in the study of law is to take a challenging undergraduate curriculum that will help you develop a rigorous work ethic and the capacity to engage in the following skills at a high level.

1. To synthesize a large body of material.
2. To analyze such material in a way to discern the key principles that will lead to a strategy to resolve the legal problem the material presents.
3. To advocate that strategy with force and clarity orally and in writing.

Regardless of what major you choose to pursue, any course of study which advances you in these critical areas will best prepare you for the study of law.

Saint Vincent has adopted a Legal Studies minor which is meant to give you a wide spectrum of these important skills. As you will see, the Minor does not simply focus on traditional law courses but challenges you to take courses in other realms of knowledge. This will enhance your capacity to be an effective attorney by seeing the broad perspectives of the human problems that will be presented to you. In this, as in so many other respects, a liberal arts education is critical to your success in the study of law and your ultimate entry into the practice of law on behalf of clients.

You should take the opportunity to speak to the Pre-Law Advisor here at Saint Vincent regarding your interest. There are strategies to employ in the decision to apply to law school and having access to a person who taught in law school for a number of years is an important resource Saint Vincent can offer you in this critical transition. Please make an appointment with him to discuss these matters and to help formulate your thinking on this important decision.

Please also take advantage of the Pre-Law Society here at Saint Vincent that offers an important support service and opportunities for students to become more familiar with the practice of law and attorneys in the region who can become friends and mentors as you pursue your new career.

Internship opportunities with legal offices in the public and private sector are possible and should be explored with the Pre-Law Advisor. Students should also consider joining our excellent Mock Trial Team, which provides excellent training in trial advocacy.

A Liberal Arts Curriculum That Will Make You Stand Out

Our liberal arts approach will help you become a multidimensional person who will stand out as a candidate for legal positions when that critical time comes. The job market for law school graduates is very difficult. When you seek your first legal position, you will need more than just a credible record of achievement in law school. You will need to exhibit an extra dimension that demonstrates that you are ready to begin promptly to be a productive member of the legal profession. That dimension could be an in-depth understanding of business, government, or the court system, fluency in multiple languages, advanced skill in writing or oral advocacy, or expertise in a field of science or technology. Our strong liberal arts curriculum will help you find new dimensions and enhance them into skills that will give you an edge in the competitive market that awaits you.

Psychological Science

The Department of Psychological Science offers a program of study that is designed to prepare students for admission to graduate school or for direct entry into the workforce in fields related to psychology. Students receive broad training in the science and application of psychological methods and principles, as well as opportunities to gain knowledge and hands-on experience in specialized areas.

The primary program of study in the Department of Psychological Science is the Bachelor of Science degree in Psychology. The credit hours required for the psychology major are purposefully kept to a manageable number to allow students to pursue specialized programs within the department and/or majors and minor from other departments. The complete list of programs offered by the department include the following:

- Bachelor of Science Degree in Psychology
- Minor in Psychology
- Concentration in Mental Health
- Addictions Specialist Training Certificate
- Minor in Biological Psychology
- Psychology Scholars Program

Other highlights of the psychology curriculum include a required internship in which students gain practical professional experience in the field. Students also complete a capstone course which can consist of an independent empirical research project (Research Thesis) or a comprehensive research paper (Research Review and Analysis). Students who complete a Research Thesis have the opportunity to present their work at a professional conference. Research Thesis is recommended for students who plan to pursue advanced study, especially in the more research-oriented fields of psychology and at the doctoral level.

Psychology Student Learning Outcomes

Students will:

- demonstrate understanding of content, principles, concepts, and applications in psychology.
- demonstrate understanding of scientific inquiry and engage in critical thinking.
- apply ethical standards to psychological science and practice.
- communicate effectively in writing and speaking.
- demonstrate successful professional development.

Requirements for the Bachelor of Science Degree in Psychology (38 Credits)

PY 100	Introduction to Psychological Science	3
PY 203	Statistics I	3
PY 204	Statistics II	3
PY 212	Child Development	3
PY 243	Abnormal Psychology	3
PY 260	Social Psychology	3
PY 308	Cognitive Psychology	3
PY 309	Learning	3
PY 331	Biological Psychology	3
PY 341	Research Methods in Psychological Science	4
PY 395	Professional Development in Psychological Science	3
PY 550	Psychology Internship	1-3

One of the following two:

PY 401	Capstone: Research Review and Analysis	3
PY 405	Capstone: Research Thesis I	

Requirements for Concentration in Mental Health (21 Credits)

(For Psychology Majors Only)

PY 219	Introduction to Counseling	3
PY 230	Positive Psychology	3
PY 251	Family Systems	3
PY 370	Ethical Issues	3
PY 343	Abnormal Psychology II	3
PY 382	Psychological Assessment	3
PY 322	Health Psychology OR	3
PY 250	Addictive Behaviors	

Students who are interested in taking PY335/BL 255 (Psychopharmacology) may substitute this course for another course in the mental health concentration with permission of the chair.

See page **332** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Psychology as a Second Major

The Department of Psychological Science collaborates with other departments to facilitate students' completion of double majors. Specifically, students who have a first major in Biology or Sociology and a second major in Psychology are exempt from the psychology internship requirement; these students may also work with the department to devise a suitable capstone project in their first major that will fulfill the requirements of the Psychology capstone. Students who have second majors in Psychology with first majors in fields other than Biology or Sociology should contact the chair of the Department of Psychological Science to discuss whether a similar arrangement would be acceptable.

Minors & Certificates

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Psychology** and **Biological Psychology**, please refer to that section.

Certificates are listed in alphabetical order beginning on page **119**. For information on the **Addictions Specialist Training** certificate, please refer to that section.

Public Policy

The Public Policy program of the McKenna School is designed to develop an understanding of the economic and political institutions, principles, and processes involved in public policy decision-making. Students are led to examine issues critically while developing a substantive knowledge of market economics and democratic-constitutional government as the context for American public policy. These studies contribute to the development of a well-rounded liberal arts education while helping students pursue their professional goals. The Public Policy program offers a general public policy major. The major seeks to provide the theoretical and analytical background needed to effectively participate in public policy-related endeavors.

Governmental actions at the various levels have a broad impact on society and affect businesses, the professions, and many aspects of individuals' lives. Economic analysis and knowledge of political organization and politics comprise much of the intellectual framework for public policy decision-making. The curriculum combines courses in economics and political science to help foster the development of such skills and knowledge. All Public Policy majors are encouraged to participate in the programs of the McKenna School's Center for Political and Economic Thought, which sponsors numerous lectures and conferences by prominent outside speakers on campus.

The program's capstone experience is fulfilled in PS 480. It is anticipated that many public policy majors may be interested in seeking immediate employment in public policy-related positions in the non-profit sector or business, or in government service or politics. To enhance career opportunities, an internship or other relevant work experience is recommended, which may be pursued through the College's Career Center.

The curriculum is also good preparation for students interested in law school; such students should also consult the College's Pre- Law program in this ***Catalog***. Students may consider applying to graduate school in public policy, public administration, or public affairs. Public Policy majors receive the Bachelor of Science degree.

Public Policy: Major Requirements (51 Credits)

BA 100	Financial Accounting I	3
BA 150	Managerial Accounting	3
BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1
BA 351	Statistics and Analytics II	3
BA 351A	Excel II Lab	1
EC 101	Principles of Economics: Micro	3
EC 102	Principles of Economics: Macro	3
EC 200	Environmental Economics	3
EC 201	Microeconomic Theory	3
EC 202	Macroeconomic Theory	3
EC 331	Public Finance	3
MA 109	Calculus with Applications I	4
PS 100	Intro to American Government	3
PS 335	The U.S. Presidency	3
PS 345	Congress and Public Policy	3
PS 242	International Politics	3
or		
PS 375	International Law	3
PS 395	What is Political Science?	3
PS 480	Senior Capstone (on a public policy topic)	0

See page **335** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Double Majors and Minors

Public Policy majors may not receive a double major or minor in Economics or Political Science; nor may they receive the Public Administration minor. **Minors** are listed in alphabetical order beginning on page **104**. For information on the **Public Administration** minor, please refer to that section.

Sociology

The Department offers a Bachelor of Arts degree in Sociology, as well as a minors in Sociology and Anthropology. The philosophical foundation of the Department embraces the institution's emphasis on the need for a holistic liberal arts education. The unique perspective given by the department is particularly appropriate and helpful to any major or career path that would benefit from an understanding of human behavior. The Department seeks to develop a student's scientific understanding of the cultural and social forces that shape human behavior. By making use of the perspectives found in the fields of Anthropology and Sociology, students come to understand the science of human behavior within a cross-cultural and historical context.

An undergraduate degree in Sociology provides a strong liberal arts foundation for entry-level positions in social services, law or criminal justice, education, community development, marketing or other business-related fields, and government jobs. Those who enter human services might work with youths at risk, the elderly, or people experiencing problems related to poverty, substance abuse, or the justice system. Those who enter the business world might work in sales, marketing, customer relations, or human resources. Others may choose a teaching career. Sociology also offers valuable preparation for careers in journalism, politics, public relations, business, or public administration — fields that involve investigative skills and working with diverse groups. In addition, an undergraduate degree in sociology is excellent preparation for future graduate work in sociology in order to become a professor, researcher, or applied sociologist.

All Sociology majors are encouraged to undertake internships in areas that will allow them to explore career options and help determine what aspects of sociology they find most interesting. Sociology majors are also encouraged to select minors or concentrations that will support their career goals.

Students with a major in Sociology are eligible to participate in a cooperative program between Saint Vincent College and Duquesne Law School that allows students to earn their bachelor's degree and Juris Doctor degree in six years. In this program, qualified students who complete their first three years of study at Saint Vincent, fulfilling the core curriculum requirements and the requirements for the major, may transfer into the Law Program and complete the requirements for the Juris Doctor in three years. For details, see the explanation of this program in the Pre-Law section of the ***Catalog***.

Sociology Student Learning Outcomes

• Delineate the major theoretical frameworks and distinctive concepts upon which the discipline is grounded.
• Explain the effects of social location on groups and individuals.
• Critically evaluate explanations of human behavior and social phenomena by using the sociological imagination.
• Apply scientific principles to understand the social world and conduct and critique empirical research.

Requirements for a Bachelor of Arts Degree in Sociology

(See core curriculum requirements.)

B.A. Sociology Requirements: (36 credits)

AN 222	Cultural Anthropology	3
PY 203	Statistics I	3
SO 101	Introduction to Sociology	3
SO 200	Race and Ethnicity	3
SO 204	Sociology of Crime	3
SO 235	Inequality and Social Problems	3
SO 405	Senior Seminar I	3
SO 356	Quantitative Research Methods	
or		
AN 360	Research Methods	3
Any four Sociology electives		12

Students are encouraged to select a complementary area of study (minor or second major) in consultation with their faculty advisor.

See pages **336** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor Information

Minors are listed in alphabetical order beginning on page **104**. For information on minors in **Sociology** and **Anthropology**, please refer to that section.

Teacher Certification

Sociology majors interested in obtaining a teaching certificate should consult the requirements of the Education Department of Saint Vincent College in the Catalog.

The Psychological Science and Sociology Departments offer a collaborative program designed to facilitate students' completion of majors in both psychology and sociology. Please see the chairpersons of Psychological Science and Sociology for specific details.

Theology

The Theology Department at Saint Vincent College offers a rigorous and engaging course of study in theology, embracing St. Anselm's famous description of theology as "faith seeking understanding." In the spirit of the Benedictine tradition, the department teaches students to integrate faith and reason.

Theology Program Outcomes

Graduates of the Theology Program will (1) have the basic knowledge and experience appropriate to secure entry-level positions as professional Directors of Faith Formation, Teachers of Theology/Religion at the Secondary Level, Campus Ministers, and Youth Ministers. Graduates of the program will also (2) be prepared to enter accredited graduate programs in Theology (and related fields), as well as seminary formation programs, enabling them to become professional pastors/ministers and academics. Additionally, graduates of the Theology Program who pursue vocational/ professional opportunities in other areas will (3) demonstrate an awareness of the broader purpose of human living (including its moral/ethical dimensions) as it relates to their chosen professional field.

Theology Student Learning Outcomes

Students will:

• Employ tools appropriate to modern biblical interpretation to engage the historical, literary, and theological meanings of the Christian scriptures.

• Analyze major doctrines of the Catholic tradition using theological methods characteristic of academic study.

• Articulate the significance of one's own theological learning in relation to the insights and needs of the contemporary world.

Theology Major Requirements: (30 Credits)

Scripture Foundations Course
TH 231 Biblical Foundations
Doctrinal Foundations Course
TH 340 Basics of Catholic Faith
(Can be taken as part of Core or as TH designated class)
Major Seminars
3 TH 400-level Seminars.
Electives
5 Additional theology courses other than the foundations Doctrine and Scripture courses listed above.
TOTAL 30 credits

See page **341** for the recommended 8-semester program plan. These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Minor

Minors are listed in alphabetical order beginning on page **104**. For information on the **Theology** and **Sanctity of Life** minors, please refer to that section.

Undeclared

Many college students begin their studies at Saint Vincent without declaring a specific program of study because they wish to further explore their interests. The undeclared program provides such students dedicated academic advising while exploring their academic options. The undeclared major is transitional in nature, but advising and supervision provide the framework found in any traditional major. On arrival at Saint Vincent, the undeclared student will be assigned an experienced and trained academic advisor from the college faculty who will assist the student in selecting courses from the core curriculum of the College which fit individual interests and expose the student to various academic courses and career options. The advisor will continue to monitor the student's progress, help with future course selection, and ultimately assist the undeclared major in the selection of a traditional academic major. In order to complete requirements for the selected major, the student will declare a major no later than the spring semester of the sophomore year.

Undeclared students are encouraged to consider moving into the Liberal Arts degree program for a more structured and individualized exploratory path that may lead to designing a program of study outside of the traditional majors. Students can certainly transition to any major from the Liberal Arts program. See the Liberal Arts section in this Catalog.

A typical first semester schedule will be comprised mostly of Core Curriculum with the possibility of certain exploratory courses based on interests mentioned on the student's enrollment portfolio.

Visual Arts and Media Design

"I am firmly convinced that a monastic school, which does not strive to advance art as much as science and religion, will be deficient in its work."
-Boniface Wimmer, O.S.B.

The Department of Visual Arts and Media Design hosts three unique programs — Art Education, Digital Art + Media, and Studio Art. The goal of the department is to lay a foundation for creative expression in the classroom, in a gallery, or on the internet. Students are motivated to reach these ends by a group of experienced and interested faculty, who introduce and reinforce skills, processes, and theories associated with fine art and media studies. Topics covered include, and are not limited to, animation, branding, drawing, graphic design, painting, photography, and video production.

Outcomes of the students' endeavors in these areas are shown at either an end-of-year exhibition or via an online portfolio. Products on display represent the individual accomplishments of each student, each of whom are encouraged to carve his or her unique path through the material presented in the art studio, classroom, and computer lab. Successful completion of either showcase is a requirement for graduation.

Digital Art + Media

Our goal is to train students to work creatively in an ever shifting digital landscape. While we feel it is of vital importance to keep pace with technology, we also strongly believe that students must learn and practice fundamental principles that lead to innovation, synthesis, and maximum creativity. Our students learn the fundamentals of animation, graphic design, illustration, 3D modeling, and video production. After that, the only limit is the imagination.

Digital Art + Media Student Learning Outcomes

• Define terminology related to the creation and production of digital art and media.
• Plan and produce a project integrating software applications.
• Plan and produce a complex project as part of a team.
• Generate a professional portfolio tailored to their own stated goals.

Requirements for a Bachelor of Arts Degree in Digital Art + Media (42 Credits)

All courses are three credits unless otherwise noted.

Required Courses (21 Credits)
DA120 Digital Layout and Design
DA140 Introduction to Digital Photography
DA150 Digital Video Production
DA190 Introduction to Interactive Media
DA220 Drawing and Illustration for Media
DA280 Animation and Compositing
DA410 Digital Media Portfolio

Digital Art + Media Elective Courses (15 Credits)
DA240 3D Modeling for Art and Animation
DA250 Documentary Production
DA320 Storyboarding for Graphic Novels
DA350 Advanced Video Editing
DA380 Dynamic Typography and Motion Graphics
DA385 Branding and Logo Design
DA550 Digital Art + Media Internship

Non-Digital Art + Media Elective Courses (6 Credits)
AR130 Drawing I
AR131 2-Dimensional Design
AR135 Materials and Process
AR225 Painting I
CA230 Writing for Media
CA304 Social Media Strategies
CA307 Media Literacy
CS102 Fundamentals of IT & Computing
EL230 Small Press Publishing
See page **289** for typical eight semester degree plan. *

Digital Art + Media Minor

Minors are listed in alphabetical order beginning on page **104**. For information on the **Digital Art + Media Minor**, please refer to that section.

Art Education* And Studio Arts Student Learning Outcomes

• Analyze the artistic style of the Western tradition and at least one style from the non-Western traditions.
• Apply vocabulary related to making art.
• Use a variety of materials and techniques to produce a body of artworks for their portfolio.
• Apply professional standards of exhibition and portfolio development.
• Develop their skills to make professional art that can generate revenue.

The Following Courses are Required for Students Seeking a Bachelor of Arts Degree in Either Art Education* or Studio Arts (42 Credits)

**Art Education majors seeking certification must also complete the requirements set by the Department of Education. Each student pursuing this outcome must consult their Department of Education for acceptance in the certification program and for advising regarding the necessary courses in their program.*

Required Courses (33 Credits)

Either of the Following Art History Courses (3 Credits)
AR101 Caves to Cathedrals
AR102 Art History II: Baroque/Present

Required Studio Arts Courses (21 Credits)
AR130 Drawing I
AR131 2-Dimensional Design
AR135 Materials and Process
AR225 Painting I
AR238 Clay and Pottery
AR404 Intensive Study in Technique
AR405 Senior Exhibition and Professional Seminar

Elective Courses (18 Credits)
One additional art history course (3 credits) must be taken for elective credit. Consult the Catalog or meet with your advisor for the appropriate options.

Three courses (9 credits) are fulfilled by any of the following.

AR225 Painting I
AR230 Drawing II
AR234 Introduction to Stained Glass
AR236 Fiber Arts
AR325 Painting II
AR350 Independent Study
AR368 Advanced Clay and Pottery
AR384 Advanced Stained Glass
Two courses (6 credits) are fulfilled by any of the following.
DA120 Digital Layout and Design
DA140 Introduction to Digital Photography
DA150 Digital Video Production
DA190 Introduction to Interactive Media
DA220 Drawing and Illustration for Media
DA280 Animation and Digital Compositing
See pages **340** (Studio Art) and page **265** (Art Education) for typical eight semester degree plan. *

*These plans are designed to be a road map to help students finish their degrees in a timely manner and should be utilized in consultation with their Academic Advisor.

Art History Minor and Studio Arts Minor

Minors are listed in alphabetical order beginning on page **104**. For information on the **Art History** and **Studio Arts** minors, please refer to that section.

MINORS

Declaration of a Minor

To declare a minor, students must consult with the Department Chair of the academic department offering the minor. The Department Chair will complete and submit the Program Adjustment Form on the student's behalf, designating a faculty member to serve as the student's minor advisor.

General Requirements

Most academic minors require successful completion of 18 credit hours. A maximum of 9 credit hours may be transferred from an accredited institution, while at least 50% of the coursework must be completed at Saint Vincent.

Course Overlap and Restrictions

Students may not declare a minor in the same field as their major unless the curriculum is demonstrably distinct and approved by the Department Chair.

Special Requirements for Business Majors within the McKenna School: A minor must include at least three non-overlapping courses beyond those required for the student's business major. Students pursuing two or more minors must complete at least three unique, non-overlapping courses for each minor.

Accounting (18 Credits)

Required Courses (4 courses / 12 credits)

BA 100	Financial Accounting I	3
BA 101	Financial Accounting II	3
BA 200	Intermediate Accounting I	3
BA 201	Intermediate Accounting II	3

Elective Courses (Choose any 2 / 6 credits)

BA 150	Managerial Accounting	
or		
BA 300	Cost Accounting I	3
BA 301	Cost Accounting II	3
BA 310	Taxes I	3
BA 311	Taxes II	3
BA 325	Analysis of Financial Statements	3
BA 400	Advanced Accounting	3
BA 405	Auditing	3
BA 406	Forensic Auditing	3
BA 420	Accounting Information Systems	3
BA 440	Government and Not-for-Profit Accounting	3
BA 470	International Accounting	3

Anthropology (18 Credits)

Option 1: Concentration In General Anthropology

The general concentration provides students with a basic foundation in the discipline of anthropology, allowing students to incorporate the principles of anthropology's holistic perspective into their approach to their major discipline.

Required Courses (2 courses / 6 credits):

AN 101	Introduction to Anthropology	3
AN 222	Cultural Anthropology	3

Elective Courses (Choose any 4 / 12 credits):

Any four Anthropology electives

Option 2: Concentration In Applied Anthropology

The concentration in applied anthropology is designed to prepare students to integrate anthropological thinking into their work in other disciplines. Students will become familiar with the broad range of applications of anthropology and will learn to approach problems from a holistic, interdisciplinary perspective.

Required Courses (4 courses / 12 credits):

AN 101	Introduction to Anthropology	3
AN 222	Cultural Anthropology	3
AN 315	Applied Anthropology	3
AN 360	Research Methods	3

Elective Courses (Choose any 2 / 6 credits):

Select two from the following (only one Sociology course may count toward the minor): AN 221, AN 230, AN 238, AN 280, AN 332, SO 106, SO 161, SO 235

Art History (18 Credits)

Foundation Courses (Choose one from each group / 6 credits total):

Take 1 (3 credits):

AR 101	Caves to Cathedrals	3
AR 102	Art History II: Baroque to Present	3

Take 1 (3 credits):

AR 130	Drawing I	3
AR 131	2-Dimensional Design	3

Elective Courses (4 courses / 12 credits):

Four additional art courses must be taken for elective credit. Consult the catalog or meet with your advisor for appropriate options.

Biochemistry (20 Credits)

Required courses:

CH 216	Quantitative Analysis	3
CH 218	Quantitative Analysis Laboratory	1
CH 221-224	Organic Chemistry I, II with Laboratory	8
CH 251, 253	Proteins and Metabolism with Laboratory	4
CH 252, 254	Nucleic Acids and Membranes with Laboratory	4

Biological Psychology (21 Credits)

There is a strong connection between the fields of Biology and Psychology. Psychology is often defined as the study of the mind and behavior. Contemporary psychologists understand and teach that all processes of the mind are ultimately the result of the functions of the brain. As a result, changing the brain - either through disease, injury, surgery, pharmacology, or even naturally over time - changes our minds and the way we think, feel, behave, and ultimately perceive and understand our world. Understanding the connection between biology and behavior is critical in any health-related field involving patient interaction, but it is of particular importance in the areas of mental health and neuroscience.

Required Courses (8 courses/ 18 credits):

PY 100	Introduction to Psychological Science	3
PY 331	Biological Psychology	3
PY 333	Sensation and Perception	3

BL 150	General Biology I	3
BL 151	General Biology I Lab	1
BL 152	General Biology II	3
BL 153	General Biology II Lab	1
BL XX	any 200-Level Biology lab course	1

Elective Course (1 course/ 3 credits): For courses in this category, students are not allowed to count a course from their major department toward the minor. For example, a Psychology Major is required to take Cognitive Psychology, so it cannot be counted toward the Minor in Biological Psychology.

PY 250	Addictive Behaviors	3
PY 308	Cognitive Psychology	3
PY 309	Learning	3
PY 322	Health Psychology1	3
PY 335/BL 255	Psychopharmacology2	3
PY 382	Psychological Assessment	3
BL 220	Comparative Vertebrate Anatomy1	3
BL 222	Developmental Biology	3
BL 226	Neuroscience	3
BL 228	Wildlife Biology	3

Note: Students pursuing a minor in Biological Psychology cannot also pursue minors in Biology and/or Psychology.

1 – This course can be applied to an Allied Health Concentration of the Integrated Sciences Major or the Minor in Biological Psychology, but not both.
2 – Psychopharmacology is cross-listed as a Biology and Psychology course. It is an appropriate Elective Course for students in department.

Biology (27 Credits):

Required Courses (8 courses / 16 credits):

BL 150, 152	General Biology I and II	6
BL 151, 153	General Biology Lab I and II	2
CH 101, 102	General Chemistry I and II	6
CH 103, 104	General Chemistry Lab I and II	2

Concentration Requirments (two lecture-lab combinations/ 8 credits): Each combination should be from a different area of concentration.

Cell and Molecular Biology Concentration:

BL 212/213	Microbiology & Lab	4
BL 214/215	Molecular Genetics & Lab	4
BL 216/217	Biotechnology & Lab	4
Bl 222/223	Developmental Biology & Lab	4

Organismal Biology Concentration:

BL 220	Comparative Vertebrate Anatomy	3
BL 221	Comparative Vertebrate Anatomy Laboratory	1
BL 224	Physiology	3
BL 225	Physiology Laboratory	1
BL 228	Wildlife Biology	3
BL 229	Wildlife Biology Laboratory	1
BL 226	Neuroscience	3
BL 227	Neuroscience Laboratory	1

Population Biology Concentration:

BL 232	Ecology	1
BL 233	Ecology Laboratory	1
BL 234	Evolution and Systematics	3
BL 235	Evolution and Systematics Laboratory	1
BL 240	Conservation Biology	3
BL 241	Conservation Biology Laboratory	1
BL 252	Invertebrate Zoology	3
BL 253	Invertebrate Zoology Laboratory	1

Elective Course (3 credits). Choose one of the following (no more than one course may count towards the student's major):
Any 200-level BL course, CH 251 – Proteins and Metabolism, CH 252 – Nucleic Acids and Membranes, CH 276 – Environmental Chemistry, ES 220 – Environmental Science, ES 245 – Environmental Policy

Students will also need to complete a 3-credit elective from the following courses: 200-level BL course, CH-251, CH-252, CH-276, ES-220, or ES-245. No more than one course taken below can count toward the student major.

Biotechnology (21 Credits)

To be completed concurrently with a traditional major course of study.

Required Courses (7 courses/ 18 credits):

HSCI 230	Health Analytics	3
BL 214	Molecular Genetics*	3
BL 215	Molecular Genetics Laboratory	1
BL 216	Biotechnology*	3
BL 217	Biotechnology Laboratory	1
BA 230	Introduction to Entrepreneurship	3
BL/BIN 550	Internship/Research Experience**	1
PL 219	Ethics and Technology	3
or		
TH 280	Catholic Bioethics	3

Elective Course (Choose 1 course/ 3 credits):

BA 170	Organizational Behavior	3
BA 220	Principles of Marketing	3
PS 390	Environmental Law and Policy	3

**These courses require the General Biology series (BL 150-153) as a prerequisite.*
***In addition to coursework, both the certification and the minor in Biotechnology require an applied internship or research experience, along with accompanying research documents*

Chemistry (minimum 17 Credits)

Required Courses (6 courses / 12 credits):

CH 216 & 218	Quantitative Analysis with Lab	4
CH 221 & 223	Organic Chemistry I with Lab	4
CH 222 & 224	Organic Chemistry II with Lab	4

Elective Course (Choose 2 courses/ at least 6 credits from the following):

CH 231	Physical Chemistry I	3
CH 241	Inorganic Chemistry	3
CH 242	Instrumental Analysis	3
CH 276	Advanced Environmental Chemistry	3
CH 321	Special Topics	3
CH 228	Introduction to Biochemistry	3
CH 251	Proteins and Metabolism	3

CH 252	Nucleic Acids and Membranes	3

Children's Literature (18 Credits)

The minor in Children's Literature is designed for undergraduate students who plan to pursue a teaching career, work in related field, or become a literacy or reading specialist.

Required Courses (2 courses / 6 credits):

CL 129	Young Adult Literature	3
or		
CL 130	Children's Literature	3
CL 206	Techniques and Classroom Applications of Children's literature	3

Elective Course (Choose 4 course/ 12 credits):

CL 259	Critical Approaches to Children's Literature	3
CL 295	Writing for Children and Young Adults	3
CL 221	Historical Literature for Children	3
CL 312	Nonfiction and Informational Books for Children	3
CL 272	Special Topics in Children's Literature.	3
CA 274	Children's Literature and Film	3

Substitutions can be approved by advisor.

Children's Studies (18 credits)

Fred Rogers was a scholar of child development, an ordained minister, and a pioneer in children's media. The minor in Children's Studies is an interdisciplinary program of study inspired by the work of Fred Rogers. Drawing from his work, the Fred Rogers Institute Archive, and contemporary psychology, communication, and humanities, students in this minor will apply fundamental research of childhood to their studies and future careers. The goals of the Children's Studies Minor are to:

- acquaint students with Fred Rogers through the study of his work and his legacy across disciplines; *this goal is fulfilled in courses in the "Study of Fred Rogers" and "Applied Fred Rogers" blocks*
- enhance students' understanding of children from a variety of disciplinary perspectives; *this goal is fulfilled in courses in the "Applied Fred Rogers" and "Developmental" blocks*
- provide students with a broad-based examination of childhood and adolescence; *this goal is fulfilled in courses in the "Applied Fred Rogers" and "Developmental" blocks*
- develop students' understanding and practical application of how to serve and work with children, youth, and/or families; *this goal is fulfilled in the "Applied Fred Rogers" block*

The Children's Studies minor is suitable for students from a variety of majors who have an interest in childhood, whether it is part of their professional plans, is an academic interest, and/or is a personal interest. Alumni that have completed this minor have gone onto professions in education, family law, pediatric medicine, social work, and more.

Required Courses (3 courses from each area/ 9 credits):

Study of Fred Rogers (Choose one of the following – 3 credits):

EL 274	Mr. Rogers' Neighborhood: Narratives, Object Lessons, and Childhood	3
TH xxx	Theology of Fred Rogers	3

Applied Fred Rogers (Choose one of the following – 3 credits):

FRI 373	Fred Rogers' Fundamentals of Learning and Growing	3
FRI 376	Creating Change for Children	3

Developmental (Choose one of the following – 3 credits):

ED 122	Curriculum Projects and Play for the Developing Child	3
PY 212	Child Development	3
PY 214	Adolescent Development	3

Elective courses (Choose 3 courses / 9 credits):

CA 281	Children, Teens, and the Media	3
CL 129	Young Adult Literature	3
CL 130	Children's Literature	3
CLS 215	Juvenile Justice	3
HI 282	American Childhood History	3
PY 251	Family Systems	3

Students may count any course from the blocks above as an elective instead. For example, a student could take both PY 212 and PY 214, taking one to fulfill the Developmental block and counting the other as an elective. Other courses on the topics of Youth Development and/or Fred Rogers may be accepted for elective credit with approval of the Director of the Minor.

Classical Thought (21-27 credits -depending on previous Latin competency)

The modes of thought developed in the classical world are of vital interest to our self-understanding as members of a Catholic, Benedictine, liberal arts community. The Catholic intellectual tradition's respect for the integration of faith and reason led the early church to build upon the philosophical schools of thought in the Greco-Roman world. As the Church spread throughout the world, the native and seminal wisdoms of other civilizations provided fertile fields for inculturation that are still vital today. St. Benedict received an education rooted in this classical world. While he found it necessary to flee Rome in his spiritual journey, he ended up calling Rome to him with the founding of his monasteries and their educational apostolates. Finally, the very idea of a liberal arts education is a fruit of the classical world's insistence that the "unexamined life is not worth living," and thus that the cultivation of the intellect is worthy of pursuit for its own sake. Students interested in the classical world and in teaching or working at a classical school will find this minor an edifying addition to their course of studies at Saint Vincent.

Required (7 courses/ 21 credits):

PL-121	Logic and Theory of Knowledge	3
PL-201	Ancient Philosophy	3
PL-400	Socratic Seminar	3
HI-102	Ancient Greece and Rome	3
LT-101	Elementary Latin I*	3
LT-102	Elementary Latin II*	3
ED-232	Introduction to Classical Education+	3

Elective courses (take 2 courses/ 6 credits in Classical Texts from the following:

AR-101	Caves to Cathedrals	3
EL-210	Classical Greek Poetry and Drama	3
PL-262	Music and the Soul	3
PL-303	Eastern Thought	3

PL-305	Special Topics	3
TH-201-209		3
TH-210-TH-221		3
TH-230- TH-237		3
TH-240	Hist./ Biblical Interpretation	3
TH-310	Theology of Eastern Christianity	3
PS 205	Classical Political Thought	3
PL-273/PS-235	Roman Political Thought	3

** Students may test out of these courses*
+ Offered every other spring in odd-numbered years

Communication and Media Studies (18 Credits):

Required Courses (4 courses/ 12 credits):

CA 100	Introduction to Communication and Media Studies	3
CA 110	Introduction to Organizational Communication	3
CA 120	Public Speaking	3
CA 140	Introduction to Interpersonal Communication	3

Electives (Choose 2 courses / 6 credits from the following):

CA 201	Research Methods	3
CA 218	Intercultural Communication	3
CA 221	Communication, Sport, and Society	3
CA 222	Broadcast Journalism	3
CA 230	Writing for Media	3
CA 236	Sports Writing	3
CA 240	Public Relations Strategies	3
CA 271	Special Topics in Communication Studies	3
CA 281	Children, Teens, & Media	3
CA 291	Facts, Persuasion, and Argumentation	3
CA 302	Collegiate Athletic Communication	3
CA 303	Communication Ethics	3
CA 304	Social Media Strategies	3
CA 307	Media Literacy	3
CA 311	Race, Gender, Class, and Media	3
CA 321	Sports Media Culture	3
CA 340	Nonprofit Communication	3
CA 344	Sports Analytics	3
CA 351	Media Effects	3
CA 355	Advanced Public Relations	3
CA 385	Advanced Interpersonal Communication	3
CA 401	Communication Projects	3
CA 415	Creative Campaigns	3
CA 440	Criticism of Media and Society	3

Computer Science (18 Credits)

Required (4 courses/ 12 credits):

CS 102	Fundamentals of IT and Computing	3
CS 110	C++ Programming I	3
CS 111	C++ Programming II	3
CS 221	Data Structures	3

Electives (2 courses/ 6 credits from the following list are required (CS 170, CS 171, any 200 or higher. At least one must be 300 or higher). Students should consult with the CIS faculty for assistance in planning the courses for the Computer Science minor.

Creative Writing (18 Credits)

The Minor in Creative Writing serves students who have a passionate interest in writing. Following a flexible program of student in fiction, poetry, creative non-fiction, and literary translation, aspiring writers learn to navigate the contemporary landscape of genres and forms with attention to elements of craft and critique. Minors explore intersections with their major field of study and, in the creative process, find a vehicle for inquiry that can be applied to other academic subjects. The minor in Creative Writing cultivates an appreciation for the richness, flexibility, and power of language, as well as a capacity for expression that distinguishes students in an array of professional pursuits.

Required (1 course/ 3 credits):

EL 110	Creative Writing and Reading (which may be taken before or at the same time as 200-level Creative Writing courses)	3

Additional Required (Choose 4 courses/ 12 credits from the following:)

EL 142	Poetry in Public	3
EL 203	Poetry Workshop	3
EL 204	Fiction Workshop	3
EL 205	Advanced Writing	3
EL 244	Creative Nonfiction Workshop	3
EL 230	Small Press Publishing	3
EL 252	Intro to Literary Translation	3

Elective (Choose 1 course/ 3 credits from):

One English elective, core elective, or interdisciplinary course upon approval. 3

Criminology, Law and Society (18 Credits)

Required (4 courses/ 12 credits):

CLS 101	Introduction to Criminology	3
CLS 215	Juvenile Justice	3
CLS 227	Criminal Law and Process	3
CLS 504	Ethical Decisions and Dilemmas in Criminal Justice	3

Take one of the following courses (1 course/ 3 credits):

CLS 275	Patterns of Criminal Behavior	3
CLS 360	Prediction and Prevention of Criminal Conduct	3

Electives (Choose 1 course/ 3 credits from the following):

CLS 230	Constitutional Criminal Procedure	3
Any 300 or 400 level CLS course		3

Cybersecurity (18 Credits)

Required (5 courses/ 15 credits):

CS 102	Fundamentals of IT and Computing	3
CS 110	C++ Programming I	3
CS 321	Data Communication and Computer Networks	3
CS 225	Cybersecurity	3
CS 325	Advanced Topics in Cybersecurity	3

Elective (Choose 1 course/ 3 credits):

Must be CIS courses at the 200 level or above. Students should consult with the CIS faculty for assistance in planning the courses for the Cybersecurity minor.

Data Analytics (19 Credits)

Two Statistics Courses (2 courses/6 credits):

MA 241	Statistics I	3
MA 242	Statistics II	3
or		
BA 350/A	Statistics and Analytics I	4
BA 351/A	Statistics and Analytics II	4
or		
PY 203	Statistics I	3
PY 204	Statistics II	3

Three data science courses (3 courses/ 7 credits):

CS 190	Programming Language Lab: Python	1
DS 100	Intro Data Science and Analytics	3
DS 300	Methods of Data Science and Analytics	3

Choose two elective courses (2 courses/ 6 credits):

BA 106	Data Visualization	3
BA 107	Relational Databases for Business Analytics	3
BA 355	Advanced Business Analytics	3
CA-344	Sports Analytics	3
CS 110	C++ Programming I	3
DS 350	Data Mining	3
ES 220	Introduction to GIS	3
EC 360	Econometrics	3
HSCI 230	Health Analytics	3
MA 251	Linear Algebra	3
SO 248	Epidemiology	3

Digital Art + Media (18 Credits)

Required Courses (4 courses/12 Credits):

DA120	Digital Layout and Design	3
DA150	Digital Video Production	3
DA190	Introduction to Interactive Media	3
DA220	Drawing and Illustration for Media	3

Elective Courses (2 courses/6 Credits):

DA140	Introduction to Digital Photography	3
DA180	Before Disney: The Art and Science of Animation	3
DA240	3D Modeling for Art and Animation	
DA250	Documentary Production	3
DA280	Animation and Compositing	3
DA320	Storyboarding	3
DA350	Advanced Video Editing	3
DA360	Package Design	3
DA380	Dynamic Typography and Motion Graphics	3
DA385	Branding and Logo Design	3
DA410	Digital Media Portfolio	3

Disability Studies Minor (21 Credits)

Students from disciplines such as psychology, criminology, theology, occupational therapy, physical therapy, and sociology can supplement these studies with a focus on related issues concerning people with disabilities relative to their chosen majors. In this manner, the minor in Disability Studies enhances learning experiences by providing instruction, which addresses the needs of people with disabilities. Students from these disciplines would take the four Special Education courses, plus ED 290 and ED-250, and one of 15 other psychology courses (see advisor for selections).

Prerequisite Courses for Non- Education Majors:

ED	290 Psychology and Education of Exceptional Student	3
ED 250	Reading & Writing for Early and Special Learners	3

Any one of the following Psychology/Education courses:
PY 100, ED 115, 212, 214, 216, 219, 243, 244, 251, 252, 260, 308, 309, 322, 331

Special Education Courses (all candidates must take)

ED 355	Instructional Interventions for Students with High Incidence Disabilities	3
ED 360	Strategies and Assessment for Students with Significant and Multiple Disabilities	3
ED 362	Classroom Approaches for Students With Behavioral and Autism Spectrum Disorders	3
ED 412	Special Education Consultation, Transition, Law	3

Economics (19 Credits)

Required (6 courses/ 16 credits):

EC 101	Principles of Microeconomics	3
EC 102	Principles of Macroeconomics	3
EC 201	Microeconomic Theory	3
EC 202	Macroeconomic Theory	3
BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1

Plus one elective (3 or 4 credits) from the following:

EC 200	Environmental Economics	3
EC 310	Labor Economics	3
EC 331	Public Finance	3
EC 353	International Finance	3
EC 360/361	Econometrics + Lab	4
EC 380	Game Theory	3
EC 390	Experimental Economics	3

** Finance and International Business majors cannot count this class toward the minor.*

Education Minor without Certification (18 credits)

Students may choose an education minor without pursuing teacher certification. To earn the non-certification Education minor, students will select from the basic pedagogy courses required in the minor for secondary or PreK-12 certification, totaling 18 education credits. ED 400 and 410 Student Teaching Field Experiences are not required.

English (18 Credits)

The minor in English offers a flexible program of study that allows students to build skills in writing, analytical reading, and critical thinking. This minor nurtures curiosity and fosters appreciation of literature, art, and culture. A minor in English communicates both technical and analytical competencies to future employers and graduate admissions counselors. Because it enhances intellect, conversational agility, and marketability, a minor in English complements any major. Students seeking a minor in English must take:

Take one of the following (1 course/ 3 credits):

EL 200	Ways of Reading: Lit Theory	3
or EL 205	Advanced Writing	3
Take one 100-level EL course (1 course/ 3 credits):		
EL 1XX	Any 100-level course with EL prefix	3
Take three 200-level EL course (3 course/ 9 credits):		
EL 2XX	Any 200-level course with EL prefix	3
EL 2XX	Any 200-level course with EL prefix	3
EL 2XX	Any 200-level course with EL prefix	3
Take one elective course (1 course/ 3 credits):		
The elective can be an English elective, core elective, or interdisciplinary course upon approval		3

Entrepreneurship (18 Credits)

Required (5 courses/ 15 credits):		
BA 230	Introduction to Entrepreneurship	3
BA 231	Franchising	3
BA 322	Entrepreneurial Finance	3
BA 413	From Business Canvas to Business Plan	3
BA 414	Failure, Success, and Innovation	3
Elective (take 1 course/ 3 credits):		
BA 325	Analysis of Financial Statements	3
BA 336	Essentials of Selling	3
BA 340	Business Law	3

Environmental Science (15-17 credits) ***

Required (6 courses/ 12 credits):		
ES 150-152	Earth Systems Science and Lab	4
BL 232-233	Ecology and Lab***	4
CH 216-218	Quantitative Analysis and Lab***	4
Choose one course with lab if available:		
(May not count toward major)		
CH 276	Advanced Environmental Chemistry***	3
CH 277	Methods of Environmental Analysis (Lab)***	2
CH 228-229	Wildlife Biology and Lab***	4
BL 230	Ornithology***	3
BL 240-241	Conservation Biology and Lab***	4
ES 230	Energy and the Environment***	4
ES 240	Geophysics***	3
ES 245/246	Hydrology and Limnology and Lab	4
ES 250	Advanced Environmental Mapping	3
BL 252-253	Invertebrate Zoology and Lab	4

**** General Chemistry I and II and/or General Biology I and II are prerequisites for these courses.*

***** Environmental Science and Environmental Chemistry majors may not minor in Environmental Science. Students must take at least two courses that do not also count toward their major.*

Exercise Science (21-22 Credits)**

The following courses are required (11 credits):		
BL140	Intro to Exercise Science and Lab	3
BL150/151	General Biology I and Lab	4
BL 245/246	Exercise Physiology and Lab	4
Choose one lecture/lab combination (4 credits):		
HSCI 222/223	Human Anatomy and Physiology I + Lab	4
or BL224	Physiology and BL225 Physiology Lab	4
Students take two of following courses (6-7 credits):		
BL142	Strength and Conditioning Assessment and Prescription	3
NSCI-235	Human Anatomy and Kinesiology/Lab	4
HSCI-250	Wellness and Nutrition with	3
PY 275	Sport Psychology	3
or		
PY 218	Life-span Development	3

*** A maximum of 11 credits from one's major program of study can also count towards fulfilling the minor*

Finance (18 Credits)

Required courses (4 courses/ 12 credits):		
BA 100	Financial Accounting I	3
BA 320	Corporate Finance I	3
BA 362	Investments I: Securities	3
BA 363	Investments II: Derivatives	3
Electives (take 2 courses from below/ 6 credits):		
BA 321	Corporate Finance II	3
BA 324	Advanced Personal Financial Plan	3
BA 325	Analysis of Financial Statements	3
BA/EC 353	International Finance*	3
BA 385	Financial Institutions	3
BA 367	Investments III. Alt. Assets	3
BA 484	Risk Management	3
BA 485	Financial Planning and Analysis	3
BA 488	Portfolio Theory	3

** International Business majors cannot count this class toward the Finance minor.*

Forensic Studies - Cybersecurity (18 Credits) **

Take two CLS courses (2 courses/ 6 credits) from below:		
CLS 205	Criminal Trial Evidence	3
CLS 227	Criminal Law and Process	3
CLS 230	Constitutional Criminal Procedure	3
CLS 320	White Collar Crime	3
Required CS courses (4 courses/ 12 credits):		
CS 102	Fundamentals of IT and Computing	3
CS 225	Computer Security	3
CS 321	Data Communication and Computer Networks	3
CS 325	Advanced Topics in Security	3

***CS Majors must take three of these four CLS courses. CLS Majors must take CLS 205 and CLS 320 for the minor, and cannot use these courses to count toward the major (CLS students must choose two other courses for their CLS major electives).*

Forensic Studies - Financial Investigations (18 Credits) **

Take two CLS courses (2 courses/ 6 credits from below):		
CLS 227	Criminal Law and Process	3
CLS 320	White Collar Crime	3
CLS 376	Federal Criminal Law	3
Required Business Administration courses (4 courses/12 credits):		
BA 200***	Intermediate Accounting I	3
BA 201	Intermediate Accounting II	3
BA 405	Auditing	3

BA 406	Forensic Auditing	3

** *Accounting majors must take all three CLS courses listed. CLS majors must take 320 and 376 and choose one other course from CLS electives to count toward the CLS major.*
*** Students must choose between an accounting minor or a Forensic Studies – Financial Investigations minor. They cannot have both appear on their transcript.*
**** Prerequisites: BA 100, BA 101*

Forensic Studies -Natural Science (18 Credits)

Required (3 courses/ 9 credits):

CLS 205	Criminal Trial Evidence	3
CLS 227	Criminal Law and Process	3
NSCI 300*	Criminalistics	3

Take 1 course (3 credits, the selected course may not count for major or core):

CLS 230	Constitutional Criminal Procedure	3
CLS 305	Violence and Victimology	3
CLS 340	Principles of Homeland Security	3
CLS 377	Addiction and Crime	3

Choose 6 or 7 credits from the following (selected courses may not count for major or core; one lecture/lab combination required; NSCI courses are not recommended for physics, chemistry, biology, or biochemistry majors):

NSCI 130/131	Introduction to Physics and Lab	4
NSCI 210/211	Chemistry of Crime and Lab	4
NSCI 200	All About Drugs	4
NSCI 260	Biotechnology: How Do They Do It?	4
NSCI 235	Human Biology and Laboratory	4
NSCI 230/231	Genes, Cells and Computers and Lab	4
NSCI 290/291	Criminalistics and Lab	4
BL 214/215**	Molecular Genetics and Lab	4
CH 252/253	Nucleic Acids and Membranes and Lab	4
CH 216/218**	Quantitative Analysis and Lab	4
BL 216/217**	Biotechnology and Lab	4
BL 150/151	General Biology I and Lab	4
ES 220	Introduction to GIS	3
CH 245**	Chemical and Forensic Analysis	2

** Does not count toward core.*
*** These courses have prerequisites that are not part of the minor.*

Global Security (18 credits)

The course of study leading to the award of a minor will require the student to successfully complete a series of upper level courses totaling 18 credits.

The student will select three courses from each of the two groups of courses below. The courses in Group A provide an important philosophical, theological, and historical context for issues involving global security. The courses in Group B address contemporary, policy-based considerations affecting the formulation of strategies for global security in the current context.

A student required to take any of these courses to fulfill a requirement for their major may not also count the course toward completion of the minor. No more than two courses may be taken from any one major field.

Group A (3 courses/ 9 credits):

HI 209	Issues in Contemporary East Asia	3
HI 228	20th-Century America	3
HI 233	History of Latin America	3
HI 280	Islamic Civilization I	3
HI 281	Islamic Civilization II	3
PL 215	Ethics	3
PL 271	Catholic Political Thought	3
PL 303	Eastern Thought	3
TH 255	Religion and Politics	3
TH 380	World Religions	3

Group B (3 courses/ 9 credits):

PS 242	International Politics	3
PS 343	Comparative Politics	3
PS 375	International Law	3
PS 341	Global Terrorism	3
CLS 320	White Collar Crime	3
CLS 340	Homeland Security	3
CLS 376	Federal Criminal Law	3
NSCI 300	Criminalistics	3
One of the following:		
CS 225	Cybersecurity	3
CS 321	Data Communications and Networking Security	3
CS 325	Advanced Topics in Cybersecurity	3

History (18 credits)

Required (5 courses/ 15 credits):

HI XXX	Any course with HI subject	3
HI XXX	Any course with HI subject	3
HI XXX	Any course with HI subject	3
HI XXX	Any course with HI subject	3
HI XXX	Any course with HI subject	3

200 level requirement (1 course/ 3 credits):

HI 2XX	Any HI course at 200 level	3

Information Systems (18 Credits)

Required (5 courses/15 credits):

CS 102	Fundamentals of IT and Computing	3
CS 110	C++ Programming I	3
CS 225	Cybersecurity	3
CS 265	Information Systems Management	3
CS 321	Data Communication and Computer Networks	3

Elective (Choose 1 course/ 3 credits):
Must be CIS course at the 200 level or above. Students should consult with the CIS faculty for assistance in planning the courses for the Information Systems minor. 3

International Business (18 Credits)

Required:

BA 102	Survey of Accounting (non-business majors only)	3
or		
BA 100	Financial Accounting I AND	3
BA 150	Managerial Accounting	3
or		
BA 101	Financial Accounting II	3
EC 101	Principles of Microeconomics	3

EC 102	Principles of Macroeconomics	3
BA 250	Global Business Management	3
BA 251	International Business	3
BA 395	Global Marketing	3
If you are majoring in marketing or management, you must also take one of the following:		
PS 242	International Politics	3
PS 244	Comparative Politics	3
BA/EC 353	International Finance	3
BA 525	Global Experience OE Around the World	2

International Studies (24 Credits)

Minor in International Studies with an area concentration in French, German, Italian, Spanish, or Chinese.

The Department of Modern and Classical Languages sponsors the minor in International Studies. The minor consists of either a concentration for the Liberal Arts major or a minor with a language and culture area concentration. The primary purpose of the minor in International Studies is to give participants a global awareness and a broader perspective of the modern world. A secondary purpose is the development of skills and abilities in speaking, writing, and reading a second language in order to enhance cross-cultural understanding. We strongly encourage students who minor in International Studies to consider study abroad.

Advanced language requirement (2 courses/6 credits):
For Chinese, six credits of language at the 200 level or above.

Two language courses at the 300 level or above for French, German, Italian, or Spanish. One course must be in either Culture and Civilization or Contemporary Cultures in relation to area of concentration.

Required courses (3 courses/ 9 credits):

SO 106	Sociology and Global Issues	3
PS 242 or 244	International or Comparative Politics	3
HI 123 or 124	Global History I or II	3

Required History (1 course/ 3 credits):
Take one history course from the following in relation to area of concentration (Only one 100-level HI course will count toward core requirements).

HI 102 or 103	Western Civilization I or II	3
HI 104 or 105	Contemporary Europe I or II	3
HI 205	Medieval Thought and Culture	3
HI 280	Islamic Civilization I	3

Elective courses (2 courses/ 6 credits):
Take two courses from the following in relation to area of concentration.

AN 222	Cultural Anthropology	3
AN 225	Anthropology and World Art	3
AN 328	Linguistic Anthropology	3
BA 250	Global Business Management	3
BA 251	International Business	3
BA 395	Global Marketing	3
BA 470	International Accounting	3
EC 353	International Finance	3
EL 118	Global Literature	3
EL 145	Multi-Ethnic Literature of the United States	3
EL 250	Contemporary World Literature	
HI 211	Sword and Siege: War in Medieval Europe	3
HI 213	Mystics, Maids, and Monarchs: Women in Medieval Europe	3
HI 232	Race and Ethnicity in Historical Perspective	3
PS 341	Global Terrorism	3
PS 375	International Law	3
SO 200	Race and Ethnicity	3
TH 359	Jews, Christians, and Muslims	3

Additions and substitutions may be made with consent of advisor.

Legal Studies (21 credits)

The Criminology Department oversees the administration of this Minor.

The Legal Studies minor is meant to address the needs of students on many levels. It seeks to do so through a fundamentally liberal arts approach.

First, there is an upswing in student interest in attending law school, and effective preparation for the rigors of that curriculum will be served by a course of study directed to that purpose. The program will provide a good testing ground for future graduate study.

The study of the legal system, however, is of great importance for students who will pursue career paths other than formal legal training.

Those entering the world of business will soon appreciate that management decisions cannot be made effectively without an understanding of the legal environment of the time. Managers need to understand what lawyers can provide them as well as why the legal aspects of decisions are not always conclusive.

Those entering the government service at any level need to grasp that the infrastructure of government is cast in a legal framework. To deal within that infrastructure effectively, an appreciation of the legal elements of the system must be achieved.

And for those who seek to effect social change, an understanding of the structure of the legal system and the mechanisms of change within it are crucial to bringing about a more just process for all concerned.

Program Objectives and Assessment Plan
To prepare students in any of the contexts set forth above, it is critical that the minor embrace a true liberal arts approach to the subject. The context of the law, in its historical and philosophical bases, is as crucial to embrace as are the structural and more nuanced components of the legal system. The curriculum proposed is meant to enable the students who complete the minor to demonstrate that they are capable of: 1) understanding and analyzing legal issues; 2) hypothesizing and applying appropriate solutions to those issues; c) using the skills gleaned to enrich their communities and succeed in their endeavors; and d) appreciating the societal place of the legal system and the expectations the community has of it.

Students enrolled in the program will be assessed based on their performance in each of the courses that they take.

Program Structure
The Legal Studies minor requires the completion of 21 credits of coursework, 15 required course credits, and 6 elective credits. The minor can readily be achieved over the normal course of 8 semesters.

To avoid double-counting certain courses required by Criminology and Politics majors taking the minor, certain specific rules apply for the satisfaction of the minor. These rules are set forth below.

Required (3 course/ 9 credits):

PS 100	Intro to American Government	3
HI 294	History of Common Law, 600-1800	3
PL 272	Philosophy of Law	3

Take one PS course from below (1 course/ 3 credits): **

PS 339	Constitutional Law: National Powers	3
PS 369	Constitutional Law: Civil Rights & Liberties	3

Take one CLS course from below (1 course/ 3 credits): **

CLS 227	Criminal Law and Process	3
CLS 230	Constitutional Criminal Procedure	3

Take two electives from below (2 courses/ 6 credits): **

BA 340	Business Law	3
CLS 205	Criminal Trial Evidence	3
CLS 210	Civil Rights Law	3
CLS 227	Criminal Law and Process	3
CLS 230	Constitutional Criminal Procedure	3
CLS 361	The Investigation and Prosecution of Urban Street Gangs	3
CLS 375	International Criminal Law	3
CLS 376	Federal Criminal Law	3
CLS 344	White Collar Crime	3
CLS 440	Constitution Litigation/Analysis	3
PS 295	American Political Thought I or PS 298 American Political Thought II	3
PS 335	The U.S. Presidency	3
PS 339	Constitutional Law: National Powers	3
PS 369	Constitutional Law: Civil Rights & Liberties	3
PS 345	Congress and Public Policy	3
PS 390	Environmental Law and Policy	3
PST 734	Intro to Canon Law	3

It is also strongly suggested that a student take EL 202 Intermediate Writing.

*These courses cannot count toward the minor if they are also being taken to satisfy core curriculum requirements.

**Politics majors must choose another Politics course at the 300 level or higher (to be approved by the director), but not a course that they are counting as a general elective in the Politics major.
***CLS majors must choose another CLS course at the 300 level or higher (to be approved by the director), but not a course that they are counting as a general elective in the CLS major.
****Students taking one of these elective courses for their major are required to take an additional course from this list.

Liberal Arts (15 Credits):

Required:

LA 225	Truth and Interpretation	3
Tier-Two Core Electives*		12

**Additional to Core requirements. Must be comprised of different disciplines.*

Literary Translation (18 Credits):

The Departments of English and Modern and Classical Languages co-sponsor the Literary Translation Minor program at Saint Vincent College. The program combines creative practice with the study of languages, literatures, and critical theory. Students draw from their skills as writers, readers, and speakers of a second language, while exploring the intersections of languages and cultures and participating in the production of international literature. Students seeking a minor in Literary Translation must take:

Required: (3 courses/9 credits):

EL 110	Creative Writing and Reading	3
EL 230	Small Press Publishing	3
EL 252	Intro to Literary Translation	3

Take one literature class (1 course / 3 credits) from the following:

EL 236	Breaking & Remaking: European Lit	3
EL 250	Around the World in 15 Weeks	3

Take one creative writing course (1 course/ 3 credits) from the following:

EL142	Poetry in Public	3
EL 203	Poetry Workshop	3
EL 204	Fiction Workshop	3
EL 244	Creative Nonfiction Workshop	3

Take one elective course (1 course/ 3 credits):
The elective can be an English elective, core elective, or interdisciplinary course upon approval 3

Management (18 -21 Credits)

Accounting requirement (3 to 6 credits):

BA 102	Survey of Accounting (non-business majors only)	3
or		
BA 100	Financial Accounting I AND	3
BA 150	Managerial Accounting	3

Required (1 course/ 3 credits):

BA 170	Organizational Behavior	3

Take four elective courses (4 courses/ 12 credits) from the options below:

BA 232	Human Resource Management	3
BA 250	Global Business Management	3
or		
BA 251	International Business	3
BA 265	Management Information Systems	3
BA 280	Leadership	3
BA 305	Business Ethics	3
BA 322	Advanced Entrepreneurship	3
BA 398	Project Management I	3
BA 468	Project Management II	4
BA 444	Operations Management	3

Marketing (18 -21 Credits)

Accounting requirements (3 to 6 credits):

BA 102	Survey of Accounting (non-business majors only)	3
or		
BA 100	Financial Accounting I AND	3
BA 150	Managerial Accounting	3

Required (2 courses/ 6 credits):

BA 220	Principles of Marketing	3
BA 380	Consumer Behavior	3

Take 3 elective courses (3 courses/ 9 credits) from below:

BA 106	Data Visualization	3
BA 330	Advertising and Promotion	3
BA 334	Retail Management	3
BA 335	Digital Marketing Analytics	3
BA 336	Essentials of Selling	3
BA 337	Nonprofit and Social Marketing	3
BA-338	Marketing Planning & Development	3
BA 395	Global Marketing	3
BA 397	Marketing Research	3
BA 425	Strategic Marketing	3

Mathematics (At Least 18 Credits)

Required (3 courses/ 12 credits):

MA 111	Analytical Calculus I	4
MA 112	Analytical Calculus II	4
MA 211	Analytical Calculus III	4

Two Math Electives (2 courses/ 6-8 credits):

MA 2XX	200 level or above	3-4
MA2XX	200 level or above	3-4

Medieval Studies (18 Credits)

Program Philosophy and Description

Medieval Studies is an interdisciplinary minor consisting of a wide range of courses that focus in significant ways on the civilization of the West in the medieval period, also known as the 'Middle Ages', ca. AD 500-1500. Arising out of the unique blending of Classical, Christian, and Germanic elements beginning in late antiquity, medieval culture became a vital and formative part of the Western heritage. Medieval people created sophisticated philosophical systems; beautiful forms of art and music; innovative styles of architecture; new expressions of piety and varieties of religious life; lively and imaginative poetry; the first universities; and the earliest forms of French, German, English, and other languages so commonplace today. The Middle Ages also saw the origin and early evolution of most European countries, as well as the first contacts and conflicts between Christians and Muslims. It is thus certainly a culture and era worthy of our attention. The purpose of the minor in Medieval Studies is to give students a broad understanding of medieval Western civilization by approaching it from a variety of perspectives. Courses are offered in literature, art, history, languages, philosophy, and theology.

The Medieval Studies minor consists of six courses in at least three disciplines, although students are encouraged to take courses from as many disciplines as possible.

Required course (1 course/ 3 credits):

HI 103	Cloisters and Castles: A History of Medieval Europe

Five courses from the following list (5 courses/ 15 credits):

EL 114	British Literature: Middle Ages to Restoration
EL 147	Arthurian Literature
EL 211	Medieval Studies
EL 212	Chaucer
AR 101	Castles to Cathedrals
HI 110	English History to 1485
HI 211	Sword and Siege: War in Medieval Europe
HI 213	Dame and Distaff: Women in Medieval Europe
HI 227	"Bring Out Yer Dead!"Medieval Europe on Film
HI 231	Garters and Green Knights: the Age of the Hundred Years War
HI 248	The History of the Christian Churches I: to 1500
HI 294	History of English Common Law, 600- 1800
FR 321	Survey of French Literature I
GE 321	German Literature of the Middle Ages
LT 321	Latin Hymns of the Roman Church
MU 110	Music History: Medieval to Renaissance
PL 202	Medieval Philosophy
PL 240	The Influence of Philosophy on Theology, Then and Now
PL 280	Thomistic Philosophy
TH 320	Theology of Medieval Christianity

Course Substitutions

With permission of the program contact, other courses suitably related to the Middle Ages can sometimes be counted toward the minor. This includes courses taken in study abroad programs.

Music (18 Credits)

Students must successfully pass an audition to be admitted to this minor. Please contact the department chairperson to schedule an audition and receive audition guidelines.

Student Learning Outcomes

1. Demonstrate an understanding of their main instrument
2. Demonstrate a thorough understanding of music notation, and apply this knowledge to deepen their understanding and appreciation of the music they encounter.
3. Place music in historical, cultural, and stylistic contexts.

Required each semester:

MU 090	Recital Attendance	0
MU 525	Applied Lessons	(6 to 12)

Required Music History courses (6 credits):

MU 101	Music Appreciation	3
MU106	World Music	3
MU 108	Music History I	
MU 112	Musical Theater History	3

Take one Music Theory course:

MU 115	Fundamentals of Music	3

6 Semesters of Ensembles:

Any combination of ensembles or private instruction selected from: (6 credits): Two semesters of piano study are

recommended if the minor's primary instrument is non-keyboard.

MU 172	Concert Band	1
MU 175	Jazz Ensemble	1
MU 180	Saint Vincent College Singers	1
MU 182	Opera Workshop	1
AR 158	Musical Theater Production	1

Operational Excellence (18 Credits)

Required courses (6 courses/ 18 credits):

BA 280	Leadership (must be taken at SVC)	3
BA 344	Intro to Operational Excellence (First of OE sequence)	3
BA 384	Lean Theory & Applications (Second of OE sequence)	3
BA 444	Operations Management (Third of OE sequence)	3
BA 483	Lean/ Six Sigma Book of Knowledge (Fourth of OE sequence)	3
BA 496	Green Belt Consulting Project (Last of OE sequence)	3

In addition to the above, Management majors choose any one of the following:

BA 467	Change management	3
BA 491	Operational Excellence in Health Care	3
BA 493	Supply Chain Management I	3

Peace and Justice Studies (18-20 credits)

Program Philosophy

The Peace and Justice studies minor is an interdisciplinary program that prepares students to build a more just and peaceful world. It accomplishes this by providing students with theoretical knowledge, the capacity for critical reflection, and the skills of practical application. Grounded in the college's Benedictine heritage and liberal arts mission, the program explores the ways societies have comprehended human nature and their successes and failures protecting human dignity.

Peace and Justice Student Learning Outcomes

Students who complete the Peace and Justice program will be able to:

• employ theoretical knowledge, critical thinking, communication, and information literacy skills in the study of peace and justice

• convey familiarity with the Catholic peace and social justice tradition

• approach an understanding of peace and justice concepts and issues through the lens of multiple disciplines

• identify concrete means of working to support peace and justice in their lives and their communities

Take 1 of the following (1 course/ 3 credits):

HI 290	Peace and Justice in Historical Perspective	3
TH 251	Intro to Catholic Social Teaching	3

Take five courses (5 courses/ 15 credits) from the list below. You must take courses from at least two different Schools. Students must take either two Service Learning-designated courses from among the courses listed below or one Service Learning-designated course from among the courses listed below and a PJS internship.

Alex G. Mckenna School of Business, Economics and Government

CLS 101	Introduction to Criminology	3
CLS 155	American Judicial System	3
CLS 210	Civil Rights Law	3
CLS 220	The Criminology of Race	3
CLS 266	The Death Penalty	3
CLS 420	Criminology of Hate	3

School of Arts, Humanities and Social Sciences

AN 222	Cultural Anthropology	3
AN 224	Applied Anthropology	3
AN 280	Medical Anthropology	3
AN 285	Culture and Health in Guatemala	6
CA 218	Intercultural Communication	3
EL 111	Environmental Literature	3
EL 138	Multiethnic Literature	3
EL 179	The Literature of Social Protest	3
EL 256	Sentimental Fictions: American Women Writers in the 19th Century	3
FRI 373	Fred Rogers' Fundamentals of Learning and Growing	3
HI 226	Society and the Environment in Global Perspective	3
HI 232	Race and Ethnicity in Historical Perspective	3
HI 290	Peace and Justice in Historical Perspective	3
PL 215	Ethics	3
PL 217	Environmental Ethics	3
SO 200	Race and Ethnicity	3
SO 235	Inequality and Social Problems	3
TH 250	Introduction to Moral Theology	3
TH 252	Peace, Justice, and Forgiveness	3
TH 265	God, Work, and Money	3
TH 256	Profiles in Catholic Social Justice	3

Herbert W. Boyer School of Natural Sciences, Mathematics And Computing

NSCI 140	Science and Global Sustainability & Lab	4
NSCI 207	Energy and Climate Change	4
NSCI 210/211	Chemistry and Crime + lab	4
	Peace and Justice Studies Internship	1
	Peace and Justice minor Exit Interview	0
NSCI 252/253	Science of Sustainable Living + lab	4
NSCI 265	Science for International Development	3
	Total	**18/19/20**[1]

[1]*Students who take two service learning courses and no science will complete the minor with 18 credits. Students who take one service learning course, one internship, and no science will complete the minor with 19 credits. Students who take one service learning course, an internship, and a science course (plus lab) will complete the minor with 20 credits.*

Philosophy (18 Credits)

Required courses (2 courses/ 6 credits):

PL-201	Ancient Philosophy	3
PL 400	Socratic Seminar	3

Complete One Course from Medieval, Modern, or Contemporary (1 course/ 3 credits):

PL 202	Medieval Philosophy	3
PL 203	Modern Philosophy	3
PL 206	19th- and 20th-Century Philosophy	3

Electives (3 courses/ 9 credits):

Complete 9 Additional Philosophy Credits		9

Physics (19 Credits)

PH 111	General Physics I	3
PH 112	General Physics II	3
PH 113	Physics I Laboratory	1
PH 114	Physics II Laboratory	1

and a minimum of 11 credits selected from courses numbered above PH 200, of which at least one must be PH 243, PH 244, PH 213, or PH 263. MA 111-112 Calculus l-II are prerequisites for General Physics. MA 211-114 Calculus III and Differential Equations are recommended electives.

Political Science (18 Credits)

(An excellent pre-law minor for students in other fields) A minor in Political Science requires 18 credits. Students pursuing the minor must complete PS-100 (Introduction to American Government). Students may fulfil the additional 15 credits by taking a combination of any other Political Science courses except PS-470, PS-471, and PS-550. Repeatable courses will only count once toward completion of the minor.

Psychology (18 Credits)

Required (1 course/ 3 credits):

PY 100	Introduction to Psychological Science	3

Take two of the following three (2 courses/ 6 credits):

PY 212	Child Development	3
PY 243	Abnormal Psychology	3
PY 260	Social Psychology	3

Take one of the following four (1 course/ 3 credits):

PY 308	Cognitive Psychology	3
PY 309	Learning	3
PY 322	Health Psychology	3
PY 331	Biological Psychology	3

Electives (2 courses/ 6 credits):

Two courses offered by department		6

Public Administration (18 Credits)

For those majoring in Political Science, in addition to the major requirements, the following courses will be required:

BA 102	Survey of Accounting	3
BA 150	Managerial Accounting	3
BA 170	Organizational Behavior	3
BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1
EC 101	Principles of Microeconomics	3

For those **not majoring in Political Science**, 18 credits are required for the minor in Public Administration. **Business majors may not minor in Public Administration**. The following courses will be required:

BA 100	Financial Accounting I and	
BA 101	Financial Accounting II	6
or		
BA 102	Survey of Accounting	3
BA 350	Statistics and Analytics I	3
BA 350A	Excel I Lab	1
PS 100	Introduction to American Government	3
PS 345	Congress and Public Policy	3

The student will also be required to choose two courses from The following list:

BA 150	Managerial Accounting	3
BA 170	Organizational Behavior	3
EC 101	Principles of Economics, Micro	3

The above program is an interdisciplinary program under the direction of the Political Science Department. Substitutions for some of the courses above are allowed with the consent of the Dean of the McKenna School.

Public Health (21 Credits)

Program Description

Public health is the science of protecting and improving the health of families and communities through promotion of healthy lifestyles, research for disease and injury prevention, and detection and control of infectious diseases (CDC Foundation). Designed to work with any major, this minor program helps students to learn about the exciting field of Public Health and to see how their liberal arts education prepares them to make important contributions to the health of our nation and globe.

Public Health Minor Student Learning Outcomes

• To introduce students to the core functions of public health including assessment, program and policy development, and assurance of quality public health provisions;
• To increase students' awareness and understanding of the importance of social, cultural, behavioral, psychological, biological, environmental, and other processes to disease and health locally and globally;
• To foster skills and proficiencies, students need to contribute to the changing field of public health through the development of health programs and policies, research, awareness, and leadership.

Required courses: (2 courses/ 6 Credits)

AN 285	Foundations of Public Health	3
SO 248	Fundamentals of Epidemiology	3

Complete five elective courses (5 courses/ 15 credits) from the designated cluster areas:

These must come from at least two of the five clusters of courses below. No more than one may be at the 100-level. Up to three credits may be fulfilled using a public health-related internship or independent research experience with a faculty member.

Cluster 1

EL 111	Green Writing: Literature and the Environment	3
HI 206	Acupuncture to Alchemy:	3

	Topics in Medical History	
HI 209	Issues in Contemporary East Asia	3
Hl 226	Society and the Environment: The American Experience	3
HI 283	Health and Medicine in East Asia	3
PS261/ PL271	Catholic Political Thought	3
TH 280	Catholic Bioethics	3

One of the following:

PL 216	Ethical Problems	3
PL 217	Environmental Ethics	3
PL 218	Bioethics	3

Cluster 2

BA 335	Internet Marketing	3
CS 214	Introduction to Mobile Application Programming	3
**CS 305	Web Technologies	3
**CS 350	Database Concepts and Information Structures	3
ES 220	Introduction to Geographic Information Systems	3

Cluster 3

**BA 440	Government & Not-for-Profit Accounting	3
**BA 491	Operational Excellence in the Service Industry with Applications in the Health Care Professions	3
CA 140	Interpersonal and Organizational Communication	3
PS 222	State and Local Government	3
PS 345	Domestic Public Policy	3
PS 390	Environmental Law and Policy	3

Cluster 4

AN 280	Medical Anthropology	3
AN 295	Culture and Health in Guatemala	3
AN 315	Applied Anthropology or	
**PY 322	Health Psychology	3
FRI 373	Fred Rogers' Fundamentals of Learning and Growing	3
SO 161	Foundations of Sustainability	3

Cluster 5

Note: Physics, chemistry, biology, or biochemistry majors are not recommended to use NSCI courses to fulfill the minor requirements.

NSCI 110	Bacteria, Friends or Foes?	3
NSCI 125	Introduction to Environmental Science	3
NSCI 140	Science and Global Sustainability	3
NSCI 245	Killer Germs	3
NSCI 235	Human Biology and Laboratory	4
NSCI 260	Biotechnology: How Do They Do It?	3
NSCI 265	Science for International Development	
**BIN 219	Biomedical Informatics	3
**BL 212	Microbiology	3
**BL 216	Biotechnology	3
**BL 232	Ecology	3
**BL 250	Medical Microbiology	3
**CH 251	Proteins and Metabolism	3
**CH 252	Nucleic Acids and Membranes	3

*** This course has prerequisites that are not elective credits toward the minor.*

Public History (18 Credits)

Required courses are HI 201, HI 202, HI 258, BA 326 and HI 550. The remaining credits may come from: AN 101, AN 222, AN 230, BA 337, BA 398, CA 230, CA 304, DA 120, DA 140, DA 150, DA 190, EL 107, EL-113, EL 133, EL 138, EL 139, EL 244. Students are urged to take additional 200-level history courses. HI 201 and HI 202 cannot fulfill history major requirements. The option list may change as new courses are developed; check with the Public History minor director or your advisor for the most current list.

Public Relations (18 Credits)

Required courses (3 course/ 9 credits):

CA 230	Writing for Media
CA 240	Public Relations Strategies
CA 355	Advanced Public Relations

Electives (take 3 courses/ 9 credits from the following):

CA 110	Introduction to Organizational Communication
CA 120	Public Speaking
CA 201	Research Methods
CA 218	Intercultural Communication
CA 291	Facts, Persuasion, and Argument
CA 302	Collegiate Athletic Communication
CA 303	Communication Ethics
CA 304	Social Media Strategies
CA 307	Media Literacy
CA 340	Nonprofit Communication
CA 415	Creative Campaigns
DA 120	Digital Layout & Design
BA 220	Principles of Marketing
EL 108	Technical Writing

Modern Languages 203 and/or 204 course (student may take both to count toward the minor).

Sanctity of Life (18 credits)

The interdisciplinary Sanctity of Life minor explores questions of human dignity across the academic disciplines of theology, philosophy, science, politics, and social science. The minor is housed in the Theology Department and administered through the Saint Vincent Center for Catholic Thought and Culture (CCTC). Our desire is to provide a rigorous program based on an integrated understanding of human life to better orient ourselves to what Saint Pope John Paul II called a Culture of Life and a Civilization of Love. Deeply animated by our college's mission as a Catholic, Benedictine, and liberal arts institution, the minor provides an academically robust program that fully explores a broad range of human-life questions with an open heart seeking truth, listening to others, and responding both courageously and charitably to the challenges we face as citizens and humans in the 21st century. Surveying the world today, the message of Life has never been more urgent.

Consider for instance perennial questions of human life emphasized by the COVID-19 pandemic such as:

- How do we properly care for the elderly and most vulnerable members of our communities?
- What is the foundation of human equality and justice?
- How do we encourage a civil discourse that respects the dignity of our fellow citizens?
- What is ethical and unethical in the areas of medicine and healthcare?

The purpose of this minor program is not to engage in partisan activities, but to better inform through academic excellence some of the public debates that ensnare our nation and the world. While there are a host of public policies to address at the local, state, and national level, the purpose of our program is academic, not activistic.

Student Learning Outcomes:

- Students will identify the theological, philosophical, and scientific understandings of human life.
- Students will understand the political and social contexts in which major policies and judicial precedents about human life are made.
- Students will apply knowledge of human life to contemporary ethical and bioethical issues.

Required courses:

TH 337	Gospel of Life, Gospel of Creation	3
TH 251	Intro to Catholic Social Teaching	3
PL 210	Philosophical Anthropology	3
PS 369	Civil Liberties	3
CLS 341	Empirical Analyses of Faith, Family, & Life	3
XXX	Science and Bioethics	3

Sociology (18 Credits)

Required Courses (2 course/ 6 credits):

SO 101	Introduction to Sociology	3
SO 235	Inequality and Social Problems	3

Electives (4 courses/ 12 credits):

Any four Sociology electives	12

Spanish (18 Credits)

A minor in Spanish requires six (6) courses above SP 203. The following five (5) courses are required (15 credits):

SP 315	Advanced Spanish Grammar and Composition	3
SP 317	Introduction to Spanish Literary Analysis	3
SP 320	Developing Oral Proficiency and Phonetics	3
	Any 200+ -level course in literature	3
	Any course in culture and civilization	3
	Elective: SP 204 or any 300-level course	3

STEM (Science, Technology, Engineering, and Mathematics) Education (18 Credits)

This minor study in STEM Education is designed to assist interested candidates in implementing effective approaches for improving STEM teaching; facilitating the dissemination and adoption of effective STEM learning practices; and promoting education experiences that prioritize collaborative, hands-on, and active learning to help others succeed in STEM fields. The minor is open to both education majors and non-education majors. The Education Department recognizes that students in other majors may be interested in this minor as part of their credentials when working with adults or youth in informal educational settings related to STEM.

Requirements for STEM Education Minor

The minor is designed to focus on teaching education and/ or related-area candidates interested in STEM how to transfer skills that grow with scientific and technological advancements in professions unforeseen at the current moment to educational settings. The 18-20 credit course of study combines content-specific classes in STEM fields with teaching and learning course work specific to STEM education. Candidates seeking teacher education certification will be eligible for the PA Integrative STEM Education endorsement upon completion of their initial certification.

Prerequisites for Education Majors (already present)

ED 100	Foundations of Education	3
ED 115	Educational Psychology	3
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1

Prerequisites for Non-education Majors

ED 205	Strategies and Techniques of Instruction	3

Required STEM Introduction Courses (4 credits)

INTS 101	Introduction to Integrated Science	1
ENGR 100	Introduction to Engineering	3

Required STEM Education Courses (9 credits)

ED 214	Interdisciplinary STEM Approaches and Connections	3
ED 319	Inquiry Investigation, Design, and Assessment in STEM Education	3
ED 385	Applied Practicum in STEM Learning	3

STEM Content Electives (6 credits) – See STEM minor advisor for options.

Studio Arts (18 Credits)

Take either of the following courses (1 course/ 3 credits):

AR130	Drawing I	3
AR131	2-Dimensional Design	3

Take either of the following courses (1 course/ 3 credits):

AR101	Caves to Cathedrals	3
AR102	Art History II: Baroque/Present	3

Take four courses (4 courses/12 credits) from any of the following.

AR 135	Materials and Processes	3
AR 236	Fiber Arts	3
AR 238	Clay and Pottery	3
AR 234	Introduction to Stained Glass	3

AR225	Painting I	3
AR230	Drawing II	3
AR325	Painting II	3
AR338	Printmaking I	3
AR350	Independent Study	3
AR368	Advanced Clay and Pottery	3
AR384	Advanced Stained Glass	3
AR 404	Intensive Study in Technique	3

Sustainability and Integral Ecology (16-17 Credits) ***

Required (3 courses/ 9 credits):

SO 161	Foundations of Sustainability	3
TH 274	Green Discipleship	3
EC 200	Environmental Ethics	3

Take 7 to 8 credits, choose one course with lab (indicated by *) from the list below:

EL 111	Environmental Literature	3
HI 226	Society and the Environment	3
PS 390	Environmental Law and Policy	3
PL 217	Environmental Ethics	3
ES 220	Introduction to Geographic Information Systems	3
BL 105	Billions of Birds Lost	3
TH 337	Gospel of Life/Gospel of Creation	3
ENG 350	Renewable Energy Technologies	3
NSCI 125/126	Introduction to Environmental Science & Lab*	4
ES 150/152	Earth Systems Science and Lab*	4
NSCI 250	Science of Abandoned Mine Drainage*	4
ES 230	Energy and the Environment*	4
BL 232/233	Ecology & Lab *	4
NSCI 207	Energy and Climate Change*	4
NSCI 265	Science for International Development*	4

Theology (18 credits)

Take one Foundations Course (1 course/ 3 credits):

TH 231 Biblical Foundations
TH 340 Basics of Catholic Faith

Take two Major Seminars (2 courses/ 6 credits):

2 TH 400-level Seminars.

Electives (3 courses / 9 credits):

Take 3 Additional theology courses other than the two foundations course mentioned above.

CERTIFICATES

Addiction Specialist Training Certificate

The Addiction Specialist Training Program is designed to provide the background knowledge necessary for students to develop the skills to help people with substance abuse problems. The program covers areas such as mood-altering chemicals, counseling theories, legal rights of clients, and the development of specific treatment skills including intake, orientation, treatment planning, and case management. Employment opportunities for addiction treatment or prevention exist in addiction treatment centers, hospitals, outpatient treatment facilities, rehabilitation centers, halfway houses, and correctional facilities such as prisons and juvenile detention centers.

The certificate requires 27 credits (or 18 additional credits for Psychology majors). At least 12 credits must be earned at Saint Vincent College.

Required courses (7 courses, 21 credits):

PY 100	Introduction to Psychological Science	3
PY 214	Adolescent Development	3
PY 219	Introduction to Counseling	3
PY 250	Addictive Behaviors	3
PY 251	Family Systems	3
PY 252	Rehabilitative Treatment Systems	3
PY 280	Interpersonal and Group Processes	3

One of the following courses (1 course, 3 credits):

PY 243	Abnormal Psychology	3
CLS 377	Addiction and Crime	3

One of the following courses (1 course, 3 credits):

PY 322	Health Psychology	3
PY 331	Biological Psychology	3

Upon completion of the program, Saint Vincent College will award an Addiction Specialist Training Certificate. The 300 clock hours of instruction may be applied toward fulfilling the Pennsylvania Chemical Abuse Certification Board instructional requirements for state certification (see www.pacertboard.org).

Benedictine Leadership Studies Certificate

The Benedictine Leadership Studies (BLS) program will allow students to analyze who they are as an individual called to serve and promote the common good of their community, and to develop a meaningful understanding of God's purpose for their life, using the teachings of the Catholic Church and Benedictine spirituality as guides.

The Rule of Saint Benedict serves as the cornerstone leadership model for the program, offering a deeper understanding of leadership in the student's personal and professional life and in service to local, national, and global communities. BLS is a virtue-based, ethical structure for the study of leadership. The program is grounded in the Benedictine Wisdom Tradition, which has been developing since *The Rule of St. Benedict* was published 1,500 years ago. Its 10 core principles, or hallmarks, are derived from *The Rule* and form the core of BLS.

The 10 Hallmarks distilled from *The Rule of Saint Benedict* are:

- Love of Christ and Neighbor as Self
- Prayer
- Stability
- *Conversatio Morum*
- Obedience
- Discipline
- Humility
- Stewardship
- Hospitality
- Community

The 10 Hallmarks shape the character of the BLS program. As a BLS fellow, the student will be educated in the virtues associated with the Hallmarks, and encouraged to develop them in ways appropriate to his or her future profession and vocation. Love of God and neighbor as self, purposeful reflection, commitment to one's obligations, openness to truth, steady work habits, humble regard for others, and a respect for creation are all attributes encouraged by the program. Recognizing that all leadership takes place in the context of communities, whether they be civic, natural or supernatural, the BLS program seeks to cultivate the complete human person: body, soul, and spirit.

Student Learning Outcomes

1) To explain the meaning of each of the 10 Hallmarks and how they bear on one another in a Benedictine leader;
2) To analyze both historical and contemporary examples in terms of the 10 Hallmarks;
3) To apply the 10 Hallmarks to reflection on one's own character and life as a whole.

Students will maintain an online portfolio throughout their four years as a BLS fellow. The portfolio will contain examples of their work, reflection on the skills they have gained, and thoughts on how they are growing in understanding and implementing the hallmarks in their life. In addition to serving as an assessment tool for BLS faculty showing how effective our programming is in meeting the BLS Objectives, this portfolio may be shared with family, friends, and prospective employers. After academic coursework and other components of the BLS program are satisfactorily completed, a Benedictine Leadership Studies certificate will be awarded upon completion of an academic degree at Saint Vincent College.

Program Structure

There are five major components of the BLS Certificate:
1) BLS Coursework
2) Retreat Workshops
3) Experiential Learning
4) Self-Leadership Exercises
5) Rome Capstone Course

1) BLS Coursework

In order to receive a Benedictine Leadership Studies certificate, a student must complete the required courses in the BLS curriculum. Most of these credits will count toward the college's core curriculum, and at least one artifact from each of these courses must be included in his or her portfolio.

2) Retreat Workshops

Each year students will join Campus Ministry in a weekend retreat based on the Benedictine Hallmarks. In addition to the required reading and participation in discussion, they will write a

brief reflection on what they learned about the specified hallmark(s) and include this in their portfolio.

3) Experiential Learning
To pursue the BLS Certificate students must participate in experiential learning activities each semester of their four years, and complete a reflection on what hallmark(s) they put into practice, to be included in their portfolio. Examples of experiential learning activities are a team-building ropes course, career planning activities and service learning projects. In addition, they will be required to complete a 0-1 credit internship during their junior year.

4) Self-Leadership Exercises
Students will be asked throughout their four years to reflect on how they are integrating the 10 Hallmarks into their self understanding and daily life. It is central to the program that they reflect on how their future profession and vocation will be shaped by their commitment to being a Benedictine leader. To facilitate this process, students will participate each semester in reflective exercises. Working with a Benedictine mentor, they will write a personal narrative based on these reflective exercises each academic year.

5) Capstone Course
In the spring semester of their senior year (with the exception of students whose majors require a senior year spring break activity), students will enroll in BLS 300: Rome Capstone Seminar. Alternatively, students can take BLS 301: Benedictine Mission to Senegal (offered every fall).

Biotechnology Certificate

Biotechnology, the technological application of biological systems, is a dynamic, evolving field that has fundamentally changed the world we live in. Advances in this field have resulted in breakthrough medical discoveries, insights into the nature of living systems, an improved understanding of evolutionary biology, improved environmental remediation, enhanced agriculture, more efficient industrial processes, novel biomaterials, and even artificial intelligence. A natural consequence of these advances has not only been significant change, but also discussion and debate in the areas of public policy, ethics, religious teachings, and business practice.

At Saint Vincent College the biotechnology curriculum has strong foundations in biology, chemistry, mathematics, and computer science, coupled with hands-on laboratory and one-on-one research experiences. However, the curriculum also incorporates ethics, public policy, government, economics, business, and law. It is the interconnection of these fields that creates opportunity; and students with an encompassing interdisciplinary background are particularly well-prepared for careers in biotechnology that extend beyond the laboratory. This includes careers in the areas of medicine, research, agriculture, public health, environmental science, engineering, policy, education, and industry.

Students in the biotechnology program have the option of pursuing either a minor, or a more in-depth certification. The certification in biotechnology program sets students apart from their peers on the breadth of their scientific foundations, complemented by insights from interconnecting fields; while the minor in biotechnology is well-suited for students in the sciences wanting to explore the applications of what they are learning, from an interdisciplinary perspective.

Certification In Biotechnology
May be completed as a post-Baccalaureate Certificate (usually in one year), or concurrently with a traditional major course of study (may require an additional semester to complete).
(See core curriculum requirements.)
(See major requirements.)

Certification Requirements Prerequisites:

BL 150	General Biology I	3
BL 152	General Biology II	3
BL 151	General Biology Laboratory I	1
BL 153	General Biology Laboratory II	1
BL 208	Cell Biology	3
BL 209	Cell Biology Laboratory	1
BL 214	Molecular Genetics	3
BL 215	Molecular Genetics Laboratory	1
CH 101	General Chemistry I	3
CH 102	General Chemistry II	3
CH 103	General Chemistry Laboratory I	1
CH 104	General Chemistry Laboratory II	1
CH 221	Organic Chemistry I	3
CH 222	Organic Chemistry II	3
CH 223	Organic Chemistry Laboratory I	1
CH 224	Organic Chemistry Laboratory II	1
MA 109	Calculus with Applications I	4

Course Requirements (32 credits):

BL 216	Biotechnology	3
BL 217	Biotechnology Laboratory	1
BL 260	Biostatistics	3
CH 251	Proteins and Metabolism	3
CH 253	Proteins and Metabolism Laboratory	1
CH 252	Nucleic Acids and Membranes	3
CH 254	Nucleic Acids and Membranes Laboratory 1	
BA 230	Introduction to Entrepreneurship	3
BL/BIN 550	Internship/Research Experience**	1
CORE-2604	Ethics and Technology	3
or		
TH 280	Catholic Bioethics	3

4 credits (course and laboratory) selected from:

BL 220	Comparative Vertebrate Anatomy	3
BL 221	Comparative Vertebrate Anatomy Laboratory	1
BL 222	Developmental Biology	3
BL 223	Developmental Biology Laboratory	1
BL 224	Physiology	3
BL 225	Physiology Laboratory	1

3 credits selected from:

BA 170	Organizational Behavior	3
BA 220	Principles of Marketing	3
PS 390	Environmental Law and Policy	3

The Certification in Biotechnology requires, in addition to course work, an applied internship or research experience, either paid or unpaid (which can occur on or off campus, during the summer or during the school year). At least 12 credits of the certificate course requirements must be

completed at Saint Vincent College.

Entrepreneurial Success Certificate (12 Credits)

The entrepreneurial success certificate is designed to help aspiring business owners gain the practical knowledge and skills necessary to successfully open and sustain their own business. Students work with entrepreneurship experts, many of whom are business owners themselves, to gain a better understanding of how to find success of their own. Courses like "From Business Canvas to Business Plan" help students in growing their future businesses through practical means.

Required (2 courses/ 6 credits):

BA 413	From Business Canvass to Business Plan	3
BA 414	Failure, Success, and Innovation	3

Choose two elective courses (2 courses/6 credits):

BA 100	Financial Accounting I	3
BA 325	Analysis of Financial Statements	3
BA 220	Principles of Marketing	3
BA 232	Human Resource Management	3
BA 324	Advanced Personal Financial Planning	3
BA 340	Business Law	3

Hospitality Certificate (12 credits)

The hospitality certificate is designed with the Benedictine Hallmark of the same name in mind. It enables its participants to learn about the hospitality industry—tourism, hotels, recreation and service-oriented businesses— through a Benedictine lens. Students will gain a thorough understanding of hospitality and its application to the business field through courses like "Benedictine Hospitality in Business and Hospitality Industry Insights."

Required (3 courses/ 9 credits):

BA339	Benedictine Hospitality in Business	3
BA329	Hospitality Industry Insights	3
BA328	Introduction to Tourism	3

Choose one elective course (1 course/ 3 credits):

BA321	Franchising	3
BA307	Sports Venue and Events Management	3
BA327	Hotel Management	3
BA250	Global Management	3
BA251	International Business	3

Legal Studies Certificate (12 Credits)

The Legal Practice Certificate is offered by the McKenna School and is meant to provide students with two distinct benefits:

- A student attending law school will have a tremendous advantage in understanding the practical implications of the law they will be studying and how that translates into the service of clients regardless of whether they are individuals, governmental or corporate. It will also give them a distinct advantage in their effort to enter the job market upon law school graduation.
- For those students who will either delay application to law school or seek to work in the legal field without obtaining a law degree, the certificate will provide a wealth of information and understanding to make them valuable assets to any law office in the role of legal assistant or otherwise.

To qualify for the certificate program, a student must have satisfactorily passed any two of the following courses: PS-339, PS-345, PS-369, PS-390, CLS-227, CLS-230, CLS-205, CLS-344, CLS-375, CLS-376, CLS-440, BA-340 or an approved course of study or practical exposure to the practice of law judged by the Admissions Committee to permit the student to maintain their standing in the Advanced curriculum the Certificate requires by the Department Chair.

Required (4 courses/ 12 credits):

CLS 401	Legal Reasoning and Analysis	3
CLS 402	Crafting Legal Documents	3
CLS 403	Survey of Legal Practice	3
CLS 404	Practicum	3

Nonprofit Studies Certificate (12 Credits)

The nonprofit studies certificate enables students to learn the nuances of working for and running nonprofit organizations such as charities, arts organizations, government agencies and religious organizations among others. Through courses like "Nonprofit Management and Nonprofit and Social Marketing," students gain exposure and knowledge about managing these types of organizations.

Required (3 courses/ 9 credits):

BA337	Nonprofit and Social Marketing	3
BA326	Nonprofit Management	3
BA339	Benedictine Hospitality in Business	3

Choose one elective course (1 course/ 3 credits):

BA280	Leadership	3
BA398	Project Management I	3
BA492	Operations Management	3
CA340	Nonprofit Communication	3
HI306	Introduction to Nonprofits and Fundraising	3

Organizational Leadership Certificate (12 Credits)

The organizational leadership certificate teaches students how to lead in real-world scenarios, regardless of title. Students will learn theories of leadership and how they shape real-life decision-making. Courses like "Organizational Behavior, Leadership and Business Ethics" help students become more effective leaders.

Required (3 courses/ 9 credits):

BA170	Organizational Behavior	3
BA280	Leadership	3
BA305	Business Ethics	3

Choose one elective course (1 course/ 3 credits):

BA308	Negotiations	3
CLS316	Strategic/Tactical Leadership	3
PS200	Profiles in Statesmanship	3
BA313	Leadership for Jedi, Wizards, and Superheroes	3
BA285	Breaking Barriers: The Journey of Women in Leadership	3

Project Management Certificate (12 Credits)

The project management certificate will help students understand both basic and new perspectives, like agile project management. Students will learn the skills needed for future certification. Courses like "Negotiation and Project Management" provide valuable knowledge for this growing career path.

Required (4 courses/ 12 credits):

BA398	Project Management I	3
BA468	Project Management II	3
BA308	Negotiations	3
BA280	Leadership	3

SAP University Alliance Certificate (9 Credits)

The SAP university alliance certificate is associated with and recognized by SAP, one of the world's leading Enterprise Resource Planning (ERP) systems. Students will participate in practical courses like "Management Information Systems" and "Supply Chain Simulation" that teach both general ERP knowledge and dedicated SAP Business One skills for their future careers. Student needs a B or better in any 3 courses to be awarded the SAP UA certificate.

Take 3 courses from the list below (3 courses/ 9 credits):

BA 107	Relational Databases for Business	3
BA265	Management Information Systems	3
BA316	Logistics	3
BA317	Supply Chain Simulation	3
BA368	SAP Business One	3
BA420	Accounting Information Systems	3

Science Foundations for Health Professions Certificate (25 Credits)

This certificate program is typically pursued as a post-baccalaureate certificate or can be taken in conjunction with any degree at Saint Vincent College. This certificate is designed for career preparation in the medical and health professions.

Prerequisite courses: BL150 BL151 BL152 BL153 CH101 CH102 CH103 CH104 MA109

Complete 25 credits in consultation with your faculty advisor: BL208 BL209 BL212 BL213 BL224 BL225 BL245 BL260 CH221 CH222 CH223 CH224 CH251 CH253 HSCI222 HSCI223 HSCIS224 HSCIS225 HSCIS250 PH109 PH110 PH113 PH114 PY100 PY214 PY243 PY308 PY322 PY331 SO101

Supply Chain Certificate (12 Credits)

The supply chain certificate will teach students about the importance of logistics, purchasing, operating and communicating within the broader supply chain of organizations. Participants will partake in simulations and practical exercises that expose them to real-world scenarios.

Required (3 courses, 9 credits):

BA493	Supply Chain Management I	3
BA499	Supply Chain Management II	3
BA317	Supply Chain Simulation	3

Choose one elective course (1 course, 3 credits):

BA316	Logistics	3
BA315	Purchasing and Procurement	3
BA250	Global Management	3
BA251	International Business	3
BA444	Operations Management	3
BA425	Strategic Marketing	3
BA308	Negotiations	3

GRADUATE AND DOCTORAL PROGRAMS

Master of Science in Management: Operational Excellence

The Master of Science in Management: Operational Excellence (MSMOE) program is comprised of 36 credits designed to prepare students for leadership roles in organizations. This program blends traditional management concepts (such as leading people, influencing organizations, and designing processes) with cutting-edge OE philosophies (related to continuous improvement, problem-solving, and waste reduction). The program is designed for those individuals who seek a more effective means of building mutual trust and respect within their organization, empowering their employees, and becoming more innovative. The MSMOE is administered by the management division of the Alex G. McKenna School of Business, Economics, and Government and is a year-round program (fall, spring, and summer semesters) that can be completed in as little as one year or no longer than five years. The program utilizes a combination of classroom (and virtual) instruction, non-credit seminars and opportunities for hands-on experience to illustrate management and OE concepts.

Program Goals

Students in the MSMOE program will be expected to:

1. Broaden their knowledge of core management and operational excellence theories and apply them to a variety of situations.
2. Discover the critical role that culture plays in the management of organizations.
3. Learn to document processes, identify problems, understand key metrics, and develop effective countermeasures to improve process performance.
4. Formulate the strategic direction of their organization to compete in a dynamic environment.
5. Influence employee performance by leveraging proper motivation, commitment, and human resource practices.
6. Prepare for leadership roles by examining best practices in management.
7. Understand the three most important considerations of management: people, organizations, and processes.
8. Demonstrate superior skills in oral and written communications, critical thinking, and creative problem-solving appropriate to top management.

Admission Requirements

All students entering into the MSMOE program must complete the Graduate Application Form and include it along with their other application materials. Admission into the MSMOE program is based on the completion of this form and the factors listed below.

1. Students must possess an earned bachelor's degree from an accredited institution. Official transcripts must be submitted from each institution attended.

2. Students who did not attain an overall 3.0 GPA on a 4.0-point scale (or equivalent) during their undergraduate studies will only be considered for provisional acceptance (please see number 9 below) unless their other application materials are exceptional. Students not meeting the 3.0 minimum may also be requested to complete the Graduate Management Aptitude Test (GMAT) for admission. Applicants required to complete the GMAT must achieve a minimum overall score of 550 and a minimum Quantitative score of 44 (Both requirements must be met).
3. Three letters of recommendation. At least one of the recommendations must be from a professional contact (i.e. supervisor) and at least one of the recommendations must be from an academic contact (i.e. professor). The other may be academic or professional. All references should clearly state the relationship between the individual providing the reference and the applicant.
4. At least one year of relevant work experience is preferred.
5. A personal statement from the applicant addressing the reasons you wish to enter the MSMOE program at Saint Vincent College.
6. Submission of curriculum vitae or résumé (evidence of work experience, community involvement, extracurricular activities, well roundedness, etc.).
7. For international applicants, a TOEFL-ibt score of 90-91, 232 on the CBT, or 6.5 on IELTS or higher is required. Some exceptions may be made for those international students from English-speaking countries or who have completed undergraduate degrees in the United States.
8. All completed application materials for the Master of Science in Management: Operational Excellence should be submitted to the Office of Graduate and Continuing Education.
9. All admission decisions are at the sole and final discretion of the graduate director of the program. Under certain circumstances, students may be provisionally admitted. In their first semester, provisionally accepted students will be limited to registering for nine credits and must earn above a 3.33 GPA. Provisional acceptance will still allow a student to qualify for financial aid if applicable.

Program Requirements

Once accepted into the program, all students must:

1. Complete the MSMOE Entrance Exam and Entrance Survey.
2. Meet with the graduate director to discuss the student's class schedule and overall academic plan.

Applicants will not be considered to be enrolled in the MSMOE program until the above requirements are met.

Graduation from the MSMOE program requires the following:

1. Completion of 36 credits of graduate coursework (see the list of required courses).

2. Completion of an OE Non-Credit Seminar.
3. Completion of the "Business Core Competencies" required by the Accreditation Council for Business Schools and Programs (ACBSP). Students who possess an accredited undergraduate degree in a business-related discipline are likely to have completed these competencies prior to enrolling in the MSMOE program. The core consists of 12 business areas which can be completed by passing approved undergraduate courses and/or by passing a series of online assessments. If these competencies are not complete prior to entering the MSMOE program, they may be accomplished at any time prior to conferral of the master's degree. A master's degree may not be conferred until the business core is complete. The ACBSP "Business Core Competencies" consists of:
   a) Accounting
   b) Management
   c) Marketing
   d) Business Ethics
   e) Business Finance
   f) Legal Environment of Business
   g) Statistics
   h) Business Policy and Strategy
   i) Economics
   j) Quantitative Skills
   k) Global Dimensions of Business
   l) Information Systems

4. Completion of the MSMOE Exit Exam and Exit Survey during the student's final semester.
5. Meeting with the graduate director for an exit interview toward the end of the student's final semester.
6. (Recommended) Completion of a publishable research project.

Transfer Credits

At the program director's discretion, the MSMOE program will only accept a maximum of six graduate credits from another institution/ graduate program to be transferred in to count as electives toward degree completion.

Dismissal from the Program

A student accepted on a provisional basis will be required to maintain a 3.33 GPA over the course of completing nine graduate credits. If the student is able to maintain a 3.33 grade point average she/he will be reviewed for regular admission. A student with provisional status will not be allowed to take more than nine credits of graduate coursework per semester. If the student is not able to maintain a 3.33 GPA after completing nine credits of graduate coursework, regular admission will be denied. Students will be removed from the program after two consecutive provisional semesters.

All students are required to maintain above a 3.0 cumulative grade point average. Students who fall below this average, receive a failing grade in one course, and/or receive two or more Cs throughout their program are placed on Academic Probation and are required to meet with the graduate director to discuss their status. Failure to meet with the graduate director will result in dismissal consideration from the program. Students on academic probation will be treated in a similar manner as provisional students (see above). Students will be removed from the program if their cumulative grade point average is below a 3.0 for two consecutive semesters. Please see the graduate policies page for more details on probation and dismissal.

Students may appeal dismissal or academic probation formally in writing. These appeals will be considered by the Assistant Vice President for Academic Affairs and Graduate Director who will meet to determine the student's status.

Online Access

At the discretion of the instructor, students have the option to take for-credit GCBA courses either via a traditional face-to-face classroom setting (recommended) or "virtually" if the need arises. Please refer to each instructor's policy for online access. If logging in, students will be expected to virtually attend the entirety of the class session, share their camera, meet all course deadlines, and participate in class discussions.

If an international student would like to take components of courses via web-enabled resources AND Saint Vincent College has assisted the student with obtaining a visa, the student must first consult the director of international education for approval. International students with Saint Vincent-sponsored visas are expected to take at least one traditional face-to-face course per semester which will require them to be physically present on campus.

Courses Required:

36 Credits – All Classes Worth 3 Credits Each

GCBA 607	Organizational Behavior and Human Resource Management
GCBA 630	Advanced Accounting and Finance in Operational Excellence
GCBA 686	Organizational Culture
GCBA 690	Quantitative Analysis
GCBA 695	Strategic Management of Complex Organizations
GCBA 697	Leadership and Ethics
GCBA 704	Management Science
GCBA 706	Operations Management
GCBA 00Z	OE Non-Credit Seminar

4 approved elective courses (12 credits)
Approved MSMOE elective courses include:

GCBA 665	Management Information Systems
GCBA 693	Supply Chain Management
GCBA 698	Agile Project Management
GCBA 705	Change Management
GCBA 711	Team Dynamics and Organizational Planning
GCBA 720	Project Management
GCBA 725	Six Sigma Lean Green Belt Certification Prep Course
GCBA 730	Graduate SAP Business One Program
GCBA 750	Independent Study (only available with approval of faculty mentor and Graduate Director; only allowed one for the duration of the program)
GCBA 751	Graduate Level Internship in Management or OE (only available with approval of Graduate Director)

Management: Operational Excellence Certificate

This certificate program is for anyone interested in implementing Operational Excellence techniques for Continuous Improvement, regardless of industry. Students will build an effective foundation of Lean and Operational Excellence skills that can be implemented immediately in your organization to reduce waste and costs, increase productivity, and gain a competitive advantage. The certificate program will also teach students to identify improvement opportunities with your company's processes, implement change, and measure the impact of those changes on safety, quality, inventory, lead time, cost, and productivity.

Required courses:

GCBA 704	Management Science	3
GCBA 706	Operations Management	3

Elective courses (Complete two):

GCBA 607	Organizational Behavior and Human Resource Management	3
GCBA 630	Advanced Accounting and Finance in Operational Excellence	3
GCBA 686	Organizational Culture	3
GCBA 725	Six Sigma Lean Green Belt Certification Prep Course	3

Project Management Certificate

The intent of the certificate program is to equip the students with skills that employers are looking for in reference to competency in the technical domain, as well as the behavioral domain in project management. We seek to help students gain sound comprehensive knowledge about project management principles and practices, in addition to problem solving and leadership. Through a combination of different case studies, tools, techniques, and hands on activities, students learn the effective fundamentals of project management in accordance with the Project Management Institute's Body of Knowledge. Students finish the program well-prepared to handle real-world project management scenarios. Additionally, students conclude the program with the necessary skills to manage both traditional and Agile projects effectively.

Required courses:

GCBA 720	Project Management	3
GCBA 698	Agile Project Management	3

Elective courses (Complete two):

GCBA 697	Leadership and Ethics	3
GCBA 705	Change Management	3
GCBA 725	Six Sigma Lean Green Belt Certification Prep Course	3

Master of Science in Criminology

This program is designed to prepare practitioners in the area of criminology to prepare candidates to serve as leaders and innovators in the system dedicated to the just enforcement of the law and to prepare professionals who are able to facilitate systematic improvements in the delivery of services and justice in the Commonwealth and in the United States.

The curriculum will employ a "think tank" philosophy to focus students on an assortment of issues, challenges, and viable solutions in the field of law enforcement, corrections, probation and parole, juvenile counseling, and the administration of justice in the court systems. The student will be able to understand, critique, and integrate the principles of sound research to address and guide future study and sound policy recommendations in these areas.

Upon completion of the master's level criminology program, students will be able to expand upon and further cultivate a solid background in the major theoretical perspectives in criminology, develop an appreciation and mastery of the scientific process, analyze and evaluate how globally diverse contexts affect beliefs and behaviors of individuals, groups, organizations, and human institutions, and demonstrate in-depth understanding of a range of ethical issues to foster cooperation and respect for diversity, which characterize and define the different facets of criminology and criminal justice.

Program Requirements
Total credits: 30

Curriculum:
Graduates of Saint Vincent College with a degree in Criminology, Law, and Society will be afforded six advanced-placement credits toward this 30-credit curriculum based upon their successful completion of courses which are currently taught at the graduate level by the Department:

- Ethical Decisions
- Criminological Theories
- Criminology Capstone

Candidates who have not received a CLS bachelor's degree from Saint Vincent College may still qualify for the six advanced placement credits. To do so, the student must successfully complete the Ethical Decisions course offered by Saint Vincent and either the Criminological Theories course or the Criminology Capstone course offered by the College. If a student opts to complete the Ethical Decisions Course and the Criminological Theories Course, they must also present evidence of completing a capstone project in the discipline of their major of sufficient depth and quality to earn the six advanced placement credits. This option will also be open to students from other institutions who complete the Saint Vincent courses outlined above.

Students who do not complete the requirements for advanced placement credit will take the Ethical Decisions course from Saint Vincent and a second course over the summer prior to the fall term of master's core courses.

Each summer, two or more elective courses will be available along with Ethical Decisions. Other elective courses may be available with the approval of the Department Chairperson.

During the fall, all master's candidates will take three core courses:

- Research Methods
- Policy Analysis
- Advanced Criminological Theories

While it is not recommended that candidates take a fourth course in the fall, the candidates may choose to take an elective course if it is offered during that term. These courses will be taught for both undergraduates and graduates and any graduate candidate taking these courses will be required to complete an additional project or additional graduate-level work at the discretion of the instructor.

In the spring, all master's candidates will take three core courses:

- Legal Issues
- Statistics
- Professional Seminar

Again, while it is not recommended that a candidate take a fourth course in the spring, an elective course may be chosen from any that are offered that term.

In the summer following the first academic year of the master's program, the candidate will have the option of either writing a thesis to be awarded six additional credits or taking two elective courses from among the courses offered that summer. A number of nationally recognized master's programs in criminology do not present a thesis option for the students but require academic coursework in satisfaction of the degree. Other institutions suggest the thesis option to candidates who intend to go on for the Ph.D. We will take a similar posture and advise that the thesis option is preferred for those students who intend to complete their doctoral studies in the area.

All required courses, in whatever term, will be offered at night. Many of these courses will be taught over seven weeks, especially two of the three required courses in the fall and spring terms. This will allow candidates to be on campus only two evenings per week over the 14-week term to complete the three courses in each term.

While a few courses may be presented in a hybrid manner using in-class and online components, we value the in-class experience most highly. The use of technology such as Skype or Zoom may be employed for students who have difficulty being present for one or more class sessions.

At the conclusion of their coursework, all candidates will be required to pass a comprehensive exam prepared and scored by the full-time faculty. The comprehensive examination will test the student's overall knowledge of the core requirements for the master's program. It will be an extended examination, in an essay format, and will be graded jointly by all the professors in the department. The comprehensive exam will be identified in the catalog as GCLS 700 Comprehensive Examination and will be a requirement for the granting of the degree.

Master's Degrees in Education

Curriculum Instruction
Special Education
Counselor Education (PreK-12 School Counselor)
Educational Leadership (K-12 School Principal)

Master of Science in Curriculum Instruction

The Master of Science Degree in Curriculum Instruction focuses on three critical elements of learning: curriculum, instruction, and assessment. Candidates will investigate various frameworks and programs of curriculum design; explore methods of making instruction meaningful to all students; and evaluate diagnostic and assessment strategies and products for use in their school or in the workplace. The Curriculum Instruction master's program provides a research component allowing students to document need, propose change, and evaluate the effect of that change. Emphasis will be placed on developing instructional leaders who will be resources to their schools, districts, and work sites in developing and implementing change and improvements that need to occur. The program is versatile in that students can earn their initial Pennsylvania teaching certification in the desired area while completing graduate courses.

Goals

The three goals of the Master of Science Degree in Curriculum Instruction are:

- To provide an advanced and individualized program of study designed for school, business, health care, and human services professionals.
- To provide opportunities for in-depth study and investigation of recent research, emergent knowledge, and current trends and issues concerning educational policies, practices, and regulations.
- To prepare professionals in education, business, health care, and human services endeavors, to assume leadership roles in stimulation, planning, managing, and evaluation of educational change.

Sequence and Scheduling

The Curriculum Instruction master's degree is designed to be an accelerated 30-credit hours that can be completed in approximately 18 months inclusive of seven required courses and three elective courses. The courses are conducted year around in the same one night-a-week-for-seven-weeks fashion. Thus, students can take two courses per term while being on campus or online one evening per week. At the close of the coursework, a comprehensive exam is required. The exam is offered each term, allowing graduation each term.

Courses Required (30 credits):

GCED 600	Educational Leadership and Professional Development	3
GCED 605	Statistics and Research Design	3
GCED 615	Curriculum and Systems Design	3
GCED 620	Assessment and Diagnostics	3
GCED 625	Instructional Technology	3
GCED 635	Instructional Methodology	3
GCED 650	Human Learning	3
GCED 800	Comprehensive Exam	0
3 electives		9

Combining an Initial Pennsylvania Teaching Certification with a Master of Science in Curriculum Instruction: "Master's-Cert" Students

Candidates may earn certification in a specialty area from the Education Department while taking graduate courses. Most "master's-cert" students take the following courses along with the necessary coursework and complete the required certification exams for one specialty area. The student's Education Department academic advisor determines the additional courses.

ED 101	Field Experience I: Observation and Interaction or	
ED 207	Practicum in Education	1
ED 205	Strategies and Techniques of Instruction	3
ED 206	Field Experience II: Strategies and Techniques of Instruction	1
PY 290	Psychology and Education for the Exceptional Student*	3
PY 115	Educational Psychology	3
ED 208	Classroom Partnerships and Inclusion*	3
ED 390	Promoting Youth Cultural Competence and Diversity*	3

Additional Early Childhood, Middle Grade, K-12, or Secondary methods, fieldwork and/or content courses will be specific to each applicant depending on prior coursework.

**See advisor, course may be substituted with a similar graduate course offering.*

Comprehensive Exam Requirement

At the completion of the graduate degree program, students are required to respond to a battery of essay questions posed by their professors. This requirement acts as an academic collective exercise that formally admits students into the exclusive group of scholars who hold a master's degree in education. Students are graded and ranked by their professors relative to their responses. The exam may be taken twice in the event of failure.

Master of Science in Special Education

The Master of Science Degree in Special Education provides advanced scholarship and training in educating students with disabilities. The program is designed for special educators who desire to learn more about the field to become master teachers or leaders. Candidates will explore advanced theory in assessment and instruction strategies and techniques for high incidence, low incidence, and emotional disabilities; in addition to life-span transition, behavior analysis, autism, and related areas of special education (i.e. hearing impaired, etc.).

Goals

The three goals of the Master of Science Degree in Special Education are:

- To provide scholarship and advanced studies for working with students with disabilities that are consistent with today's classrooms and technological resources.
- To offer opportunities to utilize research-based instructional strategies and diagnostic tools to meet the needs of various exceptionalities including low-incidence and hearing-impaired.
- To provide a convenient, advanced study program that can be completed in timely fashion designed for working professionals.

Master of Science in Special Education Sequence and Cohort Schedule

The Special Education master's degree is traditionally designed to be an accelerated 30-credit hours that can be completed in approximately 18-20 months (10 required courses) starting each fall. The courses are conducted year around. Most students take two courses per term, one or two evenings per week. At the close of the coursework, students take a comprehensive exam.

Courses Required for Master's Degree in Special Education (30 Credits):

GCED 605	Statistics and Research Design	3
GCSE 647	Advanced Topics in Clinical Application of Applied Behavior Analysis	3
GCSE 617	Diagnosis and Evaluation of Students with High-Incidence Disabilities	3
GCSE 607	Family and Professional Collaboration	3
GCSE 667	Advanced Intervention Strategies in Reading, Writing, and Mathematics	3
GCSE 687	Teaching Students with Autistic Spectrum and Developmental Disorders	3
GCSE 717	Typical and Atypical Growth and Development	3
GCSE 727	Methods and Assessment for Life-Span Transition	3
GCSE 737	Special Education Law and Ethics	3
GCSE 747	Mental Health Issues in Special Education	3
GCED 800	Comprehensive Exam	0

Obtaining Pennsylvania Special Education Certification with a Master of Science in Special Education

Students may add Pennsylvania certification in special education through a post-baccalaureate program taken concurrently with the M.S. in Special Education. Candidates will choose between PreK-8 (previously early childhood-, elementary-, or middle grade certified candidates) or 7-12 (previously secondary or K-12 certified candidates). Candidates who are not special education certified can take the following courses or transfer equivalent courses upon advisor approval.

ED 290	Psychology/Education of the Exceptional Student	3*
ED 205	Strategies and Techniques of Instruction	3*
ED 208	Classroom Partnerships and Inclusion	3*
ED 250, ED 220, ED 237, ED 320	Reading Methods	3*
ED 242, ED 235, ED 303	Mathematics Methods	3*
ED 335	Instructional Interventions for Students with High-Incidence Disabilities	3
ED 360	Strategies and Assessment for Students with Significant and Multiple Disorders	3
ED 362	Classroom Approaches for Students with Behavioral and Autism Spectrum	3
ED 390	Promote Youth Cultural Competence and Diversity	3*
ED 412	Special Education Consultation, Transition, and Law	3
ED 413	Internship in Special Ed. (PreK-8 or K-12)	3

**Already taken by SVC education graduates*

Saint Vincent College Graduates and Admittance into the MASTER of Science in Special Education

As a privilege to Saint Vincent undergraduate or post-baccalaureate teacher certification students from Saint Vincent College, admission to the Master of Science Degree in Special Education is streamlined. Upon certification, satisfactory PDE 430 evaluations, and positive recommendations for pre-student teaching, students can be enrolled without a full review.

Comprehensive Exam Requirement

At the completion of the graduate degree program, students are required to respond to a battery of essay questions posed by their professors. This requirement acts as a culminating academic exercise that formally admits students into the exclusive group of scholars who hold a master's degree in education. Students are graded and ranked by their professors relative to their responses. The exam may be taken twice in the event of failure.

Master of Science in Counselor Education

The Master of Science in Counselor Education, certifying in Pennsylvania School Counseling PreK-12, prepares candidates for a career as a professional counselor in the school setting. Candidates will receive instruction in school policies and clinical counseling for children and young adults. The 39-credit program is contemporary in design and addresses current trends and theory, including extensive competency-based fieldwork (PreK-12) that prepares candidates for the 21st century. Candidates graduating from the M.S. in Counselor Education are prepared to successfully take the Praxis II: Professional School Counselor exam.

Goals

The three goals of the Master of Science Degree in Counselor Education are:

- To provide excellent training and experiences in current methods, trends, and strategies to become an effective school counselor at the PreK-12 level.
- To offer resources, professional contacts, and tools that enable a pre-service school counselor to be successful and effective in guiding youth to reach academic, social, and professional goals.
- To provide insight into current philosophies, assessment reporting, community collaboration, creative practices,

and proactive counselor trends that help develop a strong school leadership team and student achievement.

Master of Science in Counselor Education Sequence and Schedule

The Counselor Education master's degree is designed to be an accelerated 39-credit hours program that can be completed in approximately 20 months. Most courses are conducted year-round in a one-night-a-week-for-seven-weeks fashion. Students can take two courses a term driving to campus or learning online one evening per week. At the close of the coursework, a comprehensive exam is taken. The exam is offered each term, enabling students to graduate year-round. An additional final competency evaluation is required along with a portfolio of experiences and resources illustrating the student's proficiency in school counseling (PreK-12).

Courses Required for Master's in School Counseling (39 Credits):

GCCE 601	Orientation to Counselor Education, Services, and Technology	3
GCCE 611	Career and Lifestyle Counseling	3
GCED 650	Human Learning	3
GCCE 621	Counseling of Children and Young Adults	3
GCCE 631	Theory and Practices of Group Counseling	3
GCCE 641	Counseling Techniques for Violent, Addictive, and Abusive Behaviors	3
GCED 605	Statistics and Research Design	3
GCED 615	Curriculum and Systems Design	3
GCED 620	Assessment and Diagnostics	3
GCED 645	Philosophical and Ethical Perspectives in Education	3
GCSE 607	Family and Professional Collaboration	3
GCSE 697	Teaching Culturally Diverse Students with Limited English Proficiencies	3
GCCE 651	Pre-Practicum in School Counseling	2
GCCE 661	Practicum in Counselor Education	1
GCCE 671	Internship in Counselor Education	1
GCED 800	Comprehensive Exam	0

Obtaining Pennsylvania K-12 School Counselor Certification with a Master of Science in Counselor Education

Students will be eligible for PreK-12 school counselor certification upon completion of their degree, passed comprehensive exam, satisfactory final competency evaluation, and portfolio review. Students are also required to pass the required Pennsylvania certification test for K-12 School Counselor.

Comprehensive Exam Requirement

At the completion of the graduate degree program, all students are required to respond to a battery of essay questions posed by their professors. This requirement acts as a culminating academic exercise that formally admits students into the exclusive group of scholars who hold a master's degree in education. Students are graded and ranked by their professors relative to their responses. The exam may be taken twice in the event of initial failure.

Master of Science in Educational Leadership

The Master of Science Degree in Educational Leadership offers veteran educators a degree program to obtain Pennsylvania certification as a K-12 Principal that is in full compliance with the Pennsylvania Department of Education Core and Corollary Standards for Principals. The 39-credit graduate degree requires students to have three years of documented teaching experience. However, students can enroll in some of the same courses required for the Master of Science in Curriculum Instruction; therefore, allowing them to work toward a degree while completing the required three years of teaching. Students can transfer to the Educational Leadership degree program from the Curriculum Instruction degree or they can simply add the needed K-12 Principal courses to become certified. The program is designed with the school administrator in mind; therefore, most courses address current issues, techniques, and information school principals needs.

Goals

The three goals for the Master of Science Degree in Educational Leadership are:

- To provide excellent training and experiences in current methods, trends, and strategies for becoming an effective school leader and administrator.
- To offer resources, professional contacts, and tools that will enable a pre-service school administrator to become successful and effective in leading a school building or district.
- To provide insight into current philosophies, assessment reporting, community collaboration, creative practices, and proactive leadership trends that can develop a strong community and student rapport and support.

Master of Science in Educational Leadership Sequence and Offering Schedule

The Educational Leadership master's degree is designed to be an accelerated 39-credit hours that can be completed in approximately 20 months. The courses are held year-round in a one-night-a week for-seven-weeks fashion. Thus, students can take two courses a term driving to campus or online one evening per week. At the close of the coursework, students take a comprehensive exam which is offered each term, thus enabling students to graduate year-round. An additional final competency evaluation is required along with a portfolio of experiences and resources illustrating a student's proficiency in school administration.

Courses Required for Master's in Educational Leadership (39 credits):

GCED 600	Educational Leadership and Professional Development	3
GCED 605	Statistics and Research Design	3
GCED 610	Current Issues and Trends	3
GCED 615	Curriculum and Systems Design	3
GCED 620	Assessment and Diagnostics	3
GCED 630	Managing Financial and Material Resources	3

GCED 645	Philosophical and Ethical Perspectives in Education	3
GCED 655	Educational Jurisprudence	3
GCED 675	Inclusionary Education	3
GCED 680	Supervision of Instruction	3
GCSE 607	Family and Professional Collaboration	3
GCSE 697	Teaching Culturally Diverse Students with Limited English Proficiencies	3
GCAD 676	Internship in School Administration: Fall Term	1
GCAD 686	Internship in Educational Leadership: Spring Term	1
GCAD 696	Internship in Educational Leadership: Summer Term	1
GCED 800	Comprehensive Exam	0

Obtaining Pennsylvania K-12 School Principal Certification with a Master of Science in Educational Leadership

Students will be eligible for K-12 school principal certification upon completion of their degree, passed comprehensive exam, satisfactory final competency evaluation, and portfolio review. Students are also required to have completed and documented five or more years of professional teaching experience and have passed the Praxis test for K-12 School Principal.

Comprehensive Exam Requirement

At the completion of the graduate degree program, students are required to respond to a battery of essay questions posed by their professors. This requirement acts as a culminating academic exercise that formally admits students into the exclusive group of scholars who hold a master's degree in education. Students are graded and ranked by their professors relative to their responses. The exam may be taken twice in the event of initial failure.

Graduate-Level Endorsement Add-On Certification Programs

The Saint Vincent Education Department offers two short programs that lead to an add-on certification endorsement: Early Childhood Leadership (director credential) and Online Instruction. These Pennsylvania Department of Education programs are offered in new and emerging areas where initial formal certification does not exist. Having a program or specialist endorsement improves a teacher's skills in dealing with complex classroom settings and can increase employment options. These endorsements can be added to an existing Level I or Level II certificate through the completion of credits and required fieldwork. All courses taken toward an endorsement can be counted toward a master's degree program. See the graduate advisor for more information on how to specialize in one of these areas while completing a graduate degree.

Requirements for the Early Childhood Leadership: Director Credential

In order to meet the accreditation demands for area early childhood professionals, Saint Vincent College offers courses that are required for early learning center directors. Through the Pennsylvania Office of Child Development and Early Learning, guidelines have been established to certify directors. Nine credits of graduate course work are offered to deepen and expand director performances and have been aligned and approved by the Pennsylvania Key. Candidates interested in the director credential should contact the graduate education advisor upon admittance to inquire to the offering schedule and available tuition assistance.

Required courses (select 3 courses, see adviser):

GCEL 602	Design and Management of Early Learning Settings	3
GCEL 612	Early Learning Leadership	3
GCEL 622	Creative Programs and Workshop Development for Early Educators	3
GCED 670	Visual Thinking and Learning	3
GCED 615	Curriculum Systems Design	3

Requirements for the Online Instruction Endorsement

The Online Instruction 12-Credit Program Endorsement is designed to offer the opportunity for certified and in-service teachers to enhance their professional capacity to respond to the increasing demand for expertise in teaching and learning within technological and e-learning settings. Offering the Online Instruction Program Endorsement reflects Saint Vincent College's well-established commitment to providing today's teachers with the knowledge, skill set, and competencies to leverage digital tools to meet the needs of 21st-century students and school districts alike. Completing the Online Instruction Program Endorsement will strengthen the instructional expertise and employability of newly certified teachers and present in-service teachers with a unique professional development opportunity.

Required courses:

GCED 625	Instructional Technology	3
GCIT 614	Emergent Information Management and Instructional Technologies	3
GCIT 624	Usability, Engagement, and Assessment Systems for Online Education	3
GCIT 684	Advanced Instructional Design for Online Education	

Direct Entry Master of Science in Nursing (DE-MSN) with the Clinical Nurse Leader (CNL)

The Direct Entry Master of Science in Nursing (DE-MSN) with the Clinical Nurse Leader (CNL) is an innovative and accelerated second degree program intended for individuals holding a baccalaureate or higher degree in a non-nursing major. Eligible students will be admitted directly into the program, after completing the following required prerequisite courses which provide a foundation for the graduate level nursing curriculum:

Anatomy & Physiology I with Lab	4 credits
Anatomy & Physiology II with Lab	4 credits
General Chemistry with Lab	4 credits
Microbiology with Lab	4 credits
Nutrition	2 or 3 credits
Life Span Development	3 credits
Applied Statistics (Inferential or Biostatistics)	3 credits
College Writing	3 credits

The 76 credits, two-year curriculum is designed to be completed within 6 consecutive semesters (including summers) of full-time study. Year 1 coursework completes Pennsylvania State Board of Nursing requirements and Tier 1 AACN Essentials: Core Competencies for Professional Nursing Education. Year 2 coursework completes Tier 2 AACN Essentials and Clinical Nurse Leader competencies.

Upon completion of the program, graduates are qualified to take the National Council Licensure Examination (NCLEX) to become a Registered Nurse (RN), eligible for national certification as a CNL, and earn a Master of Science in Nursing degree.

Program Goals

The Saint Vincent College Direct Entry-MSN Program prepares compassionate graduates who:

- provide competent, equitable, evidence-based, culturally sensitive care in the Benedictine tradition to individuals, families, groups, and communities, including vulnerable populations.
- demonstrate knowledge of the context in which professional nurses practice, including the biobehavioral, cultural, political, environmental, economic, ethical, legal, scientific, and spiritual dimensions.
- exhibit commitment to self-development and the advancement of the profession of nursing through participation in educational, community, and organizational activities.
- demonstrate clinical leadership for patient-care practices and delivery, including the design, coordination, and evaluation of care outcomes for individuals, families, groups, and populations.
- lead health care teams to deliver safe, quality, and equitable health care that improves outcomes for patients, clients, and staff across all spheres of care.

Admission Requirements

All students entering the DE-MSN program must complete the online Graduate Application Form and provide official transcripts of all undergraduate and graduate course work. Applicants to the DE-MSN program must:

1. Provide evidence of being awarded a baccalaureate degree in anon-nursing major, graduating with a cumulative GPA of 3.0 or higher.
2. Complete the pre-requisite courses prior to starting the program and attain a B- or higher grade. Science courses must have been completed within the past 7 years.
3. Provide three letters of reference attesting to the applicant's capacity and potential for master's level study from each of the following: a) either the director or a faculty member from the most recent academic program attendee (if applicant has been a student in the previous 5 years), b) a recent employer, and c) a person who can speak to the applicant's professional work.
4. Submit a personal essay online. The essay (500 word) must state the applicant's reasons for pursuing nursing study, what s/he expects from the DE-MSN program, and future career goals.
5. Submit current CV or resume.
6. Complete a pre-admission interview, in-person or virtually.
7. Complete all Year 1 and Year 2 courses to be eligible for graduation.

Acceptable Academic Status

- Students must maintain a cumulative grade point average (GPA) of 3.00 or better throughout the program.
- Students must earn a grade of B- or better in all required courses and a C- or better in any elective courses.
- To sit for comprehensive exams and to graduate, students must have a cumulative GPA of at least 3.0 and a grade of B- or better in all required courses

Course Repeat

- With permission of the Area of Concentration Coordinator / Program Director up to 2 courses may be repeated throughout the entire program of study. No course may be repeated more than once.
- The repeated course (s) must be the same as the one(s) in which the original grade was earned. In extenuating circumstances, a major/area of concentration coordinator, with the Dean's approval, may substitute another course of similar content. If another course is substituted, the grade in the original course is not removed and continues to be included in calculation of the GPA.
- If the same course is repeated, the original course and grade remain on the transcript; however, the grade and credits originally earned are not counted in the calculation of the GPA.
- A "W" grade reported for the repeated course will not be identified as a course repeat, the original grade earned will continue to be counted in the GPA. Incomplete ("G" or "IP") grades will not be identified as repeated courses until the course work is completed.

The repeated course does not increase the number of credits counted toward meeting the degree requirements unless an "F" is replaced by a passing grade

Warning

A full status student receives an academic warning if she or he has completed less than nine (9) credits and achieves a term GPA below 3.0 or if he/she earns a grade lower than a B- in a required course or lower than a C- in an elective course.

Academic Probation

- A full status student shall be placed on academic probation if she or he has completed nine (9) credit hours or more and achieves a cumulative GPA below 3.0.
- Only letter grades with GPA values will be used to compute the GPA and to determine academic warning or probation.
- To be removed from probation, a student must have achieved a cumulative GPA of 3.0 or above after completion of nine (9) additional credits, the equivalent of one full-time term.
- A student can be on probation only once during the program of study.

Dismissal

A student who (1) has been on probation and subsequently does not maintain a cumulative GPA of 3.0 or above, (2) fails more than two courses (earning lower than a B- in any required course or C- in any elective course), or (3) fails any course (earning lower than a B- in any required course or C- in any elective course) twice will be dismissed from the school. Accommodation to continue in the program may be offered, if extenuating circumstances exist and a recommendation for program continuation is made by the Department Chair (or designate) and the academic advisor or the School of Nursing Academic Issues Hearing Board and approved by the Dean.

- A student who exhibits a pattern of unsafe or incompetent clinical practice in any clinical course as identified by the clinical instructor may be dismissed from the School of Nursing (Policy 305).
- A student may be placed on probation or dismissed for illegal or unethical professional conduct. The student shall be referred to the School of Nursing Policy 307: Academic Integrity: Student Obligations and the University Guidelines on Academic Integrity for appropriate procedures for adjudication.

Course Curriculum Plan:

Year 1 Summer (Entry Level):

NUR 5111	Intro Pathophysiology & Pharmacology	3
NUR 5213	Foundations of Clinical Reasoning in Nursing Practice	4
NUR 5223	Foundations of Clinical Reasoning in Nursing Practice: Lab (120 hours)	2
NUR 5416	Application of Data Analytics, Informatics, & Healthcare Technology	1
NUR 5212	Perspectives on Nursing: Past, Present, & Future	1
NUR 5214	Introduction to Evidence Based Practice & Nursing Science	2

Year 1 Fall (Entry Level):

NUR 5311	Nursing Care of Adults with Acute and Chronic Disorders	3
NUR 5321	Nursing Care of Adults with Acute and Chronic Disorders: Practicum (120 hrs.)	2
NUR 5312	Nursing Care of Women, Newborns & Families	2
NUR 5322	Clinical Reasoning and Personalized Care in the Nursing Care of Women, Newborns & Families: Practicum (60 hours)	1
NUR 5411	Nursing Care of Individuals with Psychiatric, Behavioral, and Mental Health Conditions	2
NUR 5421	Clinical Reasoning and Personalized Care in the Nursing Care of Individuals with Psychiatric Mental Health Conditions: Practicum (60 hrs.)	1
NUR 5412	Nursing Care of Populations	2
NUR 5422	Clinical Reasoning that Addresses Population Health: Practicum (60 hrs.)	1

Year 1 Spring (Entry Level):

NUR 5314	Nursing Care of Vulnerable Populations	2
NUR 5324	Clinical Reasoning and Personalized Care in the Nursing Care of Vulnerable Populations: Practicum (60 hrs.)	1
NUR 5414	Nursing Care of Adults and Populations with Multiple and Complex Health Disorders	2
NUR 5315	Nursing Care of Children, Adolescents, & Families	2
NUR 5325	Clinical Reasoning and Personalized Care in the Nursing Care of Children, Adolescents & Families: Practicum (60 hrs.)	1
NUR 5413	Leadership in Systems of Care	2
NUR 5313	Genetics and Precision Health	2

Year 2 Summer (Advanced):

NUR 6423	Professional Nursing Immersion – Leadership in Systems of Care (60 hrs.)	1
NUR 602	Advanced Health/Physical Assessment Across the Lifespan	2
NUR 603	Advanced Assessment Lab (60 hours)	1
NUR 604	Advanced Pathophysiology Across the Lifespan	3
NUR 611	Contemporary Issues in Nursing and CNL Professional Role Formation	2
NUR 621	Contemporary Issues in Nursing and CNL Professional Role Formation: Practicum (60 hours)	1
NUR 612	Foundations of Health Promotion, Disease Prevention, and Public Health	2

Year 2 Fall (Advanced):

NUR 601	Advanced Pharmacology Across the Lifespan	3

NUR 622	CNL Roles Immersion I (180 hours)	3
NUR 613	Organizational Excellence & Quality Improvement	2
NUR 614	Role of the CNL: Educator	2
NUR 615	Professional Writing	2
NUR 624	Capstone: Microsystem Project I (60 hrs.)	1

Year 2 Spring (Advanced):

NUR 623	CNL Roles Immersion II (240 hours)	4
NUR 617	Healthcare System Organization, Policy & Finance	2
NUR 618	Care Delivery Leadership and Leading Teams Across the Healthcare Continuum	2
NUR 619	Healthcare Ethics	2
NUR 625	Capstone: Microsystem Project II	1
NUR 616	Professional Writing Workshop	1

Comprehensive Exam

Total Credits: 76
Year 1 Clinical Hours: 420
Year 2 Clinical Hours: 660

Progression through the program is dependent on successful completion of courses required in each previous term.

Doctor of Nurse Anesthesia Practice (Entry Program)

The Doctor of Nurse Anesthesia Practice (DNAP) entry program is designed to prepare registered nurses who possess a minimum of one year of experience in critical care nursing with the necessary knowledge and skills to become nurse anesthetists. Graduates of this program are prepared to sit for the certification examination administered by the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA). This comprehensive program, offered in partnership with the Excela Health School of Anesthesia, aims to develop advanced practice nurses with the capability to deliver competent nurse anesthesia services, leaders, and educators, capable of adapting to and influencing the continually evolving landscape of nursing practice.

The doctoral entry program offers comprehensive education encompassing both the academic and clinical aspects of nurse anesthesia. It is structured to include an intensive didactic curriculum during the initial twelve months, followed by full immersion into clinical practice during the second and third years. Students gain clinical experience with diverse patient populations across a variety of healthcare settings.

The program emphasizes four core pillars: Academic, Clinical, Evidence-Based Practice and Research, and Professionalism. Within the academic component, students acquire an advanced body of specialized knowledge essential for integrating didactic information and clinical data to develop a comprehensive, individualized plan of care. Clinically, students demonstrate the ability to plan and administer safe and physiologically appropriate anesthetics, grounded in the synthesis of anesthetic principles and basic science. The focus on Evidence-Based Practice and Research fosters an appreciation for lifelong learning, the application of best evidence, and the execution of research methodologies, all contributing to professional practice and growth. Lastly, the professionalism aspect encourages the integration of ethical, legal, and cultural considerations into both personal and professional conduct.

Upon graduation, individuals will possess the requisite skill set to serve as leaders in the advanced delivery of anesthesia, assume roles as educators, and exemplify the highest standards of the profession as leaders and role models.

The program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs and Middle States Commission on Higher Education.

Graduate Admission Policy

Acceptance of applicants into the doctoral program of nurse anesthesia is the sole responsibility of the Excela Health School of Anesthesia.

Application Deadline

Applications, along with complete submission of all required documentation for the graduate programs in nurse anesthesia, must be sent directly to the Excela Health School of Anesthesia, and be received no later than Jan. 15 of the year prior to the year of prospective matriculation.

Graduate Applicants

An applicant for the DNAP program should submit the following:

- Anesthesia School Application Form
- Professional Resume
- Summary of interest (as noted at bottom of page three of the application form)
- Application Fee ($65) made out to Westmoreland Hospital. In memo section of check, please note School of Anesthesia (or) SOA
- Photocopy of current RN Licensure (display portion, if applicable)
- Photocopy of current BLS card
- Photocopy of current ACLS card
- Photocopies of other professional certifications (PALS, CCRN, etc.)
- Photocopy of Driver's License
- Three (3) letters of reference. Letter of Reference.pdf
- These letters must utilize the form in the provided link. One reference must be from your current unit manager/supervisor. Each letter must be in a sealed envelope with the applicant's name on the front and signature of sender across the back flap of envelope.
- Official transcripts from every institution of higher learning attended (including community colleges) must be sent with your packet, even if you only took one class at that institution.
- Transcripts included in the packets must be "original transcripts" in unopened envelopes, directly from institution(s) of higher learning.

Applications will not be reviewed until all materials are completed and received. Graduate applicants must have a bachelor's degree prior to official acceptance into the program.

Financial Information

At Saint Vincent College, the cost is kept at the lowest possible level consistent with a financially responsible operation. The payment of the student's bill is due before the beginning of classes each semester or session.

Tuition And Fees For 2025-2026

DNAP Tuition (per credit) $1,262
Insurance Fee - FA & SP only $247
Technology Fee - PT $129
Additional fees may apply. Contact the Excela Health School of Anesthesia for additional information.

Graduation requirements are met when the student satisfactorily completes all curricular requirements with a minimum cumulative GPA of 3.00, completes all minimum clinical and didactic requirements of the Council on Accreditation Nurse Anesthesia Education Programs and NBCRNA, and achieves a satisfactory score on the final clinical evaluation.

DNAP Grading Scale

The following grading scale will be used for all classes, both those taught at SVC as well as

those taught at Excela Health.

A	93 – 100	4.0 grade points
A-	90 – 92	3.7 grade points
B+	87 – 89	3.3 grade points
B	83 – 86	3.0 grade points
B-	80 – 82	2.7 grade points
C+	77 – 79	2.3 grade points
C	73 – 76	2.0 grade points
C-	70 – 72	1.7 grade points

I = Incomplete P = Pass F = Fail

Dismissal

Any student in the graduate program of nurse anesthesia will be dismissed from the program when he/she has accumulated greater than six credit hours of C grades +/-, or failure of a course. Graduate students in the nurse anesthesia program may also be dismissed for clinical reasons.

Appeal Of Dismissal

Appeal of dismissal in the graduate programs for nurse anesthetists will follow the policies of the Excela Health School of Anesthesia.

We recognize great strength is derived from our similarities as well as in our differences and we build strength through an acceptance and welcoming of diversity in our students, faculty, and associated staff.

Continuing Activity

Students who wish to withdraw from the graduate program in nurse anesthesia must directly contact the Excela Health School of Anesthesia program director.

Satisfactory Academic Progress

The use of illegal drugs/substances, over-the-counter drugs that can alter consciousness, or prescription drugs in amounts not consistent with the amounts prescribed will not be tolerated. To reiterate: there is a ZERO tolerance for such behavior. The same applies for alcohol use during school hours or clinical activities. Individuals will be subjected to a hair and urine drug screening ninety days after the start the program and to random drug/alcohol screening and reasonable suspicion screening throughout the program. A student must be able to produce 1.5-inch hair specimen from their body upon request at any time.

The program stresses the importance of responsibility, maturity, and accountability on the part of every student. This is adult education, and students are expected to act accordingly. If not, a student will not be permitted to continue in the program. If the director determines that a student's conduct has presented concerns regarding patient safety, substandard care, unprofessional conduct, falsification of records, insubordination in clinical care or classroom, or any other matters delineated in the student handbook as unacceptable behavior, the student will be immediately placed on administrative leave and referred to the Student Performance Committee for action.

Resignation

If a student resigns, the student must submit a signed resignation letter to the director, who will then place it in the student's permanent file. After resigning, the student is responsible for notifying the college's Registrar and Financial Aid Office regarding their resignation and any potential tuition reimbursement. The director will ensure that the student's withdrawal is reported to relevant parties, including The Council on Accreditation, the NBCRNA, and the student's current clinical coordinator. Future inquiries from other institutions will only confirm that the student withdrew from the program without being dismissed for cause.

Graduation Requirements

Graduation requirements are met when the student satisfactorily completes all curricular requirements with a minimum cumulative GPA of 3.00, completes all minimum clinical and didactic requirements of the Council on Accreditation Nurse Anesthesia Education Programs and NBCRNA, and achieves a satisfactory score on the final clinical evaluation.

Graduation Application

Students who plan to graduate must file an application for graduation prior to their final term. The graduation application is available online in the Self-Service Portal. Upon receipt of the completed application, the Registrar will register the graduating student in an exit interview course (zero credits, pass/ fail). Completed applications for December graduation are due by September 15.

Graduation Participation

To participate in graduation ceremonies, students must be in good academic standing, must have fulfilled all financial obligations, and must have completed all degree requirements.

Curriculum – Doctoral Entry

Spring Year 1 (17 Credits)

DNAP 721	Advanced Human Anatomy, Physiology, and Pathophysiology I	5
DNAP 700	Advanced Pharmacology I	3
DNAP 713	Medical Physics	2
DNAP 703	Chemistry for Anesthesia Providers	2
DNAP 820	Research Methods	3
DNAP 840	Medical Ethics (currently called Ethics)	2

Summer Year 1 (9 credits)

DNAP 870	Healthcare Informatics	3
DNAP 800	Evidence-Based Practice	3
DNAP 830	Risk Management and Patient Safety	3

Fall Year 1 (15 credits)

DNAP 722	Advanced Human Anatomy, Physiology, and Pathophysiology II	5
DNAP 701	Advanced Pharmacology II	3
DNAP 715	Advanced Physical/Health Assessment	2
DNAP 705	Introduction to Principles of Nurse Anesthesia	3

DNAP 850	Leadership	2

Spring Year 2 (10 Credits)

DNAP 731	Basic Anesthesia Principles I (Didactics)	6
DNAP 880	U.S. Healthcare Systems & Healthcare Economics	3
DNAP 751	Clinical Practicum I	1

Summer Year 2 (4 credits)

DNAP 732	Basic Anesthesia Principles II (Didactics)	3
DNAP 752	Clinical Practicum II	1

Fall Year 2 (10 credits)

DNAP 733	Basic Anesthesia Principles III (Didactics)	6
DNAP 755	Selected Topics in Anesthesia (old Advanced Theory and Practice of Anesthesia)	3
DNAP 753	Clinical Practicum III	1

Spring Year 3 (10 Credits)

DNAP 831	Advanced Anesthesia Principles I (Didactics)	6
DNAP 900	Doctoral Project I	2
DNAP 854	Clinical Practicum IV	2

Summer Year 3 (6 credits)

DNAP 960	Critical Events in Anesthesia Simulation	3
DNAP 910	Doctoral Project II	2
DNAP 855	Clinical Practicum V	1

Fall Year 3 (10 credits)

DNAP 832	Advanced Anesthesia Principles II (Didactics)	6
DNAP 920	Doctoral Project III	2
DNAP 856	Clinical Practicum VI	2

Course Descriptions

AN-101 INTRODUCTION TO ANTHROPOLOGY
This course presents an introduction to anthropology as a holistic discipline that studies the human condition across space and time, employing comparative and evolutionary perspectives. Students will develop a fundamental grasp of the principles, methods and theories that define each of the four fields of anthropology as well as appreciation of how the discipline offers tools for a holistic study of the human condition. Typically offered fall semester. 3 credits

AN-221 BIOLOGICAL ANTHROPOLOGY
This course explores human biological origins, evolution and variation through the application of evolutionary theory and examination of the fossil record. Topics include primatology, paleoanthropology, ecology, forensic anthropology, evolutionary medicine, genetic variation of living populations and evolutionary origins of human behavior. (Occasional offering.) 3 credits

AN-222 CULTURAL ANTHROPOLOGY
This course explores the concept of culture as an integral part of the human experience. We will explore the many facets of culture, including marriage and kinship and religion and ritual. We will examine the myriad ways in which humans organize and sustain themselves and examine concepts of gender, race and ethnicity. We will explore how an anthropological perspective can be applied to understand and solve human problems. Typically offered every other spring semester. 3 credits

AN-225 ANTHROPOLOGY AND WORLD ART
What is art? What counts as art, and how and why is it designated so? Why do humans create art? Is there a universal aesthetic? These are questions we explore in this course. We begin by examining the evolutionary foundation of appreciation for aesthetics and capacity for creative expression in Homo sapiens. We then explore, from an anthropological perspective, the creative urge that is a human universal. We consider the question, "What is art?" and seek answers from a number of societies and perspectives. We examine a broad range of material and social functions of art and contemplate the symbolic character of artistic expression and then explore the worlds of artists themselves, examining their position in and relationship to society and how they often simultaneously embody and transcend traditional social expectations. We will also consider issues such as the integration of art from small scale societies into global markets and the impact of tourism on local art practices. (Occasional offering.) 3 credits

AN-230 ARCHAEOLOGY
This course provides an overview of the field of archaeology. Through the exploration of numerous archaeological case studies, we learn about the methods and theories that archaeologists use to study and recreate the story of past humans through an examination of the materials they left behind. We also examine the ethical and legal issues inherent to uncovering the past, particularly with regards to the handling of human remains. Typically offered every other spring semester (odd-numbered years). 3 credits

AN-233 ARCHAEOLOGY FIELD METHODS & TECHNIQUES
This course introduces students to fundamental methods and techniques employed in contemporary field archaeology. Initial instruction furnishes a background in basic concepts of archaeology. Thereafter, procedures and practices are provided for conducting regional survey and site excavation within a Cultural Resource Management (CRM) format, through which students gain employment. Pedestrian survey, remote sensing, basic map reading, sediment/soil descriptions, stratification, grid, excavation methods, provenience recording, photography, flotation, as well as notetaking/site management procedures are among the topics covered. Proposal writing and budgeting for field projects are addressed. Upon completion of this course, students are prepared for their first archaeology field experiences. 3 credits

AN-235 HISTORY AND CULTURE OF PERU
Learn about the culture and politics surrounding the legendary Machu Picchu. As we explore Cusco, Machu Picchu, and Peru's Sacred Valley studying the history and culture of this region, we will examine how historical power structures shape the stories we tell about ancient people. This 3-credit course is structured around a spring break trip to the Cusco region of Peru. Before the trip, students will take part in on-line coursework to prepare to get the most out of our excursions and activities in Peru. After the trip, students will complete projects synthesizing what they have learned. 3 credits.

AN-255 CULTURES OF THE BIBLE
The people of the Bible lived in an environmental and cultural setting very different from that of modern times. Using a variety of frameworks and sources from archaeology and cultural anthropology, this course will examine how Biblical narratives take place within social, economic, political and ecological contexts of the ancient Middle East and surrounding areas. Students will apply a combination of archaeology and cultural anthropology to illuminate the lives and times of the Biblical eras. Typically offered every other spring semester (even-numbered years). This is an online course. Occasional offering. 3 credits.

AN-258 EXPLORING SENEGALESE CULTURE
This course offers an in-depth exploration of the rich and diverse cultural landscape of Senegal, a country in West Africa. Through the lens of psychologic anthropology, this course aims to provide students with a comprehensive understanding of the cultural beliefs, values, lifestyles, and ethnic groups that shape the vibrant society of Senegal. This course requires participation in a short-term study abroad trip to Senegal. 3 credits.

AN-265 CHINESE & CHINESE AMERICAN FOLKLORE
In this class, we will read the English translations of popular Chinese folklore, legends, and myths. These include the tale of Mulan, the story of the Cowherd and the Weaver Girl, the legend of He Shi Bi, the myth of Nu Wa, and many more fascinating stories from China's rich oral traditions and folk literature. We will look through the lens of gender and intercultural communication studies to analyze how these stories evolved throughout history and how they were told differently in mainstream and vernacular cultures. Additionally, we will examine a number of adaptations of these stories in film, TV series, opera, and dance by Chinese and Chinese American authors, and compare the differences in terms of language, theme, moral, and functionality. This course will also expose students to the vibrant folklore communities in China and talk about folklore's contributions to the formation of cultural identities. 3 credits.

AN-280 MEDICAL ANTHROPOLOGY
Medical Anthropology is a specialization within anthropology that draws from the discipline's four fields of cultural anthropology, physical anthropology, archaeology, and linguistics. This course presents an overview of the range of theories and approaches medical anthropologists use to understand the way people deal with, think about and experience health and disease. Topics to be covered include evolutionary approaches to health, cultural and political ecology of health, ethnomedical systems, cultural constructions of

illness, biomedicine as a cultural system, and applied medical anthropology. Typically offered every other spring semester (even numbered years). 3 credits.

AN-285 FOUNDATIONS OF PUBLIC HEALTH
Public health applies social and natural sciences toward the mission of "fulfilling society's interest in assuring conditions in which people can be healthy" (Institute of Medicine, Future of Public Health, 1988). This course explores the foundations of public health through study of the history, ethical and theoretical foundations and institutional structures by which public health professionals work toward this mission. Through readings, lectures, discussions and active learning projects, students will examine concepts, principles and tools of the discipline and develop an understanding of the role of public health professionals and organizations in promoting health of populations. 3 credits.

AN-287 GLOBAL HEALTH PRACTICE
In this course, students will take part in an on-going global health project in collaboration with the instructor. The course will include introductions to global health topics, frameworks, and programs and involve planning and preparation for practical activities, research and internships in global health, such as foundational research, data collection, program planning, and program evaluation. 1 credit.

AN-295 CULTURE & HEALTH IN GUATEMALA
Guatemala is a country characterized by majestic mountains, towering volcanoes, elegant colonial architecture and colorful indigenous culture. Its beauty and exoticism stand in stark contrast to the poverty that affects 75% of its people. In this course, we will explore how the culture, political economy and ecology of this land and its people become important factors in the health of its population. During a fourteen-day trip to Guatemala, students will be immersed in Guatemalan culture through service-learning projects with clinics, schools and hospitals, visits to museums and Mayan ruins and experiential learning opportunities with local families and organizations. Six credits.

AN-315 APPLIED ANTHROPOLOGY
Applied anthropology is the application of anthropological theories, perspectives and research methods to understanding and solving real-world problems. This course will examine applications of anthropology in areas including medicine and public health, environmental and ecological issues, indigenous rights and basic human rights as well as in the context of other disciplines such as business, marketing and education. Students will participate in an applied project as part of an experiential and service-learning approach. Prerequisites: AN-222. Typically offered every other fall semester (odd numbered years). 3 credits.

AN-322 GLOBAL ENGAGEMENT SEMINAR
In this seminar course, students will engage in reading, discussion, and debate about various ways to analyze and interpret the world's increasingly interconnected political, social, cultural, ecological, and economic systems. Drawing from a range of academic materials and resources on current events and issues, students will practice skills and ways of thinking that will allow them to work productively with people and institutions from various cultures and backgrounds and will analyze how their actions, locally, play a part in the complex dynamics of our connected world. 3 credits.

AN-328 LINGUISTIC ANTHROPOLOGY LINGUISTICS
The course examines the origins, nature, and development of human language and communication. The topics we cover include the mechanics of speech, history of languages, ways in which languages change, connections between language and cognition, kinesics, literacy, and language acquisition. (Occasional offering). 3 credits.

AN-350 INDEPENDENT STUDY - ANTHROPOLOGY
Independent investigation and research into a special topic for selected students. Topics are determined by both student and professor. Prerequisite: permission of faculty member and departmental chair. May be repeated. Variable credit.

AN-360 RESEARCH METHODS
This course takes a practical, experiential approach to collection and analysis of qualitative data. Students will learn the fundamentals of research design and, through a series of field exercises, develop skills in a number of qualitative data collection methods and analysis. Research methods covered will include observation, participant observation, informal and formal interviewing, focus groups and questionnaires. Through discussion and exercises, we will examine ethical issues, theoretical foundations, and potential applications of qualitative and mixed method research. Typically offered every other fall semester (odd numbered years). 3 credits.

AN-375 SPECIAL TOPICS/ANTHROPLOGY
Topics vary, but the focus of this course is an in-depth examination of specific issues and/or developments in anthropology. Prerequisite: junior or senior standing. Occasional offering. 3 credits.

AN-450 SENIOR SEMINAR - ANTHROPOLOGY
This course is a capstone course for Anthropology majors. It is designed to facilitate critical reflection and analysis through completion of an independent senior project as well as a self-evaluation of anthropological skills/knowledge and personal objectives. Prerequisite: permission of the faculty member. 3 credits.

AN-550 ANTHROPOLOGY INTERNSHIP
Students may arrange to receive credit for employment experience in various non-college settings. It is also possible to have paid or unpaid professional work entered into the transcript as "no credit." Prerequisite: permission of the departmental coordinator. May be repeated. Variable credit.

AR-100 ART & MUSIC OF WESTERN CULTURE
An interdisciplinary course designed to provide students with an introductory experience in the fine arts. The course is divided into two components. The first consists of a survey of the evolution of art and music in the context of the historical and cultural background of major periods of western civilization. The second is a study of the principles inherent in both musical composition and the structure and meaning of style and expression in architecture, painting, and sculpture. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered both semesters. 3 credits.

AR-101 CAVES TO CATHEDRALS: PREHISTORIC TO RENAISSANCE ART
What does art communicate? This course provides an introduction to the art and architecture of western culture from pre-history through the Renaissance. Topics include the Neolithic Age, Ancient Near East Art, Egyptian Art, Greek and Roman Art, the Middle Ages (Early Christian, Romanesque, and Gothic), and Renaissance Art. Emphasis is placed on how art and architecture reinforce the social, religious, and cultural beliefs of civilizations. No prerequisites. Fulfills the Core Curriculum fine arts requirement. Offered fall semester. 3 credits.

AR-102 ART HISTORY II: BAROQUE TO THE PRESENT
How avant-garde is contemporary art really? This course explores the art and architecture of western culture and shows how it continues to influence contemporary art. We'll examine Baroque, Neoclassical, and

the Romantic periods as well as all the "isms" of the 20th century. Other topics such as poetry, dance, performance, and emerging art forms will be discussed. No prerequisites. Fulfills the Core Curriculum fine arts requirement. Offered spring semester. 3 credits

AR-109 BIOLOGY AND ART
This course will provide the students with a scientific understanding of the properties of the materials used in the creative arts and the relationship to the biological processes involved in the synthesis of these materials. The course will focus on properties of the fibers used in the arts and allow the students to understand how this relates to their proper use of the materials. In the laboratory portion of the course, the students will be instructed in the scientific method and use this to investigate the properties of the fibers and compare the uses of the fibers with differing biological origin. Students are expected to have a better appreciation of the features of the fibers and how this affects their use in the creative arts. 4 credits

AR-125 ACTING I
This course will teach fundamental skills for acting for the stage. The major emphasis is on actor development and growth through various acting exercises, techniques, character portrayal, monologue work and scene study. Fulfills the Core Curriculum fine arts requirement. No prerequisites. Fulfills the Core Curriculum fine arts requirement. Offered both semesters. 3 credits

AR-130: DRAWING I When we draw, we express ourselves, document the world around us, explore materials, and think. Come explore drawing with us. How do foundational skills improve attention to detail, flexible thinking, and observational skills? Open to all students. No prerequisites. Fulfills the Core Curriculum fine arts requirement. Fee. Offered fall semester. 3 credits

AR-131 : TWO DIMENSIONAL DESIGN
Pencil, marker, ink, layering, shading, stippling: these are just a few of the materials and techniques we will use in this class. Come join us and learn about their theoretical and practical uses. Open to all students. No prerequisites. Fulfills the core curriculum fine arts requirement. Fee. Offered fall semester. 3 credits

AR-135 MATERIALS AND PROCESS: THREE-DIMENSIONAL DESIGN
Want to explore how things are made? This course is perfect for a student who likes to work with their hands and enjoys making things but does not consider themselves an artist. Come join us as we learn how to use a variety of materials including fiber, clay, glass and more. Along the way, we'll learn about positive and negative forms, how materials feel and how they work. All are welcome. Fee. Offered spring semester. 3 credits

AR-139 OUTSIDE THE BOX; PKG. DESIGN/BOOKBINDIN
Walk through any wholesale food store, and you'll find cardboard boxes in all shapes and sizes. Some boxes are meant to break open and display products; others are hefty and protect fragile items, and others have eye-catching shapes. Take that same walk through a bookstore and each new publication feels different in your hands. Some are coarse and rugged, other books feel slick and modern. How does the designer use paper and cardboard in so many different ways? This course will include demonstrations, play, and experimentation to explore package design and bookbinding. The course is open to everyone including graphic design, visual art, and engineering students. Meets the requirements for the Fine Arts Core Requirement. Fee. No prerequisites. 3 credits

AR-158 THEATER ARTS PRODUCTION
The student will be part of the preparation and performance of a lead role or ensemble role in a fully staged music theater or theater production directed by a faculty member. Participation in stage crew or other backstage responsibilities is also a possibility. This course, builds upon the foundational studies associated with preparation and exploration (both dramatic and musical), focuses on performance and is either a 4 or 5 week rehearsal/performance process (approximately 75 hours). Students are taught methods for synthesizing all former training in acting, music, and movement to the needs of the character and the play/score. The course encourages collaboration among the students and the Director. With the supervision of the Director, the students will use their training to perform in either the College's Play or Musical. One production will occur in the Fall semester and the other in the Spring semester. Departmental consent required. 1 credit

AR-165 THE SHOW MUST GO ON! MUSICAL THEATER HISTORY
This course explores the history, development, creators and composers of musical theater. We will discuss the major elements from the mid-18th century to the present of a musical production; the book, lyrics, score, dance and set design. We will trace the musical's evolution through the colorful eras of Minstrel Shows, Vaudeville, Burlesque, Revue, and the Golden Era up through the British Invasion and to the present day. You will learn the techniques and contributions from such great composers and lyricists as Irving Berlin, Jerome, Kern, Cole Porter, Rodgers and Hammerstein II, and Stephen Sondheim's influences on the present-day musical theater. 3 credits

AR-168 MUSICAL THEATRE DANCE STYLES
This course covers a variety of dance styles used in musical theatre including jazz, ballet, tap, ballroom, musical theatre movement, street dance, and folk dance forms; the development of musical theatre from the early styles of Broadway to the present. It will also include the styles and contributions of major musical theatre choreographers. 3 credits

AR-175 BEFORE DISNEY: ART AND SCIENCE OF ANIMATION
This course introduces students to the technological developments of animation. Topics include: perception of motion, machines used to create moving pictures, and artistic conventions used by animators. Students will watch, discuss, and write about important historical examples. Students will also create an introductory portfolio of stop motion, drawn, and digital animation. 3 credits

AR-190 IMAGES AND EVANGELIZATION
This class explores the city of Rome as the cradle of the Christian tradition in the visual arts. From the earliest paintings in the catacombs to the monumental installations of the Baroque, the Christian community in Rome engaged with the arts as a form of evangelization. While at first, art was strictly tied to theology, the Middle Ages saw art collaborate more closely with the imagination of the artist culminating in the glorious productions of the Renaissance and the Baroque. Through readings, site visits and classroom lectures, student will learn the history of Christian imagery in Rome, the techniques and methods for making art, the rudiments of iconography, and also explore the question of defining "Christian" Art. Site visits will include the Catacombs of Priscilla, the Sistine Chapel, St Peter's Basilica, St Mary Major as well as a trip to Florence. 3 credits

AR-205 SACRED SPACES: ARCHITECTURE, ART, RITUAL, MEANING
People of all cultures and time periods have set apart certain places as connected to the divine. What makes a space sacred—and why should we care? This course explores a broad range of sacred spaces, such as Stonehenge, Chichén Itzá, Angkor Wat, Hagia Sophia, and Saint Vincent Basilica, and serves as an entry point to studying world art and architecture. Some class sessions will examine original artworks and artifacts in the Saint Vincent Art & Heritage Collections. Fulfills the Art Education requirement. Offered fall and spring semesters. 3 credits

AR-215 ACTING II
Continuing to develop a role through script analysis. The course focuses on learning and applying a practical method of analyzing a script for fundamentals using objectives, emotions and actions. The goal of the course is to teach actors to make and play effective choices that are firmly grounded in text. Exercises include extensive scene study (from both plays and musicals) and may include audition technique work as well as additional improvisations. Prerequisite: AR 125-01. 3 credits

AR-218 ANIMATION & DIGITAL COMPOSITING
This course introduces students to the history and aesthetics of animation. Class formats range from practical exercises, presentations, and viewings. Topics include the technological development of animation, the principles of perceiving movement, and artists' use of animation in different cultural contexts. Additionally, students will demonstrate their ability to create animated movements using traditional methods and digital tools. Hybrid Course. Prerequisites AR-130, AR-233, AR-330, or CA-285. This course was previously titled "Animation and Effects." 3 credits

AR-225 PAINTING I
This course is for students who want to learn the methods and materials of painting with oils and acrylics. Its purpose is to provide the student with solid foundational skills and an opportunity to explore a variety of approaches in the creation of paintings including layering, glazing, mixing paint medium and proper studio maintenance. Prerequisites: AR-130 or AR-131. Fee. Offered fall semester. 3 credits

AR-230 DRAWING II
This course continues to explore the methods and materials of drawing. Its purpose is to provide the student the opportunity to explore a variety of approaches to drawing. Line, color, form, value, and composition will be the primary topics. No prerequisites. Fee. Offered Spring semester. 3 credits

AR-234 INTRODUCTION TO STAINED GLASS
Students will be introduced to the tools and materials needed to create both two and three-dimensional designs made with stained glass. Processes include: designing stained glass, cutting glass, assembling using the copper foil method and leading glass, soldering lead and copper foil, sealing leaded panels. Fee. Offered fall semester . 3 credits

AR-235 PAINTING II
This course is a progression of AR-225. Students will refine their skills and have the opportunity to expand their use of materials, The students should begin to develop a personal style. Fee. 3 credits.

AR-236 FIBER ARTS
This class will include both traditional and non-traditional fibers. We will explore various methods of creating artwork using fiber which will include knitting, crocheting, felting, and weaving. Animal, vegetable, and mineral fibers will be spun into usable strands to create cloth and other art pieces. The use of embellishments such as beads, embroidery, and trims added to fabric will also be employed. Offered Spring semester even-numbered years. 3 credits

AR-238 CLAY AND POTTERY
This course will introduce the student to various techniques used when working with clay. Students will create three-dimensional forms in clay through hand-building, pinching, coiling, and throwing on a potter's wheel. The finished forms will be fired in a kiln and glazed. The outcome of this class is to create clay based art that will be included in the student's final portfolio. Fee. 3 credits

AR-318 3D MODELING FOR ART AND ANIMATION
This advanced course introduces students to the principles of constructing and rendering three-dimensional forms in digital space. Students will begin by creating three-dimensional objects and environments. Topics include: workflow, building and moving forms, applying textures, and lighting. Class format includes: examination of professional examples, studio time, and demonstrations. Hybrid Course. Fee. Prerequisites: AR-330, CA-130 or AR-233. 3 credits

AR-330 DIGITAL PHOTOGRAPHY AND POST-PRODUCTION
This course teaches students about digital photography and postproduction, providing them with the knowledge, skills and experience necessary in professions which utilize photographs and digital art in various applications. Topics and skills the course will address include the history and development of the modern digital camera, terminology used in digital imagery, physical components and features of digital cameras, and post-production techniques in image enhancement and manipulation. Since mastering the complexity of the various features available on digital cameras today is an integral part of the course, each student is required to have a personal digital camera to use. This camera should have various features and functions and be the best quality camera the student can afford. No prerequisites. 3 credits

AR-331 ADVANCED DRAWING
This course allows the student to continue to build on their drawing skills. This course is like an independent study but will be scheduled during a Drawing course. Prerequisites AR- 130 Drawing I and AR – 230 Drawing II. Repeatable. 3 credits.

AR-345 ADVANCED PAINTING
After completing Painting I and II this advanced course allows the student to earn credits while continuing to explore various painting media. This course is like an independent study course but is scheduled during a Painting course. Prerequisites Painting I - AR 225 and Painting II AR 235. Repeatable. 3 credits.

AR-334 DYNAMIC TYPE & MOTION GRAPHICS
The fundamentals of typography, its theory, practice, technology and history will be covered in this course. Letterforms, type design and classification, proportion, and hierarchy will be studied. Students will focus on the details of page composition and the relationship of space to clarity, legibility and aesthetics. Typography and letterforms will be explored as both a means of communication and a vehicle for expression and enhanced meaning. Does not satisfy Fine Arts Core Curriculum requirement. This course was previously titled "Typography." 3 credits

AR-337 ADVANCED STAINED GLASS
This course provides the stained-glass student with new skills to further their ability in how they work with glass. Glass painting, fusing glass, etching on glass, and the use of beveled glass will take

the craft of stained-glass art to a whole new realm. We will also work with mosaic designs using scrap glass. There will be an opportunity to create three-dimensional designs with glass such as Tiffany style lampshades as well as more modern projects. Students must have the basic techniques of cutting glass and lead assembly of glass well understood before taking this advanced course. One project will become a part of the Saint Vincent Campus for further generations of students to enjoy. Fee. May be repeated for credit. 3 credits.

AR-340 STORYBOARDING FOR GRAPHIC NOVELS
Stories are all around us. They appear in 3-pane comic strips, lengthy graphic novels, 15-second commercials, and even in print ads and, of course, animation. How do they work? How are they made? This course will examine a variety of visual story telling media and introduce students to the basics of story boarding, backgrounds, and simple movement. Students will watch and critique examples. They will also be introduced to the principles of visual story development, the visual cues that advance narrative even in still pictures, stop-motion animation, and basic digital animation skills. 3 credits

AR-350 INDEPENDENT STUDY -- ART
Topics of research are chosen and developed by the student with the guidance of the professor directing the study. Prerequisites: AR-101 and AR-102 or AR-130, AR-131 and AR-225. May be repeated. Permission of the instructor and department chair required. Variable credit.

AR-368 ADVANCED CLAY AND POTTERY
This course builds on the basic skills introduced in AR-238. Students will continue to learn how to throw on the wheel, construct complex hand-built projects, and explore the properties of glazes. Prerequisites: AR-238, Clay and Pottery. This course can replace the Sculpture II requirement for Visual Arts, Art Education and Graphic Design majors. Fee. 3 credits

AR-386 ADVANCED FIBER ART
Having developed basic skills in crocheting, weaving, felting and sewing, students will now explore how these techniques can be used to create three dimensional artistic forms. Wearable art, installation and contemporary fibers will be the focus of the assignments. Students will be encouraged to develop their own vision and apply a mixture of techniques. Prerequisite: AR-236. Fee. 3 credits. May be repeated for credit.

AR-404 Intensive Study in Technique
What kind of art do you want to make? Assignments are student directed and faculty mentored. All materials offered by the department are available for student use. Students are encouraged to develop their own style, be ambitious and work in a professional manner. Fee. Prerequisites: At least two 200 level studio courses.3 Credits.

AR-405 SENIOR EXHIBIT. & PRO. SEMINA
Senior Exhibition is the second part of the capstone project for art education and visual arts majors. Students will continue to develop a personal style and portfolio of work. Students are required to exhibit their work in the Saint Vincent College Gallery. To do so, they must follow all the guidelines, due dates and produce the deliverables required by the Gallery Director and not the course professor. This opportunity affords the student a professional experience that is demanded of the field. Prerequisites: AR-404. Graduating students only or permission of instructor. Fee. 3 credits.

AR-550 ART INTERNSHIP
Students may work in a professional setting in order to extend their learning experience beyond college into the world of work; relevant experiences can take the form of internships, field work, and cooperative programs, particularly in artist studios, commercial graphic design departments, art galleries, museums and arts management offices. Students may or may not be paid, depending on the policy of the employer. For junior and senior art majors and minors only. May be repeated. Variable credit.

AVIP-120 FOUNDATIONS & DEVELOPMENT OF AVIATION
Foundations and Development of Aviation discusses important innovations of systems including engines, flight controls and other advancements in aircraft systems throughout the years. Students will learn through a review of past accident history how improvements in aviation safety were made, reasons for implementation of aviation regulations, and why models such as crew resource management and risk management were developed. 3 credits

AVIP-160 PRIVATE PILOT FLIGHT THEORY
Comprehensive course of instruction which prepares students for the FAA Airman Knowledge Exam - Private Pilot. 7 credits

AVIP-170 PRIVATE PILOT FLIGHT CERTIFICATION
Students fly with a college-affiliated, FAA-approved flight provider culminating with an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the Private Pilot Airplane Certificate (no limitations). Students are required to have a valid second-class medical certificate to enroll in this course. 3 credits

AVIP-180 INSTRUMENT FLIGHT THEORY
Comprehensive course of instruction which prepares students for the FAA Airman Knowledge exam for an Instrument rating. 7 credits

AVIP-190 INSTRUMENT FLIGHT RATING
Students fly with a college-affiliated, FAA-approved flight provider culminating with an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the FAA Part-141 Instrument Pilot Rating. 2 credits

AVIP-202 AIRCRAFT ENGINES THEORY
Emphasis is on the fundamental principles of aircraft engine construction and operation. This includes supercharged and non-supercharged reciprocating engines as well as gas turbine engines. General engine operating procedures and performance diagnosis are also studied. 3 credits.

AVIP-204 AIRCRAFT SYSTEMS THEORY
This is a detailed study of the theory of the operation of aircraft hydraulic, electrical, fuel, oil, pressurization, anti-icing and instrument systems; and includes the various sources of basic power for the operation of aircraft systems as well as the functional application of mechanisms operated by these systems. 3 credits.

AVIP-205 AIRCRAFT ENGINES & SYSTEMS
Students will acquire the knowledge of construction, operation, and components of reciprocating and jet powerplants. They will understand the operation and components of cabin pressurization and air conditioning systems, flight control systems, landing gear systems, fuel systems, electrical systems, anti-icing systems and fire detection systems. 4 credits

AVIP-215 COMMERCIAL FLIGHT THEORY
Comprehensive course of instruction which prepares students for the FAA Airman Knowledge Exam - Commercial Pilot. 5 credits.

AVIP-220 COMMERCIAL FLIGHT CERT. I
Students fly with a college-affiliated, FAA-approved flight provider.

The course comprises the first half of the flight training required to obtain the FAA Part-141 Commercial Pilot Certificate. 3 credits

AVIP-225 COMMERCIAL FLIGHT CERT. II
This is a continuation of AVIP-220. Students fly with a college-affiliated, FAA-approved flight provider culminating with an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the FAA Part-141 Commercial Pilot Certificate. 3 credits

AVIP-250 MULTI-ENGINE FLIGHT RATING
Students fly with a college-affiliated, FAA-approved flight provider culminating in an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the Multi-Engine Pilot Rating (no limitations). 1 credit

AVIP-260 HUMAN FACTORS THEORY
This course provides students with a detailed introduction to aspects of aviation safety and the associated components of pilot psychology, human factors, aircraft technology and aero-medical physiology. Emphasis will be on resource management in single pilot and multi-crew member operations. 3 credits

AVIP-270 AERODYNAMICS OF FLIGHT
This course is an analysis of the physics of flight. The course includes application of basic aerodynamics to the wing and airfoil, analysis of lift and drag components relative to the wing platform and airplane performance, and application of aerodynamic effects of turbojet engines involving principles of propulsion. 3 credits

AVIP-275 CERTIFIED FLIGHT INSTRUCTOR THEORY
This course uses real-world scenarios as the foundation of Certified Flight Instructor (CFI) training and aligns with the Jeppesen Flight Instructors Ground Syllabus and FAA/Industry Training Standards (FITS). While learning the Fundamentals of Instruction (FOIs) is required in this course and to succeed as a CFI, the application of those FOIs is equally important. The course presents situations and circumstances that CFI's face every day as learning experiences and lessons. The primary tenet of this training course is that you prepare for the real world of CFI instruction, by acting as a CFI while in training. Therefore, throughout the course, the pilot in training (PT) will take on different tasks or jobs just as if they were already a CFI. 2 credits.

AVIP-280 CERTIFIED FLIGHT INSTRUCTOR - AIRPLANE
Students fly with a college-affiliated, FAA-approved flight provider culminating in an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the FAA Certified Flight Instructor Certificate for Airplane. 2 credits

AVIP-285 CERTIFIED FLIGHT INSTRUCTOR - INSTRUMENTS
Students fly with a college-affiliated, FAA-approved flight provider culminating in an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the FAA Certified Flight Instructor Certificate for Instruments. 2 credits

AVIP-288 CERTIFIED FLIGHT INSTRUCTOR - MULTI-ENGINE
Students fly with a college-affiliated, FAA-approved flight provider culminating in an endorsement for a check flight with a FAA-approved flight examiner. Successful completion will result in receipt of the FAA Certified Flight Instructor Certificate for Multi-Engine. 2 credits

BA-100 FINANCIAL ACCOUNTING I
Topics include: a general introduction to accounting principles, basic financial statements, the double entry accounting system, the accounting cycle, worksheets and trial balances, merchandising operations, control accounts and subsidiary ledgers, special journals, and internal control and accounting for assets. Offered every semester. 3 credits.

BA-101 FINANCIAL ACCOUNTING II
Students examine generally accepted accounting principles as it applies to the preparation of financial statements of corporations and partnerships. Students prepare financial statements for corporations and partnerships. Students also prepare and utilize the statement of cash flow. Students study and discuss federal payroll taxes, especially employer liabilities and all journal entries. The course covers financial ratios to be used in the analysis of financial statements. The course analyzes long-term liabilities and all associated entries and also devotes a good deal of time to accounting for investments. Prerequisite: BA-100. Offered every semester. 3 credits

BA-102 SURVEY OF ACCOUNTING
Restricted to non-business majors only. This course examines topics common to BA 100 and BA 101, but at a level that is beneficial for non-business majors. Survey of Accounting is recommended to students who will eventually run their own business or be in an occupation that requires some degree of accounting knowledge. Topics include introduction to financial statements, internal controls, cash and accrual basis of accounting and financial statement analysis. The course is for non-business majors only. Offered every other year, spring semester. 3 credits

BA-105 INTRO TO MANUFACTURING/OE
The class, conducted in conjunction with the Kennametal Foundation and Greater Latrobe Senior High School, provides an opportunity for students in 11th and 12th grade to learn about engineering and manufacturing through experiences at Kennametal's Technology Center in Latrobe and its manufacturing facilities. The students attend lectures taught by Kennametal employees (Innovators) and participate in projects and field trips at Kennametal twice weekly for fifteen weeks. During the class time at the high school, students research various engineering careers, participate in projects, and develop career skills such as public speaking and resume writing. Students selected for the course are expected to have a strong foundation and interest in science and mathematics. The students are responsible for finding their own transportation to Kennametal's Technology Center and must be available Tuesday's and Thursday's for an additional class period after the end of the normal school day, in addition to the daily scheduled class time the last period of the day. 3 credits

BA-106 DATA VISUALIZATION
This course teaches the essential and practical skills necessary to communicate information about data clearly and effectively through graphical means. Rendering data clearly and effectively with appropriate visual analytics reduces the time required to achieve understanding and helps in managing the ever-growing amount of available digital data. Students will learn to combine visualization theory with modern data visualization software to create a wide range of graphics and dashboards, both static and interactive. A laptop or iPad is required. Offered fall semester. 3 credits

BA-107 RELATIONAL DATABASES FOR BUSINESS ANALYTICS
In this course, students will develop an understanding of relational databases and how to utilize the information stored within them through queries using Structured Query Language (SQL). Relational

databases power the intelligence of most organizations today and in many cases, the wealth of knowledge found in those databases can only be fully realized through the use of querying with SQL. This programming language allows users to gather, manipulate, store, and present data from the relational database to be leveraged by stakeholders within an organization through a variety of SQL driven tools. This course will cover the key topics of Relational Database Structure, Relational Database Management, Querying Information with SQL, Manipulating Data in SQL, Advanced Querying and Data Storage, and SQL Driven Tools. This course will not only provide students with a foundational understanding of relational databases and the use of Structured Query Language, but it will also give students the knowledge of how they interact with tools like information systems (SAP Business One) and visualization studios (Tableau or PowerBI). Offered Fall semester only in odd years. 3 credits.

BA-140 BUSINESS COMMUNICATIONS
The course focuses on communication is sales and leadership communication. communication in sales: top earning salespeople know that successful business is based on creating strong relationships. Students will learn persuasive communication skills to open conversations, follow-up language, and powerful deal-closing communication. course focus will include crafting a variety of effective presentations, networking communication, and communication in business negotiations. Leadership communication: effective communication is a key ingredient of being a successful business leader. whether it's motivating employees, team building, holding critical conversations, or recruiting employees to pursue change that will positively impact the bottom line; mastering practical business communication skills is a valuable asset for business management. Students will learn how to communicate ideas clearly, powerfully, and intentionally with a goal of leading others to create vision, develop culture and achieve organizational goals. Offered spring semester. 3 credits

BA-150 MANAGERIAL ACCOUNTING
A study of the use of accounting information in performing managerial functions including planning, controls, cost and financial analysis, costing behavior, and incremental costing. Emphasis is on the use of accounting as a tool for management decision making. Prerequisite: BA-100. Offered every semester. 3 credits

BA-170 ORGANIZATIONAL BEHAVIOR
A systematic study of the manager-subordinate relationship as it operates in the environment of an organization. Students develop managerial skills in leadership, motivation, communications, human relations, decision making, and policy formulation. Students learn ways in which these skills can be employed in organizations with established goals, technology and structure. Special attention will be given to how the individual, the work group, and the organization interact to influence the behavior of the business organization and that of its human resources. Offered every semester. 3 credits

BA-177 MANAGEMENT FROM A BIBLICAL PERSPECTIVE
This course provides a systematic study of the field of management in organizations from a Biblical perspective. Major management topics such as leadership, organizational culture, business ethics, and decision-making are examined considering the people and events in the Bible. Special attention is given to drawing the connections between the Biblical perspective and current management principles. 3 credits

BA-199 PROFESSIONALISM I
This course should be taken by students in their second year. It can be taken prior to, after, or in the same semester as BA299: Professionalism II. Together, these two courses reinforce key areas of professionalism. This part emphasizes career planning, networking, and communication. Sophomore year - Offered Fall and Spring. 1 credit.

BA-200 INTERMEDIATE ACCOUNTING I
Topics include a deeper coverage of: Compilation of the income statement and balance sheet; cash, inventories, tangible fixed assets, intangible assets and miscellaneous topics, building on the foundation set in BA-100 and BA-101. Prerequisite: BA-101. Offered fall semester. 3 credits

BA-201 INTERMEDIATE ACCOUNTING II
This course continues with a deeper discussion of liabilities, investments, leases, stockholders' equity, statement of cash flows, and corrections of errors. Prerequisite: BA-200. Offered spring semester. 3 credits

BA-209 SPORTS ADMINISTRATION
This course will provide a broad overview of sport administration. The course will introduce students to the essential areas required to work in the field of sport. Students will explore the foundations and principles on which sport administration operates. Topics of study will include, but not be limited to, the history of sport administration, budgeting, staff management, athletic event planning and career opportunities in the sport industry. 3 credits

BA-211 SPORTS MEDIA, PROMOTION & ADMINISTRATION
This course combines an analysis of the sports media industry with practical sports media management and promotional skills. The course will help students to understand the theoretical foundations for effective sport promotion and sales and how to incentivize, serve and retain consumers and sponsors, and help them to develop the skills they will need to manage media promotion and coverage of sports organizations. Students will use real-world examples and group projects to assist in developing their preparedness to enter the field. No prerequisites. 3 credits

BA-212 LEADERSHIP IN SPORTS
Demonstrate to the students who want a career in sports management the business and economic potential of the sports industry, to include facilities management, branding, marketing, and recruiting, via multiple scenarios, panel discussions, and other learning tools. This class will be leadership based. 3 credits.

BA-220 PRINCIPLES OF MARKETING
This course is an introduction to the theoretical and practical foundations of marketing in a global-managerial framework. The primary marketing decisions variables (product design, pricing, distribution, sales, advertising, and promotion) are introduced and examined from both managerial and consumer perspectives. The relationships among marketing and the other functional areas of business (accounting, finance, and management) are emphasized. Applied economics, electronic commerce, and ethical decision making are interwoven with the substantive topics. Students are exposed to current events in the Wall Street Journal and participate in case studies, group activities, and marketing simulations. No prerequisites. Offered every semester. 3 credits.

BA-230 INTRODUCTION TO ENTREPRENEURSHIP
This course studies the role played by entrepreneurs and small businesses in the American economy. The course will aid the student

in both understanding the entrepreneurial process, as well as learning practical approaches to launching new ventures. Topics include: entrepreneurial traits and characteristics, small business creation methods, the innovation process, small business management techniques, market research and analysis, and financial considerations affecting small businesses. Emphasis will be placed on the value of comprehensive business planning and how a well-crafted business plan contributes to the future success of a new firm. Students work in teams to construct a formal business plan for a new venture of their choosing. Class participation and group interaction are required. No prerequisites. Offered fall semester. 3 credits

BA-231 FRANCHISING
This course is designed to give students (a) the tools to evaluate a franchise, whether for their own purchase of a franchise and/or to provide advice and assistance to others regarding a proposed franchise purchase or operation; (b) an appreciation for the historical and practical benefits of franchising-a uniquely American business and marketing strategy, and a proven alternative to personal or public financing of the expansion of a successful and communicable business operation; and (c) a familiarization with the technical requirements of a franchise lawfully offered for sale to the general public under the Franchise Investment Act and relevant state and local statutes and precedents. Prerequisites: BA-101 or BA-102 or practical experience. Offered spring semester. 3 credits

BA-232 HUMAN RESOURCE MANAGEMENT
In today's dynamic business environment, an organization's human resources may represent their last sustainable competitive advantage. This course will provide an overview of the nature of human resource management as a function within a company and as part of the task of every effective business and professional leader. We will explore the employment relationship, the complex regulatory environment, methods of creating and sustaining a productive employee population, and the importance of integrating HR management with the business strategy from the HR manager's perspective. Prerequisite: BA-170. 3 credits

BA-233 COMPENSATION AND BENEFITS
In this course, students will gain an extensive understanding of the foundation of employee financial rewards. Alignment of individual remuneration to organizational objectives is critical to create cohesion in the success of an enterprise. Income protection and long-term employee financial planning establish the base while market and performance-based pay along with variable incentives assist with retention and motivation. This course addresses each of these two broad themes. Half of the course will address compensation structures, base pay models, variable reward systems, and classification schema. Students will be exposed to job evaluation methodologies and their relationship to recruiting and employee development. The second half of the course will focus on employee benefits including health insurance, income protection insurance, deferred compensation and retirement plans such as 401(k), 403(b), various types of pension plans, Employee Stock Ownership Plans (ESOP's) and non-cash rewards such as paid time off. A review of the regulatory environment will be included. Offered as needed. 3 credits

BA-234 NONPROFIT MANAGEMENT
This course explores the particular elements of management in the Nonprofit Sector. From elements of Human Resources to Strategic Planning and Organizational Management, this course explores key components of these areas and is of valuable information for those who desire to learn about the world of the nonprofit, the 501(c)(3) and other designations: Charitable, Religious or Educational Organizations as well as political agencies, social welfare agencies and other similar agencies. 3 credits

BA-250 GLOBAL BUSINESS MANAGEMENT
Students will be introduced to international trade theory and practical global business applications throughout the term. They will be provided with an overview of the global economy, the globalization debate, country and cultural differences, regional economic integration, and international management decision-making processes. Topics will include globalization, international trade theory, exporting considerations, market research resources and methodology, identification and evaluation of international business customers and/or partners, foreign direct investment, market entry methods, and basic international terms and documentation. Offered spring semester. 3 credits

BA-251 INTERNATIONAL BUSINESS
This course focuses on participant-centered learning and is designed to prepare students for a true career pathway in International Trade. It is designed to help students prepare for the CGBP Exam to be a Certified Global Business Professionals as part of the NASBITE platform. Students will learn the fundamentals of exporting and how to utilize export resources. Subject-matter-experts from the public and private sectors will frequent this class to conduct guest lectures. Globalizing a business, export readiness, U.S. export classifications, classifying export products, foreign market evaluation and selection, international marketing data, foreign market entry strategy and partner selection, international product and pricing strategies, global cultures, global legal, trade agreements, and compliance issues, mechanics of logistics, documentation and export compliance, financial risk, payment methods and global trade finance - are all topics covered in the course. 3 credits

BA-265 MANAGEMENT INFORMATION SYSTEM
Students are provided with an introduction to the information technology hardware and software platforms, tools, and methodologies utilized in the corporate systems environment. Topics include: hardware, networks, operating systems, databases (MySQL), Business Intelligence, Desktop Applications, Business Applications, Electronic Commerce, and Systems Design and Development. The course will also include a detailed examination of the SAP Business One application software. Business majors should take this class during their sophomore year. Offered every semester. Three credits.

BA-280 LEADERSHIP
This course presents a theoretical and applied treatment of a pervasive and challenging task of leading in the new global economy - continuously and successfully dealing with the issues of constant improvement within a framework of ethical leadership based on the Ten Core Benedictine Values. Students will learn leadership theories, concepts, and applications that will allow them to successfully initiate, analyze, and implement various types of organizational changes across a range of disciplines. BA-280 is designed as the first course in leadership and is available to students without any prerequisites. Students in the Benedictine Leadership Studies Certificate Program receive 3 credits towards their Social Science Core requirements. BA-280 also serves as a capstone class for the Operational Excellence minor.. 3 credits

BA-285 BREAKING BARRIERS: THE JOURNEY OF WOMEN IN LEADERSHIP
This course explores the dynamic field of Women Leadership Studies and delves into the multifaceted aspects of leadership, examining the unique challenges and opportunities that women leaders encounter in various spheres of life. By the end of this course, students will not only gain a comprehensive understanding of women's leadership but

also be equipped with the knowledge and skills to contribute meaningfully to the advancement of women in leadership positions. 3 credits.

BA-299 PROFESSIONALISM II
This course should be taken by students in their second year. It can be taken prior to, after, or in the same semester as BA199: Professionalism I. Together, these two courses reinforce key areas of professionalism. This part emphasizes technology and developing other technical and miscellaneous workplace skills. Sophomore year - Offered Fall and Spring. 1 credit.

BA-300 COST ACCOUNTING I
This course provides a thorough study of the three elements of production cost: direct materials, direct labor, and manufacturing expense. The course also provides an application of the aforementioned three elements to job order, cost systems, standard costs, flexible budgets, and break-even analysis. Stress is placed on cost accounting as a tool of management. Prerequisite: BA-200. Offered fall semester. 3 credits

BA-301 COST ACCOUNTING II
Cost Accounting II is a study of cost allocation, capital budgeting, joint and by-product costing. The course emphasizes decision making and provides a detailed examination of process costing and transfer pricing. Prerequisite: BA-300. Offered spring semester. 3 credits

BA-305 BUSINESS ETHICS
This course is designed to focus the business major's critical thinking and ethical reasoning through the lens of contemporary business issues. In addition to completing the theoretical material in the field of business ethics, students complete a series of short written and oral presentations based on contemporary business case studies. Student presentations utilize a range of resources including the Internet, campus network, Schoology course software, and Microsoft PowerPoint software. Students complete a seminar paper on current business issues. Students are required to apply ethical lenses derived from Catholic Social teaching and core Benedictine values. The eight lenses are: Human Dignity, Common Good, Solidarity, Subsidiarity, Hospitality, Stewardship, Stability and Community. Prerequisite: BA-170 and senior status. Offered every semester. 3 credits

BA-307 SPORTS VENUE AND EVENT MANAGEMENT
In this course, students will learn how to plan and host a variety of events in diverse venues. Students will be prepared to facilitate event planning in major sports organizations and prominent event centers. This comprehensive study includes the business practices associated with the reservation, scheduling, and presentation of events. Students will study the business and financial aspects of booking events and filling a venue's calendar as well as security precautions. 3 credits

BA-308 DYNAMICS OF NEGOTIATION
To be an effective participant in a global economy, people must develop negotiation skills. Whether you are a worker, owner, monk, leader, politician, parent, or student, you negotiate all the time. Although leaders may have formal responsibility for negotiating agreements with other firms or constituencies (such as nations); they must compete with their colleagues for a share of organizational resources; they must encourage adequate performance from subordinates and resolve disputes arising among them. Off the job, we constantly negotiate with others - including children. Bargaining is a constant in our lives. This course explores the dynamics and nature of negotiation in today's global, social media obsessed, polarized environment. The course uses an action-oriented, experiential approach to build negotiation skills. Learners will be exposed to theoretical issues arising in different negotiation contexts. They will subsequently participate in a simulation designed to illustrate each theoretical issue. As the semester progresses, more complex negotiation elements will be included in the course. As a capstone experience, the final examination will be a structured team-based negotiation that is observed and scored using a rubric capturing all elements of negotiation dynamics and performance. 3 credits

BA-310 TAXES I
This course provides students with an introduction to Federal Income Tax Law. The Internal Revenue code is studied and applied to various tax situations of individuals. Topics include gross income, exclusions, business expenses, non-business deductions, and the realization of gain or loss. Prerequisite: BA-100. Offered fall semester. 3 credits.

BA-311 TAXES II
The following topics constitute the subject matter of the course: property transactions, capital transactions, section 1231 1245 & 1250 transactions, installment sales, depreciation, depletion, partnerships, and corporations. Prerequisite: BA-100. This course is offered in the spring term. 3 credits

BA-313 LEADERSHIP FOR JEDI, WIZARDS, AND SUPERHEROES
This course is focused on integrating scholarly studies in leadership and related areas with examples from popular culture (including, but not limited to, Star Wars, Lord of the Rings, Harry Potter, Marvel, Game of Thrones, and Pirates of the Caribbean). The aim is not merely to provide superficial illustrations, but rather to dive deeper into complex leadership topics related to how leaders make decisions and exert influence which, in turn, impact the Common Good (potentially either positively or negatively). The approach of this course will be to examine key leadership theories and concepts from various disciplines related to leadership studies and then to illustrate them through familiar popular culture examples. Popular culture is useful because it is relatable and accessible while not being specific to any "real world" context with which learners might be unfamiliar or have little interest. Upon seeing these leadership concepts play out in the example, learners will then be invited to reflect on how they might relate to their own leadership roles and experiences in the future. With this greater understanding of leadership theories and concepts, students will be able to apply them to future situations. 3 credits

BA-314 SPORTS INDUSTRY INSIGHTS
The sports industry is comprised of athletic teams, but also other organizations that impact and are impacted by athletics. These can include vendors, customers, and other businesses that benefit from sporting events (examples could include restaurants in and near stadiums as well as apparel companies among others). Even within athletic teams, there are a lot of business functions that go on off the field of which students should be aware. This course leverages industry experts to provide students with realistic examples of what careers are like in a variety of areas impacted by sports. 3 credits

BA-315 PURCHASING & PROCUREMENT
Purchasing and Procurement are aspects of the supply chain focused on supply management. This means that students of Purchasing and Procurement will come to understand best practices in sourcing or buying materials and services crucial to the operations of an organization. Purchasing and Procurement focuses on positive relationships with supplier organizations. 3 credits

BA-316 LOGISTICS
There are a variety of crucial areas necessary to understanding supply

chains holistically. One is the area of logistics. Logistics is about the flow of inventory, goods, services, and other materials from a supplier, throughout an organization, and to a customer. Special consideration will be given to transportation and processes related to movement throughout a supply chain. 3 credits

BA-317 SUPPLY CHAIN SIMULATION
This class presents students with experiential exercises that simulate a variety of different aspects of the supply chain. These simulations will utilize SAP to provide students with a value-added understanding of supply chain processes using one of the most widely utilized ERP systems in the world. 3 credits

BA-318 CAPM EXAM PREP COURSE
The Project Management Institute (PMI) offers widely recognized certifications based on their Project Management Body of Knowledge (PMBOK). Their general Project Management certification geared primarily to individuals without significant hands-on experience (such as undergraduate students) is the CAPM certification. This class provides students with information to study and prepare for PMI's CAPM examination. 3 credits

BA-320 CORPORATE FINANCE I
This course presents an analysis of the principal financial problems involved within the life cycle of the corporation. A large amount of time is also devoted to ratio analysis, cash budgets, financing fixed and working capital requirements, capital budgeting, the cost of capital, and dividend policy. Prerequisites: BA-101 and must buy TIBA II plus calculator. Take sophomore year. Offered every semester. 3 credits

BA-321 CORPORATE FINANCE II
Topics include Dividend Policy, capital project financing, business valuations, further ratio analysis and changing corporate governance issues. Case studies will be used to provide a practical application for financial theory. Prerequisites: BA-320 and TIBA II plus calculator. Offered spring semester. 3 credits

BA-322 ADVANCED ENTREPRENEURSHIP
This course examines the sources of funding available to entrepreneurs to fund their business and options that they can utilize to harvest their investments. The course will focus on the private debt and equity markets that service start-ups and rapidly growing entrepreneurial firms. The course will be divided into four parts. Part I will provide an overview of small business financing and how the entrepreneur should prepare to approach the financial community. In Part II, we will examine the private equity markets that specifically provide financing to new ventures in the form of seed money. Particular attention will be focused on both angel financing and the venture capital market. Part III examines the private debt markets that provide financing to small firms with a particular emphasis on commercial banks and governmental agencies that are supportive of entrepreneurial ventures. Part IV will cover the options to the entrepreneur to monetize his/her investment. Prerequisites: BA-230. Offered as needed. 3 credits.

BA-324 ADV. PERSONAL FINANCIAL PLANNING
This course is primarily designed for finance majors who desire to take the Certified Financial Planner (CFP) exam after graduation and for other business majors who are interested in taking an advanced level course in personal financial planning. Topics covered in the course will include retail banking, money management and credit management skills, major personal asset acquisitions, such as, automobiles and houses, the proper use of insurance to protect against potential hazard(s). Major emphasis in the course will be placed on investment and retirement planning, tax planning, and estate planning. Prerequisites: BA-362 and must have TI BAII Plus calculator. Take junior/ senior year. Offered spring semester. 3 credits

BA-325 ANALYSIS OF FINANCIAL STATEMENTS
This course emphasizes the use of financial and accounting information. The course is a case study approach to the financial problems of sole proprietorships and corporations. Topics will center around ratio analysis, financial projections, working capital management, capital budgeting, the cost of capital, capital structure and planning, and dividend policy. Prerequisite: BA-320. Offered fall semester. 3 credits

BA-326 NONPROFIT MANAGEMENT
A nonprofit (or not-for-profit organization) is one in which all income gets reinvested back into the organization in some manner. Nonprofit organizations can include charities, arts organizations, government agencies, and religious organizations among other groups. There are challenges and opportunities with regard to managing nonprofits: on one hand, employees and the public may be attracted to the mission of the organization while, on the other hand, nonprofit organizations may not have as much capital readily available for expenditures. This course will explore these example challenges and opportunities as well as many others. 3 credits

BA-327 HOTEL MANAGEMENT
A key component of tourism and hospitality is the area of hotel management. While traveling, most tourists seek overnight accommodation. This course goes beyond just aspects of typical business management courses by focusing on those aspects unique to a focus on guest services, events, and other areas of hotel management in addition to those key activities related to offering overnight accommodations to travelers. 3 credits

BA-328 INTRODUCTION TO TOURISM
The tourism industry is comprised of many different facets. From transportation to service to overnight accommodations, there are a lot of careers within the field of tourism. This class takes the first step in exploring a variety of aspects of tourism. Inherent in the tourism industry is a focus both on service and understanding customers. This class will also consider the importance of these important foci as well. 3 credits

BA-329 HOSPITALITY INDUSTRY INSIGHTS
One of the best ways to learn about hospitality is through experiencing working in the field first-hand. This course presents the next best thing by linking students with professionals working in the hospitality field. In addition to describing the basics of hospitality careers, this course will provide real-world perspectives to students to give them insight into what it is like to work in the hospitality field. 3 credits

BA-330 ADVERTISING AND PROMOTION
This course provides a basis for understanding the marketing communication process and how it influences consumer decisions. The overriding objective is to provide a sophisticated and thoughtful approach to the management of advertising and promotion activities. The course draws heavily on the extensive research in consumer behavior and social psychology. Special attention is given to ethical considerations in developing the communication process. Students conduct special projects in observational research, critical analysis of advertising, the internet, and media planning. Students complete a comprehensive advertising campaign. Prerequisite: BA-220. Offered fall semester only. 3 credits

BA-334 RETAIL MANAGEMENT
This course examines strategic and tactical concepts needed to

successfully manage an omnichannel retail company with the goal of optimizing customer value and providing a long-term competitive advantage. Students will learn how environmental analysis and customer buying behavior should guide a retail market strategy. Specific attention will be given to tactical implementation of the retail strategy in the areas of merchandise management, store design, visual merchandising and customer relationship management. Students will apply course concepts to analyze case studies from a variety of retailers and will be asked to develop a new retail concept for a local retailer. The course will also cover different career opportunities in retailing. Prerequisite: BA-220. Offered fall semester only. 3 credits.

BA-335 DIGITALMARKETING ANALYTICS
This course will provide students with a base knowledge of digital analytics strategies and tactics. Students will learn how to obtain [internet] data, how to analyze data and turn it into insights, and how to present and communicate insights into actionable recommendations. Students review key digital analytics concepts and are exposed to a wide variety of platforms and tools throughout the semester. It is highly recommended that students take BA-106 Data Visualization (fall semesters) before taking BA-335 Digital Analytics. Offered spring semesters. 3 credits

BA-336 ESSENTIALS OF SELLING
An overview of the role of the sales manager, both at headquarters and in the field, in managing people, resources, and functions of marketing. The challenges of forecasting, planning, organizing, communicating, evaluating, and controlling sales are analyzed. In addition, the changing role of the customer is examined and sales techniques to meet such changing market demands are evaluated. Prerequisite: BA-220. Offered spring semester. 3 credits

BA-337 NONPROFIT/SOCIAL MKTG
Throughout this course, students will develop a deeper appreciation for and understanding of the role and importance of marketing within nonprofit organizations and for socially oriented causes. Topics emphasized within the course include an examination of the differences between for-profit and nonprofit marketing management and the development of marketing strategies necessary for achieving the organization's mission, cultivating relationships with donors, and standing out in the marketplace. Offered fall semester. 3 credits

BA-338 MARKETING PLANNING & DEVELOPMENT
This course builds upon students' knowledge of basic marketing concepts to provide a deeper, holistic understanding of the strategic marketing management process. Students will gain career-relevant experience through the creation and analysis of marketing plans that are designed to support organizational objectives. Particular emphasis will be placed on collecting and analyzing market data for the development of new consumer products and markets. 3 credits

BA-339 BENEDICTINE HOSPITALITY IN BUSINESS
Benedictine Hospitality is a well-known Hallmark from the Rule of Saint Benedict. Hospitality Management is both a career and discipline of study. This course combines perspectives from both of these views of "Hospitality." In doing so, it advocates the importance of service in business and suggests that the Rule can have strong implications for organizational management. This course is focused on advocating a Benedictine approach to Hospitality for real-world businesses. 3 credits

BA-340 BUSINESS LAW
The course provides the student with an intensive analysis of contract and sales law, as well as the study of bailments and personal property. Legal sources, the court system, torts, and criminal law will be explored. U.C.C. sections on negotiable instruments, banking and secured transactions are studied. Federal bankruptcy, real property and estate planning are presented. A focus on business organizations includes agencies, partnerships, limited partnerships, and corporations. Offered every semester. 3 credits

BA-344 INTRODUCTION TO OPERATIONAL EXCELLENCE
Introduction to Operational Excellence, familiarizes students with operational excellence concepts, theories, principles, and tactics. Designed as a survey of topics, BA 344 prepares students for more advanced and consecutive operational excellence coursework. This course covers the definitions and applications of operational excellence using the human and operational systems-in-balance model. Students will come to learn the contributions of modern management movements to operational excellence, a theoretical model for organizing operational excellence concepts, the relationships between positive leadership approaches, and standardized management processes for production, strategy, and continuous improvement. This course will equip students with a lexicon for future operations, management, leadership, strategy, and lean applications classes. 3 credits

BA-350 STATISTICS AND ANALYTICS I
This course is an introduction to the study of statistics emphasizing descriptive and inferential statistics. Topics include visual presentation of data, summary descriptive measures (e.g. mean, median, mode, variance and standard deviation), statistical sampling, probability, probability distributions and hypothesis testing. Offered fall semester. Must also register for BA-350A fall semester. 3 credits

BA-350A EXCEL I LAB
Students learn excel applications utilized in statistics. Additional advanced excel techniques will be taught to enhance their business utilization of spreadsheets. 1 credit

BA-351 STATISTICS AND ANALYTICS II
This course is a continuation of BA-350 and explores hypothesis tests, correlation, two-sample inferences, analysis of variance, regression analysis and other topics. Prerequisite: BA-350. Must also register for BA-351A spring semester. 3 credits

BA-351A EXCEL II LAB
Students learn excel applications utilized in statistics. Additional advanced excel techniques will be taught to enhance their business utilization of spreadsheets. 1 credit

BA-353 INTERNATIONAL FINANCE
The course covers the following topics: recent developments in international financial markets, the utilization of foreign exchange and derivative security markets, exchange rate determination, international asset portfolio theory, and financial risk management strategies. Cross-listed as EC-353. Prerequisite: EC-102, BA-320, and BA-351 or EC-360. Offered fall semester. 3 credits

BA-355 ADVANCED BUSINESS ANALYTICS
This course introduces advanced data analytic tools specific to business applications. Through case studies, topics in descriptive and predictive analytics will be covered, including supervised and unsupervised learning techniques, risk analysis, and sensitivity analysis. Coverage of these topics will emphasize conceptual understanding, interpretation, and communication through group presentations. Prerequisite: DS-300. 3 credits

BA-362 INVESTMENTS I: SECURITIES
Topics include: the investment environment, financial markets, the time value of money, general principles of investment; investment

analysis; investment timing; bond pricing, the term structure of interest rates, and duration; techniques for pricing publicly traded equity; and fundamental and technical analysis. Prerequisite: BA-320. Offered fall semester. 3 credits

BA-363 INVESTMENTS II: DERIVATIVES
Topics include: the alternative trading strategies; the valuation of options; the efficiency of option markets; commodity futures; spot, forward and future prices; empirical evidence on price relationships; hedging and speculation; the portfolio approach; risk and return on futures contracts; interest rate futures; alternative forward loans; options on futures; and currency futures. Prerequisite: BA-320. Offered spring semester. 3 credits

BA-364 INTRO TO ERP SYSTEMS
Tens of thousands of companies ranging in size from Fortune 500 to small entrepreneurial startups have incorporated Enterprise Resource Planning (ERP) Systems as their core business management system. These ERP systems maximize the integration and real-time availability of information and have proven to be a strategically competitive weapon in allowing firms to optimize operational and financial performance. In this course, you will gain an extensive understanding of what ERP systems are through a hands-on simulation experience with a fully configured and operational ERP system - SAP ECC. Within this integrated, team-based, competitive business simulation, the student will be quantitatively challenged to incorporate and measure the impacts of operational excellence concepts such as consistent forecasting and planning; procurement and product design strategies; manufacturing decisions (e.g. production scheduling, set-up reductions, lot size reductions); and funding decisions on capital investment and advertising. The development of information reporting and its importance to decision making support will be included. This team-based approach will also challenge the student in understanding the nature of integrated ERP systems and the critical aspects of developing organizational roles, responsibilities, and coordination within an operationally excellent firm. 3 credits

BA-367 INVESTMENTS III: ALTERNATIVE ASSETS
Topics include: the rationale for alternative assets in the portfolio in the broader portfolio; hedge funds; private equity; private debt; real assets; the performance of assets classes; introduction to asset class-based portfolio management; fee structures of alternative asset classes. Prerequisites: BA-362, BA-363. Offered fall semester. 3 Credits

BA-368 SAP BUSINESS ONE PROGRAM
This cross-listed hybrid course will prepare students for a career working with SAP Business One, the world's leading Enterprise Resource Planning (ERP) system for the small-to-medium sized business (SMB) segment. The class will meet once per week and will include lectures, on-line videos, exercises and a workshop. Topics covered in detail include: Business Processes - Revenue, Expenditure and Production processes. Structured Query Language (SQL), including multiple exercises. Data Transfer Workbench (DTW), including multiple exercises. Crystal Reports, including multiple exercises. 2 or 3 credits"

BA-374 SPORTS LAW
This course will provide a detailed overview and analysis of the legal principles and ethical issues found in professional sports. Topics that will be discussed include athlete representation, labor law, antitrust exemption, arbitration, collective bargaining, salary cap administration, free agency and the application of ethics as a method in the decision making and problem-solving process. 3 credits

BA-380 CONSUMER BEHAVIOR
The purpose of this course is to study human responses to products and services by linking the upstream conceptual foundations in consumer psychology with its downstream marketplace applications. Accordingly, the extant research in social psychology will guide the development of marketing strategies. Special attention is given to the scientific method in cognitive psychology. Ethical issues surrounding consumer research are interwoven throughout the course. Students will conduct an experimental research project including hypothesis development, experimental design, data collection and hypothesis testing, and interpretation. This course provides dedicated workshops in SPSS software. Prerequisites: BA-220. Offered every semester. 3 credits

BA-384 LEAN THEORY & APPLICATIONS
Introduction to Lean Tools and Concepts, familiarizes students with various concepts and tools from the lean toolbox. This course is intended to expand on the concepts from BA 344 and be a building block to further work in Operational Excellence and Six Sigma Green Belt areas. This course will cover the definition and theory behind lean tools such as Poke Yoke, Standardized Work, Takt Time, Pull, JIT, Kanban, Safety, Deming Cycle (PDCA), Value Stream Mapping, and application of lean tools to different areas of an organization. Students will create value stream maps, apply 5S+1 techniques, and apply A3 tools. This course will offer students the opportunity to learn through theory, lecture, and hands on approaches.3 credits.

BA-385 FINANCIAL INSTITUTIONS
The nature and role of financial institutions in the economy. Topics include interest rate structure, regulation, financial markets, and asset and liability management of various types of financial institutions. Emphasis is placed on the relationship between theory and practice. Prerequisite: BA-320. Offered fall semester. 3 credits

BA-386 CULTURE IN OPERATIONAL EXCELLENCE
This course will focus on the cultural characteristics that are required for a successful and sustained implementation of Operational Excellence in an organization. During the course we will explore more deeply what makes up culture, how culture can be modified and what characteristics are necessary for a culture to support a continuous learning organization. During the second half of the course, we will review a methodology to implement these cultural concepts within an organization. We will study how this methodology can lead to an organization that is nimble, efficient, customer-focused and constantly learning. The students will be able to take with them techniques to begin the introduction of Operational Excellence in their organization. Offered fall semester. 3 credits

BA-394 LEAN ASSESSMENT
This course focuses on the Lean Audit skills and tools that are essential to individuals and teams that are interested in conducting an effective Lean Assessment. The Lean Assessment is a critical component of Operational Excellence. Once this course is completed, the student is eligible to conduct Lean Assessments for KCOE Sponsors and other potential employers. 3 credits

BA-395 GLOBAL MARKETING
This course is an upper-level, managerially oriented course that offers a systematic treatment of marketing on a global scale. The purpose of the course is to examine the specific issues involved in entering overseas markets and conducting global marketing operations. Special attention is given to analyzing the global economic environment, targeting global markets, sourcing and producing internationally, formulating global marketing strategies, and implementing global marketing mixes. Students are exposed to

current events in the Wall Street Journal and participate in case studies and simulations. Prerequisites: BA-220. Offered fall semester. 3 credits

BA-397 MARKETING RESEARCH
This course introduces students to the descriptive, diagnostic, and predictive roles of marketing research by examining both the substantive and technical domains of the marketing research process. Special attention is given to the survey method. Accordingly, students will receive workshops on Qualtrics, an on-line survey software. Students will also learn how to conduct focus groups. The foundation of the course is a student-generated marketing research project, where participants clearly define a marketing problem, design a study, collect data, analyze it, and present the findings. This course builds on the material learned in BA-350 and BA-351 and provides dedicated data analytic workshops in EXCEL and SPSS. Prerequisites: BA-220 and BA-351. Offered fall semester only. 3 credits

BA-398 PROJECT MANAGEMENT I
Project Management is a highly rewarding profession that became widely recognized as a valuable career path in the mid-20th century. As a profession, it focuses on controlling resources to meet the requirements of projects. Individuals with Project Management skills are highly in demand by employers. Similar to Operations Managers, Project Managers must apply specialized knowledge, skills, tools and techniques often in a team-based environment. The difference is that, while operations are ongoing, projects have definitive beginnings and ends, are non-recurring, and can often be somewhat unique when compared with other projects. These characteristics present distinct challenges and difficulties when compared with operations. This course will cover the Project Management Institute's (PMI) five Project Management Processes (Initiating, Planning, Executing, Monitoring and Controlling, and Closing), discuss certification opportunities with PMI, and will allow students to develop the knowledge and skills necessary to become a successful Project Manager. Offered fall semester only.3 credits.

BA-400 ADVANCED ACCOUNTING
Topics include: income presentation and interim reporting, disclosure of segmental data, business combinations and consolidated statements, partnership ownership changes and liquidation governmental accounting, accounting for non-profit organizations. Prerequisite: BA-201. Offered spring semester. 3 credits

BA-405 AUDITING
This course explores the field of auditing and public accounting as a career. Topics include conducting and concluding an audit, working papers, internal control and evidence, and the audit of selected groups of accounts. Prerequisite: BA-200. Offered fall semester. 3 credits

BA-406 FORENSIC AUDITING
It is estimated that Companies lose, on average, 5-7% of their revenues to fraud schemes each and every year. This course will focus on the "Red Flags" of fraud and effective Risk Management techniques to counter fraud. Students will be introduced to various Forensic Auditing concepts and provided opportunities in a case study setting to apply these concepts to recognize fraud scenarios within various accounting and financial applications such as Financial Reporting, Accounts Payable, Payroll and IT. Significant well known frauds such as Enron, Worldcom, Tyco and our own local LeNature will be studied for clues on how to apply forensic applications to early warning signals to detect frauds before they grow larger. As trained forensic accounting professionals, successful students will learn how to apply professional skepticism and a questioning mind to identify signs of fraud. Prerequisite: BA-405. Offered spring semester. 3 credits

BA-413 FROM BUSINESS CANVAS TO BUSINESS PLAN
This course will show how an entrepreneur's concept can evolve into a full-fledged plan to launch a business. Specific consideration will be given to funding as well as basic business concepts necessary for a nascent entrepreneur to successfully launch their business. 3 credits.

BA-414 FAILURE, SUCCESS, AND INNOVATION
Many small businesses fail. This course examines the how and why of entrepreneurial failure. It also considers those steps that an entrepreneur might take in order for their business to have an improved chance of success. Furthermore, this course suggests that entrepreneurs also must look to the future to find "the next best thing" so that they can continue to be innovative and offer value-added products and services into the future. 3 credits

BA-420 ACCOUNTING INFORMATION SYSTEMS
This course examines accounting systems as an integral component of a management information system. The student will obtain an understanding of transaction processing, internal controls, information system concepts, relational databases, Enterprise Resource Planning (ERP) systems, and system analysis techniques. The course will also include extensive work on configuration of the SAP Business One ERP software. Prerequisite: Junior status or permission of instructor. Offered spring semester. 3 credits

BA-421 FINANCIAL MODELING IN EXCEL
This course develops skills in Excel for financial modeling, security valuation, and constructing optimal portfolios and efficient frontiers. Offered spring semester. 3 credits

BA-425 STRATEGIC MARKETING
This senior-level course emphasizes the decisions that marketing managers face in their efforts to bring together the objectives and resources of their organizations with the needs and opportunities in the marketplace. Building on the fundamentals of marketing and economics, special attention is given to the marketing decisions that students are most likely to confront in their careers. The centerpiece of the course is a marketing simulation. Teams of students will be responsible for the analysis, planning, implementation, and control of an on-going firm. Prerequisites: BA-220, BA-350, BA-380. Offered spring semester. 3 credits

BA-444 OPERATIONS MANAGEMENT
This course is designed for undergraduate students across numerous disciplines associated with business and economics and will introduce the students to concepts applicable to careers in general management, the health care industry, manufacturing as well as customer facing organizations such as theme parks and the food service industry. Initially we will explore the perspective of the customer and the concept of utilization and them one of the most successful strategies in operations: the use of lean tools and concepts to eliminate waste and improve throughput - ultimately translating to a reduction in cost (and improvement in profit). Lean concepts provide an approach for arranging all the processes from raw materials to finished products in a single, smooth flow and can identify and eliminate waste throughout the Value Stream. The course will then explore some of the basic concepts associated with the management of operations with topics ranging from inventory management, capacity and utilization, Little's law, forecasting and the analysis of queuing (waiting) and/rudimentary transport problems. A primary class emphasis will be on applying the concepts to simulations and spreadsheet applications enabling the student to apply their

knowledge to real world problems and develop analytical solutions upon which to base their management decisions. 3 credits.

BA-467 CHANGE MANAGEMENT
This course focuses on change management. According to McKinsey, 70% of transformation type projects fail. Change management is an increasingly important skill for business leaders and professionals because of increasingly dynamic market conditions and capabilities. This results in a more Volatile, Uncertain, Complex and Ambiguous (VUCA) business world. In this course, the tasks, tools and structure of change management process will be introduced according to the program phases that start with initiation, planning, design, implementation and include stabilization. Case studies will be reviewed along with best-in-class examples for creating awareness, increasing participation, providing needed new knowledge and building new skills and ensuring the structure is in place to promote, support and sustain the needed change and realize the change benefits and value. Business change readiness, leadership and stakeholder engagement, project planning and resourcing, communication, risk management, process analysis, organizational structure and job aids, team engagement, motivational techniques and proving sustained benefits realization will be addressed in this course. 3 credits

BA-468 PROJECT MANAGEMENT II
This course is a follow-up to Project Management I. The focus of this course will be to apply the learning previously gained to a real-world project. The project management career path is a rapidly growing profession, and it is expected that through 2020, 1.57 million new jobs will be created each year putting qualified practitioners in demand. The successful student will work through the five stages of Project Management in conjunction with a Not-for-Profit Organization of the student's choice to implement a fundraising project. The course will make detailed use of the tools and techniques taught in PM I and provide students with valuable, relevant project management experience. As a secondary objective of the course, students will be familiarized with the requirements of the Certified Associate in Project Management (CAPM)® of the Project Management Institute, an asset, should they choose to pursue, that will distinguish them in the job market and enhance their credibility and effectiveness working on - or with - project teams. Spring semester. Spring Semester. Prerequisite: BA-398. 4 credits

BA-470 INTERNATIONAL ACCOUNTING
This course introduces the global nature of accounting in business. The course examines a variety of topics including: the comparative study of accounting concepts and reporting in various countries, international accounting standards, accounting problems of multinational corporations, and US GAAP requirements for the translation of foreign financial statements. Prerequisite: Senior status or permission of instructor. Offered spring semester. 3 credits

BA-471 GREEN BELT PREPARATION
Six Sigma and Lean are customer-focused, disciplined problem-solving processes that strive to develop and deliver near-perfect products and services. They rely upon a rational decision-making approach to the improvement process known as DMAIC (Define, Measure, Analyze, Improve, and Control). Hundreds of companies of varying sizes and industries have adopted Six Sigma/Lean as part of their business using the knowledge and skills of practitioners known as Green Belts. In this course, you will learn the foundations of the DMAIC process as it applies to both lean and statistical processes. As a Lean Six Sigma Green Belt candidate you will gain a thorough understanding of how to apply the Six Sigma and Lean tools and interpret the results. The principles of organizational change through project management, communication, and technical process improvement will be covered, as will the skills necessary to quantify deliverables to an organization in terms of cost, quality, cycle-time and/or safety improvements. At the end of the course, you will be prepared to sit for the Green Belt Certification Exam, an industry recognized achievement. Offered spring semester. 3 credits

BA-483 LEAN SIX SIGMA BOOK OF KNOWLEDGE
This course is designed for undergraduate students in majors associated with business, engineering and economics. The course challenges the student to apply the basic concepts, tools and techniques associated with improving a process - any process. This course will provide valuable knowledge to students ranging from those contemplating a management career, to those who will work directly in the continuous improvement field, and to those who simply want to view things differently; those that want to improve efficiencies in their lives and their organizational skills across a wide range of settings. Your Green Belt preparation will rely upon and put to practical use the statistical and organizational excellence concepts that were taught in previous coursework. The course provides a holistic approach to a customer-focused, disciplined, problem solving process, which develops and can deliver near-perfect products and services. It will rely heavily upon a rational decision-making approach to the improvement process known as DMAIC (Define, Measure, Analyze, Improve and Control). Thousands of companies of varying sizes across hundreds of industries have adopted Six Sigma/Lean as part of their business using the knowledge and skills of practitioners known as Green Belts. In this course, you will learn the foundations of the DMAIC process as it applies to both lean and statistical processes. As a Lean Six Sigma Green Belt candidate you will gain a thorough understanding of how to apply over 40 Six Sigma and Lean tools and interpret the results. The principles of organizational change through project management, communication, and technical process improvement will also be covered, as will the skills necessary to quantify deliverables to an organization in terms of cost, quality, cycle-time and/or safety improvements. 3 credits.

BA-484 RISK MANAGEMENT
Risk Management presents risk analysis as a major role in financial planning and advising. The course looks at risk on both an individual and business level. Pre-requisites, BA-362. Spring semester. 3 credits.

BA-485 FINANCIAL PLANNING AND ANALYSIS
This course serves as a preparation for the Chartered Financial Analyst Exam Level I. Course content focuses on the Candidate Body of Knowledge, which encompasses the following ten areas: ethical and professional standards, quantitative methods, economics, accounting and corporate finance, global markets and instruments, valuation and investment theory, analysis of fixed income securities, analysis of equity investments, analysis of alternative investments, and portfolio management. Prerequisite: Second semester senior business majors or continuing education students with BA/BS in hand. Offered spring semester. 3 credits

BA-488 PORTFOLIO THEORY
Topics include: The economic origin of finance; modern portfolio theory, the Capital Asset Pricing Model; Arbitrage Pricing Theory; the Efficient Market Hypothesis; the Behavioral critique and the psychology of investing; and active portfolio management. Prerequisite: BA-367. Offered spring semester. 3 credits

BA-491 OPERATIONAL EXCELLENCE IN HEALTHCARE SETTING
This course examines the following topics: challenges facing healthcare, concept of waste and quality in the healthcare environment, application of the Toyota Way to the healthcare

industry, and building the healthcare industry of the future. Prerequisite: Junior status. 3 credits

BA-493 SUPPLY CHAIN MANAGEMENT I
This course is designed to help the student acquire an understanding of the most current practices being implemented by businesses as they compete to bring to the market place their products and services in an ever more demanding global economy. Students will be introduced to new, and sometime unconventional, tools companies are currently using in an effort to delete inefficiencies from their manufacturing, expenditure and revenue cycles by improving supply chain relationships. Prerequisite: Junior status. Offered fall semester. 3 credits

BA-494 QUANTITATIVE METHODS, QUALITY AND PROBLEM SOLVING IN OPERATIONAL EXCELLENCE
This course focuses on quantitative methods utilized in operational excellence. Students review measures of quality and the implementation of quality improvement techniques. Concepts of process control, variability and flow are explored within a practical framework of applied problem-solving techniques. Techniques include control charts and capability indices; six sigma and the DMAIC model; and analysis of overall system performance by applying the Theory of Constraints and Little's Law queuing theory. Concepts are applied to examples in both manufacturing as well as service. Process variability and interdependence are also modeled and explored within a discrete event simulation software environment. Prerequisite: Statistics I or permission of instructor. 3 credits

BA-495 BUSINESS POLICY AND STRATEGY
This is the capstone course for all business majors and as such covers aspects of the McKenna school curriculum. The class covers the field of strategic management. This course utilizes a multiperformance approach. Each student participates in a simulation where teams operate and control every aspect of a corporation. Each corporation then competes in this virtual reality, utilizing every business course they have taken in various decisions that are required. Students are not only expected to understand the role various levels of management play in strategic planning and control, but a required to demonstrate the abilities throughout the simulation. The course also utilizes case studies to give real-life examples of strategic situations. Students must be able to conduct an internal and external analysis (SWOT, 5 Forces, etc.) of the company, which includes an analysis of cultural and political issues. Students must be adept at creating and presenting business cases. Prerequisite: Senior status. Every semester. 3 credits

BA-496 GREEN BELT CONSULTING PROJECT IN OPERATIONAL EXCELLENCE
Upon successful completion of the Lean Six Sigma Book of Knowledge class, this course places class emphasis on applying tools to simulations and diverse real-life applications. As process improvement and the leaning of costs are fundamentally important in today's highly competitive environment, the mastery of these tools and concepts could give you a significant competitive advantage in the marketplace. Students will be assigned real world problems with organizations and companies both within the college and local companies. They will work alongside the companies' employees in deploying their operational Excellence (OE) knowledge to solve challenging problems such as improving supplier quality, improving call center throughput, and maintaining flow through a tool crib. With the knowledge gained during this course, and the use of tools associated with the major principles of lean and six-sigma, the successful student will be prepared to sit for the administration of the Green Belt Certification Exam. While this certification is not a part of the graded coursework, students are encouraged to apply the classroom and experiential learning to this exam at the end of the course. Passing this exam will give you a valuable credential as you enter the workforce.

BA-498 TOOLS, TECH. & METHODS FOR OE
This course provides the necessary tools, techniques and methods to begin transforming an organization towards operational excellence. The body of knowledge covered by this course is centered on the application of the 4P model of the Toyota Production System, which includes Philosophy, Process, People and Partners and Problem Solving. As you become proficient in tools and gain a deeper understanding of the 4P model, you will be prepared to play a critical role in an organization's journey towards operational excellence. Required text: The Toyota Way Field book: A Practical Guide for Implementing Toyota's 4Ps. Prerequisite: BA-386. Offered as needed. 3 credits

BA-499 SUPPLY CHAIN MANAGEMENT II
Advanced Supply Chain systems and concepts are further explored. In this course, you will gain an extensive understanding of integrated systems and how they are used in optimizing supply chain performance. The student's learning is focused through a live interactive experience with a fully configured and operational SAP ECC system. Within this integrated, team-based, competitive business simulation, the student will be challenged to optimize their supply chain by realizing the impacts of OE concepts such as consistent forecasting and planning; procurement and product design strategies; manufacturing decisions (production scheduling, set-up reductions, lot size reductions); and funding decisions on capital, advertising, and lean investments. Additional topics will cover the application of linear optimization techniques in supply chain settings such as aggregate planning and logistics, and components of global logistics and e-commerce. This course experience will also challenge the student in understanding the nature of integrated organizations and the critical aspects of developing organizational roles, responsibilities, and coordination within an operationally excellent supply chain. Offered as needed. 3 credits

BA-500 INDEPENDENT STUDY--BUSINESS ADMINISTRATION
May be repeated. Offered every semester. Variable credit.

BA-501 SPORTS APPRENTICESHIP
This experience will provide students with hands-on opportunities in Sports Management. Through coordination with Saint Vincent's Athletics Department, students will gain exposure to leading sports management related projects and gameday operations. Students should meet with representatives of the Athletic Department the semester prior to registration in order to be approved and briefed for a project/role. Offered Fall and Spring. 3 credits.

BA-525 GLOBAL EXPERIENCE
Spend your spring break in a city abroad. The curriculum varies according to the city visited but focuses on the various business and cultural themes. Offered spring semester. 2 credits

BA-550 BUSINESS INTERNSHIP
This course pertains to Business Administration Internships where work experience is utilized to extend the students learning experience. Students are employed in an area related to their academic endeavor. The purpose of the program is to integrate academic studies and employment activities. Offered every semester. McKenna School students have an upward limit of six credits for internships. Pass/fail only. Variable credit up to 3 credits

BL-103 WORLD SERIES OF BIRDS
The World Series of Birding is a competition held by the Audubon Society in New Jersey during mid-May of each year. Teams from around the world compete to find the most bird species in a single 24-hour period. In preparation for the event, students will be introduced to the identifying characteristics of about 12 species per weekly meeting, with the expectation that they learn 150+ species by the end of the semester. Attendance on one 15-hour Saturday field trip is required, plus the actual competition held at the end of the semester. The team will arrive in Cape May, New Jersey, two days before the competition in order to refine skills and scout locations. The extended weekend trip close to graduation makes it difficult for seniors to participate. This is a Service-Learning course in which our team works with others to collect scientifically valuable data on bird migration and distributions. Students enrolling in this course need not have prior birding experience, but enthusiasm is essential. Offered spring semester. This course is repeatable. Variable 0-1 credit.

BL-105 BILLIONS OF BIRDS LOST
North America lost 2.9 billion birds between 1970 and 2018, or about a third of its total bird population. Similar losses have been found worldwide in almost every avian taxonomic group. However, two kinds of birds (raptors and waterfowl) have not shown these losses because humans have protected these birds more than the others. This gives us hope for the rest if we can duplicate these successes. But do we have the will to make changes to protect birds (and other living things)? This course will provide an overview of the great diversity of birds, plus the causes for their crashing populations and the actions needed to protect what birds remain. In addition, we will examine the ethical, religious, public health, economic, and ecological reasons for pursuing conservation. Students will come away with the tools and knowledge necessary to resolutely say "yes, we can protect birds" and in so doing, help the human race. 3 credits

BL-130 INVESTIGATING BIOLOGY I
This once a week, two-semester consecutive course will cover basic Biology concepts along with academic skills and career exploration. Students should enroll in both semesters if still a Biology major. BL-130 offered every fall and BL-131 offered every spring. For freshmen only who are not in General Biology I or II. Permission of Chair needed. No prerequisites. 1 credit

BL-131 INVESTIGATING BIOLOGY 2
This once a week, two-semester consecutive course will cover basic Biology concepts along with academic skills and career exploration. Students should enroll in both semesters if still a Biology major. BL-130 offered every fall and BL-131 offered every spring. For freshmen only who are not in General Biology 1 or 2. Permission of Chair needed. No prerequisites. 1 credit

BL-140 INTRO TO EXERCISE SCIENCE LECTURE
This is an entry-level course designed for students interested in a career in athletic training, exercise science, sports medicine, physical therapy, or any other exercise/sport related health field. The course will introduce the students to various aspects of Sports Medicine and Exercise Science. This includes, but is not limited to, careers in sports medicine, injury and illness evaluation, treatment and rehabilitation techniques, legal considerations, emergency preparedness, etc. This course will also utilize both lecture and practical techniques to introduce research and evidence-based practice as it pertains to various topics in sports medicine and exercise science. 3 credits

BL-142 STRENGTH & CONDITIONING ASSESSMENT & PRESCRIPTION
In this course students will learn the scientific foundations required to design a subject-specific exercise program to improve the overall health and wellness of individuals. Knowledge gained from this course will assist in the development of exercise programs for individuals as well as groups. Students will be introduced to concepts that will prepare them for a personal training certification. 3 credits

BL-150 GENERAL BIOLOGY I
This year-long course with BL-152 is intended for science majors. The first semester addresses the biology of cells, animal physiology, development, and taxonomy. The second semester continues with plant biology, classical and molecular genetics, and ecology and evolution. At the conclusion of the course, Biology majors select cell and molecular biology, organismal biology or population biology as an area of concentration for subsequent work. A passing grade in BL-150 is required for BL-152. Fall semester and summer. 3 credits

BL-151 GENERAL BIOLOGY I LABORATORY
This course introduces scientific method, statistics, laboratory techniques, and the use of instruments as students perform experiments that reinforce and expand upon ideas presented in BL-150. Fall semester and summer. 1 credit

BL-152 GENERAL BIOLOGY II
This year-long course with BL-150 is intended for science majors. The first semester addresses the biology of cells, animal physiology, development, and taxonomy. The second semester continues with plant biology, classical and molecular genetics, and ecology and evolution. At the conclusion of the course, Biology majors select cell and molecular biology, organismal biology or population biology as an area of concentration for subsequent work. A passing grade in BL-150 is required for BL-152. Spring semester and summer. 3 credits

BL-153 GENERAL BIOLOGY II LABORATORY
This course introduces scientific method, statistics, laboratory techniques, and the use of instruments as students perform experiments that reinforce and expand upon ideas presented in BL 150 and 152. Spring semester and summer. 1 credit.

BL-208 CELL BIOLOGY
This course is an intensive examination of cell ultrastructure and function. Emphasis is placed on the role of specific organelles in cellular processes such as membrane structure, function, biogenesis and recycling; protein structure, assembly, modification and trafficking; energy transduction; intracellular transport; cellular locomotion; cell cycle control and programmed cell death; and cell to cell communication. Techniques employed in the study of cellular components and processes, including microscopy, are integrated into the course content as is the relationship of individual cells within the environment of an integrated multicellular organism. Prerequisites BL150-153. Fall semester. 3 credits

BL-209 CELL BIOLOGY LABORATORY
The laboratory is designed to familiarize students with the general methods used to study the physical nature of cells and their inherent biochemical processes. Experimental techniques performed range from the measurements of cell growth rates to the differential purification and biochemical analysis of subcellular components. The use of fluorescence microscopy to localize specific proteins in situ, using digital image capture and analysis will be profiled. Throughout the laboratory an emphasis will be placed on the use of digital technologies to facilitate quantitative analysis of biological processes. Prerequisites BL150-153. Fall semester. 1 credit

BL-212 MICROBIOLOGY
This course will introduce students to microbiology, the study of microorganisms with a focus on bacteria and viruses. The course will

include discussions and lectures on the history of microbiology, microbial growth and metabolism, and microbial genetics. The impact of microorganisms in the environment, interactions with other organisms, and microbial diseases, treatments and the human immune response will be studied. Prerequisites BL150- 153. Spring semester. 3 credits

BL-213 MICROBIOLOGY LAB
Students will learn how to properly handle, grow, and identify microorganisms. Students will study microorganisms in the environment including biofilms, the effect of antibiotics on bacteria, identification of food contaminants, and various factors that contribute to changes in microbial growth. The lab will focus on bacteria. Prerequisites BL150-153. Spring semester. 1 credit

BL-214 MOLECULAR GENETICS
This course focuses on the gene, both in the context of genome structure and organization, and the coordination of individual gene expression. Specific emphasis is placed on the interaction between DNA and protein in relation to the regulation of gene expression, DNA replication, and recombination; the critical role of chromatin structure in gene organization and expression; and the molecular events in transcription, translation, and mutation. Structure and function comparisons are made between prokaryotes and eukaryotes using the bacterium Escherichia coli, the simple eukaryote Saccharomyces cerevisiae (baker's yeast), and humans, as paradigm organisms. Special attention is given to the techniques employed in molecular genetic analysis, including recombinant DNA methodologies and the relationship between molecular genetics and the fields of bioinformatics and biotechnology. Prerequisites BL150-153. Fall semester. 3 credits

BL-215 MOLECULAR GENETICS LABORATORY
This course is a hands-on engagement of the foundational methodologies used to elucidate, manipulate and quantify gene anatomy and expression. The technologies employed for cloning vector design and construction, molecular cloning, gene transfer, nucleic acid isolation, hybridization analysis, DNA amplification, RT-PCR, DNA sequencing, and genetic sequence and database analyses are explored theoretically and in practical application. Prerequisites BL150-153. Fall semester. 1 credit

BL-216 BIOTECHNOLOGY
This course engages the rapidly developing field of biotechnology through careful dissection of the technologies and their applications. Topics including cell-based and cell-free food and beverage biotechnology, heterologous protein expression in prokaryotic and eukaryotic systems, the design and production of the transgenic plants and animals, stem cell technologies, reproductive and therapeutic cloning strategies, genome engineering, somatic and germline gene therapy approaches, vaccine development, DNA forensics, bioremediation, biofuels, and high throughput screening are examined in detail with consideration given to both their potential and realized industrial, medical and environmental applications. Emphasis is placed on the technical considerations unique to each technology, although safety and ethical considerations will also be addressed. Prerequisites BL 150-153. Spring semester, even-numbered years. 3 credits

BL-217 BIOTECHNOLOGY LABORATORY
This course provides students with significant hands-on experience performing techniques critical to the biotechnology industry. Laboratory exercises involve, food biotechnology, biosensor construction, forensic DNA analysis, recombinant protein production and purification in both prokaryotic and eukaryotic systems, plant and animal cell culture, and gene transfer to cultured plant and animal cells. Must be concurrently enrolled in BL-216 Biotechnology. Prerequisites BL150-153. Spring semester, even-numbered years. 1 credit

BL-220 COMPARATIVE VERTEBRATE ANATOMY
This course endeavors to provide a comprehensive comparison of vertebrate structure and function in the major body systems. Animals being discussed range from fish to reptiles, to mammals. Human comparisons are also included with each body system. This course is taken concurrently with Comparative Vertebrate Anatomy Laboratory. Prerequisites BL150-153. Fall semester. 3 credits

BL-221 COMPARATIVE VERTEBRATE ANATOMY LAB
The first part of this course is the comparative analysis of vertebrate skeletal structure. Animals under study include sharks, fish, amphibians, reptiles, birds, and mammals. The second part of the course involves an intensive study of mammalian gross anatomy through dissection of a cat. Body systems to be studied include the muscular, digestive, urogenital, reproductive, circulatory, and nervous systems. Prerequisites BL150-153. Fall semester. 1 credit

BL-222 DEVELOPMENTAL BIOLOGY
This course provides a comprehensive study of both invertebrate and vertebrate embryology with a particular focus on important model organisms. The course will also provide an overview of plant developmental mechanisms. Areas of study include gametogenesis, fertilization, early embryological events and organogenesis. This course will focus on both classical embryological and modern molecular and genetic techniques. In addition, the course incorporates a component that discusses the bioethical issues surrounding important areas in developmental biology such as cloning and stem cell research. Taken concurrently with Developmental Biology Laboratory. Prerequisites BL150-153. Spring semester, odd-numbered years. 3 credits

BL-223 DEVELOPMENTAL BIOLOGY LAB
This course provides students with hands-on experiences in both classical and molecular developmental biological techniques. The course consists of two distinct units. The first unit focuses on the preservation and developmental staging of invertebrate and vertebrate embryonic model organisms. The second part focuses on the theory and practice of using molecular techniques (RT-PCR, In-Situ Hybridization, etc.) to investigate gene expression patterning during normal and abnormal embryonic development. Must be concurrently enrolled in BL-222 Developmental Biology. Prerequisites: BL 150-153. Spring semester, odd-numbered years. 1 credit

BL-224 PHYSIOLOGY
Detailed study of organ system function with emphasis on humans. The systems studied include neuromuscular, cardiovascular, respiratory, renal, digestive and endocrine. Homeostasis, regulatory mechanisms and the functional relationships between systems are emphasized. Prerequisites BL150-153. Spring semester. 3 credits

BL-225 PHYSIOLOGY LAB
Hypothesis-driven laboratory experiments designed to explore organ system function in mammals, including humans. Students work extensively with computers to acquire, process and present data. **Prerequisites BL150-153. Spring semester. 1 credit**

BL-226 NEUROSCIENCE
This course provides an application of the fundamental concepts of neuroscience to brain areas, pathways and processes, simple and complex behaviors, as well as mental diseases and disorders. Emphasis is given to the structure and function of the human brain. The course combines lectures, discussions, case studies, and

independent projects to allow students to explore topics across the breadth of the field of neuroscience. These topics include neuroanatomy, neurophysiology, neuropharmacology, and behavioral and cognitive neuroscience. Prerequisites BL150-153. Spring semester, even-numbered years. 3 credits

BL-227 NEUROSCIENCE LABORATORY
This laboratory exposes students to a variety of techniques used by neuroscientists. These techniques include neuroanatomical and histological procedures, neurophysiological methods, neuropharmacological investigations, as well as commonly used approaches to explore brain-behavior relationships. Some laboratories incorporate computer simulations. Prerequisites BL150-153. Spring semester, even-numbered years. 1 credit

BL-228 WILDLIFE BIOLOGY
This course combines elements of animal natural history, physiology, and behavior to survey how animals cope with short-term and seasonal changes in their environment. In particular, we will discuss the challenges animals face in maintaining homeostasis during periods of reproduction, migration, hibernation and torpor, resource scarcity, and heightened competition or predation risk. We will examine strategies used by a variety of vertebrate and invertebrate species. Prerequisites BL150-153. Fall semester, even-numbered years. 3 credits

BL-229 WILDLIFE BIOLOGY LABORATORY
The objectives for lab and field activities in this course include instruction on animal capture techniques, and the study of animal resource use in relation to habitat and microclimate. Prerequisites BL 150-153. Fall semester, even-numbered years. 1 credit

BL-230 ORNITHOLOGY
For thousands of years people have marveled at the beauty, the diversity, and the abilities of birds, particularly their ability to fly. Feathers are unique to birds, and birds are also known for their migratory behavior, singing ability, and parental care. While this course will cover these topics in depth, we will also examine how the study of birds can generate new insights relating to issues affecting all animals, including the nature of intelligence, communication, evolution, and ecological interactions. Class periods will feature lectures, multimedia demonstrations, and discussion of scientific literature. There will be a significant number of field trips to observe, identify, and capture birds in their native habitats. Prerequisites BL150-153. Spring semester, even-numbered years. 3 credits

BL-232 ECOLOGY
This is a general course emphasizing physical-chemical-biological relationships. Evolutionary trends are considered. Topics include energy relations, biogeochemistry, population growth, and the structure and function of communities and ecosystems. Prerequisites BL150-153. Fall semester. 3 credits

BL-233 ECOLOGY LABORATORY
Lab and field experiences paralleling Ecology 232 are designed to teach specific techniques of research design, field sampling, and data analysis in terrestrial and freshwater ecosystems. Prerequisites BL150-153. Fall semester. 1 credit

BL-234 EVOLUTION AND SYSTEMATICS
The theory and evidence of the gradual evolution of organisms, and taxonomic relationships of animals and plants. Offered in odd-numbered years, spring semester. Prerequisites BL150-153. 3 credits

BL-235 EVOLUTION AND SYSTEMATICS LAB
Laboratory experiments, computer simulations, and field trips are designed to study concepts presented in BL-234. Offered in odd-numbered years, spring semester. Prerequisites BL150-153. 1 credit

BL-240 CONSERVATION BIOLOGY
The rate of global species extinctions today is comparable to that experienced in the Cretaceous when the dinosaurs fell from prominence. This course will examine the modern causes of extinction as well as the techniques in biology used to monitor and sometimes reverse declining populations of endangered animals and plants. Both a community- and species-centered approach to conservation are discussed. Other topics include mechanisms of evolution and population genetics, invasive species, habitat assessment, wildlife and fisheries management, and species conservation plans for both domestic and international populations. A significant portion of the course grade will be based on a comprehensive term paper and oral presentation. Prerequisites BL 150-153. Fall semester, even-numbered years. 3 credits

BL-241 CONSERVATION BIOLOGY LAB
The laboratory section will emphasize conservation techniques such as habitat assessment, animal and plant identification, animal capture, and field trips dedicated to learning about specific rare or endangered species and rare or endangered habitats. There will also be considerable time spent indoors doing computer modeling. Prerequisite BL-150-153.Fall semester, even-numbered years. 1 credit

BL-245 EXERCISE PHYSIOLOGY
This course represents an evaluation of how the body responds and adapts to both acute and chronic exercise stress at the subcellular through the organ and system level. Pre-requisites BL 150-153. 3 credits

BL-252 INVERTEBRATE ZOOLOGY
This course will cover the behavior, structure, physiology, classification and distribution of invertebrates. It will be divided into four main topics: terrestrial invertebrates, aquatic freshwater invertebrates, aquatic marine invertebrates and parasitic invertebrates. Spring semester, even-numbered year. Prerequisites: BL150-153. 3 credits

BL-253 INVERTEBRATE ZOOLOGY LABORATORY
Lab and field experiences paralleling Invertebrate Zoology. This class will teach specific techniques for dissection of preserved invertebrates, invertebrate identification, research and data collection with live and preserved invertebrates, and field sampling and preservation of terrestrial and aquatic invertebrates. Spring semester, even-numbered years. Prerequisites: BL-150-153. 1 credit

BL-255 PSYCHOPHARMACOLOGY
This course will focus on the concepts underlying the study of behavioral pharmacology, the behavioral tests that are used to evaluate the efficacy of psychoactive drugs, and how to properly interpret the results of those tests in a way that is consistent with sound scientific principles. Prerequisite: BL-150 or PY-331. 3 credits

BL-260 BIOSTATISTICS
This course deals with quantitative and statistical methodology in the biological sciences. It includes experimental design and the conventions of generating, analyzing, interpreting and presenting biological data. Prerequisites: BL 150-153. Offered in the spring semester. 3 credits

BL-290 HUMAN DISSECTION LAB EXPERIENCE
The course objective will be to teach human anatomy through interactive lab dissection taught by two local practicing orthopedic surgeons. Each interactive lab dissection will focus on a different

human anatomic body part or system - i.e., knee, foot and ankle, cardiac, pulmonary, neurological, digestive, and circulatory. In addition to learning human anatomy surgical technique will be taught as part of the lab instruction. In addition to exploring the interrelationships between anatomic structure and function, the instructors will correlate the dissections to help teach common pathological processes and disorders such as arthritis, cardiac disease, lung disease, gastrointestinal disorders. Prerequisites: BL-150-153 and BL-220-221. Recommended pre-or coreq BL-224-225. Offered spring semester. Fee. 1 credit. Pass/Fail.

BL-295 FUNDAMENTALS OF MICROBIOLOGY
Fundamentals of Microbiology is a one-semester course that explores disease-causing microorganisms (pathogens) with a focus on bacteria and viruses, how these pathogens are transmitted, and control mechanisms within and outside the human body. Students will also learn how to avoid the spread of infectious microorganisms in the hospital environment. This course is complemented by the Fundamentals of Microbiology Laboratory (BL-296). Nursing majors only. Prerequisites CH-125 and Ch-127. Fall semesters. 3 credits

BL-296 FUNDAMENTALS OF MICROBIOLOGY LAB
Fundamentals of Microbiology Laboratory is a one-semester course that explores disease-causing microorganisms (pathogens) with a focus on bacteria. Students will also learn how to avoid the spread of infectious microorganisms in the hospital environment. This 1-credit laboratory (3 hours) is complemented by the Fundamentals of Microbiology (BL-295) lecture course. Nursing majors only. Prerequisites CH-125 CH-127. Fall semesters. 1 credit

BL-297 PATHOPHYSIOLOGY I
Pathophysiology 1 is the first semester of a year-long pathophysiology course that explores pathogenic mechanisms on the molecular, cellular, organ, and systemic level. This will allow for a deeper understanding gained in Fundamentals of Microbiology and Human Anatomy and Physiology (both taken sophomore year). Real-life examples will lead to discussion and activities. This course continues with Pathophysiology II (BL-298). Nursing majors only. Prerequisites BL-150-151, BL-295-296, and INTS-222-225. Fall semesters. 2 credits

BL-298 PATHOPHYSIOLOGY ACROSS THE LIFESPAN II
Pathophysiology 2 is the second semester of a year-long pathophysiology course that explores pathogenic mechanisms on the molecular, cellular, organ, and systemic level. This will allow for a deeper understanding gained in Microbiology for Nurses and Anatomy and Physiology (both taken sophomore year). Real-life examples will lead to discussion and activities. This course is a continuation of Pathophysiology I (BL-297). Prerequisites BL150-151, BL-295-296, BL-297, and INTS-222-225. 2 credits

BL-299 PHARMACOLOGY
This course will cover the basic principles of pharmacology and drug therapy necessary for general nursing and medical practice. Concepts of drug effectiveness, mechanism of action, pharmacokinetics, adverse effects, therapeutic uses, and drug interaction will be examined. In most cases, the emphasis will be on the pharmacological action of drugs on specific organ systems. In most instances, drugs will be discussed in relation to their clinical use in the treatment of specific disease conditions. 3 credits"

BL-301 JUNIOR RESEARCH SEMINAR
Design and plan a research project. Write a research proposal. Offered spring semesters. 2 credits

BL-302 RESEARCH PROJECT
Perform the experimental phase of the research project. Prerequisite: BL-301. Offered fall semester. 2 credits

BL-303 RESEARCH THESIS
Write the senior research thesis. Prerequisite: BL-302. Offered spring semester. 1 credit

BL-310 TEACHING BIOLOGY
Primarily laboratory instruction which includes lecturing, laboratory preparations and assistance under the supervision of the faculty member in charge of the course. It is not substitute teaching and is intended to provide first-hand experience with the teaching process. Permission of instructor required. 1 credit

BL-333 SPECIAL STUDY
The student will pursue a faculty directed course of study. Permission of Chairperson required. Variable credit. May be repeated.

BL-350 BIOLOGY INDEPENDENT RESEARCH PROJECT
The student will pursue research distinct from the Senior Research Project. Does not fulfill major or minor credit requirements. Variable credit. May be repeated.

BL-550 BIOLOGY INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work. Students are employed in an area related to their academic endeavor. Academic credits are P/F and are awarded by individual departments according to the extent of the work experience. Students may or may not be paid depending on the site. The purpose of the program is to integrate academic studies and employment activities. Does not fulfill major or minor credit requirements. Variable credit. May be repeated.

BLS-200 LEADERSHIP & THE ETERNAL CITY
This course is designed to prepare BLS students for the Rome trip. It must be taken in the Fall prior to taking the trip. Students will work through a reading packet on the history of Rome focusing on leadership. Those students who already have 19 credits in their schedule may take this course for 0 credits. BLS students only.

BLS-250 HALLMARKS AND CAREERS
Those students who already do an internship course with another program can petition to count that course as the equivalent of BLS-550. If accepted, they will be asked to complete the essay assignment to fulfill the BLS internship and take BLS-250 as a 0-credit course. 0 credit

BLS-300 ROME CAPSTONE SEMINAR
This is the capstone course for the Benedictine Leadership Studies Program and is normally scheduled in the spring semester of the senior year. Exceptions are made for those in 3-2 programs (e.g., Engineering) and for those whose major program has spring break requirements in the senior year (e.g., Education and Psychology). These students take BLS-300 in the spring of their junior year. The core component of the course is a one-week international trip to Rome which will contain academic content relating to specific examples of leaders directly relating to the areas visited during the week and Benedictine heritage content. A member of the Saint Vincent College faculty will coordinate and teach the material covered in the course. Pre- and post-trip materials will also be included in the course and will be included in the final grade determination. 3 credits

BLS-301 BENEDICTINE MISSION TO SENEGAL
While monasticism has ancient roots in Africa, the Benedictine monasteries and convents that exist there today are considerably

younger than our own Saint Vincent Archabbey. Some of the oldest were only formed in the early 20th century, and most of them, like Keur Moussa Abbey in Senegal, are less than 60 years old. Keur Moussa was founded in 1961 by French monks and today is a growing community that demonstrates both the universal appeal of the Benedictine life of prayer and work, as well as the adaptability of The Rule to any culture. Thanks to their educational and medical apostolates, as well as the vibrancy of their liturgical life, the monks of Keur Moussa play an important role in their broader community. In this travel course, we will live, pray, and work with the monks, learning firsthand what it means to serve in the Benedictine mission to Senegal. 3 credits.

BLS-550 BLS INTERNSHIP
The Internship will usually be taken during the junior year and will consist of a minimum of 45 hours. In addition to meeting the standard requirements for an SVC internship as stipulated by the Career and Professional Development Center, BLS students will write an essay in which they analyze their experience in terms of the Hallmarks. Students who already have 19 credits in each of their junior year semesters will take BLS-550NC as 0 credit. 0 or 1 credit

CA-100 INTRO TO COMM & MEDIA STUDIES
This course introduces students to the communication discipline, the Department of Communication, and Saint Vincent College. Students will explore major theories that have shaped the field of communication, as well as learn about the history of the discipline. Throughout the course, students will be asked to examine their own communication and the communication of others, cultural contexts of communication, and apply theoretical lenses to better understand and critically examine communication. 3 credits

CA-110 INTRODUCTION TO ORGANIZATIONAL COMMUNICATION
This course introduces students to theoretical approaches to communication within organizations, whether workplace, communities of worship, school clubs, or athletic teams. Topics examined include how we communicate through leadership, conflict, decision making, ethnic and cultural diversity, and gender. Students examine historic styles and approaches to institutional organization and management from the industrial revolution through post-modernity. 3 credits

CA-120 PUBLIC SPEAKING
Students learn to research, organize, and deliver public presentations with extemporaneous speaking technique. Students present informative, persuasive, group-persuasive, and impromptu speeches within a classroom setting. Students receive written and oral constructive critiques of their speeches based on clear evaluation criteria from their teacher and actively analyze and critique the speeches of their peers. Students learn how to amplify their speech with the effective use of a variety of presentational aids. 3 credits

CA-140 INTRODUCTION TO INTERPERSONAL COMMUNICATION
This course introduces students to interpersonal communication theory and practice in a variety of relationships and settings. Topics include perception, identity, nonverbal communication, conflict, the "darker side" of interpersonal relationships, and family communication. The course will provide students with a more critical understanding of interpersonal communication within their lives, as well as the lives of others. 3 credits

CA-201 RESEARCH METHODS
This course is designed to introduce students to the investigative tools used by communication scholars and practitioners outside of academia. The class will focus on the concepts and methods by which communication research is designed, conducted, interpreted, and critically evaluated. Along with course readings and tests, students will work on several small-scale research projects and assignments. 3 credits

CA-218 INTERCULTURAL COMMUNICATION
An exploration of the theories and practices of communicating across difference, this course engages issues of what comprises culture, how to identify and navigate cultural norms, verbal and nonverbal variations in communication, and strategies for clear communication across language and cultural differences. Students will learn to identify their own cultural assumptions and will examine the role such assumptions play in communication. Special attention will be given to how to build connections across cultures through effective communication. 3 credits

CA-221 COMM, SPORT AND SOCIETY
This course provides a broad overview of the role of communication in sport, and the emerging area of sports communication in the larger discipline of communication. Throughout the semester, students will learn how individuals, organizations, and cultures communicate about sport, as well as how we learn about sport through communication across a variety of contexts ranging from interpersonal communication to media. Students are encouraged to critically examine the relationships between communication, sports, culture, and society. 3 credits

CA-222 BROADCAST JOURNALISM
The class will focus on writing and reporting well-balanced, comprehensive and visually compelling stories. Students will research, write, and report stories. Course objectives also include learning how to meet deadlines, learning to be a critical observer and listener, and learning how to consolidate and prioritize large volumes of information into meaningful, relevant, time-sensitive presentations. 3 credits

CA-230 WRITING FOR MEDIA
This course introduces students to a variety of media writing, the building blocks of media writing such as audience, planning, revising, editing, headlines, keywords and style. Assignments may include social media, web copy, advertising, interview, news scripts, and feature writing. Students read and discuss examples of media writing, workshop assignments and learn the basics of editing, proof reading and Associated Press Style. 3 credits

CA-236 SPORTS WRITING
This course examines the history and different contexts of sports writing, with particular focuses on narrative construction, coverage of sporting events, and analysis of teams and athletes. In addition to analyzing pieces of sports writing in their historical and sociocultural contexts, students will learn the skills to produce original pieces of sports writing in these different genres of coverage. 3 credits

CA-240 PUBLIC RELATIONS STRATEGIES
Students build on the intellectual awareness, professional attitudes and personal aspirations developed in 100-level communication courses and during internships. Case studies from business, non-profit and governmental PR campaigns are reviewed for an understanding of the decision-making process within these entities. Research, writing, and presentation of a PR campaign in community, media, and government settings will be discussed. A final PR media kit is prepared by students to add to their portfolio documentation. 3 credits

CA-250 ADVERTISING STRATEGIES
Continuing the discussion of the history of the ad industry, students

learn how to collect and analyze various demographics via primary and secondary research. Examine and critique existing ad campaigns for best practices, effectives and social Significance, based on strategy. Students will prepare portions of a mock integrated marketing campaign including client analysis, brand awareness, media choice, and creative suggestions. 3 credits

CA-271 SPECIAL TOPICS/COMM STUDIES
This course offers students the unique opportunity for more advanced study of different topics related to the field of media studies. Topics may include, but are not limited to, television criticism, film studies, media ecology, video gaming, and media literacy. Topics and prerequisites will vary by semester. 3 credits

CA-281 CHILDREN, TEENS, & MEDIA
At a very early age, children are inundated with mediated messages that shape their developmental trajectory, relationships with others, and perceptions of the world. As media usage among this age group steadily increases, it is essential that students understand the role of media in the lives of children. This course is designed to introduce students to a variety of issues that relate to children and the media, including the history of children's media, developmental and individual differences of users, cognitive and behavioral media effects (e.g., fear responses, educational learning, body image, aggression), media content developed for children, public policy, and social concerns (e.g., media education). Students will also utilize the archives within the Fred Rogers Institute for Early Learning and Children's Media to learn about the valuable work of Fred Rogers, a pioneer in children's educational media. 3 credits

CA-291 FACTS, PERSUASION, & ARGUMENT
What is the difference between persuasion and propaganda? How do you make arguments that move others to action? Is it true that appeal to facts are always better than emotion? Drawing from a wide range of argumentation and persuasion theories, this course examines the construction and use of arguments in a variety of communication contexts. We consider the content of arguments - facts, ideas, intuitions, emotions, experiences - and the contexts in which they do or do not serve as effective bases of reasoning or persuasion. Most importantly, you will learn about ethical questions, how to create connections with your audience, and how to use arguments to build greater human connection and lasting change. 3 credits

CA-302 COLLEGIATE ATHLETIC COMM.
This course will provide students with a practical overview of the management and operation of the administrative office of athletic communication. Chief among the topics to be covered would be the practices, regulations, & requirements set forth by the National Collegiate Athletic Association as they pertain to media coverage (industrial and social) and the production/dissemination of statistics spanning a variety of team and individual sports. 3 credits

CA-303 COMMUNICATION ETHICS
Words matter: how we communicate through what we say, how we say it, the medium used to communicate and the situation in which we find ourselves all have an impact. Through readings on topics such as political communication, workplace communication, intersectionality, religious communication, and healthcare communication, for example students explore discourse and dialogue as actions with ethical implication. 3 credits

CA-304 SOCIAL MEDIA STRATEGIES
Focused on the use of social media by professional communicators, this course centers around understanding consumer interactions with social media, which channels are available for communication and marketing initiatives, how to develop an outcomes-focused social media strategy and how to track effectiveness of social media campaigns. Students will also work through an online analytic simulation creating social media copy that drives sales, engagement, and targets specific demographic audiences. 3 credits

CA-307 MEDIA LITERACY
Media literacy has been defined as "the ability to access, analyze, evaluate, create, and act using all forms of communication." It can empower people to be critical and mindful media users, as well as engaged citizens. This course will introduce students to the broad field of media literacy, engage students in activities that promote mindful media use, and encourage students to embrace mindfulness as a practice and lens with which to better understand media literacy and media-related behaviors. 3 credits

CA-311 RACE, GENDER, CLASS, & MEDIA
This course explores the representations of race, gender, and class within media content, as well as audience interpretations of these portrayals. Students will be introduced to the sociological and communicative lenses that scholars employ to examine these representations, as well as the cultural influences that shape them. Additionally, students will be encouraged to consider the role of media literacy and activism in countering particular mediated representations and shaping our culture. 3 credits.

CA-321 SPORTS MEDIA CULTURE
This course examines the role of mass media, advertising, and public relations in sports communication. Students will learn about various media and the conventions and historical traditions that guide how media present sport to audiences. The course examines issues related to economics, media ethics, and the representation of different groups (e.g., racial/ethnic, gender) in sports media content. The role of public relations and advertising in sports, as industries that largely utilize media, will also be explored. 3 credits

CA-340 NONPROFIT COMMUNICATION
This course gives students the opportunity to explore public relations and communication in the non-profit arena. Reading materials cover the history of philanthropy in the United States, non-profit marketing, fundraising, understanding the nature of a 501(c)(3) and grant writing. Projects typically include working with a non-profit client to provide them with plans for a special event, a social media campaign, web content or media release and a grant proposal. When possible, guest speakers from non-profit, foundation and creative agencies are scheduled so that students can network and learn about careers in the non-profit realm. 3 credits

CA-344 SPORTS ANALYTICS; INTERPRETATION AND COMMUNICATION
This course examines sports analytics and their different contexts. We explore the utility of analytics both in general and in particular sports and contexts, discuss the principles behind analytics, and examine how different metrics offer different interpretations of sports phenomena. Best practices for using analytics to answer sports research questions and communicate analytical information are discussed and practiced throughout. 3 credits

CA-350 INDEPENDENT STUDY IN COMMUNICATION
Students engage in a research project of particular interest to the student. Advisor and faculty approval is necessary. Juniors and seniors only. Variable credit.

CA-351 MEDIA EFFECTS
This course is designed to introduce students to media effects theories and research. Throughout the semester we will engage in readings, activities, and assignments that focus on the application of media effect theories and concepts. The goals of this course are for

students to better understand the role of media in society, as well as the relationship between various media and their audience. 3 credits

CA-355 ADVANCED PUBLIC RELATIONS
Students reinforce concepts and skills from CA-240 by planning and executing a special event as well as the public relations campaign to promote it. Students will also be introduced to crisis communication, spokesperson training, campaign evaluation and other advanced public relations concepts. Students will create and distribute promotional materials, media releases, social media posts and possibly earn real media coverage for the event. 3 credits

CA-385 ADVANCED INTERPERSONAL COMM.
This course is designed to explore major theories and research in the area of interpersonal communication, with the expectation that students will finish the course with the skills and knowledge to be more critical, mindful, effective, and skilled communicators. Throughout the semester, students will be encouraged to think deeply about how individuals present themselves across a variety of contexts using communication, as well as the different ways that we interpret messages. The course will focus on a variety of different relational contexts of interpersonal communication, including romantic relationships and dating, family communication, friendships, and communication with coworkers. 3 credits

CA-401 COMMUNICATION PROJECTS
This course is designed for students who are interested in working on research projects that investigate some type of communication phenomena. Working in small groups under the guidance of the course instructor, students will choose a topic of choice, design a research project, and collect and analyze their data. Students might choose to use surveys, interviews, ethnography, focus groups, or content analysis to explore their topic. At the end of the semester, students will be encouraged to submit their project to the Undergraduate division of the Eastern Communication Association national conference and the SVC Undergraduate Research Conference. Prerequisite: CA-201. 3 credits

CA-415 CREATIVE CAMPAIGNS
Students utilize theory and concepts learned in previous courses to produce a complete Integrated Marketing Communication campaign. Students develop tools for performing primary and secondary research, as well as market, product, and company analyses. Students develop social media, media relations and advertising plans as well as assessment criteria for their campaigns. Seniors only or juniors with permission of instructor. 3 credits

CA-440 CRITICISM OF MEDIA AND SOCIET
This upper-level seminar for all communication majors serves to enhance students' critical, ethical, and communicative response to the maelstrom of media images and content that continuously confronts us throughout our daily lives. Students employ prominent contemporary rhetorical perspectives to evaluate a variety of mass media (including television, film, novels, advertising, Internet, etc.) through in-class presentations, discussions, written assignments, final examination, and a series of critical essays. These activities enrich students' abilities to understand the form, content, and context(s) of any communication, and subsequently, to become more effective and ethical communication professionals. CA juniors and seniors only. 3 credits

CA-451 SENIOR CAPSTONE
This course is the culmination of students' experiences and education in the communication and media studies major. Students will revisit theoretical foundations of the discipline and apply the skills they've cultivated throughout their coursework. The course prepares students as they leave SVC to pursue graduate coursework or their chosen profession. 3 credits

CA-550 COMMUNICATION INTERNSHIP
Students work in a supervised and evaluated internship enabling communication majors to enrich their academic experience with involvement in an appropriate career organization or facility. Variable credit.

CH-101 GENERAL CHEMISTRY I
A study of chemical principles including atomic structure; chemical bonding; types of chemical reactions; stoichiometry; solution chemistry; and chemistry of the elements. Offered fall semester. 3 credits

CH-102 GENERAL CHEMISTRY II
A study of chemical principles related to quantitative chemical analysis. Topics include the nature of liquids and solids; chemical kinetics; equilibrium; thermodynamics; acids and bases; precipitation reactions; electrochemistry; and nuclear reactions. Prerequisite: CH-101. 3 credits

CH-103 GENERAL CHEMISTRY I LABORATORY
Laboratory studies related to the principles in general chemistry with emphasis on quantitative measurements. Must be taken simultaneously with, or after successful completion of CH-101. Offered fall semester. 1 credit

CH-104 GENERAL CHEMISTRY II LABORATORY
Laboratory studies related to the principles covered in CH 102. Must be taken simultaneously with, or after successful completion of CH-102. 1 credit

CH-115 FUNDAMENTALS OF CHEMISTRY
This course is designed for students pursuing science majors at Saint Vincent who would like to develop proficiency in how to learn chemical concepts for general chemistry. Topics include chemical problem-solving, atomic structure, chemical structure, the mole concept, and an introduction to stoichiometry. Emphasis will be given to learning strategies required for success in chemistry. 2 credits

CH-125 INTRODUCTION TO GENERAL, ORGANIC AND BIOCHEMISTRY
A study of the basics of general, organic, and biochemistry at an introductory level, including atomic structure, bonding, acids and bases, and organic functional groups. The relationship between chemical principles and human health is emphasized throughout the course with particular attention given to the structure and metabolism of proteins, nucleic acids, lipids, and carbohydrates. Offered spring semester. 3 credits.

CH-127 INTRODUCTION TO GENERAL, ORGANIC AND BIOCHEMISTRY LABORATORY
A lab designed to accompany CH-125. Provides practical experience to support chemistry foundational learning. Emphasizes chemical measurements, atomic structure, formulas, and chemical reactions of organic functional groups related to biomolecules. Must be taken simultaneously with, or after successful completion of CH-125. Offered spring semester. 1 credit.

CH-216 QUANTITATIVE ANALYSIS
This course covers topics in analytical chemistry such as statistics, equilibria, electrochemistry, ion specific electrodes, absorption spectroscopy, and chromatography. Prerequisite: CH-102. Offered spring semester. 3 credits

CH-218 QUANTITATIVE ANALYSIS LABORATORY
This course contains laboratory experiments that are related to the principles covered in CH-216. Must be taken simultaneously with, or after successful completion of CH-216. Offered spring semester. 1 credit

CH-221 ORGANIC CHEMISTRY I
The basic principles of the chemistry of carbon compounds are developed with emphasis on nomenclature, physical properties, structure, reactions, mechanisms, and synthesis. Prerequisites: CH-102, 104. Offered every year. 3 credits

CH-222 ORGANIC CHEMISTRY II
The basic principles of the chemistry of carbon compounds are developed with emphasis on structure, reactions, mechanisms, and synthesis. Prerequisites: CH-221. Offered every year. 3 credits each semester

CH-223 ORGANIC CHEMISTRY I LABORATORY
This laboratory complements CH-221-222 by introducing the basic organic laboratory techniques of synthesis, isolation, and analysis, including chromatography and infrared and nuclear magnetic resonance spectroscopy. Emphasis is placed on developing microscale techniques. Students are encouraged to work more independently as the year progresses. Must be taken simultaneously with, or after successful completion of CH-221-222, respectively. Offered every year. 1 credit each semester

CH-224 ORGANIC CHEMISTRY II LABORATORY
This laboratory complements CH 221-222 by introducing the basic organic laboratory techniques of synthesis, isolation, and analysis, including chromatography and infrared and nuclear magnetic resonance spectroscopy. Emphasis is placed on developing microscale techniques. Students are encouraged to work more independently as the year progresses. Must be taken simultaneously with, or after successful completion of CH 221-222, respectively. Offered every year. 1 credit each semester

CH-228 INTRODUCTION TO BIOCHEMISTRY
This course is designed to provide an overview of modern biochemistry for chemistry majors and other students with minimal background in biology. The chemistry of amino acids, basic principles of protein structure, enzyme kinetics, lipids and membranes, intermediary metabolism, and nucleic acid chemistry is covered. No previous background in biology is necessary. This course is not intended for students pursuing a career in the health professions. Prerequisites: CH-221-224. Offered spring semester of odd-numbered years. 3 credits

CH-231 PHYSICAL CHEMISTRY I
A study of the laws and theories used by chemists to describe, interpret and predict physical properties and chemical changes. Topics include quantum mechanics and spectroscopy. Prerequisites: CH-222-224 with a grade of C- or better; PH-111-114; MA-111-112. Offered every year. 3 credits

CH-232 PHYSICAL CHEMISTRY II
A study of the laws and theories used by chemists to describe, interpret and predict physical properties and chemical changes. Topics discussed include statistical and macroscopic thermodynamics and kinetics. Prerequisite: CH-231. Offered every year. 3 credits

CH-233 PHYSICAL CHEMISTRY I LABORATORY
In this laboratory, students conduct experiments that are based on physical chemical phenomena covered in CH-231. Thorough data analysis and report writing are also emphasized in this course. Must be taken simultaneously with, or after successful completion of CH-231. Offered fall semester. 1 credit

CH-241 INORGANIC CHEMISTRY
An in-depth study of special topics in inorganic chemistry including molecular orbital theory, chemical bonding, point group symmetry, acid-base theories, and coordination and organometallic chemistry. Prerequisite: CH-222. Offered fall semester of odd-numbered years. 3 credits

CH-242 INSTRUMENTAL ANALYSIS
The emphasis in this course is on applications of instrumental analysis to all aspects of chemistry. Students will gain knowledge of the theory and usage of a variety of modern instrumental methods including spectrophotometry, spectroscopy, chromatography, and electroanalytical techniques. They will also gain experience in applying their knowledge in solving analytical problems. Prerequisites: CH-216 or CH-253. Offered spring semester. 3 credits

CH-245 CHEMICAL & FORENSIC ANALYSIS
The chemistry course is an integrated lecture laboratory with one credit lecture and one credit laboratory. The emphasis will be on instrumental chemical analysis and will focus on developing skills used in forensic analysis such as quality control, gas chromatography-mass spectroscopy and infrared spectroscopy. Students will have an opportunity to develop both instrument operational and maintenance skills. Prerequisite: CH-222-224. Offered Fall odd years. 2 credits

CH-251 PROTEINS AND METABOLISM
This course is concerned with how macromolecular structures self-assemble, chemical mechanisms of reactions that occur in living systems, and the molecular basis of cellular regulation. Protein structure/ function and metabolism are the central themes of this course. The specific objectives are to familiarize the student with the structure and function of amino acids/peptides/proteins, enzyme catalysis, and regulation, carbohydrate structure and function, and an overview of metabolism, synthetic/degradative pathways and their regulation. Prerequisites: CH-221-224; one year of general biology is strongly recommended. Offered fall semester. 3 credits

CH-252 NUCLEIC ACIDS AND MEMBRANES
This course focuses on two major themes, the structure and function of membranes and the biochemistry of nucleic acids. The topics covered will include: structures of lipids and membranes, membrane proteins, signal transduction, structure of DNA and RNA, DNA replication and repair, RNA synthesis, protein synthesis, and the biochemical basis for control of gene expression. Emphasis throughout the course will be on the molecular mechanisms and protein components involved in various structures and processes. Prerequisites: CH-221-224; one year of general biology strongly recommended. Offered spring semester. 3 credits

CH-253 PROTEINS AND METABOLISM LAB.
This laboratory course is intended to expose the student to laboratory aspects of modern protein chemistry and expand on some material covered in CH-251. Students will carry out experiments illustrating physical properties of proteins, protein purification (including various forms of chromatography and electrophoresis), and enzyme kinetics/inhibition. Must be taken simultaneously with, or after successful completion of CH-251. Offered fall semester. 1 credit

CH-254 NUCLEIC ACIDS & MEMBRANES LABORATORY
This laboratory course introduces students to experimental techniques used in the study of membranes and nucleic acids. Methods will include membrane structure and dynamics, ligand binding to DNA, DNA electrophoresis, and characterization of

nucleic acid/protein complexes. Must be taken simultaneously with, or after completion of CH-252. Offered spring semester. 1 credit

CH-276 ADVANCED ENVIRONMENTAL CHEMISTRY
This course will incorporate the study of the chemistry of air, water and soil in terms of both the natural and polluted environments. The topics covered will include: stratospheric ozone, chemistry of the troposphere, toxic organic chemicals, natural water chemistry, water treatment processes, and heavy metal contamination in soils. Prerequisite: CH-216. Offered fall semester of even-numbered years. 3 credits

CH-277 METHODS OF ENVIRONMENTAL ANALYSIS
A laboratory course emphasizing the sampling, preparation, and analysis of water and air samples. The course is primarily laboratory based in which teams of students work on a set of environmental projects. Students are responsible for the planning, preparation, sampling, analysis, and reporting for each project. Each project will emphasize a different type of environmental matrix and different types of chemical analysis. Sample analysis will include use of atomic absorption spectrophotometry, chromatography, inductively coupled plasma spectrophotometry, turbidity, and conductivity. Prerequisite: CH-216. Offered fall semester of even-numbered years. 1 credit

CH-282 ADVANCED PHYSICAL METHODS
This course is an integrated laboratory that introduces advanced students to the physical and instrumental methods used by chemists. Students in this course will learn about (1) the integrated nature of chemical research, (2) a variety of advanced laboratory techniques, and (3) the methods of experimental design and report presentation. The laboratory experiments focus on spectroscopy, chromatography and other advanced physical and analytical techniques. Taken simultaneously with, or after CH-232 and CH-242. Offered every spring semester. 2 credits

CH-283 ADVANCED CHEMICAL METHODS
This course is an integrated laboratory that introduces advanced students to a variety of contemporary topics in experimental chemistry. Students in this course will learn about (1) the integrated nature of chemical research, (2) a variety of advanced laboratory techniques, and (3) the methods of experimental design and report presentation. The laboratory experiments focus on advanced organic chemistry, inorganic chemistry, polymers, and materials science. Offered every fall semester. 2 credits

CH-285 TEACHING CHEMISTRY
This course is designed to meet several requirements for chemistry certification. It is also designed to give students practical experience in preparing and teaching chemistry laboratories. In this course students will work with a chemistry laboratory instructor as a lab assistant. They will develop skills in laboratory preparation, management, and developing experiments. In addition, students will develop projects on the history of chemistry, household chemical safety, and laboratory safety. Offered fall semester. Prerequisite or co-requisite: ED-304. 2 credits

CH-300 RESEARCH SEMINAR I
This course will introduce the student to the research experience and will include an orientation to the library and use of reference materials. Students will be assigned articles to read and discuss. An introduction to writing and presenting a research proposal will be included. Students will be introduced to the procedure for maintaining a laboratory research notebook. Students must be available to attend CH 302 when outside speakers present seminars on selected topics in that course. Prerequisite: CH-231/233 or CH-251/253 with a grade of C- or better. Offered spring semester. 1 credit

CH-301 RESEARCH LABORATORY
Independent study or investigation involving intensive work with faculty guidance in the laboratory and library. This course includes an assessment of cumulative laboratory skills. Prerequisite: CH-300. Offered fall semester. 2 credits

CH-302 RESEARCH SEMINAR II
Presentation of research work completed during the previous semester; the oral presentation is made after the thesis report has been written. Outside speakers may present seminars on selected topics. Prerequisite: CH-301. Offered spring semester. 1 credit

CH-321 SPECIAL TOPICS
The purpose of this course is to introduce students to topics of contemporary interest in chemistry. Topics discussed are drawn from the following areas: organic and inorganic kinetics, stereochemistry, molecular orbital theory, spectroscopy, electrochemistry, solid state chemistry, polymer science, surface chemistry, and photochemistry. Prerequisites: CH-221-224. Offered spring semester of even-numbered years. 3 credits

CH-323 COMPUTATIONAL CHEMISTRY
This course focuses on computational and simulation methods used in chemistry and materials science applications. Topics include ab initio calculations, density functional theory, molecular dynamics simulation, Monte Carlo methods, and multi-scale methods. Students will perform computational assignments and conduct a computational project. 2 credits

CH-325 METHODS IN CRIMINALISTICS
Criminalistics is the collection and examination of evidence of crime and is an application of many scientific disciplines. This laboratory provides an introduction to the methodologies and applications used in a forensic laboratory. Topics discussed include organic and inorganic chemical analyses of physical evidence, principles of serology and DNA analysis, identification of fresh and decomposed human remains, ballistics, fingerprint analysis, facial reconstruction, drug analysis, and forensic entomology. 2 credits

CH-350 INDEPENDENT STUDY--CHEMISTRY
Studies to be chosen and developed by the student with the guidance of the professor directing the study. May be repeated. Variable credit.

CH-550 CHEMISTRY INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work, through internships, field work and cooperative programs. Students may or may not be paid depending on the site. May be repeated. Variable credit.

CHI-101 ELEMENTARY CHINESE I
For beginners in the language. The two courses form a sequence and are normally completed as a unit. No prerequisite for CHI-101. Satisfactory completion of CHI-101 is a prerequisite for CHI-102. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to Chinese culture. Pinyin (the most-widely used Chinese phonetic system) will be taught as a tool to learn the spoken language. Students will also learn Chinese characters in order to be able to communicate effectively in real Chinese situations. Approximately 200 words and expressions in both Pinyin and character forms will be taught. CHI-101 offered fall semester. 3 credits

CHI-102 ELEMENTARY CHINESE II
For beginners in the language. The two courses form a sequence and are normally completed as a unit. Satisfactory completion of CHI-101 is a prerequisite for CHI-102. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to Chinese culture. Pinyin (the most-widely used Chinese phonetic system) will be taught as a tool to learn the spoken language. Students will also learn Chinese characters in order to be able to communicate effectively in real Chinese situations. Approximately 400 words and expressions in both Pinyin and character forms will be taught. CHI-102 offered spring semester. 3 credits

CHI-103 INTRO TO CHINESE ARTS
This course introduces three vibrant Chinese art forms: folk music, calligraphy, and tea culture. For each art form, this course provides an overview, guides the class to appreciate the art as a live and impactful form, and offers hands-on activities for the class to engage with the art form. Students also have the opportunity to display the outcomes of their learning through presentations, exhibitions, and performances. Whenever possible, these displays of learning outcomes are public-facing and service-oriented, such as singing, calligraphy demonstrations, and tea tasting at community organizations on campus or in the vicinity of Latrobe. This is a course approved for Writing Designation. Students are expected to communicate and reflect upon their interaction with these art forms through reflective writing. Chinese language skills are not required for this course. 3 credits

CHI-203 INTERMEDIATE CHINESE I
This course is designed for students with prior experience on listening, speaking, reading and writing Chinese at the elementary level. While students will be trained in all four skills, more emphasis will be given to reading and writing Chinese characters, expanding vocabulary, understanding Chinese culture. To facilitate the study of the language, different aspects of Chinese culture and society will be introduced through group activities, multimedia programs, and research project throughout the course. Offered fall semester. 3 credits

CHI-204 INTERMEDIATE CHINESE II
This course offers Chinese for daily communication through intensive study and practice in written and spoken Chinese. Students will carry on conversations and participate in classroom discussions in Mandarin Chinese on various topics associated with daily life and learn to write short passages in Chinese characters. This course also explores definitions of culture and analyzes the dynamic role of language in culture and culture in language, with an aim to foster cross cultural awareness and self-realization while developing proficiency in Chinese. Offered spring semester. 3 credits

CHI-305 ADVANCED CHINESE CONVERSATION I
This course aims to improve the ability to speak and understand Chinese, emphasizing correct pronunciation and intonation. Active participation from the students is required. Students will have the opportunity to converse on a variety of topics. Prerequisite: CHI-204. 3 credits

CHI-306 READING CHINESE
This course provides an introduction to reading Chinese. Reading materials include newspaper articles, poetry and short stories. Students are required to complete written assignments and discuss the readings. Cultural awareness, reading, writing and speaking skills will be enhanced. 3 credits

CHI-307 ADV CHINESE CONVERSATION II
This course continues to develop students' conversational abilities through daily use of the target language. Students will engage in real-life situational role plays and engage in discussions of and make formal oral presentations of cultural and literary readings. This course promotes cultural awareness and communicative proficiency. 3 credits

CHI-308 ADVANCED CHINESE GRAMMAR I
The course is designed to further build on students' Chinese grammatical foundation and facilitate their language use with proper syntax in both their verbal and written communication. Contextualized materials will be used to further develop speaking, listening, reading and writing skills in order to gain mastery over Chinese grammar. 3 credits

CHI-309 ADVANCED CHINESE GRAMMAR II
The course will continue to further strengthen students' Chinese grammatical foundation and facilitate their language use with advanced syntax in both their verbal and written communication. Individual presentations and collaborative work will be implemented to further enhance students' communicative skills. 3 credits

CHI-310 CHINESE LIT. IN TRANSLATION
This course introduces students to the classical literature and culture of the Tang, Song, Yuan, Ming and Qing Dynasties. Readings will include poetry, prose, dramas and novels. All readings, papers and class discussions are in English. 3 credits

CHI-311 SELECTED READINGS IN CHINESE
This course explores the major literary works of modern Chinese literature and the significant historical events during this period. Students will gain insights to Chinese culture through a variety of readings. The short story is emphasized along with selected poems and plays of the twentieth century. All readings, papers and class discussions are in English. 3 credits

CHI-313 BUSINESS CHINESE I
Students in this class will acquire business vocabulary for a variety of business scenarios. Students will read Chinese texts with a business focus and engage in role-plays representing a variety of business scenarios. Through this class, students will develop their linguistic and cultural fluency when conducting business activities with speakers of Chinese. Prerequisites: Placement Exam or the equivalent of CHI-204 Intermediate Chinese II. 3 credits.

CHI-320 TOPICS IN CHINESE LANGUAGE, CIVILIZATION OR LITERATURE
The contents of this course will vary from an emphasis on difficult aspects of Chinese language and conversation practice, to reading a variety of genres which include essays, poems, short stories and plays. Historical and political developments will be discussed. Students will enhance their understanding and appreciation of cultural beliefs, attitudes and practices. 3 credits

CHI-321 INTRODUCTION TO CHINESE MOUNTAIN
Culture In this course, students will discuss several important mountains, each with particular political and religious significance. Students will gain a better understanding of Chinese values and ways of thinking as they explore the significant role that mountains hold in Chinese culture. This course is designed for students at the advanced level with a basic vocabulary of 400 or more Chinese characters. 3 credits

CHI-350 INDEPENDENT STUDY -- CHINESE
May be repeated. Variable credit.

CIST-100 INTRODUCTION TO INFORMATION TECHNOLOGY
A computer course designed to introduce students to personal computers. Topics include basic concepts of computer operations, storage media, software categories, Windows operating system, computer communication devices, and Internet. The course also includes introduction to Microsoft Word, Excel, Access, and PowerPoint. Honors Option Available Introduction to Information Technology honors introduces concepts related to global computing concepts together with Microsoft Office to develop documents, spreadsheets, databases and presentations. Through a series of projects students will learn how to develop integrated applications correlated to other honors courses. 3 credits

CL-129 YOUNG ADULT LITERATURE
This literature course provides the opportunity for students to review recent trends in young adult literature. Class members read and discuss a selection of at least ten contemporary young adult novels in addition to secondary sources. Course requirements include short essays, reading quizzes, exams, and class participation. This course is required of all students seeking secondary teaching certification in English. Will only fulfill English core for Education majors. 3 credits

CL-130 CHILDREN'S LITERATURE
This literature course invites students to explore the evolution of children's Students will read and discuss a selection of at least 12 different authors of literature for children. Assigned readings include the picture book, realistic fiction, nonfiction, historical fiction, science fiction, fantasy, and secondary sources. The goal of the course is to enable students to make substantive, independent evaluations of the texts at hand and other texts they encounter. Course requirements include short essays, reading quizzes, two exams, and class discussion. Will only fulfill English core for Education majors. 3 credits

CL-175 NONFICTION AND INFORMATIONAL BOOKS FOR CHILDREN
This course will examine informational text as it refers to printed, visual, auditory, digital, and multimedia texts that complement each standards-based unit, align to curricular goals, and represent an appropriate level of challenge for students. In addition, the course will support students' literacy development across disciplinary contexts. Special emphasis will be placed on analyzing the process of extracting and constructing meaning from informational text in the content areas. Course discussions and assignments will also apply theories of language and literacy development, ways of consuming as well as disseminating evidence-based practices, and how different models for reading and pedagogical approaches can inform complex text instruction in the content areas for diverse learners. Graduate GCRS-613. 3 credits

CL-201 FOUNDATIONS OF LITERACY
The Foundations of Literacy course provides a scientifically based foundation in the cognitive, socio-cultural, linguistic, and motivational influences on literacy and language development. The course presents the key scientifically based reading research foundations needed to understand how reading develops, and effective methods and strategies used to teach literacy skills to young children through young adults. Topics include understanding reading research, cognitive psychology's contributions to understanding the reading process, language development, the sequence of learning to read, the essential components of reading instruction, and an introduction to the most effective approaches to teaching reading across the grade bands. Graduate GCRS-603. 3 credits

CL-206 TECHNIQUES AND CLASSROOM APPLICATIONS OF CHILDREN'S LITERATURE
The course focuses on applying literature instruction to reach all readers. The essential components of effective use of literature, scientifically based reading strategies, interventions for students with learning or language needs, and appropriate literacy assessments are addressed. The course will cover a variety of activities and materials to address reading level within a classroom. Participants will develop strategies that are based on the results of academic performance and provide differentiated instruction for all learners including students with disabilities and language learners. There will be required purchases of materials and supplies for developing instruction as well as introductory clinical field assignments. Graduate GCRS-633. 3 credits

CL-221 HISTORICAL LITERATURE FOR CHILDREN
The course will focus on three interrelated themes through the study of more than twelve pieces of historical literature for children and young adults, including the historical context in which childhood takes place and is defined; the diversity of childhood with respect to economic class, gender, race, ethnicity, geographical residence, and religious belief; and the shifting power relationships between parents and children. At the completion of the class, students should be able to explain and exemplify the inherent complexities of presenting historical fiction and non-fiction to children and adolescents, discuss thoughtfully and intelligently issues raised with reading historical fiction and nonfiction for children and adolescents, write with authority and thoughtful depth concerning works of historical fiction and nonfiction for children and adolescents and evaluate works of historical fiction and nonfiction for children and adolescents. Will only fulfill English core for Education majors. 3 credits

CL-259 CRITICAL APPROACHES TO CHILDREN'S LITERATURE
Critical studies of children's literature draw not only on literary theory but also on an interdisciplinary approach to age-specific fiction. This literature course helps students interrogate children's and young adult literature and the roles it has played in national and familial identity, social reform, aesthetic movements, and other topics. In this discussion-orientated class, readings include approximately five novels and critical essays, assignments include weekly papers, one substantial critical paper, and class participation. Prerequisite: EL-102. Will only fulfill English core for Education majors. 3 credits

CL-260 FOLKLORE IN IRISH CHILDHOOD
From its earliest days, Ireland has enjoyed a rich and complex mythic tradition that serves as an energizing source for literature, folk and fairy lore, and even music that contributes to the worldview and identities of young people. In this experiential learning course, students travel to Ireland to conduct folklore collection using techniques of ethnography to investigate the ways that four cycles of Irish folklore shape the experiences of Irish children and those of Irish descent. Students examine such topics as Ireland's sacred geography, deities, fairies, heroes, folk ritual, and traditional songs, as well as the methods of folklore collection. 3 credits

CL-272 SPECIAL TOPICS IN CHILDREN'S LITERATURE
This literature course offers students unique opportunities for more intensive study of children's literature. Topics vary from semester to semester, and students should consult the registration system for specific descriptions of courses offered. Prerequisites EL-102 and CL-130 or EL-130, or CL-129 or EL-129. Will only fulfill English core for Education majors. 3 credits

CL-295 WRITING FOR CHILDREN AND YOUNG ADULTS
This course will introduce undergraduates to the art of writing for

young people. It may focus on a single genre in depth (for instance, the young adult novel) or invite students to read and write broadly across a range of genres (picture books, children's poetry, nonfiction for the young, etc.). Prerequisites CL-130 or EL-130 or CL-129 or EL-129. Will only fulfill English core for Education majors. 3 credits

CL-312 NONFICTION AND INFORMATIONAL BOOKS FOR CHILDREN
This course will examine informational text as it refers to printed, visual, auditory, digital, and multimedia texts that complement each standards-based unit, align to curricular goals, and represent an appropriate level of challenge for students. In addition, the course will support students' literacy development across disciplinary contexts. Special emphasis will be placed on analyzing the process of extracting and constructing meaning from informational text in the content areas. Course discussions and assignments will also apply theories of language and literacy development, ways of consuming as well as disseminating evidence-based practices, and how different models for reading and pedagogical approaches can inform complex text instruction in the content areas for diverse learners. Graduate GCRS-613. 3 Credits

CL-350 CHILD. LIT. INDEPENDENT STUDY
An independent study may be possible by arrangement with an individual faculty member. Course may be repeated with a different topic. Variable credit.

CL-380 DIAGNOSIS FOR READING DIFFICULTIES
This course provides an overview of assessments and materials that may be used by the reading specialist to observe and document PreK-12 pupils' reading performance, relate pupils' performance to appropriate reading instruction and evaluate their progress. Additionally, students will utilize assessment instruments to observe and identify the nature of children's difficulties and strengths and effectively diagnose the literacy instructional needs of diverse learners, PreK-12. Finally, students will be taught how to communicate test results properly and accurately to parents and stakeholders. Graduate GCRS-623. 3 credits.

CL-405 READING SPECIALIST PRACTICUM
This course addresses strategies for using literacy assessment data to design, implement, and evaluate reading instruction for readers with diverse literacy needs. Projects in this course are shared with other field courses in progress. Minimum of 60 hours of focused on addressing the literacy instruction needs of struggling readers and writers in PreK-12 clinical and/or classroom settings is required. Graduate GCRS-643. 3 credits.

CLS-099 FRAMING THE DEATH PENALTY ISSUE
The debate over society's use of the death penalty has existed as long as society has been around. As more states and countries decide to discontinue or modify the practice, some thoughtful reflection is needed on the true issues underlying the debate. The course will help frame those issues to facilitate more in-depth discussion in future endeavors. Lecture presentations using PowerPoint will be posted as well as a reading list. Discussion boards will be used. The course is designed to permit students to complete it at their own pace during the semester without set start/end times, other than the beginning date for the term and the last day of classes. 1 credit

CLS-101 INTRODUCTION TO CRIMINOLOGY
Study of the contemporary criminal justice system, major systems of social control and their policies and practices; victimology; juvenile justice; comparative criminal justice of the field. 3 credits

CLS-155 AMERICAN JUDICIAL SYSTEM
This course examines the historical background, the traditions, and the legal principles that underlie the Courts as an integral component of the American System of Criminal Justice. Both differences and similarities inherent within the State and Federal Court processes will be analyzed, and the procedures through which the Criminal Courts uphold the basic rights and liberties of all U.S. citizens, both victims and the accused, will be explored. The dynamics of the judiciary will be considered through the examination of the critical foundations of the judicial process. A primary focus will be placed upon understanding the respective roles played by the Judges, Prosecuting Attorneys, Defense Counsel, Police and Probation Officers, and other Court-related personnel in the criminal court process. 3 credits

CLS-160 RESEARCH WRITING & ADVOCACY
This course introduces you to the skills necessary in any field of Criminology. Effective research is a necessary skill of anyone who seeks to improve any aspect of the Criminal System and make it a more effective instrument of justice. Writing skills in this area are critical since decision makers most often rely upon well-constructed, authoritative and concise reports to guide policy decisions in these critical areas. And in virtually every area of Criminology, individuals ultimately become advocates either for individuals or for important policy initiatives. Thus, understanding the art of advocacy is critical. This course will assist you in developing skills in all of these areas. Beginning Fall 2018, this course must be completed by the end of the sophomore year. 3 credits

CLS-175 SPECIAL TOPICS: CRIMINOLOGY
This version of special topics will focus on hate crimes. An analysis of the origins of hate crimes with a particular emphasis on law enforcements efforts to investigate and prosecute them will be presented. The course would be an interesting supplement to the Criminology of Hate Course otherwise to be taught in upcoming semesters. 3 credits

CLS-1751 SPECIAL TOPICS: CRIMINOLOGY HUMAN TRAFFICKING
This version of special topics will focus on hate crimes. An analysis of the origins of hate crimes with a particular emphasis on law enforcements efforts to investigate and prosecute them will be presented. The course would be an interesting supplement to the Criminology of Hate Course otherwise to be taught in upcoming semesters. 3 credits

CLS-205 CRIMINAL TRIAL EVIDENCE
Evidence uncovered by the finest detective, or the most sophisticated CSI will be of little use to a prosecutor if it is not admissible in the trial of a criminal case or does not satisfy the burden of proof the law imposes. This course explores the basics of the language of a criminal trial: the rules and principles of evidence. What is "relevant"? When will "relevant" evidence be excluded by the rules of hearsay or the defendant's right to confront witnesses? The nature and permissible scope of expert testimony will be an important aspect of the course. How does forensic science translate into court testimony? What other subjects of expert testimony do/should courts recognize? Finally, what is the meaning of "proof beyond a reasonable doubt"? Why are jury verdicts in some celebrated cases only understandable by reference to this basic principle of the criminal process? Students will engage in trial simulations to illustrate various points of the course material. 3 credits

CLS-215 JUVENILE JUSTICE
Study of causative factors of juvenile delinquency and the treatment of juvenile offenders. Specific topics include gang subcultures, peer pressure, juvenile offenses, and the juvenile justice system. 3 credits

CLS-220 THE CRIMINIOLOGY OF RACE
This course utilizes theoretical and empirical readings to examine race, crime, and criminal justice. While it examines racial and ethnic relations in society, it focuses on ways in which race may affect decisions to commit crime, policing and minority communities, and the disparities in the justice system. Further, the course will address issues in court proceedings, sentencing, and corrections. By evaluating research and discussing modern controversial issues, students will have the opportunity to create informed decisions, identify areas most profoundly affected by racial inequities, and outline solutions and practices designed to emphasize equality and justice. 3 credits

CLS-225 CRIMINOLOGY OF SEXUAL ASSAULT
This course will allow the student to gain a qualified understanding of the various types of sexual violence and the legal definitions of Sexual Assault, Rape, and other forms of sexual violence, how the numerous types of criminal offenses relative to Sexual Assault are graded under the Pennsylvania Consolidated Statutes, Title 18 of the Pennsylvania Crimes Code, and the Statute of Limitations on reporting cases of Sexual violence. The course will continue in providing the student with an updated familiarity about the Pennsylvania Consolidated Statutes, Title 18, Section 505 - Use of Force in Self-Protection.? The student will gain a complete and thorough understanding, including legal consequences, on when, how, and why certain levels of force are allowed under the law for self-protection. Finally, the course will explain and discuss solutions for overcoming Sexual Violence, providing Self-Protection possibilities, and Legal Issues concerning Sexual Violence.? Several texts will be utilized in forming a decision on the relative prevalence of sexual violence in society, especially on College campuses across the nation. 3 credits

CLS-227 CRIMINAL LAW AND PROCESS
The primary objective of this course is to present to the student basic principles and methods of the American Criminal Justice System. It will discuss aspects of crime, means of social control, law enforcement, and the operation of criminal courts. (Formerly PS-227) 3 credits

CLS-230 CONSTITUTIONAL CRIMINAL PROCEDURE
This course will engage the student in a critical analysis of the limitations imposed on the gathering and presentation of evidence in criminal cases that are imposed by 4th, 5th and 6th Amendments to the United States Constitution and parallel provisions of the State Constitution. It will involve an exploration of the origins and evolution of the exclusionary rule and the particular grounds for exclusion mandated by application of those Constitutional principles. The course will also seek to give the student a practical perspective on the overall process of a criminal case from pre-trial litigation through final appeal, including the process under which the law permits the government to seek the imposition of the death penalty, and the limitations imposed upon that by the 8th Amendment. 3 credits

CLS-235 ETIOLOGY OF MASS VIOLENCE
This course is designed to examine a variety of forms of mass violence, including serial, rampage, and spree murders. The course material will also discuss familicide, genocide, terrorist attacks, and systemic victimization. Rooted in theory, this class aims to understand personal, societal, and cultural factors that contribute to mass violence. In addition, the social and policy responses to mass violence and public response to such events will be covered. In order to understand mass violence in a criminal justice context, it also becomes necessary to study rates of occurrence, historical events, and prior research (including methodology and limitations). While the course focuses on mass violence in the United States, other international mass violence cases will be discussed briefly. 3 credits

CLS-245 CORRECTIONS, PROB. & PAROLE
Study of the history, theory, practice and legal environment of incarceration, diversion, community-based correction, and treatment of offenders. 3 credits

CLS-250 THE POLICE: A HISTORY
This course describes historical events that shaped practices in policing that exist in American jurisdictions today. It is designed to show how police interaction and public opinion changed policing strategies. This course will also show how changes in Supreme Court rulings on criminal procedure changed the type of investigative work performed by police agencies. 3 credits

CLS-266 THE DEATH PENALTY
This course is meant to give the students an in-depth insight into the phenomenon of capital punishment throughout history and as it is specifically applied today in the United States. The material will be presented from three distinct approaches: the sociological/criminological background and theory of the death penalty, the penological dimension of the carrying out of executions by prison officials and the differing challenges that presents from administering life sentences without parole, and the legal framework in which the death penalty may be applied as determined by the courts and legislature. The course will be team taught by the faculty of the CLS Program whose specialized interests correspond to the perspectives the course will present. Course materials will be distributed online. Extensive class discussion is anticipated. 3 credits

CLS-269 AGENCY MANAGEMENT
An analysis of the administration and management of organizations to include their structure and environment, problems of communication, motivation of personnel, leadership, personnel supervision, organizational conflict, decision-making, organizational effectiveness, and changes and innovation in administration and management. 3 credits

CLS-270 21st CENTURY ISSUES IN CRIMINOLOGY
Criminology is a discipline that covers a wide variety of societal areas intertwined with the criminal justice system. Those areas include the kinds of human conduct that should be criminalized, the policy considerations in the enforcement of criminal laws, limits on how the investigation of those crimes should take place, terrorism, violence and victimization, police accountability, race relations, mental health, homeland security, narcotics trafficking and addiction, the impact of new technologies, gangs and organized criminal activity, mass violence, and a multitude of other issues. This course will explore a range of these topics, giving the student the opportunity to perceive the vastness and intricacy of the problems facing those who try to achieve a just system consistent with the protection of the innocent and the fair treatment of all who are affected when criminal activity occurs. The course is of particular value to students in the early stages of their work in criminology so as to give them a perspective on these larger topics enabling them to focus their research efforts as they progress through the curriculum. 3 credits

CLS-272 PHILOSOPHY OF LAW
What is law, and what is its purpose? Is human law dependent upon a higher, Divine law? What is the relationship between law and morality, and what makes a law binding? Is it ever morally acceptable to disobey the law, and, if so, when? Such are among the central questions of the philosophy of law, and philosophers have been reflecting on them for thousands of years. In this course, we will look at some of the central theories of law that have shaped our legal

culture, and which still register in the legal and political debates we have today. 3 credits

CLS-275 PATTERNS OF CRIMINAL BEHAVIOR
The course is meant to correlate the basic principles of psychology with conduct manifesting itself in criminal violations. A full understanding of the various pathologies contributing to the diagnosis of behavior commonly reflected in criminal conduct will be developed. Techniques for assessing such behavior and the standards for characterizing it are to be studied as a preliminary to the sort of psychological profiling to be discussed in more advanced courses. 3 credits

CLS-290 MENTAL ILLNESS & CRIMINAL PROCESS
This course provides an overview of mentally disordered individuals' involvement in the criminal justice system and a historical perspective on how we have arrived at this point. Topics include the development of mental health practice and policies within the scope of the three main components of the criminal justice system, policing interventions, the insanity defense, violence and mental illness, and diversion strategies. 3 credits

CLS-300 COMPARATIVE CRIMINAL JUST.ICE IN SOUTH AFRICA
This three-credit course offers students the unique opportunity to explore South African society, culture, and crime. Given the relatively recent end to apartheid and ongoing struggles with race relations and integration, this course will provide students the chance to examine how social and individual factors affect violent crime rates throughout the country. The experience will highlight the country's rich in ethnic and cultural diversity, introduce students to international criminal justice and policing tactics, and similarities and differences in policies and practices. 3 credits

CLS-303 EMPIRICAL ANALYSIS OF FAITH, FAMILY AND LIFE
This course examines the social science research and policies pertaining to the sanctity of life. Likely topics include analyses of the effects of abortion on women and families, discipline and behavior modification strategies for children, rehabilitative interventions for addiction, discussions on the death penalty, end of life decisions when caring of the sick and elderly, and related issues. Specifically, these topics will be empirically analyzed through social scientific research, providing a basis for charitable discussion of broader implications about sanctity of life in students' lives in our nation's public policies. 3 credits

CLS-305 VIOLENCE AND VICTIMOLOGY
The course introduces the leading theories and research in the area of violent criminal behavior and victimization. A special emphasis is on violent patterns and victimization over time, victim-offender relationships, and the experience of victims in the criminal justice system. Addresses major violent crimes such as murder, rape, robbery, assault, and serial killing. 3 credits

CLS-315 CRIMINOLOGICAL STATISTICS
This course is designed to introduce students to principles of quantitative strategies in criminology. Using statistical software, students will engage in basic data analysis, including univariate and bivariate measures, correlation, t-tests, analysis of variance, regression and related measures. Emphasis will be placed on how to use, interpret and understand some of the techniques used by social science researchers and practitioners within the criminal justice system. 3 credits

CLS-316 STRATEGIC/TACTICAL LEADERSHIP
This course will focus on developing leadership and supervision skills utilizing the military leadership theories of Sun Tzu, Antoine Jomini, and the US Army Field Manual 3-0, C1 (USAFM). Students are exposed to 25 centuries of military thought. While military leadership is highlighted, the principles developed in this course are directly applicable to the practice of law, implementation of government policy, and business organizations. This course will focus on planning, strategy, tactics, and operational aspects of leadership in government, law, and business. Eight military leadership principles are common among Sun Tzu, Antoine Jomini, and the USAFM, and these shared constructs form the basis for which leadership theory will be explored. Ethical dilemmas, current events, battles, and business/higher education scenarios will be used to help students understand and improve their leadership skills. 3 credits

CLS-320 WHITE COLLAR CRIME
This course considers crimes committed by corporations as well as white-collar criminals: how such crimes are defined; who commits or is victimized by them; which moral, ethical, legal and social contexts promote them; and how society responds. Procedural and policy considerations in the investigation and enforcement of relevant statutes will also be covered, including the concept of legal privilege, the role of the grand jury and other pretrial processes, evidentiary questions, litigation strategies, and potential sanctions and other punishments. Prerequisite: CLS-101. 3 credits

CLS-325 CRIME RATES IN AMERICA
The course will focus on understanding the trends and implications of the varying crime rates experienced in America in recent history and the policy implications as such rates are projected into the future. What caused the steep increase in crime in the 1980's? Why did crime rates plummet in the mid 1990's? Where do the rates project in the upcoming decade? The presentations will involve a number of etiological and system-oriented discussions that would include an element of international criminology and would likely rely on the books The Great American Crime Decline, The New Criminal Justice, and Understanding Crime Statistics. 3 credits

CLS-327 JUVENILE JUSTICE ADMINISTRATION
This course is meant to build upon the Juvenile Justice Course and give the students an appreciation of the complexity of the juvenile justice system and the challenges it presents to those who administer the distinct judication system which handles Juvenile cases and the programs established in the various jurisdictions to treat juveniles adjudicated by the judicial system. 3 credits

CLS-340 PRINCIPLES OF HOMELAND SEC.
Students will gain an understanding of homeland security by analyzing the various security principles and policies that establish a foundation upon which to organize U.S. security efforts as a nation. Students will study how the national strategy aligns and focuses homeland security functions within critical areas such as: (1) intelligence and warning, border and transportation security, domestic terrorism; (2) protecting critical infrastructure and defending against catastrophic terrorism; and (3) emergency preparedness and consequence management. The first area focuses primarily on preventing terrorist attacks, the second area on reducing the nation's vulnerabilities, and the third on minimizing the damage and recovery from the aftermath of terrorist attacks. Prerequisite: CLS-101. 3 credits

CLS-341 EMPIRICAL ANALYSIS OF FAITH, FAMILY, AND LIFE
This course examines the social science research and policies pertaining to the sanctity of life. Likely topics include analyses of the effects of abortion on women and families, discipline and behavior modification strategies for children, rehabilitative interventions for

addiction, discussions on the death penalty, end of life decisions when caring for the sick and elderly, and related issues. Specifically, these topics will be empirically analyzed through social scientific research, providing a basis for charitable discussion of broader implications about sanctity of life in students' lives in our nation's public policies. 3 credits.

CLS-350 CRIMINOLOGY INDEPENDENT STUDY
Independent investigation and research into a special topic for selected students. Topics are determined by both student and professor. Prerequisite: permission of faculty member and departmental chair. May be repeated. Variable credit

CLS-356 QUANTITATIVE RESEARCH METHODS
This course is an overview of research methodology in the social sciences. The general subject areas include research design, sampling, quantitative and qualitative methods, ethical issues, and computer-assisted analysis of results using SPSS. The emphasis will be on quantitative methods. Occasional offering. 3 credits

CLS-360 PRED/PREVENT. OF CRIM CONDUCT
This course presents an analysis of high-profile criminals and showcases the empirical and theoretical data to support theories of criminality. Criminal behavior will be viewed through biological, psychological, social, and environmental perspectives. Violence and criminal behavior will be viewed on a developmental continuum. Contemporary issues will be discussed highlighting recent current criminal events that include competence, eyewitness testimony, criminal profiling, jury selection, false memory, and interrogation strategies. Students will be provided with the tools necessary to understand assessment procedures, determine preventative factors, and current treatment models that may help mitigate the causes and outcomes of crime and violence. 3 credits

CLS-361 PROSECUTION OF CRIMINAL STREET GANGS
An examination of the complex sociological, psychological, and criminological dimensions of criminal street gangs, gang membership, and the problems of law enforcement in prosecuting these entities. This course will cover a wide spectrum of topics that interrelate to this complex issue in law enforcement. 3 credits

CLS-367 GENDER AND CRIME
This course will examine the notions of gender identity and development, social constructs of gender, and the ways in which femininities and masculinities may influence victimization and offending. Rooted in criminological theory, including modern feminist theories, the course will evaluate empirical research to examine the function of gender in the criminal justice system, media representation of male and female offenders, and gendered experiences as criminal justice professionals. 3 credits

CLS-376 FEDERAL CRIMINAL LAW
An examination of the principle statutes utilized by the federal government to prosecute individuals for a wide variety of criminal activities focusing on organized crime prosecutions. Discussion of the Hobbs Act, the RICO Act and money laundering statutes and mail fraud and wire fraud will all be considered. 3 credits

CLS-377 ADDICTION AND CRIME
Examines the social issues and problems of alcohol and drug misuse in American society. Legal and illegal substances are considered, as are the causes of substance abuse and alternatives. The factors and theoretical perspectives of alcohol and drug abuse in America are discussed as well as the legal systems present in society and the impact these systems have on alcohol and drug use/abuse. 3 credits

CLS-380 CRIMINOLOGY OF FIREARMS
Examines the historical, societal, and legal aspects of firearms in American society. The Constitution and legal precedents are considered, as are changes in regulation over time. Questions concerning private ownership and crime rate trends will be discussed along with the factors and theoretical perspectives of gun violence in America. 3 credits

CLS-385 ORGANIZED CRIME IN AMERICA
This course will examine the origins and growth of organized crime in America. The major focus of the course will be on the traditional five (5) organized crime families of New York. However, we will also examine other types of organized crime including the so-called "Irish Mob" and organized crime groups associated with the former Soviet Union. Students will develop a comprehensive understanding of the structure, culture and street rules of these criminal enterprises. Additional topics will also include the tools and methods used by the Federal Bureau of Investigation to investigate and prosecute organized crime members. 3 credits

CLS-390 PRE-CAPSTONE
To assist students in preparing for the preparation and presentation of their Capstone Project, the Department offers this team-taught course to provide specific direction on the substance of the work that would be deemed acceptable for a Capstone Project. Four specific areas will be covered. First, a review of research methods with be provided to assist the students in making certain that they provide an adequate basis of authority for the position their Capstone paper presents. Second, a review of statistics will permit the students to understand how to effectively analyze and present statistical data their research uncovers in order to support the argument set forth in their presentation. Third, a review of the theories of the discipline will make sure that the students understand that the appropriate presentation of any proposal allows theory to drive research and then policy. Finally, the students will receive overall instruction on how to effectively set forth their Capstone presentation and how to prepare an effective PowerPoint that will allow them to engage the audience to whom they will present their analysis and conclusions. While this course is primarily directed to Criminology majors, it would prove valuable to anyone preparing a Capstone presentation in a number of academic disciplines. One credit.

CLS-399 CRIMINAL ANALYTICS
The difference between an average criminal investigator and a great one is profound. The great ones must see a field wider than just the horizon of an arrest and perceive issues far more numerous and complex than simply where fingerprints might be found. They must appreciate what insight the hard sciences may afford them, what the cyber-world may yield as fruitful evidence, and what the forensic accountant might help them uncover. They must also know the limits of such specialties. Even more so, they must glean the culture and social mores of the environment in which the investigation is to take place and appreciate the nature of the people who may come to fill the roles of victim, witness and suspect. They are like great field generals, understanding their own resources and of those who oppose them, the need for direction without the burden of rigidity when the original direction is shown to be ineffective and, ultimately, never losing sight of their central mission. That mission is to find the truth but, even more critically, to achieve justice in a way which serves the noblest principles of their profession. 3 credits

CLS-400 RACE AND JUSTICE
Race and Justice offers a more comprehensive examination of the modern political issues in the discourse on race and the criminal justice system. In this discussion-based course, students will be expected to read and evaluate a variety of arguments and perspectives

while using research and policy recommendations to identify clear paths to progress, equity, and social change. Graduate students enrolled in the course will have increased reading and writing expectations relative to undergraduate students, but all students will be exposed to the most influential current texts in race and criminology. 3 credits

CLS-401 LEGAL REASONING AND ANALYSIS
This course will be an intensive exercise in the analysis of legal problems and the application of statutes and precedents in aid of the formulation of a thoughtful resolution. The students will be presented with numerous hypothetical situations and applicable statutes and precedents. They will be required to determine various lines of argument to resolve the situations from the perspectives of the opposing sides. One week of this course will be devoted to an understanding of the principles of statutory interpretation. 3 credits.

CLS-402 CRAFTING LEGAL DOCUMENTS
The crafting of documents for use in any legal setting requires proficiency in two distinct areas. First, the applicable law must be gathered through effective legal research. And second, the document must be prepared in a clear, concise and authoritative manner so as to convince the Court that the relief sought should be granted. Students will learn the essential tools of legal research and the art of crafting documents with correct citations of authority. It is anticipated that a civil complaint, an answer to a civil complaint, motions in a criminal prosecution, a sales agreement, and similar standard non-formulaic documents will be prepared in a format an attorney may review for presentation to a Court. 3 credits

CLS-403 SURVEY OF LEGAL PRACTICE
The first section of this course will be devoted to ensuring that the students are familiar with the rudiments of legal ethics through a review of the key provisions of the Code of Professional Responsibility. Thereafter, the students will be offered the opportunity to obtain an intense briefing of the key principles in three separate practice areas (Criminal/Civil Litigation, Property Law, and Wills & Estates). The course will conclude with the students preparing a PowerPoint presentation on a topic area of interest including specific ethical challenges the area presents. This course will be an online offering. 3 credits.

CLS-404 PRACTICUM
The students will be placed in a law office in the practice field of their choice for a one semester internship. They will complete a report on their efforts at the conclusion of the semester. 3 credits.

CLS-420 CRIMINOLOGY OF HATE
This course will explore the phenomenon of hate crimes and the laws response to them. Consideration will be given of the legislative changes made to deal with hate crime scenarios and how the courts and law enforcement seek to respond to them. A discussion of the psychological basis for hate crimes will also be entertained. 3 credits

CLS-425 SURVEY OF CYBERCRIME
The phenomenon of cybercrime has created serious challenges both for those in the cybersecurity field and the criminal justice system. This course will analyze how crimes of various types and potential national security threats are or may be committed by use of the Internet and/or other cybertechnologies. Ethical considerations in the use of such technology as a weapon to combat crime and terrorism will also be discussed, along with the statutory framework under which prosecutions of such crimes may take place. 3 credits

CLS-440 CONSTIT. LITIGATION/ANALYSIS
The course will focus on the art of litigating Constitutional issues. Selected topics in Constitutional Law (such as Equal Protection, Substantive Due Process, Free Speech, Establishment Clause, Commerce Clause) will be discussed from the perspective of forming effective arguments on both sides of a given problem. The topics will be developed in depth with a view to giving the student an appreciation of the nuances in each area. There will be a heavy emphasis on legal reasoning, analysis and argumentation. The course will conclude with the preparation of a brief and the presentation of oral arguments to a panel of judges. A semester of Constitutional Law or some equivalent prior coursework is necessary. Formerly titled Advanced Constitutional Law. 3 credits

CLS-504 ETHICAL DEC. & DIL. IN CJ
This course examines the major ethical dilemmas that confront criminal justice professionals throughout their careers. Students are exposed to the philosophical principles of ethical decision making. Students also examine issues-based, practical approaches to ethical issues found in all three branches of the criminal justice system - police, courts, and corrections. Policy issues are reviewed, and students are encouraged to engage in discussions of key topics in professional ethics and the delicate balance between law and justice. Students enrolled in this course will begin to think about the impact and importance of ethical decision making by criminal justice professionals. 3 credits

CLS-510 CRIMINOLOGICAL THEORIES
This course focuses on the study of crimes, criminals, causes of criminal behavior and victimization issues. Students explore how the classical, psychological, sociological, economic, biological and political theories of crime explain criminal behavior, and the impact of these theories on the work of the criminal justice system. Prerequisite: CLS-101. 3 credits

CLS-550 CRIMINOLOGY INTERNSHIP
Students may arrange to receive credit for employment experience in various non-college settings. It is also possible to have paid or unpaid professional work entered into the transcript as "no credit." Prerequisite: permission of the departmental coordinator. May be repeated. Variable credit.

CLS-590 CLS CAPSTONE PROJECT
This is the capstone course for justice studies students. It will focus on the integration of information learned from different courses with special focus on criminal law and legal issues, theories of crime, juvenile delinquency, law enforcement, corrections, ethics, forensic science, and research methods. This course will be offered to justice studies students in their final semester in which they receive their degrees. Prerequisite: Student must be in the last semester of their Criminology, Law, and Society course work, or receive permission of instructor. 3 credits

CORE-1400 LISTENING SEMINAR
This seminar encourages students to develop habits of listening to the Catholic, Benedictine, and Liberal Arts traditions through engagement with the primary and contemporary texts that inform these traditions with an eye toward the relevance of the Listening, Learning, Loving Core Curriculum. Readings will combine required selections across all sections, recommended and optional texts chosen by individual instructors from a set list, and one selection by the preceding year's seniors that demonstrates the virtue of hospitality. 3 credits

CORE-1401 LISTENING SEMINAR: HEALTH WELLNESS AND SELF-CARE
This seminar will satisfy CORE SL04 at the introductory level and should be taken during students' first semester at the College. This seminar is open only to nursing students. There are two components

to this seminar: Listening and Health, Wellness and Self-Care. Students will learn how to develop habits of listening to the Catholic, Benedictine, and Liberal Arts traditions through engagement with the primary and contemporary texts that inform these traditions with an eye toward the relevance of the Saint Vincent core. Nursing students apply the listening content to the health, wellness and self-care component, serving as a guide on their life-long journey of health and wellness. Evidence-based tools and techniques to care for themselves are emphasized. Health, the state of physical, mental, social, and spiritual well-being, is attained through wellness, the process through which individuals become aware of, and make choices toward, a more successful and meaningful existence. Self-care is the application of wellness principles to promote health. Through faculty-guided and student-interactive web-based applications, students will listen, learn, practice, and reflect on self-care activities to enhance their health and wellness through the lens of Catholic, Benedictine and Liberal Arts traditions. 3 credits.

CORE-1500 CORE WRITING
Core Writing introduces students to the kinds of writing tasks and skills required by academic courses and helps you develop your skills in persuasive and analytical writing. By following the Three Stages of Good Writing Practice and applying the Six Principles of Good Writing, students will learn how to become a more self-aware and focused writer. This course works with the Writing Center, employing Writing Associates to provide support and studio time. 3 credits

CORE-2400 LEARNING SEMINAR
The Learning Seminar is the second seminar in the Listening, Learning, Loving Core Curriculum. It builds upon the first year Listening Seminar, reflects back on tier one courses, and prepares students for the capstone Loving Seminar. The seminar encourages students to engage primary and contemporary texts from the natural sciences, social sciences, humanities and arts. Readings will combine required texts across all sections along with recommended optional texts chosen by individual instructors from a set list. The seminar reinforces oral and written communication. The seminar aims to develop habits of learning that are part of the Catholic, Benedictine, and Liberal Arts traditions and so prepares students to "integrate their professional aims with the broader purposes of human life." 3 credits

CORE-3400 LOVING SEMINAR
The Loving Seminar is the capstone of the Listening, Learning, Loving Core Curriculum. It brings together the previous seminars, all core classes, and students' major field of study to "integrate their professional aims with the broader purposes of human life." It does this by focusing on primary texts in the Catholic, Benedictine, and liberal arts traditions, connecting the core outcomes to the major course of study, developing an understanding of caritas (love), and drawing out the implications for students' ongoing education, future students at the college, and communities beyond the college. Thus, the course will analyze texts, utilize service learning, and recommend a text that will be required in the Listening Seminar. 3 credits

CORE-3401 CAPSTONE SEMINAR
The Capstone Seminar is the capstone of the SVC Core Curriculum. It brings together the previous seminar, all core classes, and students' major field of study to "integrate their professional aims with the broader purposes of human life." It does this by focusing on primary texts in the Catholic, Benedictine, and liberal arts traditions, connecting the core outcomes to the major course of study, developing an understanding of caritas (love), and drawing out the implications for students' ongoing education, future students at the college, and communities beyond the college. Thus, the course will analyze texts, utilize service learning, and recommend a text that will be required in the Listening Seminar. 3 credits

CS-102 FUNDAMENTALS OF IT & COMPUTING
This course is for the student who wishes to be fluent in information technology (IT) and computer concepts. It is an introduction to the wide range of concepts, techniques, and applications of computer and network technologies. Emphasis is on the possibilities and limitations of Computer Science/Information Systems/Cybersecurity in personal, commercial, and organizational activities. Topics include history of computing, computer types, computer structure and operation, computer languages, human/computer interaction, program development, computer applications, basic networking, security, and computers in society. Offered spring semesters. 3 credits

CS-106 LINUX SYSTEM ADMINISTRATION
This course provides an introduction to the use and administration of the Linux operating system. Operating system concepts will be covered as well as how Linux implements these concepts. The course will explore the main areas of the operating system, including the file system, process execution in a multitasking, multi-user environment, basic networking, and security functionality. 2 credits

CS-109 INTRO. TO VISUAL BASIC PROG.
An introduction to the Visual Basic programming language and the concepts and techniques of GUI programming. The syntax of Visual Basic, forms, properties, controls, variables, decision structures, functions, subroutines, and VBScript are covered. Offered spring semesters. 3 credits

CS-110 C++ PROGRAMMING I
An introduction to problem solving and computer programming. Topics include algorithms, program structure, input/output, modularity and parameters, control structures, data abstraction, arrays, text files, and structured techniques. 3 credits

CS-111 C++ PROGRAMMING II
A study of advanced programming techniques and applications continuing from the point where CS-110 ended. Elementary data structures and associated algorithms are examined. Topics covered include arrays, strings, file processing, classes, linked lists, and recursion. Prerequisite: CS-110. 3 credits

CS-125 FUND OF CYBERSECURITY
CS125 is a first course in Cybersecurity. It is designed to provide an introduction to Cybersecurity and Information Assurance fundamentals, networks, and organization security concepts. Students will be introduced to cybersecurity topics such as networking, system administration, software security, the basics of cryptography, and programming. 3 credits.

CS-170 DISCRETE STRUCTURES
This course is an introduction to the topics in discrete mathematics that are of particular use in computing. Discrete mathematics is especially concerned with counting techniques and finite or infinite sets of integers (discrete numbers), instead of a continuous range of numbers (such as the real numbers used in calculus). Topics to be covered include logic, sets, functions, simple proof techniques, algorithms, running time analysis, basics of number theory, RSA encryption, graphs and trees, finite state machines, parsing, and grammar. 3 credits

CS-171 INTRODUCTION TO COMPUTABILITY
This course emphasizes the mathematical and theoretical foundations of computer science. The primary topics are computability theory and Turing machines, complexity theory (including the classes P, NP,

NP-complete, and NP hard), grammars and parsing, push-down automata, and running time analysis (especially using recurrence relations and generating functions). Important fundamental questions will be answered, such as whether all functions are computable and the existence of unsolvable problems. Also included is an introduction to proofs of program correctness and some running time analysis for algorithms to solve the traveling salesperson problem. 3 credits

CS-190 PROGRAMMING LANG LAB: PYTHON
A laboratory that covers an introduction to the Python programming language including fundamental programming techniques including syntax, control statements, and libraries used in data science and data analytics. 1 credits.

CS-205 WEBSITE DESIGN & PROGRAMMING
This introduction to web development and web programming is intended for both CIS majors and non-majors. Topics include basic aspects of good web design and introductions to technologies that add functionality such as HTML 5, cascading style sheets, JavaScript, the document object model, XML, PHP, Ajax, and the MySQL database. Offered spring semester alternate years. Prerequisite: CS-111. Pre/co-requisite CS-221. 3 credits

CS-214 INTRODUCTION TO MOBILE APPLICATION PROGRAMMING
This course will cover the basics of developing applications for mobile platforms such as the Apple iOS or Android devices. Differences between mobile and desktop computing will be discussed. Programming languages for the development of mobile software will be introduced along with integrated development environments such as Xcode for iOS and Eclipse for Android. Students will complete projects in small groups. Offered on irregular basis. Prerequisite: CS-221. 3 credits

CS-221 DATA STRUCTURES
The study of data structures and associated algorithms is developed in an object-oriented fashion. Various implementations of data structures and the efficiency of the associated algorithms are discussed. Topics to be covered include stacks, queues, keyed tables, recursion, linked lists, binary search trees, sorting, searching, has tables, graphs and their traversals, heaps and B-trees. Prerequisite: CS-111. 3 credits

CS-225 CYBERSECURITY
This course examines both the theory and practices that serve as the foundations of cybersecurity. Utilizing the CISSP Common Body of Knowledge as a foundation, fundamentals of access control, network security, risk management, cryptography, business continuity/ disaster planning, environmental security, software development security, and security architecture and design are introduced. Prerequisite: CS-102. 3 credits

CS-226 MOBILE FORENSICS
This course covers areas of mobile forensics, including topics from the legal and technical aspects of the discipline. Software based forensics tools will be utilized to examine mobile communication and computing devices. Removable storage mediums will also be addressed. A focus will be placed on recovering data that could be used to identify users and their actions. Supporting topics will also cover the basics of the investigative process, issues regarding privacy, incident response policies and procedures, evidence gathering, exhibit handling, and differences between private and criminal investigations. The course will also cover the essentials of mobile phone networks and differences with traditional data/communication networks. Prerequisite: CS-225. 3 credits

CS-250 USER INTERFACE DESIGN
Good decisions involving the design of a user interface can lead to programs that are easier for users to execute and ultimately give its end user a greater sense of satisfaction. This course will discuss the many issues involving such human-computer interaction. A group project involving the design or re-design of a site or application will be completed. Prerequisite CS-111. 3 credits

CS-255 INTRODUCTION TO ARTIFICIAL INTELLIGENCE
This course will present overviews of the roots of artificial intelligence, predicate calculus, search techniques, knowledge representation and knowledge-based problem-solving. In addition to other assignments, students will be required to complete projects using languages and techniques which will be introduced during the course. Prerequisite: CS-221, CS-170. 3 credits

CS-265 INFO. SYSTEMS MANAGEMENT
This course provides an introduction to management information systems, e-commerce, planning, and decision support systems explaining how information is used in organizations, the role of information technology professionals, and how information systems are used to an advantage in business settings. Social and ethical issues related to the design, implementation and use of information systems will be addressed. Basic information technology project management skills will be covered as well as the issues and challenges involved in managing an information services department and navigating organizational structures in the corporate world. Prerequisite: CS-102. 3 credits

CS-267 CLOUD FOUNDATIONS
CS267 is designed to introduce students to the business models, technological infrastructure, and deployment strategies of cloud computing. Topics covered include: Infrastructure, Storage, Security, Identity Management, and more. Pre-requisite: CS-102. 3 credits

CS-270 INTRODUCTION TO NUMERICAL COMPUTATION
An introduction to the algorithms of scientific computation and their application to problems in engineering algebra and calculus. Topics covered include number representation, error analysis, programming techniques, function evaluation, solutions of nonlinear equations, solutions of linear systems, numerical integration, eigenvalues/eigenvectors, and solutions of differential equations. Prior programming experience is not required. Prerequisite: MA 102 and MA 103, or MA 109, or MA 111. 3 credits

CS-292 ENGINEERING & COMPUTER ETHICS
This course provides students with the knowledge to recognize ethical and professional responsibilities in engineering and computing situations. Students will also learn how to make informed judgments and to articulate the impact of engineering and computing solutions when considering the impact of engineering solutions in global, economic, environmental, and societal contexts. Course topics include basic ethical concepts, codes of ethics, ethical theories, ethical problem-solving techniques, and risk and safety. Students will analyze and discuss engineering and computing ethics case studies to reinforce the course material and to develop their skills in effective communication and the ability to acquire and apply new knowledge. Prerequisite: ENGR 100 or CS 102 or Tier 1 SLO 6 core class. Offered fall semester. 3 credits

CS-305 WEB TECHNOLOGIES
This course focuses on more complex web technologies than are covered in CS 205. The majority of the course involves building a significant web application. Prerequisite: CS 221. 3 credits

CS-310 PROGRAMMING LANGUAGES
This course examines the features, implementation, and design of programming languages. Various high-level programming languages representing different programming paradigms will be covered. Programming language translation and runtime features such as storage allocation will be among the topics that are considered. Prerequisites: CS 170 and CS 335. 3 credits

CS-312 INTRODUCTION TO ALGORITHMS
This course covers the design, operation, and running time analysis of a wide array of algorithms. This includes the study of algorithms that follow these paradigms: divide-and-conquer, dynamic programming, randomized algorithms, and greedy algorithms. Algorithms examined include many for searching and sorting; insertions, lookups, and deletions in various data structures, and common graph algorithms. Prerequisite: CS 221 and CS 171. 3 credits

CS-315 SERVER-SIDE PROGRAMMING
This course concentrates on designing, writing, installing, and configuring software for Linux and Windows servers. Possible languages to be used include C++, PowerShell, Node.js, and bash. Server-based software projects often provide a service that many users can access simultaneously, often over the network. Also covered is the use of git and GitHub in managing projects and installing software. Prerequisites: CS 221. 3 credits

CS-321 DATA COMM. & COMPUTER NETWORKS
This course covers the major areas of data communications and networking. It uses the OSI layered approach and focuses especially on the TCP/IP protocols and the Internet. LAN technologies and the configuration of routers and switches are also included. Prerequisite: CS-225. 3 credits

CS-322 ADVANCED NETWORKING
This course will address computer networking beyond the OSI model framework. Current industry techniques and technologies are explored in areas of voice, mobile, wireless, and remote technologies. Issues in system security, performance, and maintenance will also be examined. Current research and evolving trends will be discussed to highlight the ever-changing nature of the field and to identify the skills necessary in evaluating new technologies. Students will be expected to build functioning networks during hands on activities beginning with basic wiring through router and VPN configurations. Prerequisite: CS-321. 3 credits

CS-325 ADV. TOPICS IN CYBERSECURITY
This course explores advanced topics in cybersecurity such as computer forensics, malware analysis, secure coding, and penetration testing of web applications and networks. Building upon the theoretical foundations of CS225, students will participate in multiple lab and practical exercises to gain experience with current field techniques. The course requires a basic knowledge of cybersecurity issues, networking, and programming background. Prerequisite: CS-225. 3 credits

CS-326 ETHICAL HACKING & PENETRATION TESTING
This course prepares students to conduct successful penetration testing and ethical hacking projects. Students will learn how to perform detailed planning and reconnaissance, exploit target systems to gain access, maintain access, and reporting assessments of system risk with remediation recommendations. Exercises against target networks will be conducted in hands-on labs. Students will learn a variety of methods to safeguard infrastructure, prevent attacks, and perform validation of firewalls, operating systems, and networks. 3 credits

CS-330 OPERATING SYSTEMS
This course covers basic computer hardware, processes, CPU scheduling, virtual memory and main memory management, caching, interrupts, processes and threads, system calls, synchronization, I/O, deadlock, disk scheduling, real time scheduling, operating systems security, file systems, interprocess communications, multiprocessor systems, storage management, virtualization, the user interface, and performance. In addition, it uses Linux as a case study, emphasizing system administration tasks, Linux utilities, pipes, and bash scripts. Prerequisite: CS-335. 3 credits

CS-335 COMPUTER ORGANIZATION
This course introduces fundamental concepts of how computers process instructions and data. Hardware organization, instruction and addressing-mode processing, computer arithmetic, and translation of high-level language constructs to assembly code are discussed. Prerequisite: CS-221. 3 credits

CS-350 DATABASE CONCEPTS & INFORMATION STRUCTURES
This is a first course in modeling complex organizations of data. It includes a review of logical file structures and access methods. Information structures and databases are studied, with detailed work in personal and enterprise database systems. Prerequisite: CS-102. 3 credits

CS-351 INFORMATION SYSTEMS ANALYSIS & DESIGN
An investigation of the discipline of systems analysis in relation to the information-system life cycle. Structured and object-oriented techniques of analysis and design applicable to current system documentation and the development of general systems solutions are presented. Topics include process and data flows, I/O designs, and systems modeling. Problem solving and communication skills employed in the transition from analysis to design are stressed. Students who take this course are not eligible to take CS-355. Prerequisite: CS-109 or CS-110. 3 credits

CS-355 SOFTWARE ENGINEERING
This course covers methods for software design and implementation, and support tools such as code repositories and project management (e.g., Jira). The course includes instruction in project management, teamwork, and written and oral communications skills. Students work in teams to create and deploy a software system. Cannot substitute for CS-351 Information Systems Analysis and Design. Prerequisite: CS-221. 3 credits

CS-357 COMPUTING SCIENCE PROJECT I
Using principles and techniques developed in CS-351 Systems Analysis and Design or CS-355 Software Engineering, a capstone senior project is researched, designed, documented, implemented and tested over two semesters. Projects are typically completed individually, but a team approach may be used at the discretion of the instructor. Projects may be done for actual clients. Each project should be done in an area related to one's concentration. Prerequisite: CS-351 or CS-355. 1 credit

CS-358 COMPUTING SCIENCE PROJ. II
Using a design developed in CS-357 Computing Science Project I, a software system is implemented and tested. Projects are done in teams. Prerequisite: CS-357. 2 credits

CS-365 COMPUTER GAME DESIGN AND DEVELOPMENT
This course covers concepts and methods for the design and development of computer games. Topics include: graphics and animation, sprites, software design, game design, user interfaces, game development environments. 3 credits

CS-366 ADV. COMPUTER GAME DESIGN & DEVELOPMENT
This course is a continuation of CS-365 and is focused on the development of 3D games and other advanced game-programming techniques. Students design and implement several games during the semester. Prerequisite: CS-365. 3 credits

CS-367 MULTIPLAYER-NETWORKED GAME DESIGN/DEVEL
This course is a continuation of CS-365 and is focused on the development of multiplayer, networked games, with emphasis on both hardware and software design issues. The course will explore sophisticated programming techniques and advanced algorithms. Students design and iteratively improve a game during the semester. Prerequisite: CS-365. 3 credits

CS-375 APPLIED CRYPTOGRAPHY
This course presents sufficient number theory and finite field algebra to describe common cryptographic systems. Course topics include the German Enigma machine, DES, AES, the RSA cryptosystem, discrete logarithms, the ElGamal cryptosystem, elliptic curve cryptography, quantum cryptography, and lattice-based cryptography. Students will use computer software to solve cryptography problems and will write their own software to handle some types of cryptography, do cryptanalysis, etc. using C++ and the bigint package in Linux. Common applications of cryptography such as key distribution, digital signatures, and cryptocurrencies will also be studied, as well as some of the methods of attacking cryptosystems. Prerequisites: CS-170 and CS-221. 3 credits

CS-450 INDEPENDENT STUDY--COMPUTING & INFORMATION SCIENCE
An independent study may be possible by arrangement with an individual faculty member. Course may be repeated with a different topic. Variable credit.

CS-550 COMPUTING & INFO SCIENCE INTERNSHIP
An internship involves practical work experience, typically with a local business. Course may be repeated. Variable credit. May be done for no credit.

DA-120 DIGITAL LAYOUT & DESIGN
Students will learn the fundamentals of graphics, image manipulation, and print publication. In addition to understanding current software applications within the field, students will be taught the basics of layout and design. Offered every spring. 3 credits

DA-140 INTRODUCTION TO DIGITAL PHOTOGRAPHY
This course teaches students about digital photography and postproduction, providing them with the knowledge, skills and experience necessary in professions which utilize photographs and digital art in various applications. Topics and skills the course will address include the history and development of the modern digital camera, terminology used in digital imagery, physical components and features of digital cameras, and post-production techniques in image enhancement and manipulation. 3 credits

DA-150 DIGITAL VIDEO PRODUCTION
This course provides students a broad introduction, both theoretical and practical, to the instruments and techniques used in modern visual communication, most notably digital video. Camera work, lighting, sound manipulation and non-linear editing will be studied and utilized to create multiple short-form video projects for their portfolio. The skills learned in this introductory course provide a foundation for use in advanced courses and internships. Offered every semester. 3 credits

DA-180 BEFORE DISNEY: ART AND SCIENCE OF ANIMATION
This course introduces students to the technological developments of animation. Topics include: perception of motion, machines used to create moving pictures, and artistic conventions used by animators. Students will watch, discuss, and write about important historical examples. Students will also create an introductory portfolio of stop motion, drawn, and digital animation. 3 credits

DA-190 INTRODUCTION TO INTERACTIVE MEDIA
This course will enable the student to utilize current industry software to develop and design websites that thoughtfully engage the web user. Students will learn the basic principles of design and will apply this knowledge when building their own websites. With their web project, students should be able to combine communicative, rhetorical, and visual knowledge with an understanding of navigation, content organization, and the common conventions of the web. Offered every semester. 3 credits

DA-200 FILM STUDIES
In this course, students will broaden their knowledge of the film industry and its language via a variety of selected readings and screenings. They will explore the history of film as an art form and media industry, and analyze and critique film artifacts using a variety of film theories. Offered every fall semester. Three credits.

DA-202 SPORTS ON FILM
Students will expand their understanding of the structural and narrative components that define the American sports movie as a genre of fictional/nonfictional film storytelling. Throughout the course, they will consider how this particular mode of production is both static and dynamic by screening films that defined and challenged the characteristics of the genre. 3 credits

DA-220 DRAWING AND ILLUSTRATION FOR MEDIA
This class develops skills using vector graphics for fine art, illustration, and design. Assignments focus on the use of layers, light and shadow, and fluency in the use of digital tools. Later assignments explore creative and editorial considerations as well as how to export files to other programs for further work including animation. Offered Fall Semester. 3 credits

DA-240 3D MODELING FOR ART AND ANIMATION
This advanced course introduces students to the principles of constructing and rendering three-dimensional forms in digital space. Students will begin by creating three-dimensional objects and environments. Topics include: workflow, building and moving forms, applying textures, and lighting. Class format includes: examination of professional examples, studio time, and demonstrations. Hybrid Course. 3 credits

DA-250 DOCUMENTARY PRODUCTION
Students examine camera, lighting and interviewing techniques used by documentary filmmakers such as Ken Burns, Albert Maysles, D.A. Pennebaker, Errol Morris and Michael Moore in their acclaimed productions. Through readings and screenings, students will gain a greater understanding of how one can use a video camera to communicate a message, and that quality is not based solely on technology but on the informed application of technology. Prerequisites: DA-150. Offered every other fall semester. 3 credits

DA-280 ANIMATION & DIGITAL COMPOSITING
This course introduces students to the history and aesthetics of animation. Class formats range from practical exercises, presentations, and viewings. Topics include the technological development of animation, the principles of perceiving movement,

and artists' use of animation in different cultural contexts. Additionally, students will demonstrate their ability to create animated movement using traditional methods and digital tools. Prerequisites DA-120, DA-150. Offered every spring. 3 credits

DA-320 STORYBOARDING FOR GRAPHIC NOVELS
Stories are all around us. They appear in 3-pane comic strips, lengthy graphic novels, 15-second commercials, and even in print ads and, of course, animation. How do they work? How are they made? This course will examine a variety of visual story telling media and introduce students to the basics of story boarding, backgrounds, and simple movement. Students will watch and critique examples. They will also be introduced to the principles of visual story development, the visual cues that advance narrative even in still pictures, stop-motion animation, and basic digital animation skills. 3 credits

DA-345 TELEVISION CRITICISM
This course will provide students with a foundational approach to a variety of forms of television criticism. Through a combination of screenings and readings, numerous video texts spanning the history of television as a medium will be deconstructed and analyzed from multiple perspectives. As a result, students will gain a greater understanding of what distinguishes television from other mass media. Offered every other fall semester. 3 credits

DA-350 ADVANCED VIDEO EDITING
In this course, students will generate media content using advanced digital video editing. Through readings and/or screenings, they will expand their grasp of the power of juxtaposing moving images and will apply these practices through a variety of assignments. They will conclude the course with multiple projects to be included in their portfolio. Prerequisite: DA-150. Offered every other fall. 3 credits

DA-355 INDEPENDENT STUDY COMMUNICATION
Students engage in a research project of particular interest to the student. Advisor and faculty approval is necessary. Juniors and seniors only. Variable credit.

DA-380 DYNAMIC TYPE & MOTION GRAPHICS
The fundamentals of typography, its theory, practice, technology and history will be covered in this course. Letterforms, type design and classification, proportion, and hierarchy will be studied. Students will focus on the details of page composition and the relationship of space to clarity, legibility and aesthetics. Typography and letterforms will be explored as both a means of communication and a vehicle for expression and enhanced meaning. 3 credits

DA-385 LOGO DESIGN AND BRANDING
Design and execute a comprehensive branding and identity system for a sports team, retail or corporate enterprise that includes logo, print collateral, environmental graphics, packaging and wearables using advanced methods and tools in the Adobe Creative Suite software package (InDesign, Illustrator, Photoshop). Prerequisite: DA-120 or DA-220. Offered every fall. 3 credits

DA-410 DIGITAL MEDIA PORTFOLIO
This seminar style course will allow students to prepare for a future in the digital arts. They will create a portfolio or demo reel using personal projects created for previous classes, strengthen their prospects for careers and graduate school, and work as a team to create a senior exhibition that will be open for the public. Prerequisites: DA-120, DA-140, DA-150, DA-180, DA-190, DA-220, DA-280. Offered spring semester. Seniors only. 3 credits.

DA-550 DIGITAL ART/MEDIA INTERNSHIP
Students may work in a professional setting in order to extend their learning experience beyond college into the world of work; relevant experiences can take the form of internships, field work, and cooperative programs, particularly in artist studios, commercial graphic design departments, art galleries, museums and arts management offices. Students may or may not be paid, depending on the policy of the employer. For junior and senior art majors and minors only. May be repeated. Variable credit.

DNAP-700 ADVANCED PHARMACOLOGY I
This is (part one of) a two-semester course that will cover the basic principles of pharmacology needed in daily practice. This includes drug effect, mechanism, and interactions. In most cases, emphasis will be on the pharmacological action of drugs on specific organ systems. In some instances, drugs will be discussed in relation to their clinical use in anesthesia. Specific topics include the pharmacokinetics of drug absorption, distribution, metabolism and excretion; the mechanisms of drug action; drugs affecting the autonomic nervous system, the central nervous system including inhaled anesthetics; the cardiovascular system; as well as neuromuscular blocking agents and reversal. 3 credits

DNAP-701 ADVANCED PHARMACOLOGY II
This course is a continuation of Advanced Pharmacology I. It will cover the basic principles of pharmacology needed in daily practice. This includes drug effect, mechanism and interactions. In most cases, emphasis will be on the pharmacological action of drugs on specific organ systems. In some instances, drugs will be discussed in relation to their clinical use in anesthesia. Specific topics include a review of central nervous system drugs; anti-inflammatory drugs; and drugs that act on the cardiovascular, respiratory, renal, hepatic, gastrointestinal and hematological systems. Pharmacology of Anesthetic Agents I (HSC-500), or its equivalent, serves as the prerequisite. 3 credits

DNAP-703 CHEMISTRY FOR ANESTHESIA PROVIDERS
This course provides an introductory look at selected topics in organic chemistry, medicinal chemistry and biochemistry as they pertain to administration of anesthesia. The class will focus on: functional groups, relationship between chemical structure and function, acid-base properties including the impact of PKa and ionization on solubility and binding of drugs, basic protein structure, enzyme and receptor site structure and the binding of drugs to receptor sites, and hepatic metabolism. 2 credits

DNAP-705 INTRODUCTION TO THE PRINCIPLES OF NURSE ANESTHESIA
This introductory course will introduce the basics of anesthesia for the beginning nurse anesthesia student. Methods of anesthesia and specialized equipment will be introduced. Students will be afforded the opportunity to practice basic anesthesia techniques on the computerized human simulator. 3 credits

DNAP-713 MEDICAL PHYSICS
This course deals with a basic review of the laws of physics as they relate to anesthesia practice. Specific topics to be covered include, but are not limited to, pressure, hydrostatics, hydrodynamics, gas laws, thermodynamics, vaporization, electrical circuits and electrical safety. 2 credits

DNAP-715 ADVANCED PHYSICAL / HEALTH ASSESSMENT This course in physical / health assessment provides the nurse anesthesia student with the needed skills and knowledge to perform both a thorough admission assessment and a thorough preoperative assessment and evaluations of the surgical patient. History taking and physical examination across the life span presented in this course will enable the nurse anesthesia student to

develop the strong assessment skills that are required of a certified registered nurse anesthetist. 2 credits

DNAP-721 ADVANCED HUMAN ANATOMY, PHYSIOLOGY, AND PATOPHYSIOLOGY I
The primary objective of this two-semester course is to provide the foundation necessary to understand the anatomical and physiological bases underlying the pharmacology, anesthesiology and other interventions employed by nurse anesthetists. More specifically, students will study, in-depth, the structure, function and pathophysiology of the neuromuscular, cardiovascular, respiratory, renal, endocrine and hepatobiliary systems. 5 credits

DNAP-722 ADVANCED HUMAN ANATOMY, PHYSIOLOGY, AND PATHOPHYSIOLOGY II
The primary objective of this two-semester course is to provide the foundation necessary to understand the anatomical and physiological bases underlying the pharmacology, anesthesiology and other interventions employed by nurse anesthetists. More specifically, students will study, in-depth, the structure, function and pathophysiology of the neuromuscular, cardiovascular, respiratory, renal, endocrine and hepatobiliary systems. 5 credits

DNAP-731 BASIC ANESTHESIA PRINCIPLES I (DIDACTICS)
Anesthesia didactics integrates previous classes that the anesthesia student has taken with new material in a seminar fashion. Body systems and particular target populations are analyzed with particular attention to anesthetic implications. Anesthesia approaches for particular surgeries are discussed. 6 credits

DNAP-732 BASIC ANESTHESIA PRINCIPLES II (DIDACTICS)
These are a continuation of Basic Anesthesia Principles I. These courses will increase the level of information and integration. Anesthesia for specialized surgeries and high-risk populations are studied. 3 credits

DNAP-733 BASIC ANESTHESIA PRINCIPLES III (DIDACTICS)
These are a continuation of Basic Anesthesia Principles I. These courses will increase the level of information and integration. Anesthesia for specialized surgeries and high-risk populations are studied. 6 credits

DNAP-751 CLINICAL PRACTIUM I
This initial clinical course is designed to integrate with basic didactic coursework. Students will be assigned to affiliates clinical sites. Students will be required to meet or exceed level specific objectives. Experiences will build from simple cases and techniques to the more complex. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 1 credit

DNAP-752 CLINICAL PRACTICUM II
The second clinical course is designed to promote the skills gained in Clinical Practicum I and integrate prior basic didactic content with more advanced concepts. Students will be assigned to affiliated clinical sites. Students will be assigned to increasingly complicated cases and will be required to meet or exceed specific objectives as defined by the clinical practicum evaluations. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 1 credit

DNAP-753 CLINICAL PRACTICUM III
This third clinical course is designed to integrate more advanced clinical concepts. Students will be assigned to affiliated clinical sites. Students will be assigned to increasingly complicated cases and will be required to meet or exceed level specific objectives as defined by the clinical practicum evaluations. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 1 credit

DNAP-755 SELECTED TOPICS IN ANESTHESIA
This course is designed to build upon the student's basic knowledge and skills. It will encompass and integrate a variety of input for medical and anesthetic management. It will focus on a greater depth of understanding and the ability to analyze concurrent problems that can arise in patient care and propose an appropriate course of management. 3 credits

DNAP-800 EVIDENCE-BASED PRACTICE
Evidence-based practice integrates expert knowledge, research, scholarly evidence and patient preferences or values in making decisions about care and care delivery. Evidence-based practice de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research. Advanced practice nurses have an important role in having active inquiry about the challenges presenting in the ever-changing health care system. Clinicians and other professionals work together to bridge gaps between evidence and practice to improve patient outcomes and be active professionals in the delivery of healthcare. Heath care delivery is more than clinical skills; it is patient, family and professionals being part of a care delivery system that meets and even exceeds quality standards and expectations. 5 credits.

DNAP-810 U.S. HEALTH CARE SYSTEMS
A comprehensive overview of U.S. health care systems covering structure, finance, governance, personnel, history and cultural values. Examination of critical challenges and interactions with economic, technological, political and social forces to include the health care systems' response to these influences. Three credits. 3 credits

DNAP-820 RESEARCH METHODS
This course is designed as a 3-credit graduate course covering the principles and practices of research methods with specific applications in statistical methods and analysis using Microsoft Excel as the tool for carrying out statistical operations and understanding statistical concepts as they relate to health policy and health administration issues. Topics covered in text include Excel Review, Introduction to Statistics and Levels of Measurement, Presenting Data, Descriptive Statistics, Probability, and Measures of Central Tendency, Measuring Data, Sampling Methods, Generating the Research Idea, Sample Size, Effect Size, and Power, Chi-Square, Student t-Test, Analysis of Variance (ANOVA), Correlation Coefficients, Regression Analysis, Relative Risk Versus Absolute Risk and Other Common Public Health Measures. 3 credits.

DNAP-830 RISK MANAGEMENT & PATIENT SAFETY
This course provides an in-depth look at how current social, behavioral, economical factors influence the practice of anesthesia. Focus will be on patient safety and human error as they relate to patient outcomes. The course will review anesthesia related events that have been identified as key risk areas either harming or potentially harming patients. There will be analysis of models to prevent harm and leadership behaviors that can be used by the anesthesia team to avoid these errors through implementation of safety science and performance improvement. Emphasis will be placed on the benefit of multi-disciplinary teamwork and crisis management in anesthesia to establish organizational excellence. 3 credits

DNAP-831 ADVANCED ANESTHESIA PRINCIPLES I (DIDACTICS)
This is a continuation of DNA-731/ 732 and 733. This course will increase the level of information and integration. Anesthesia for specialized surgeries and high-risk populations are studied. 6 credits

DNAP-832 ADVANCED ANESTHESIA PRINCIPLES II
This is a continuation of DNAP-731/ 732 and 733. This course will increase the level of information and integration. Anesthesia for specialized surgeries and high-risk populations are studied. 6 credits

DNAP-840 MEDICAL ETHICS
This course is an introduction to the principles of healthcare and medical ethics. It will focus on the ethical dimensions of research including HIPAA and on informed consent for medical procedures. Topics covered in this course include: a discussion of ethics versus morals, current ethics positions in anesthesia practice, history and ethics of human subjects research, informed consent guidelines, Institutional Review Board (IRB) regulations and review process, HIPAA regulations, and Hospital Ethics Committee structure and function.2 credits

DNAP-850 LEADERSHIP
This course is designed to help students both explore the concept of leadership as well as to assess and develop their own leadership skills. The perspective underlying this course is that leadership is (a) contextual in nature and (b) requires the mastery of multiple behaviors. Both of these can only be accomplished through a better understanding of self, others and one's context. Thus, there will be a heavy introspective and reflective component to the course. 2 credits

DNAP-854 CLINICAL PRACTICUM IV
This fourth clinical course is designed to integrate more advanced clinical concepts. Students will be assigned to affiliated clinical sites. Students will be assigned to increasingly complicated cases and will be required to meet or exceed level specific objectives as defined by the clinical practicum evaluations. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 2 credits

DNAP-855 CLINICAL PRACTICUM V
This fifth clinical course is designed to integrate more advanced clinical concepts. Students will be assigned to affiliated clinical sites. Students will be assigned to increasingly complicated cases and will be required to meet or exceed level specific objectives as defined by the clinical practicum evaluations. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 1 credit

DNAP-856 CLINICAL PRACTICUM VI
This final clinical course is designed to assist the nurse anesthesia student to synthesize all didactic content and to demonstrate their ability to meet all program outcome criteria for clinical practice. Students will be assigned to affiliated clinical sites. Students will be assigned to all types of cases for patients across the acuity spectrum. Students will be expected to manage anesthesia with a high degree of autonomy in this clinical rotation. Clinical experiences will be guided by certified registered nurse anesthetists and / or anesthesiologists. 2 credits

DNAP-860 HEALTH CARE ECONOMICS
An introduction to economic and public policy factors that affect health care systems. Provides a review of relevant economic concepts and covers topics such as demand for health services, health care provider behavior, implications of insurance strategies, cost containment, health technologies and government regulations. Students will also conduct a cost-effectiveness study to understand how cost-effectiveness strategies can inform decision-making. 3 credits

DNAP-870 HEALTH CARE INFORMATICS
This course is to provide a set of practical and powerful tools to understand health care information systems that benefit patient care. The framework of the course is to encompass current trends in information technology such as artificial intelligence, anesthesia documentation, decision support systems, and blockchain. The course will also include reviewing project management software and the study of cryptocurrency. 3 credits

DNAP-873 PREC. MED. USING BIG DATA
This course will describe how to use direct-to-consumer genetic information and other health information for identifying individual and personalized risk of disease. 3 credits

DNAP-875 TIME SERIES ANALYSIS
This course explores the background methodology on time series analyses and provides students with the ability to conduct their own time series analyses for research purposes. The course provides demonstrations using the R statistical software language and enables students to implement and run time series analyses and correct syntax and statistical issues through the use of tutorials and discussions. 1 credit

DNAP-880 U.S. HEALTHCARE SYSTEMS AND HEALTHCARE ECONOMICS
This graduate course examines the ever-changing U.S. healthcare system. The course focuses on current trends. We will examine the advanced practice nurse role and the implications for current and future role development. Value creation in healthcare is connected with patient outcomes, cost reductions, reimbursement, and practice patterns. The "same old approaches" are not always effective and exploration for new approaches and their impacts will be explored. We will examine the necessary and essential involvement of nurses to engage in activities, individually, and as members of professional organizations to enhance the position of nursing in positively influencing healthcare policies at multiple levels. This graduate course also is an examines economic ideas, particularly drawing on current economics, which affect the health care system. Provides a review of relevant economic concepts and covers topics such as demand for health services, implications of insurance and payment strategies, the business of anesthesia and the future of anesthesia care. This course reviews the economic impact on a personal professional level such as provider opportunities. 3 credits.

DNAP-900 DOCTORAL PROJECT I
The Doctorate of Nurse Anesthesia Practice (DNAP) will culminate in the successful completion of a faculty-approved doctoral project relevant to the field of healthcare and anesthesia. The doctoral project will be carried out over several semesters. For the project the student will plan the project by identifying an area of interest, developing data collection strategies, gathering and analyzing the data, as well as disseminating the findings of the project. The student will also be expected to prepare the completed study in a format suitable for publication in a scholarly journal. 2 credits

DNAP-910 DOCTORAL PROJECT II
The Doctorate of Nurse Anesthesia Practice (DNAP) will culminate in the successful completion of a faculty-approved doctoral project relevant to the field of healthcare and anesthesia. The doctoral project will be carried out over several semesters. For the project the student will plan the project by identifying an area of interest, developing data collection strategies, gathering and analyzing the data, as well as disseminating the findings of the project. The student

will also be expected to prepare the completed study in a format suitable for publication in a scholarly journal. 2 credits

DNAP-920 DOCTORAL PROJECT III
The Doctorate of Nurse Anesthesia Practice (DNAP) will culminate in the successful completion of a faculty-approved doctoral project relevant to the field of healthcare and anesthesia. The doctoral project will be carried out over several semesters. For the project the student will plan the project by identifying an area of interest, developing data collection strategies, gathering and analyzing the data, as well as disseminating the findings of the project. The student will also be expected to prepare the completed study in a format suitable for publication in a scholarly journal. 2 credits

DNAP-960 CRITICAL EVENTS IN ANESTHESIA SIMULATION
This course will provide students the opportunity to manage mock critical situations specific to the anesthetic plan. Senior students will participate in small groups, managing various scenarios as they unfold. Students will be expected to recognize the crisis and provide appropriate anesthetic management. Skill development of specific tasks, as well as critical thinking and communication, will all be evaluated. The class is designed to help the senior student provide safe care during crisis situations as they progress toward independent practice. 3 credits

DS-000 DATA SCIENCE ELECTIVE
Elective course in Data Science. Permission of the Chairperson is required.

DS-099 DATA SCIENCE AND SPORTS
As every sports fan knows, the sports world is full of statistics and data. From simple win-loss records, to the number of goals by right-handed defensemen during the 3rd period. This course introduces the process of data science through the lens of predicting outcomes in professional sports. Leave "gut feelings" to the pundits; in this course you will make predictions based on data. Learn to collect, clean, summarize, visualize, and analyze data, and use that data to build predictive models. This course will emphasize the concepts and thought processes involved in data science rather than the underlying mathematical/statistical theory. As such, no mathematical background beyond algebra is required and no prior computer coding experience is required. 1 credit

DS-100 INTRODUCTION TO DATA SCIENCE AND ANALYTICS
Introduction to knowledge discovery techniques, emphasizing computer-based tools for the analysis of large data sets. Topics include data preparation, exploratory data analysis, data consistency checking, dealing with missing and conflicting data, and ethical considerations including privacy and confidentiality. Students will have hands-on experience and complete a project. 3 credits

DS-300 METHODS OF DATA SCIENCE & ANALYTICS
This course is designed to develop student's skills in data science and analytics and how they can be used to answer questions about real-world problems. Topics covered will include data cleansing and transformation, data management and visualization techniques, ethical considerations such as recognizing "junk science" and algorithmic bias. Students will work in teams on a data analytics project. Prerequisites: DS-100, CS-190, and either MA-241 or BA-350. Spring Semesters. 3 credits

DS-350 DATA MINING
A course covering data mining concepts, methodologies, and programming. Topics include decision tables and trees, classification and association rules, clustering, pattern analysis, and linear and statistical modeling. Additional topics may include data cleaning and warehousing and techniques for text and web mining. Prerequisite: DS 300 and either MA 242 or BA 351. Fall Semesters. 3 credits

DS-370 DEEP LEARNING AND OTHER ADVANCED DATA SCIENCE ALGORITHMS
This course will build more advanced data science problem solving skills. Students will develop advanced models to handle complex data, assess and interpret models and develop sensitivity analysis. They will also develop and use simulations to analyze data. One type of advanced method is Deep Learning. Prerequisite or Co-requisite: DS-350. Fall semesters of even-numbered years. 3 credits

DS-400 DATA SCIENCE AND ANALYTICS CAPSTONE
Students will work in teams to complete a data analysis project through all the project stages including developing appropriate questions, data mining, cleansing, and transformation, appropriate analysis using data tools, visualization of the results of the analysis, and communication to the client. Students will also explore responsible conduct of research and other ethical considerations. Prerequisite: DS-370 or BA-355. Spring Semesters. 3 credits

DS-550 DATA SCIENCE INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work. Students are employed in an area related to their academic endeavor. Academic credits are awarded according to the extent of the work experience. Students may or may not be paid depending on the site. The purpose of the program is to integrate academic studies and employment activities. May be repeated. Variable credit.

EC-101 PRINCIPLES OF MICROECONOMICS
The course introduces the student to economic reasoning, terminology and fundamental concepts. Emphasis is placed on individual economic units such as the household and the firm and how they affect and are affected by the various market structures existing in American capitalism. Offered every semester. 3 credits

EC-102 PRINCIPLES OF MACROECONOMICS
An analysis of the functioning of the entire economy, in particular the forces that influence the level of production, unemployment, and prices. Also included are the nature and role of governmental intervention in changing these variables. Offered every semester. 3 credits

EC-200 ENVIRONMENTAL ECONOMICS
Environmental economics focuses on the effects of human choices on the natural environment. This course develops a set of tools to evaluate the tradeoffs inherent in these choices. These tools help the student to identify the source of environmental problems and compare the efficiency and distributional effects of various policy options. 3 credits.

EC-201 MICROECONOMIC THEORY
The course provides rigorous analysis of consumer and producer behavior, market structure in both the product and resource markets, and general equilibrium theory. The course emphasizes the theoretical foundations and techniques of Neoclassical microeconomics. Prerequisite: EC-101, MA-102 and MA-103, or MA-109, or MA-111. Offered fall semester. 3 credits

EC-202 MACROECONOMIC THEORY
An examination and analysis of aggregate economic relationships in the context of competing Keynesian and Classical paradigms. The course emphasizes differences in the choice of appropriate stabilization policy on the part of government, as well as the theoretical structures of macroeconomic models. A brief introduction

to economic growth theory is included. Prerequisite: EC-102. Offered spring semester. 3 credits

EC-310 LABOR ECONOMICS
This course studies the labor market. Labor economics describes the interaction between workers and firms in the labor market, with workers supplying labor and firms demanding labor. Labor supply topics include unemployment insurance, retirement, pension plans, unions, and human capital development. Labor demand topics include compensation structure, wage versus fringe benefits, nondiscrimination rules, and discrimination in the job market. Unemployment and employment measurement, trends, and interpretations will also be covered. Offered spring of odd-numbered years. Prerequisites: EC-201 and BA-350. 3 credits

EC-331 PUBLIC FINANCE
Public Finance studies role governments play in allocating resources. We investigate which goods and services governments are most likely to provide, treating a government as an economic agent with its own objectives. We also investigate how taxes and debt used to fund the government impact households and firms. Offered spring, even years. 3 credits.

EC-353 INTERNATIONAL FINANCE
The course covers the following topics: recent developments in international financial markets, the utilization of foreign exchange and derivative security markets, exchange rate determination, international asset portfolio theory, and financial risk management strategies. Cross-listed as BA 353. Prerequisites: EC-102, BA-351 or EC-360. Student must purchase TIBA II plus calculator. Offered fall semester. 3 credits

EC-360 ECONOMETRICS
This course is designed as a continuation of BA 350. It is an introduction to regression and correlation analysis, multiple regression, their uses and related problems such as multicollinearity, serial correlation and heteroskedasticity. The course is balanced between theoretical development and applications. Prerequisite: MA-102 and MA-103, or MA-109, or MA-111 and BA-350 or MA-208. Offered spring semester. 3 credits

EC-361 ECONOMETRICS LAB
Students will learn the fundamentals of statistical computing in R. The course will primarily focus on the functions and packages in R most vital to basic econometric analysis, with an emphasis on fitting and assessing linear regression models. Throughout the course, students will gain exposure to basic programming, perform statistical simulations, and gain experience manipulating and analyzing data. All students taking EC-360 must take EC-361. Offered spring semester. 1 credit

EC-380 GAME THEORY
The primary goal of this course is to study the scope and methods of game theory, focusing on applications arising within the discipline of economics. Game theory attempts to describe the strategic interaction of agents (e.g., consumers, firms, or the government) in situations where there are competing interests and/or the outcomes depend on the actions chosen by the various agents. The course is designed to expose students to the concepts studied by game theorists as well as the set of analytical skills used in game theory. Prerequisites: EC-201, MA-102 and MA-103, or MA-109 or MA-111. Offered fall semester of even-numbered years. 3 credits

EC-390 EXPERIMENTAL ECONOMICS
This course focuses on laboratory experimentation as a research tool in applied economics, particularly in the areas of industrial organization, political economy, and game theory. The course offers both an overview of general principles used in designing, conducting, and evaluating behavior in economic experiments and a review of current research in the field of experimental economics. The areas of study include market behavior in alternative institutional settings, allocation decisions in settings with externalities, and individual choice with uncertainty. Prerequisites: EC-201, MA-102 and MA-103, or MA-109, or MA-111. Offered fall semester of odd-numbered years. 3 credits

EC-400 ADVANCED TOPICS IN ECONOMICS
This course is designed for students who intend to pursue a Ph.D. in Economics. The course covers topics in Microeconomics, Macroeconomics, and Econometrics that a student would typically encounter in the first semester of a Ph.D. program. These topics include unconstrained and constrained optimization for multivariate functions, the envelope theorem, the implicit function theorem, dynamic programming, rational expectations, matrix treatment of linear regression analysis, proofs of regression properties, and maximum likelihood estimation. Prerequisites: EC-201, EC-202, EC-360, MA-212, and MA-251. Offered fall semester of odd-numbered years. 3 credits.

EC-480 SENIOR THESIS
The purpose of this seminar is to produce a scholarly piece of research and writing. Prerequisites: EC-201, EC-202, EC-390, MA-102 and MA-103, or MA-109, or MA-111. Offered spring semester of even-numbered years. 3 credits

EC-500 INDEPENDENT STUDY - ECONOMICS
May be repeated. Variable credit.

EC-550 ECONOMICS INTERNSHIP
Pass/Fail option only. Students are subject to the McKenna School's Student Guide to Internship Procedures and Requirements. See Business Administration section of this Bulletin for a detailed description. Variable credit up to three credits.

ED-00A FORMAL EDUCATION ADMISSION
Students working on a teacher certification must earn a B- in ED205 Strategies and Techniques to be formally admitted into the teacher preparation program.

ED-100 FOUNDATIONS OF EDUCATION
This course is designed to introduce students to the legal principles that establish teaching as a profession and that govern the behavior of teachers. The school as a governmental agency and a state and local institution is examined within a multi-disciplinary context (history, law, philosophy, politics, psychology, and sociology). The Code of Professional Practice and Conduct for Educators is studied. Special emphasis is given to the significance of The Individuals with Disabilities Education Act (IDEA) within the context of compensatory education. Students will also examine racial and cultural diversity, rural and urban educational issues, and the roles of the school and the educator as agents of cultural and educational change. Educational research tools and appropriate instructional technology applications are included. Major emphasis is placed on the development of an educational philosophy. Tubercular check, Act 126, Act 151 and Act 34 clearances must be obtained before the beginning of class. 3 credits

ED-101 FIELD EXPERIENCE I: PREK-4 OBSERVATION AND INTERACTION LABORATORY
This field-based course combines thematic lectures and case study analyses with systematic observation in a variety of PreK-4 schools and classroom settings. The goal of this course is to provide an overview of the various dimensions of modern teaching. In addition to field site experiences, students will be introduced to online

teaching practices and techniques using web conferencing and other tools. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. This course meets three hours per week. Approximately 20 hours of fieldwork are involved. 1 credit

ED-102 FIELD EXPERIENCE: 4-8/K-12 OBSERVATION & INTERACTION LAB
This field-based course combines thematic lectures and case study analyses with systematic observation in a variety of middle schools and classroom settings. The goal of this course is to provide an overview of the various dimensions of modern teaching. In addition to field site experiences, students will be introduced to online teaching practices and techniques using web conferencing and other tools. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. This course meets three hours per week. Approximately 20 hours of fieldwork are involved. 1 credit

ED-103 FIELD EXPERIENCE: 7-12/K-12 OBSERVATION & INTERACTION LAB
This field-based course combines thematic lectures and case study analyses with systematic observation in a variety of secondary schools and classroom settings. The goal of this course is to provide an overview of the various dimensions of modern teaching. In addition to field site experiences, students will be introduced to online teaching practices and techniques using web conferencing and other tools. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. This course meets three hours per week. Approximately 20 hours of fieldwork are involved. 1 credit

ED-109 PHYSICAL/CULTURAL GEOGRAPHY
Major areas of study include maps and globes, the earth in space, eco-regions, climate patterns, human habitation, land and water formations, origins of ecological degradation, natural and cultural relationships, and regional studies. The five geographic themes are investigated within the framework of the National Geographic Standards. The course emphasizes cross-cultural and global perspectives of historical events and movements, and the socio-economic activities of people in their regional environs. A major requirement is the development of a regional profile using geographic relationships. Appropriate research and instructional technology applications are included in the course. This course includes both lecture and laboratory components and meets three hours per week. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. 3 credits

ED-115 EDUCATIONAL PSYCHOLOGY
This course is designed to introduce students to areas of psychology relevant to educational settings. The primary focus of the course is on psychological theory and research and their application to applied educational settings. Topics include learning and motivation; students' social, cognitive, and emotional development; the structure and function of tests; and methods of classroom management. Offered both semesters. 3 credits

ED-122 CURRICULUM, PROJECT & PLAY FOR THE DEVELOPING CHILD
This Fred Rogers-inspired course explores the importance of understanding the nature of preschool children (3- through 5- years-old), how they learn and techniques for program planning. Understanding the preschooler's nature will lead to the coordination of standards. State and national accreditations and rating scales for preschoolers and preschool spaces will be examined and adapted into program plans. Exploring opportunities to involve parents and community to enhance program quality will be explored. Fred Rogers inspired methods will be explored to incorporate meaningful play and authentic experiences into the classroom. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. 3 credits

ED-142 MATHEMATICS FOR TEACHERS
A course designed specifically for prospective teachers in K-12 schools. The goal is to help students better comprehend and apply mathematical concepts and principles in the content strands of geometry, number systems, data analysis and statistics, and problem solving. Students will be introduced to a variety of materials, activities with physical manipulatives and computer models, and various types of software as tools for teaching and learning. The course focus will include emphasis from the national standards and Pennsylvania standards for mathematics as well as state standards for other certification areas that include application of mathematics in another subject area. Offered spring semester. 3 credits

ED-155 GEOMETRIC/MEASUREMENT THEORY
This course will provide pre-service teachers current trends, techniques, technologies, and research about teaching geometry. The course is designed to increase content knowledge and the knowledge of instructional strategies for teaching geometry. The van Hiele model for the development of geometric thought will be studied. Topics will include measurement, two- and three-dimensional figures, spatial relationships, constructions, tessellations, similarity and congruence, proportion, properties of figures. Students will participate in a variety of problem-solving activities including paper folding and the use of a variety of interactive web tools.

ED-200 COMPREHENSION & VOCABULARY ESSENTIALS FOR EARLY AND SPECIAL LEARNERS
This course is designed to equip educators with the skills and strategies needed to enhance reading comprehension and vocabulary development in early and special education settings. The course provides a comprehensive exploration of foundational literacy principles tailored to young learners and those with diverse learning needs. 3 credits

ED-203 STEP-UP TEACHING FOR NON-EDUCATION MAJORS
Students enrolled in other majors than education are provided with an opportunity to teach a 10-week course to area homeschool families. Students will learn basics of lesson planning, development, and assessment in order to be successful in delivering a K-12 course. This course is for anyone interested in teaching but seeking another major. Act 151 and 34 clearances are required for this course and to work with children on campus. 0 or 1 credit

ED-205 STRATEGIES AND TECHNIQUES OF INSTRUCTION
This course focuses on basic teaching strategies for prospective educators including instructional planning, classroom management, models of instruction, instructional technologies, effective presentation skills and appropriate assessment practices. The selection and organization of content includes such factors as the availability and appropriateness of resources; curriculum standards, including use of the PDE Standards Aligned System; research trends; preferred teaching styles; desired learning outcomes, thinking and study skills, and students' learning and cultural needs. Extensive use is made of taxonomies of learning for defining objectives and analyzing questioning, instructional design, information presentation and assessment strategies. Instructional needs of ESL students and special needs students are addressed within the regular classroom setting. This course includes both lecture and hands-on activities. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. Prerequisite: ED-100. 3 credits

ED-206 FIELD EXPERIENCE II: STRATEGIES AND TECHNIQUES OF INSTRUCTION
This course is designed to be taken concurrently with ED 205 Strategies and Techniques of Instruction. Students will participate in an authentic on-campus teaching experience with school age students and practice techniques and strategies that are taught in ED 205. Students will be instructed, observed, and mentored by a master teacher and administrator. The course is scheduled on Friday afternoons. Tubercular FBI, check, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: Concurrent with ED-205. 1 credit

ED-207 PRACTICUM IN EDUCATION
The requirements and content of this field-based course vary by arrangement with the instructor. It is designed to offer students opportunities for systematic observation and/or instructional interaction with children in a variety of learning environments. It can be taken in lieu of ED 101, 102, or 103 or as an elective for those who wish to earn credit for working in educational settings. In addition to field site experiences, students will be introduced to online teaching practices and techniques using web conferencing and other tools. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances must be obtained before beginning the class. 1 credit

ED-208 CLASSROOM PARTNERSHIPS AND INCLUSION
This course is designed to provide the full scope of current trends, adaptive technologies, instructional techniques and innovative strategies needed to effectively teach K-12 special learners and gain an understanding of the need for effective communication. Through the review of learning theory, students will be given methods of teaching in traditional and nontraditional classrooms along with tools for adapting instruction for all learners. Students will also be given the opportunity to practice the dynamics of effective communication that will assist in the development of meaningful partnerships with families and the educational communities. Dynamic inclusionary techniques will be practiced. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-290. 3 credits

ED-214 INTERDISCIPLINARY STEM APPROACHES AND CONNECTIONS
This course investigates the elements of an integrative approach to STEM education with a focus on the approaches that bring together Science, Technology, Engineering, and Mathematics. Students will have both in and out of class experiences to help define the STEM domain and how it can be used and facilitated with all levels of learners. This course will examine the components of the Next Generation Science Standards, Common Core Math Standards, inquiry investigation, project-based learning, and will allow opportunities for hands-on participation in STEM education. Successful candidates will propose, plan, and present ideas for successful STEM related project-based learning integration at an age/content appropriate level for his or her area of interest. 3 credits

ED-220 READ, WRITE & DIFFERENTIATION IN THE CONTENT AREA
Teacher candidates will learn methods and strategies for teaching reading, writing and differentiation to meet the needs of all learners in secondary disciplinary areas. The course focuses on methods and strategies for strengthening the academic literacy skills of secondary learners across disciplinary areas to support the CCSS goal of College and Career Readiness for all learners. Theoretical perspectives around adolescent literacy are linked to research-based practices for embedding literacy instruction in all disciplinary areas to fulfill the expectations of the content area classroom with attention to differentiating instruction to the meet the needs of diverse learners. Including 21st century literacies (e.g., visual, technological, digital) in instructional design to further support diverse learners will also be addressed. Prerequisite: ED-205. 3 Credits

ED-221 HISTORICAL LITERATURE FOR CHILDREN
The course will focus on three interrelated themes through the study of more than twelve pieces of historical literature for children and young adults, including the historical context in which childhood takes place and is defined; the diversity of childhood with respect to economic class, gender, race, ethnicity, geographical residence, and religious belief; and the shifting power relationships between parents and children. At the completion of the class, students should be able to explain and exemplify the inherent complexities of presenting historical fiction and non-fiction to children and adolescents, discuss thoughtfully and intelligently issues raised with reading historical fiction and nonfiction for children and adolescents, write with authority and thoughtful depth concerning works of historical fiction and nonfiction for children and adolescents and evaluate works of historical fiction and nonfiction for children and adolescents. 3 credits

ED-230 SOCIAL STUDENTS FOR EARLY & SPECIAL LEARNERS
This course investigates the growth and development of young children within the realm of the expanding environmental social studies curriculum. The six disciplines of social studies instruction at the primary grade levels provides the framework for the course structure. The focus of learning will be on the pre-service student's ability to design appropriate and engaging lessons for early learners in a preschool and elementary school setting. This will include the incorporation of the Pennsylvania Standards for Social Studies Instruction and the National Council of Social Studies (NCSS) Standards. An emphasis will be placed on appropriate differentiation to address the variety of learning needs that a typical classroom presents. Adaptations to lesson design in the general education environment using co-teaching and inclusionary practices will be a strategic component of the course. Practice demonstrations, simulations and assessment strategies will be utilized. A required on-site experience will provide authentic classroom interaction with students in the school setting. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-232 INTRODUCTION TO CLASSICAL EDUCATION
This course provides an introduction to the pedagogy of classical education, paying special attention to its history, philosophical foundations, curricular models, teaching methods, and schools of thought as they pertain to the contemporary field of education. Readings will focus on primary sources influencing classical education. The structure of the course will apply teaching methods commonly found in classical education. 3 credits

ED-234 TEACHING OF SCIENCE FOR MIDDLE AND SPECIAL LEARNERS
This class provides pre-service teachers with the study of children's thinking relating to the content and teaching of science in middle grades. Topics include differentiated instruction, guided inquiry, adapted discovery for special learners, lab-based hands-on learning, and cooperative learning models for the study of physical, life, environmental, natural sciences, as well as for technology and engineering. This course consists of both lecture and laboratory components including opportunities to teach short lessons to peers to integrate learning theory with the content and conceptual knowledge in science based on the Pennsylvania STEELS standards and the Next Generation Science Standards. This course meets three hours per week and includes field experience. Tubercular check, FBI,

Act 126, Act 151, and Act 34 clearances must be obtained before beginning the class. Prerequisites: ED 100, ED 205/206, and PY 115 or consent of the instructor. 3 credits.

ED-235 TEACHING OF MATHEMATICS FOR MIDDLE & SPECIAL LEARNERS
This course will provide pre-service teachers with current trends, techniques, technologies, and research about teaching mathematics in the middle school classroom and inclusive settings. This course will explore successful strategies for developing and modifying lessons to meet the needs of all students. Attention will be paid to developing instruction for developing procedural skills, conceptual knowledge, and problem solving. Classroom strategies, hands-on techniques including the use of manipulatives, and the importance of communication will be discussed and presented. Current research will be examined along with recommendations from the National Council of Teachers of Mathematics (NCTM) and other relevant organizations. Tubercular check, FBI check, Act 151 and Act 34 clearances, must be obtained before beginning of class. 3 credits

ED-237 TEACHING OF HUMANITIES FOR MIDDLE AND SPECIAL LEARNERS
This course utilizes a blended learning model in exploring current literature and composition-based methodologies for effective teaching in middle grade English and social studies classroom environments. The course investigates successful strategies and academic standards/anchors necessary for successful teaching in the thematic middle grades. Course content will also include working with special needs and culturally diverse middle graders. The course requires students to equally prepare English and social studies lessons, microteaching, and field experiences within an integrated middle grade experience. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. Prerequisites: ED-100, ED-205/206, and PY-115 or consent of the instructor. 3 credits

ED-242 NUMERICAL & MANIPULATIVE MATH FOR EARLY AND SPECIAL LEARNERS
This course will provide pre-service teachers with current trends, techniques, technologies, and research about mathematical teaching in the special, early elementary, and inclusive settings. Classroom strategies, hands-on numerical techniques and communication, and the use of manipulative tools will be discussed and presented. Through a combination of readings, student research, in-class activities, microteaching and practical experience along with presented curricula, students will gain the skills necessary to create classroom enthusiasm toward mathematics. During much of the in-class time, students will participate in or present elementary mathematics lessons which parallel the types of lessons and strategies currently being promoted by the National Council of Teachers of Mathematics (NCTM) and other organizations that are interested in quality mathematics instruction at the early elementary level. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-244 SCIENCE & THE ENVIRONMENT FOR EARLY AND SPECIAL LEARNERS
This class emphasizes the study of young children's thinking in relation to the content and conceptual basis of science, technology, engineering and mathematics, and the environment in which they live. Differentiated instruction, inquiry, adapted discovery for special learners, STEM-oriented hands-on learning, making, design thinking and cooperative learning models form the pedagogical base for the study of physical, life, environmental, natural sciences, technology, engineering and mathematics. This course consists of both lecture and laboratory components including an inquiry- based demonstration and participation lab that provides the opportunity to integrate early learning theory with the content and conceptual knowledge base in science and the environment. This course includes lecture and laboratory components, meets three hours per week and includes a school-based field experience. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-250 READING & WRITING FOR EARLY & SPECIAL LEARNERS
This course addresses the development of emergent literacy skills in young children with and without special needs ranging in age from preschoolers through fourth grade who are "learning to read." Emphasis is placed on studying theories of learning, models of instruction, and their application in the design of appropriate language arts lessons for early and special learners. Special attention is given to the topics of balanced literacy, phonemic awareness, phonics instruction, whole language, vocabulary development, comprehension and beginning writing skills. Students will learn how to use the Fred Rogers archive and children's literature to enrich reading and writing curriculum as a learning medium with learners. Students are engaged in the planning and presentation of thematic units of instruction and language arts lessons that correlate with State and National Standards. Observations of language arts lessons in local schools and/or a tutoring experience are required. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-259 CRITICAL APPROACHES TO CHILDREN'S LITERATURE
Critical studies of children's literature draws not only on literary theory but also on an interdisciplinary approach to age-specific fiction. This literature course helps students interrogate children's and young adult literature and the roles it has played in national and familial identity, social reform, aesthetic movements, and other topics. In this discussion-oriented class, readings include approximately five novels and critical essays, assignments include weekly papers, one substantial critical paper, and class participation. 3 credits

ED-290 ED & PY OF EXCEPTIONAL. STUDENTS
This course examines the characteristics of exceptional individuals and effective educational strategies for their inclusion in the general education setting. All areas of exceptionality including early intervention and the gifted and talented are included. Other topics include the legal bases for education of the exceptional, techniques for identification and assessment, adaptation of curriculum and materials, the use of technology, available educational and community resources for positive intervention for students and their families, and current developments in the field. Tubercular check, FBI, Act 151, Act 126, and Act 34 clearances must be obtained before beginning the class. Prerequisite: ED-115. 3 credits

ED-300 TEACHING OF FOREIGN LANGUAGE, K-12
This course is designed to prepare students for a career in foreign language education. Students gain knowledge of current and past theories of language acquisition, learning, and teaching. Students develop a philosophy and style of teaching and are required to design and present lessons for students of various ages, abilities, aptitudes, and physical conditions from diverse socioeconomic and cultural settings, backgrounds, and environments. Students familiarize themselves with the National Standards for Foreign Language Teaching, the Pennsylvania State Standards K-12, and the ACTFL

Proficiency Guidelines. Students incorporate these standards in their lesson designs and instruments for assessment of student performance. Students integrate effective technological tools in the design of classroom lessons. Opportunities for reflection and self-evaluation concerning one's development as an effective teacher are provided. Membership in professional associations is encouraged. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. 3 credits

ED-301 TEACHING OF ENGLISH, 7-12
Course topics and experiences include the review of content area professional readings and the evaluation of appropriate internet resources. Students in this course will explore, analyze, and apply effective instructional strategies and materials for the secondary English classroom. Students will develop and present lesson and unit plans aligned the Common Core Standards. Field-based observations and experiences related to English Language Arts in the target grade levels are required as part of the course. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-302 TEACHING OF SOCIAL STUDIES, 7-12
The major emphasis of this standards driven course is the systematic investigation of teaching strategies and techniques, including lesson planning and student micro-teaching demonstrations, authentic learning and assessment, global education, instructional needs of special students, religion in the curriculum, and multicultural education. Current trends and issues in social studies education are also explored through required readings in periodical literature and educational research. Special attention is given to the teaching of current events, individualization and differentiation of instructional strategies and techniques, and the utilization of inquiry techniques. Membership in professional associations is encouraged. Appropriate research and instructional technology applications are included. One field-based experience is required. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisites: ED-205 or consent of the instructor. 3 credits

ED-303 TEACHING OF MATHEMATICS, 7-12
Course topics and experiences include: the identification of content area skills, development of scope and sequence charts, applications of technology to the teaching of mathematics, text and resource analysis, investigation of mathematics curricula with respect to Pennsylvania Core Standards and the NCTM National Standards, review of learning theory and its application to teaching methods, identification of specific learning groups and their special needs, and the development and use of teaching materials including written lesson plans and units of instruction. Videotaped micro-teaching and follow-up analyses are required. Membership in professional organizations is encouraged. This course includes field-based experience. This course includes both lecture and laboratory components and meets three hours per week. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-304 TEACHING OF SCIENCE, 7-12
Lectures and discussions focus on the philosophy of science; the human learning basis of science instruction; interaction analysis in the classroom; current trends in science curriculum and instruction aligned with the Pennsylvania Academic Standards; inquiry, direct instruction, cooperative learning, and discussion models of teaching; designing course, unit, and lesson plans; and authentic assessment of learning, micro-teaching, appropriate technology applications, and library research projects are required. Membership in professional associations is encouraged. One field experience is required. This course includes both lecture and laboratory components and meets three hours per week. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisites: ED-205/206 or consent of the instructor. 3 credits

ED-305 TEACHING OF ART, K-12
This course is designed to introduce the art education student to the teaching of art at the elementary and secondary levels. In addition to weekly class meetings, opportunities for classroom observation and directed teaching strategies will be provided. An emphasis is placed on developing a proficiency in art curriculum planning, motivational strategies, art room management, and methods of evaluation in art. Students will participate in mock-teaching and local art museum experiences. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. 3 credits

ED-306 TEACHING OF BUSINESS, COMPUTER AND INFORMATION TECHNOLOGY
This comprehensive course is designed to present the theory and methodology necessary to develop, teach, and evaluate instructional lessons and units relating to business subjects including accounting, business law, career development, communication, computation, economics and personal finance, entrepreneurship, information technology, international business, management, and marketing. Students will also learn about establishing and administering advisory committees, business clubs, and work experiences. School visitations and review of current literature are included. Applications are appropriate to the elementary, middle and high school. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. 3 credits

ED-307 TEACHING OF HEALTH AND PHYSICAL EDUCATI
This course is designed to introduce candidates to health and physical education pedagogy at both the elementary and secondary levels. In addition to weekly class meetings, opportunities for classroom observation and directed teaching strategies will be provided. An emphasis is placed on developing a proficiency in health and physical education curriculum planning, motivational strategies, classroom management, and assessment. Students will participate in a mock-teaching experience. Tubercular check, 4 FBI, Act 126, Act 151, and Act 34 clearances must be obtained before beginning the class. 3 credits.

ED-308 PERFORMANCE & VISUAL ARTS FOR EARLY EDUCATORS
This course addresses the principles, methodology, and decision-making skills essential for teachers to enrich elementary curriculum through the fine arts. It focuses on an integrated inter-disciplinary approach that increases teacher and student awareness of the creative processes and their role in promoting child development. This course includes both lecture and laboratory components, meets three hours per week, and includes a school-based field experience. Tubercular check, FBI, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-311 FIELD EXPERIENCE III
This field-based course is held on and off campus utilizing local school districts, Saint Vincent College Challenge program, and other youth programs for pre-student teaching experiences in the early adolescent setting. Supervised teaching and observations will be conducted to assist students in adapting curriculum and designing lessons for delivering instruction to middle (grades 4-8) learners. Students will have the opportunity to implement their lesson plans and self-evaluate their own practice teaching. Opportunities to observe veteran teachers and the middle school approach to teaching will be offered. Exploration of a variety of techniques to present the

same topic to different levels and how to incorporate interdisciplinary teaming will be addresses. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-317 PROGRAM DEVELOPMENT FOR INFANTS AND TODDLERS

This Fred Rogers-inspired course explores the importance of understanding the nature of young children (birth through 4 years) how they learn and techniques for program planning. Through site visits and role play participants explore the basics of infant care and how to address their physical, emotional and cognitive needs. Appropriate curriculum and room design will be explored and adapted to a variety of ages and stages. State and National accreditations and rating scales for infants and infant spaces will be examined and adapted into program plans. The Rogers Center will be used to enhance programming and the selection and use of appropriate materials. Different types of available programs will be discussed. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-122. 3 credits

ED-318 FIELD EXPERIENCE III: EARLY CHILDHOOD INSTRUCTION AND THEORY

This field-based course is held on and off campus utilizing local Pre-K learning centers for pre-student teaching experiences in the preschool setting. Supervised teaching and observations will be conducted to assist students in adapting curriculum and designing lessons for delivering instruction to early learners. Students will have the opportunity to implement their lesson plans and self-evaluate their practice teaching. Opportunities to observe veteran teachers and the Fred Rogers approach to teaching will be offered. Exploration of a variety of techniques to present the same topic to different levels and how to incorporate topics into discovery areas will be a focus. Students will be asked to incorporate room and program design from ED-122 into their teaching experiences. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-122. 1 credit

ED-319 INQUIRY INVESTIGATION, DESIGN, AND ASSESSMENT IN STEM EDUCATION

This course concentrates on the theory and practice of inquiry learning, project design, and assessment of inquiry-based activities. Students will participate in using new tools, developing ideas, and construction of proposed solutions that demonstrate a strong STEM knowledge. This course will require students to utilize the design process, employ fundamental concepts of mathematics, engineering, and scientific principles, to complete a final project that demonstrates STEM and the process of communicating through the disciplines. Presentations and group projects will be required as well as technical reports and construction of valid and reliable assessments. This course is a STEM content course in which students should expect to demonstrate mastery of basic skill concepts in mathematics and science. 3 credits

ED-320 COMPOSITION & LANGUAGE ARTS FOR UPPER ELEMENTARY

This course addresses the continuing development and refinement of literacy skills in the intermediate grades. The focus is on presenting the components required in a balanced program for language arts instruction. Reading, writing, speaking, and listening strategies across the curriculum are emphasized along with problem solving and higher level thinking skills. Various approaches for reading and writing instruction are examined including the use of basal readers and reading and writing workshops. Guidelines and techniques for teaching grammar, spelling, and handwriting are learned and presented in lesson plans that comply with State and National Standards. Students continue their study of children's' literature by reviewing several chapter books, participating in a literature response group, and by developing a literature focus unit. Appropriate instructional technologies are included. Observations of language arts lessons and/or a tutoring experience are required. This course includes both lecture and laboratory components and meets three hours per week. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-322 FIELD EXPERIENCE III: K-12

This field-based course is held on and off campus utilizing local school districts and other youth programs for pre-student teaching experiences in the K-12 or secondary setting. Supervised teaching and observations will be conducted to assist students in adapting curriculum and designing lessons for delivering instruction to K-12 and secondary (grades 7-12) learners. Students will have the opportunity to implement their lesson plans and self-evaluate their own practice teaching. Opportunities to observe veteran teachers and the secondary school approach to teaching will be offered. Exploration of a variety of techniques to present the same topic to different levels and instruction regarding young adult transition to post-secondary education, armed forces, or workforce will be emphasized. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 1 credit

ED-325 PHYSICAL HEALTH AND WELLNESS FOR EARLY EDUCATORS

This course involves the study of personal health and wellness as it relates to the early childhood educator when performing as a leader and mentor for young children. It includes instruction on the development of physical education activities appropriate for early learners. The prospective classroom teacher will be provided with a knowledge base in health, fitness, and wellness. Students will be exposed to a rounded approach to life-long wellness as an individual and teacher. Assignments will include lesson planning, exams, physical inventories, microteaching, student discussion, etc. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-330 EARLY CHILDHOOD LEADERSHIP AND COMMUNITY ADVOCACY

This Leadership course focuses on the administrative aspects of Early Childhood, beginning with an historical overview of preschool. It focuses on the role of a director or administrator in both a business and leadership aspect. State and national accreditations for the preschool (DHS, STARS, NAEYC) as well as the director (Director Credential) and Staff (CDA, PDR) are explained and explored. Determining how to write a business plan, quality improvement plan, and the development of handbooks (Parents, Staff and Policy and Procedure) are included in the class work. Practice in developing strategies on how to be a leader not a manager, developing your team, utilizing your team's strengths, and furthering your staff's development. The importance of political advocacy and how to get involved are discussed. Advertising opportunities and designing brochures for enrollment enhancement are a focus. Community engagement groups, parent groups, grants and awards to enhance programming are explored. communicating and interfacing with parents, is addressed through the design and delivery of a parent informational meeting, held in an early learning site. Prerequisite: ED-317. 3 credits

ED-350 INDEPENDENT STUDY--EDUCATION
Open to junior and senior students with the approval of the department chairperson. Independent studies are administered only by special need and on a case-by-case basis. Variable credit.

ED-355 INST. INTER/HIGH INCID. DISABILITIES
This course addresses various strategies and techniques for successful teaching of students with high incidence disabilities. Within this course, there is a concentration on remediation and adaptation in the general curriculum areas of reading, written and spoken language, and mathematics. Students are exposed to secondary curricular areas of life skill strategies, self-determination strategies, and self-advocacy strategies. Emphasis will be placed on supporting students with high incidence disabilities in the general curriculum and collaborating with general education teachers. Course requirements include practice teaching and field experiences, lesson planning, consultation and research of available journals and resources for teaching. Tubercular check, FBI, Act 151, Act 126, and Act 34 clearances must be obtained before beginning the class. 3 credits

ED-360 STRAT/ASSESS. SIG/MULTI DISAB
This course concentrates on diagnostic and evaluation techniques used with students who have significant, developmental, and multiple disabilities. The use of formal and informal assessment tools in areas specific to functional and life skills is emphasized. Students acquire knowledge of various assessment procedures used to identify students for special education and for individual education program designs implemented within the traditional or non-traditional classroom. This course requires students to perform simulated hands-on and practical implementation of assessment tools to monitor students' progress. In addition, the course focuses on methods teachers use to organize curriculum and implement assessment and instruction to ensure maximum learning for students with moderate and/or severe disabilities. Students are exposed to the curriculum needs such as life, vocational, social skills, and functional academics. 3 credits

ED-362 BEHAV. & AUTISM SPEC. DISORD.
This course informs students about techniques for the instruction of students with emotional disabilities and autism, the principles of applied behavior analysis, and the use of behavior assessments in the classroom. In addition, students are exposed to the multiple characteristics of students with autism and other emotional and behavioral disabilities. Students are taught classroom approaches for helping students with emotional disabilities and autism gain access to the general curriculum. This course focuses on the implementation of various positive behavior techniques in order for special educators to ensure maximum learning and class management. 3 credits

ED-381 EDUCATIONAL TESTING
This course is designed for middle level majors and provides an overview of psychological and educational testing of preschool and school age children and youth. Topics include the history, issues, and problems of psychological and educational assessment; test design and evaluation; an overview of tests of intelligence, academic achievement, interests, and aptitude; ecological assessment of classroom behavior; and a review of ethical issues. Consideration will be given to assessing the needs of exceptional children and ways of critically reviewing such assessment for purposes of educational decision-making. Prerequisite: ED-205. Fee. 3 credits

ED-385 APPLIED PRACTICUM IN STEM TEACHING AND LEARNING
This authentic experiential course is designed to use a project-based and data-driven approach to provide future STEM professionals with the experiences and scholarship necessary to be successful STEM leaders or educators. This course requires students to participate in a conference(s) or workshop(s) related to STEM Education and to present research that enhances STEM teaching and learning. Students will be required to travel to sites and mobile labs to experience the variety of STEM instructional settings and assess their effectiveness in supporting STEM education. Students will also tour factories and workplaces that use 21st century technologies for production to help align instructional program design to real-world occurrences. 3 credits

ED-390 PROMOTING YOUTH CULTURAL COMPETENCE AND DIVERSITY
This course is intended to provide both practical and theoretical insights into challenges and difficulties in human communication that result when representatives of different countries interact. The course addresses the history and current realities and principles of the field of second language learning and teaching. It focuses on the needs of the learner, the role of the teacher, cultural differences and international challenges, and the application of methodology in developing communicative competence. Using current techniques and teaching exercises, the course provides students with applied training in approaches of instruction for non-native speaking learners. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances, must be obtained before beginning the class. Prerequisite: ED-205. 3 credits

ED-400 FIELD EXPERIENCE IV: PRE-STUDENT TEACHING PRACTICUM
Student registers for ED 400 the semester prior to student teaching. The course is designed to provide supervised instructional experiences with children and adolescents and an interactive didactic seminar to address the prerequisite skills specific to student teaching. Topics include familiarization with instructional aids and materials, reinforcement of basic teaching pedagogy, knowing and understanding school policies, developing rapport with students and faculty, and providing ample opportunities for systematic observation and supervised teaching in the certification area. ED 400 includes a weekly seminar and a commitment of one full day per week of fieldwork for a semester. Requirements include school site teaching with a minimum of two teaching periods observed by the College supervisor. Appropriate research and technology applications are included. Students must have gained formal admission to the teacher certification program before enrolling in this course. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. Prerequisites: ED-205 and at least one teaching methods course. Fee. 2 credits

ED-401 PRE-STUDENT TEACHING SEMINAR
Seminar offers interactive didactic opportunities to address the prerequisite skills specific to student teaching. Supplemental assignments assist the teacher candidate in developing a professional teacher portfolio. Additional topics include professional conduct and ethics, resources and technology in individual school districts, reinforcement of classroom management skills, professional communication, and professional test preparation. 3 credits

ED-410 FIELD EXPERIENCE V: STUDENT TEACHING INTERNSHIP
The Student Teaching Internship is a full semester experience. A variety of supplemental assignments are designed to enhance professional competencies. Prerequisites include completion of all other certification requirements, with the exception of Professional Seminar (ED-411). Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances must be obtained before beginning the class. Student must take ED-411 concurrently with ED-410. Fee. 9 credits

ED-411 PROFESSIONAL SEMINAR
The seminar meets weekly and is required of all students who enroll in ED 410. Lectures, demonstrations, and discussions draw upon the immediate problems and experiences of student teaching. Supplemental assignments are designed to assist the student in applying educational principles of instruction in actual classroom settings. Appropriate research and technology applications are included. Additional emphasis is placed on preparation of credentials package. Prerequisites include completion of all other certification requirements with the exception of student teaching. Tubercular check, FBI, Act 126, Act 151 and Act 34 clearances must be obtained before beginning the class. Students must take ED-411 concurrently with ED-410. 3 credits

ED-412 SPEC. ED. CONSULT, TRAN, LAW
Within this course, candidates will focus on Special Education laws, Special Education paperwork, and transition for students with disabilities. Candidates will gain practical knowledge of how to complete required teacher generated paperwork that is mandated by the current Special Education law. They will also gain knowledge of what Special Education law says about students with disabilities transitioning into adulthood and how to develop programming to meet the variety of needs for secondary students with disabilities. 3 credits

ED-413 INTERNSHIP IN SPECIAL EDUCATION
Similar to Student Teaching, this internship requires the candidate to spend time with a special education teacher. The 150 required hours are split between high-incidence and low-incidence disabilities so the student gains experience with various students and disabilities within their certification range. During the semester, the student will develop a professional portfolio that provides evidence of mastery for each of the 10 Council for Exceptional Children Initial Content Standards. In addition, the student will be observed twice by a mentor and twice by the supervisor. This course will coincide with ED-412 - Special Education Consultation, Transition, and Law. 3 credits

ED-505 SUPERVISED TEACHING EXPERIENCE: FALL TEACHING INTERNSHIP
The Supervised Teaching Internship is a full semester experience for students teaching on an intern certificate that occurs in the fall semester. Observations of teaching practice with feedback will occur on a monthly basis. A midpoint and final evaluation, that is aligned to the Danielson Framework (PDE 430) will be completed. 1 credit

ED-515 SUPERVISED TEACHING EXPERIENCE: SPRING TEACHING INTERNSHIP
The Supervised Teaching Internship is a full semester experience for students teaching on an intern certificate that occurs in the fall semester. Observations of teaching practice with feedback will occur on a monthly basis. A midpoint and final evaluation, that is aligned to the Danielson Framework (PDE 430) will be completed. 1 credit

ED-520 SPECIAL EDUCATION FOUNDATIONS TEACHING INTERNSHIP
This course examines the characteristics of exceptional individuals and effective educational strategies for their inclusion in the general education setting. All areas of exceptionality including early intervention and the gifted and talented are included. Other topics include the legal bases for education of the exceptional, techniques for identification and assessment, adaptation of curriculum and materials, the use of technology, available educational and community resources for positive intervention for students and their families, and current developments in the field. 3 credits

ED-550 EDUCATION INTERNSHIP
This course is a self-designed internship in education that provides students the opportunity to learn and practice education theory through experiential fieldwork. The internship design, duties, and course evaluation must be monitored by the assigned faculty member. Variable credit.

EL-101 WRITING AND RESEARCH
Writing and Research offers instruction in academic writing with special attention to rhetorical situations, preparing students to enter academic conservations through awareness of audience, discourse conventions, and research strategies. Writing and Research, as first tier course in Saint Vincent College's Writing Program, introduces you to the kinds of writing tasks and skills required by your academic courses and helps you develop your skills in persuasive and analytical writing. By following the Three Stages of Good Writing Practice and applying the Six Principles of Good Writing, you will learn how to become a more self-aware and focused writer. Your writing process will sharpen as you practice gathering and evaluating others' ideas, including and weighing your own ideas, developing those ideas in your drafts, critiquing one another's writing, and revising your drafts into finished, polished papers. Discussions of readings, assignments, and papers will aim to help you practice audience awareness, critical reading, information literacy, and research skills. As you work on informal exercises and formal essays, you will increase your grammatical proficiency, enhance your understanding of style, and develop an academic voice. 4 credits.

EL-102 LANGUAGE AND RHETORIC
This first-year writing course develops students' ability to read analytically, think critically, and write formal, documented essays that incorporate readings. Through four formal essay assignments, students learn how to apply the Six Principles of Good Writing as a compositional guide and rubric for evaluation. To improve their management of the writing process, students practice the Three Stages of Good Writing Practice, and to prepare them for future assignments, students learn how to use outside sources responsibly and how to document sources properly. All students must complete this course to satisfy the Core Curriculum. This course does not count toward the English major. 3 credits

EL-103 PRINCIPLES OF LITERARY STUDY
This literature course is an introduction to college-level literary studies. Students will become familiar with a variety of literary texts drawn from the genres of short fiction, poetry, drama, and creative nonfiction, and will learn the formal features that distinguish these genres. Just as importantly, students will develop the reading and analytical skills needed to appreciate more fully the intellectual and emotional rewards that literary writing offers to its active, interested readers. Such readers will be able to apply these skills to other disciplines and will find reading literature to be not merely a dry academic exercise, but a means by which they can more richly understand themselves and their world. 3 credits

EL-107 NEWS WRITING
In this writing course, students will learn about the nature and role of journalism in a democratic society and practice and publish their own news writing. Along with the function and ethics of journalism, students will learn how to determine what is newsworthy, gather information and check sources, structure a news article, compose various kinds of feature articles, write paragraphs and sentences in a journalistic style, and edit their own writing and that of others. Students submit completed articles to the college's student newspaper; if accepted for publication, those articles receive bonus points. 3 credits

EL-108 TECHNICAL WRITING
In this writing course, students learn how to plan, compose, and revise technical documents. Assignments include problem analyses, instructions, proposals, process descriptions, and formal reports. In the process of completing these assignments, students practice strategies for analyzing audience, writing clear sentences, composing memos and letters, paraphrasing, organizing reports, and using new media. 3 credits

EL-110 CREATIVE WRITING AND READING
This creative writing course introduces the fundamentals of creative writing craft in three genres: poetry, fiction, and creative nonfiction. Students read and discuss short contemporary texts and respond to in-class writing prompts. In the workshop element of the course, students give and receive peer feedback on their drafts and collaboratively explore strategies for revision. Students produce a final portfolio of revised work in all three genres. This course is a prerequisite for advanced courses in Creative Writing and may not be taken after students have enrolled in advanced courses in Creative Writing. 3 credits

EL-111 ENVIRONMENTAL LITERATURE
This literature course engages the connections among literature and the environment, reading touchstone texts in nature writing and branching out into units on culture, animals, children's literature, global warming, and post-apocalyptic representations of environmental disaster. This course mixes short readings with novels and considers various ecocritical and interdisciplinary perspectives in order to explore imaginative literature. Discussion-oriented class; requirements include weekly reading reflections, group presentation, take-home mid-term and final short-answer and essay exams, as well as class discussion. 3 credits

EL-112 LITERATURE AND LEADERSHIP
In this literature course, students will read fiction and poetry and watch films by and about leaders and leadership. Through these readings, students will gain a greater understanding on ways in which the definition of leadership has evolved, and how leadership has adjusted to suit changing circumstances. Readings from Machiavelli and other classic authors will set the tone for fiction, nonfiction, poetry, and films that depict the lives and struggles of those who have chosen to lead or who have been thrust into positions of responsibility and consequence. Students will maintain a reading blog and perform a final writing exercise. 3 credits

EL-113 WOMEN'S LITERATURE
This literature course examines the various roles assumed by women, both as characters and authors, to issues such as the possibility of a particularly female aesthetic and literary tradition. Readings may include Rowson, Jacobs, Austen, Woolf, Mukerjee, Morrison, among other writers, and consider texts across space, time, class, and ethnicity. Discussion-oriented class; requirements include weekly papers or reading reflections, quizzes, group presentation, final, and class discussion. 3 credits

EL-114 BRITISH LITERATURE: BEGINNINGS TO PRESENT
This discussion-based course surveys British literature in its various genres from the Anglo-Saxon era to the twenty-first century. Students will read selections from authors like Chaucer, Marlowe, Milton, Swift, Keats, Woolf, Joyce, Ishiguro, and Zadie Smith and locate these readings within the medieval, renaissance, neoclassical, romantic, Victorian, modern, and postmodern periods. Discussions of these readings, a reading blog, two short essays, a midterm and a final exam will develop students' reading comprehension, critical thinking, and analytic writing. 3 credits.

EL-117 LEADERS AND VOICE IN AMERICAN LITERATUR LITERATURE; BEGININGS TO PRESENT
This course in American Literature explores the prevalence of American leaders and their powerful voices, from the colonial era through present day. Throughout the evolution of literary genres, themes, and forms, this course explores the leaders and voices that helped define and develop the American literary tradition. In this writing and reading based class, students will read short works by famous American leaders and authors that helped shape the way we see the world today. Students will take reading comprehension quizzes and write three response-based literary papers. 3 credits

EL-118 GLOBAL LITERATURE
This introductory literature course takes a geographical approach to world literature. Readings may include novels, short stories, poetry, drama and film from the Americas, Africa, Asia, Europe, and Oceania. All reading is in English. Authors might include (but are not limited to) Gabriel García Márquez, Gabriela Mistral, Pablo Neruda, Arundhati Roy, Haruki Murakami, Chinua Achebe, Chimamanda Ngozi Adichie, Mahmoud Darwish, Anna Akhmatova, Elena Ferrante and many others. Class members acquire skills in reading imaginative literature with attention to language and culture; they respond to questions and prompts on a weekly basis. The course is writing-designated; students must complete one short essay and two long ones. 3 credits

EL-119 HISTORY OF THE ENGLISH LANGUAGE
This linguistics course examines the history of English from a technical standpoint and also from a political, social, and even religious perspective. Students begin with an overview of linguistic theory. Then, concentrating on such linguistic phenomena as Grimm's Law and the Great Vowel Shift, they examine how Anglo-Saxon (Old English) became middle English, and how that in turn evolved into modern English. They also analyze how historical, psychological, and social forces have shaped modern English and what forces may shape it in the future. Student progress is measured by periodic quizzes, discussion boards, three essays, and class participation. This course is required of all English majors seeking secondary certification to teach English. 3 credits

EL-126 ROCK N ROLL CRITICISM
In this literature course, students examine the history, artistry, and cultural impact of contemporary popular music by reading the work of critics from academia, mainstream music journals, and the underground press. Students read about and discuss such issues as genre, audience, image, aesthetic value, history, race, and gender. Also, students examine and learn how to analyze the prose style of such popular music critics as Cohn, Marcus, Christgau, Bangs, and Tate. Finally, students develop their ability to write criticism by learning how to listen critically, establish aesthetic criteria, and apply them in written pieces. Students must compose a series of worksheets, deliver an oral report, take a midterm and final, and complete a course project, which may be creative. 3 credits

EL-127 SHAKESPEARE ON FILM
In this literature course, students read and discuss several key Shakespeare plays and screen a variety of film adaptations from such directors as Kurosawa, Jarman, Zeffirelli, and Olivier. Students will learn how to watch films critically, to understand various approaches to adapting a written text to film, and to express their discoveries effectively through discussion and writing. This course requires a reading and screening journal, as well as a midterm and final exam. 3 credits

EL-128 CHILDREN'S LIT: FABLES - 1900
This literature course explores the cultural construction of childhood

and children's literature from classical antiquity to 1900. Student move from medieval children's literature to Puritan children's literature, rationalist children's literature, and romantic children's literature. Readings include literary texts, secondary essays, and two nineteenth century novels. Course requirements include reading logs, unit tests, final exam and participation in group and class discussion. 3 credits

EL-133 AMERICAN LIT: BEGINNINGS TO PRESENT
This literature course explores the evolution of literary genres, themes, and forms from the colonial era through the present. This course explores the poetry, fiction, and various narrative forms that help define and develop the American literary tradition. In this discussion-oriented class, readings include a multitude of short works. Students take reading comprehension quizzes and write three-to-four papers. 3 credits

EL-136 READING SHORT FICTION
This course in short fiction explores the short form. Short stories, flash fiction, novellas, and graphic novels all have a place in short fiction. Literature crosses cultures and continents to cultivate community and express identity; the short forms it takes have been ripe for innovation and experimentation. Unifying topics are chosen by the instructor and may include: minority literature, gender studies, the urban experience, the rural experience, immigrant literature, genre study, leadership, or more. Students will take a thematic approach while reading, interpreting, discussing, and analyzing short fiction. Three credits.

EL-138 MULTIETHNIC LITERATURE OF THE UNITED STATES
This literature course engages questions of national literature as expressed, developed, and critiqued in a multicultural arena. While it is impossible for the readings in this class to be totally representative of the emerging multicultural canon, nonetheless, students will read texts from a variety of different American ethnicities and their themes. Readings include approximately 8 books that explore the diverse perspectives of writers representing African Americans, Hindus, Muslims, Hispanics & Latinos, Asians, and Middle Easterners, among others. Assignments include short reflections on novels, reading quizzes on each book, group culture/ethnic presentation, a paper, final exam, and class participation. 3 credits

EL-139 AFRICAN AMERICAN LITERATURE
This literature course studies the major themes and artistic innovations in African American literature from the Africans' diaspora in the 17th century to the present. Moving from slave narratives, songs, and early American documents through the aftermath of slavery, into the Harlem or New Negro Renaissance, through the Civil Rights Movement, and arriving at contemporary literature and the election of our first African American president, this course provides an historic and literary overview of African American literary production. Course requirements include short unit response papers, a group presentation, unit quizzes, final exam, and class participation. 3 credits

EL-140 MULTIETHNIC LITERATURE LEADERSHIP AND DIVERSITY
This literature course engages questions of national literature as expressed, developed, and critiqued in a multicultural arena. While it is impossible for the readings in this class to be totally representative of the emerging multicultural canon, nonetheless, students will read texts from a variety of different American ethnicities and their themes. Readings include approximately 8 books that explore the diverse perspectives of writers representing African Americans, Hindus, Muslims, Hispanics & Latinos, Asians, and Middle Easterners, among others. Assignments include short reflections on novels, reading quizzes on each book, group culture/ethnic presentation, a paper, final exam, and class participation. 3 credits

EL-141 DIVERSITY AND LEADERHSIP IN MULTIETHNIC LITERATURE
This literature course engages questions of national and global literature as expressed, developed, and critiqued in a multicultural arena. While it is impossible for the readings in this class to be totally representative of the emerging multicultural canon, nonetheless, students will read texts from a variety of different American ethnicities and their themes. Readings include approximately 8 books that explore the diverse perspectives of writers representing African Americans, Hindus, Muslims, Hispanics & Latinos, Asians, and Middle Easterners, among others. Assignments include 1 Important Quote Paper (IQP) that reflects on literary/quote analysis; Reading responses/discussion questions; 1 literary quote analysis exam. 3 credits.

EL-142 POETRY IN PUBLIC: OUTREACH AND CURATION
In the Literary Arts In this project-based class, students will curate selections of literary work for multiple forms and venues, such as print and online publications. For example, students might produce Generation magazine, the school's annual publication of student poetry, fiction, nonfiction, and art. Students will also complete outreach, identifying communities and collaborations to plan events such as readings, happenings, workshops, or other in-person or virtual engagements. The course offers students the opportunity to sharpen their evaluative and group decision-making strategies. Participants learn various formatting, editing, and proofreading techniques to be put into practice. Students learn about event planning and develop intentions and strategies for engaging multiple audiences around literary art. Students will work on independent and group projects. 3 credits

EL-143 THE BEAT GENERATION
This literature course explores the major poetry and prose of Kerouac, Ginsberg, Burroughs, Snyder, and others within a framework of post-WWII history, art, literature, and music. Students write a series of short papers, take a midterm and final exam, deliver oral presentations, and submit a course project, which may consist of creative work. 3 credits

EL-144 LEADERSHIP AND VOICE IN AMERICAN SHORT FICTION
For SSS-TRIO Grant Students Only. This course in short fiction explores the short form. Short stories, flash fiction, novels, and graphic novels all have a place in short fiction. Literature crosses cultures and continents to cultivate community and express identity; the short forms it takes have been ripe for innovation and experimentation. Unifying topics are chosen by the instructor and may include: minority literature, gender studies, the urban experience, the rural experience, immigrant literature, genre study, leadership, or more. Students will take a thematic approach while reading, interpreting, discussing, and analyzing short fiction. 3 credits.

EL-145 AMERICAN LEADERS IN SHORT FICTION
For Act 101 Grant Students Only. This course in short fiction explores the short form. Short stories, flash fiction, novels, and graphic novels all have a place in short fiction. Literature crosses cultures and continents to cultivate community and express identity; the short forms it takes have been ripe for innovation and experimentation. Unifying topics are chosen by the instructor and may include: minority literature, gender studies, the urban experience, the rural experience, immigrant literature, genre study, leadership, or

more. Students will take a thematic approach while reading, interpreting, discussing, and analyzing short fiction. 3 credits.

EL-148 CATHOLIC WRITERS
This literature course will examine literature by Catholic authors from the mid-nineteenth century to the present day. Students will read and discuss works by such writers as Gerard Manley Hopkins, G. K. Chesterton, Dorothy Day, Flannery O'Connor, and Shusaku Endo, among others, and so explore the ways that the writer's faith affects their imaginations, their views of moral conflict and of character, and their spirituality. The readings and the specific focus of the course may vary from semester to semester. Work may include a midterm, a final, a research paper, quizzes and other short assignments, and class participation. 3 credits

EL-154 SPECIAL TOPICS IN LITERATURE
This literature course offers students unique opportunity for more focused study of literary periods, figures, genres, creative writing modes, and interdisciplinary topics. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-155 SPECIAL TOPICS: CREATIVE WRIT
This creative writing course offers students unique opportunity for more focused study of topics in Creative Writing. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-156 SPECIAL TOPICS: PROF. WRITING
This writing course offers students unique opportunity for more focused study of topics and methodologies in Professional Writing. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-157 SPECIAL TOPICS: CHILDREN'S LITERATURE
This literature course offers students unique opportunity for more focused study of topics in Children's Literature. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-158 CR. WRIT/LEADERSHIP & CHARACTER
This writing course is designed to guide SSS-TRIO students through the process of creating believable characters and presenting them to the reader effectively. The characters they create will exemplify specific leadership traits, but will be required to break beyond idealism into realism. We will discuss how to avoid unnecessary exposition, how to choose a perspective, and how to construct a story within the scope of flash fiction and short stories - the usual starting place for fiction writers. Students will write several short pieces, focusing on character development and presentation. They will then write a final paper comparing their character to George Milton from Of Mice and Men, and determine which is a better leader based on the characteristics discussed in class. 3 Credits

EL-165 LITERARY DUBLIN
In this study-abroad literature course, students will read key texts by such Irish writers as W.B. Yeats, James Joyce, and Sean O'Casey and then travel to Ireland walk down the Irish streets and meadows that inspired their work. The class will meet infrequently at SVC; the majority of the class time will take place during a week-long trip to Dublin and County Sligo, where students will attend lectures, tour author's homes and museums, and retrace the steps of the characters they have read. Required work includes an online reading blog, two short papers, and an oral presentation. 3 credits

EL-166 SHAKESPEARE IN LONDON
In this study-abroad literature course, students will experience Shakespeare's plays in the city in which they were first performed. Before travelling to London, students will read the play texts and exchange their interpretations through blog posts. In London, students will visit key sites, hear lectures from scholars and actors, and see the plays that they have read at the two preeminent Shakespeare theaters: Shakespeare's Globe in London and the Royal Shakespeare Company in Stratford-Upon-Avon, the bard's birthplace. In London, students will maintain a journal that will include their impressions of the city and reviews of the plays. 3 credits

EL-167 AMERICANS IN PARIS
This is a travel course and an introductory literature course. In it, students will explore the literature produced by expatriate American writers who came to Paris for inspiration, artistic freedom, or freedom from bigotry. Though a wide variety of writers will be considered, special emphasis will be placed on the writers of the Lost Generation, the Paris Noir movement, and the Beat Generation. During spring break, we will travel to Paris, where students will explore the streets, cafes, parks, and museums that fired the imaginations of these writers. Required work includes an online reading blog, two short papers, and an oral presentation. Fee.3 credits.

EL-168 THE RENAISSANCE IN FLORENCE
This is a Travel Course. EL 168, with EL 165-Literary Dublin, EL 166-Shakespeare's London, EL 167-Americans in Paris constitute the English Department's "Literary Explorer" series, a group of courses that enables students to experience literature in at its sources, deepening their understanding and appreciation of that culture's history and literature, and thereby meeting the core goal of "demonstrating an informed understanding of their historical, cultural, and political location within a global context." In this class, students will gain a greater appreciation for the rich literary, cultural, and political history of Florence, Italy through reading key literary texts, visiting the city during spring break, and exploring a relevant topic in depth. We will read texts drawn from the late medieval to the high renaissance period, roughly 1300 to 1550. During this period, some of western history's greatest literature, painting, sculpture, and architecture was produced in this small city. 3 credits. Students must pay for the spring break trip to Florence.

EL-170 IMAGES OF CHINA IN WESTERN TEXTS
This course is a period-by-period survey of major European and American works describing China. From the study of these texts, we will begin to understand the shaping and changing of the images of China. For Medieval texts on China, we will read The Travels of Marco Polo, The Travels of Odoric of Pordenone and The Travels of Sir John Mandeville. !6th-century texts on China will include Certain reports of China, learned through the Portugals there imprisoned . . . by Galeote Pereira and The History of the Great and Mighty Kingdom of China . . . by Juan Gonzalez de Mendoza. The Journals of Matteo Ricci, Bellum Tartaricum, or the Conquest of the Great and most renowned Empire of China by Martin Martinius (Martino Martini) and The Conquest of China, By the Tartars: A Tragedy by Elkanah Settle will be the focus for the 17th-century. For 18th-century France, we will read various works related to China by Voltaire, and, for 18th-century England, The Citizen of the World by Oliver Goldsmith and texts related to the Macartney Embassy to China. Works by Bret Harte and Mark Twain and Chinese Characteristics by Arthur Smith will present the 19th-century American image of China. Ezra Pound and The Good Earth by Pearl Buck will be read as representative of the 20th-century view of China. One purpose of this course is to introduce how the images of

China changed over the centuries. Another purpose is to offer various methodologies that can be used to study national images or "the other." The teacher's lectures will include an analysis of the text under consideration as well as information about the author and the historical background. Each class will also have students giving oral reports based on their written report about the text being read. 3 credits

EL-171 THE CLASSIC CHINESE NOVEL
The Dream of the Red Chamber or The Story of the Stone, as it is now often called, is generally considered the greatest of traditional Chinese novels. Its name in Chinese is Honglou meng??? (HLM hereafter). It was first published in 1791. The author of the first 80 chapters is Cao Xueqin ??? (d. circa 1763); and the last 40 chapters are said to be by Gao E ??(c. 1738- c. 1815), the editor of the first printed edition. In this course we will read each week usually about 12 or 13 chapters from the English translation of HLM. There are two complete English translations. One by Yang Xianyi and Glady Yang (3 volumes) and another by David Hawkes and John Minford (5 volumes). Students can read either one of these translations. During class, I will first discuss the chapters having been read, especially the literary and writing techniques used in those chapters as well as character analysis. Next, students will present oral reports on those chapters, based on their written report. Students who know Chinese are welcome to write about the quality of the English translations. In the final part of the class, I will introduce a book and article written in English about HLM. 3 credits

EL-172 CHINESE LIT: ZHOU TO TANG DYNASTIES
This course is the first of a three-course series on Chinese literature. It will introduce Chinese literature from the Zhou Dynasty (1046 to 221 BCE) to the Tang Dynasty (618 to 907 CE). During the eras covered for this course, the word 'literature' had a much broader meaning than it does today, so in addition to imaginative texts, including poetry and prose in translation, we will also study works of philosophy and history. The main survey to be used is Anthology of Chinese Literature, Volume I: From Early Times to the Fourteenth Century edited by Cyril Birch (1965). Students' work will include weekly readings, written reports that will be the basis for oral reports, and a final paper. 3 credits

EL-173 CHINESE & CHINESE AMERICAN FOLKLORE
In this class, we will read the English translations of popular Chinese folklore, legends, and myths. These include the tale of Mulan, the story of the Cowherd and the Weaver Girl, the legend of He Shi Bi, the myth of Nu Wa, and many more fascinating stories from China's rich oral traditions and folk literature. We will look through the lens of gender and intercultural communication studies to analyze how these stories evolved throughout history and how they were told differently in mainstream and vernacular cultures. Additionally, we will examine a number of adaptations of these stories in film, TV series, opera, and dance by Chinese and Chinese American authors, and compare the differences in terms of language, theme, moral, and functionality. This course will also expose students to the vibrant folklore communities in China and talk about folklore's contributions to the formation of cultural identities. 3 credits.

EL-174 CHINESE LITERATURE II
This course is the second of a three-course series on the history of Chinese literature. It will introduce Chinese literature from the Song Dynasty (960-1279 CE) to the end of the Qing Dynasty (1644-1911). Chinese Literature III will look at 20th-century Chinese from the Republican Period (1911-1949) and that of the People's Republic (1949-). In Chinese Literature II literary texts from these dynasties will be studied: Song Dynasty (960-1279), Yuan Dynasty (1271-1368), Ming Dynasty (1368 to 1644), and Qing Dynasty (1644-1911). The focus of this course, besides introducing the literature of these four dynasties through readings in anthologies, will be on three of the major works of fiction produced: Outlaws of the Marsh, Journey to West, Jin Ping Mei, and Dream of the Red Chamber, also known as The Story of the Stone. Drama from the Yuan Dynasty will be read, too. Student grades will be based on written reports (40%), oral reports (30%), and class participation (30%). 3 credits.

EL-179 THE LITERATURE OF PROTEST
In this discussion-based literature course, students explore the ways in which literature, art, music, and film have responded to injustice, censorship, and militarism. Papal encyclicals, the Universal Declaration of Human Rights, and the U.S. Bill of Rights establish the moral basis for an analysis of a diverse group of artists that includes John Stuart Mill, John Milton, Mary Wollstonecraft, James Baldwin, Henry David Thoreau, Bob Dylan, Rebecca Harding Davis, Larry Kramer, Adrienne Rich, Tim O'Brien, and Abbie Hoffman. Students will maintain a reading blog, deliver an oral report, and take a midterm and final. 3 credits

EL-185 HISTORY OF THE BOOK
In this introductory literature course, students will study the history of books and printing from the ancient world to the present. The course will focus on books as artifacts, as vessels of knowledge and literary creativity, and as indicators of literacy, public taste, and power. To delve into book history, students will explore the unique resources in Saint Vincent rare books collection. 3 credits

EL-200 WAYS OF READING: AN INTRO TO LITERARY THEORY
In this intermediate literature course, English majors and minors survey and practice the literary theories of the 20th and 21st centuries. Beginning with New Criticism, students concentrate on such critical theories of the contemporary period as Structuralism, Deconstruction, Marxism, Feminism, Cultural Studies, Post-Colonial Theory, and Post-Modernism. Emphasis, however, will be placed on applied criticism, through three short essays in which students examine text from the perspective of specific critical schools. Along with the three essays, students must take midterm and final exams. This course is required of all English majors. This course does not fulfill requirements for the core. 3 credits

EL-203 POETRY WORKSHOP
In this advanced creative writing workshop, students deepen their study of poetic craft while beginning to navigate the landscape of contemporary poetry and poetics. In weekly reading assignments, students explore the variety of forms, questions, and impulses driving poetry today, building a context for their own writing in the genre. Requirements include one term paper; and weekly writing and workshop of poems, which culminate in a final portfolio of original work. Prerequisite: EL 110 or permission of instructor. 3 credits

EL-204 FICTION WORKSHOP
In this advanced creative writing workshop, students deepen their study of the craft of short fiction. Students read modern and contemporary short story collections in addition to a book of short fiction craft. This course requires extensive reading assignments-usually one short story collection per week, plus chapters from a craft book-in addition to the writing and workshop discussion of stories for the final portfolio project. 3 credits

EL-205 ADVANCED WRITING
Advanced Writing explores writing across the curriculum and in multiple academic disciplines, taking special consideration of contextualized expectations within writing communities. This class develops a bird's eye view of knowledge production, rhetorical

contexts, and diverse professional landscapes. Students will study their own positionality in academic writing while learning to engage critically with the diverse writing of their peers. This course is required for writing consultant work-studies. 3 credits

EL-214 SHAKESPEARE'S GREATEST HITS
In this intermediate literature course, students engage in an intensive study of selected tragedies, comedies, and history plays from both traditional and contemporary perspectives. Students will trace Shakespeare's plays to their sources, examine dramatic conventions, review the plays' formal literary qualities, and situate the plays in their historical and philosophical context. Also, students will read these plays through such theoretical lenses as deconstruction, gender studies, new historicism, and postcolonialism. Course requirements include a midterm and final exam, a critical summary of a scholarly article, a reading blog, and a term paper. 3 credits

EL-216 SATAN AND CO.: BRITISH RENAISSANCE LIT
This advanced literature course focuses on the major texts of Spenser, Donne, and Milton. Along with their close reading of the primary texts, students will locate these texts within the religious, political, and philosophical crises that distinguish the early modern era. The course familiarizes students with the criticism of these writers and their work by requiring that they write a short essay, deliver an oral presentation on a scholarly article, take a midterm and final exam, and compose a research-based paper. 3 credits

EL-224 THE ROMANTIC AGE
While Romanticism in Europe enjoyed its high period in the first half of the nineteenth century, this upper-level course examines romanticism as a cultural influence with principles that predate 1798, and which reach beyond 1840. While the canonical Romantic writers-Blake, Wordsworth, Coleridge, Shelley and Keats-occupy center stage, thinkers and ideas influencing them and modifying their work are given significant attention, especially neo-classicism, touring, the French Revolution, feminism, and landscape painters. Genres include poetry, polemics and fiction. Students of sophomore standing or above complete two literary analyses, participate in four workshops, and take a final exam. 3 credits

EL-230 SMALL PRESS PUBLISHING
This creative writing course serves as a hands-on introduction to the editorial and production processes involved with publishing a book in the small press poetry market. Students work directly with Eulalia Books, a poetry-in-translation press on campus, while exploring the phenomenon of small press publishing in a broader sense. Readings and discussions focus on the historical, aesthetic, ethical, and social dimensions of independent publishing, with a focus on how small presses form a subversive space for new literatures to emerge. A series of practical workshops run by editor, book artists, and writers will introduce students to the aesthetics of publishing handmade books, from design (typography, layout) and printing techniques (screen-printing, letterpress), to important digital and print formats (blog, zine, chapbook). Beyond workshop attendance and reading, requirements are a review of a small press, weekly blog posts, and a final publishing project. 3 credits

EL-230A SMALL PRESS PUBLISHING
This course is a continuation of EL-230. 1 credit

EL-236 BREAKING AND REMAKING: EUROPEAN LIT FROM 1800 TO PRESENT
This advanced literature course covers the major literature, art, and film of the Realist, Symbolist, Modernist, Surrealist, and Contemporary periods of European literature. Students will connect literature to key philosophical and cultural movements of the era, and will apply both traditional modes and contemporary literary theory in their analyses of texts. Required work includes a short essay, an oral presentation on a scholarly article, a midterm and final examination, and a research-based term paper. 3 credits

EL-242 TORTURED GENIUS: LIT OF THE AMERICAN RENAISSANCE
This literature course centers on the mid-nineteenth century literary production that constitutes the American Renaissance, an explosion of touchstone texts that defined our nation, reflected its own time, and forecast our own. Readings may include Emerson, Thoreau, Hawthorne, Melville, Stowe, Whitman, and Dickinson. Discussion-oriented class, readings include approximately four novels, two poetry oeuvres, and 10 critical essays, assignments include weekly papers and essay reading rubrics, researched term paper, and class participation. 3 credits

EL-244 CREATIVE NONFICTION WORKSHOP
In this advanced creative writing workshop, students deepen their study of creative nonfiction. This course requires extensive reading assignments-usually one book per week-in addition to the writing and workshop discussion of essays for the final portfolio project. 3 credits

EL-250 AROUND THE WORLD IN 15 WEEKS: CONTEMPORARY WORLD LIT IN TRANSLATION
This reading-and-writing seminar covers notable 20th and 21st century works in English translation from a variety of languages, with an emphasis on recent translations from Latin America, Asia, and Africa. What does it mean to read a translation? In this course, we learn to pay attention to the special linguistic and cultural considerations involved in simply reading translations, while also addressing the many ethical and aesthetic dimensions of the translator's task. Students will dabble in new contemporary literary contexts, cultures, and styles while learning about the cultural forces at play in how we read and re-create foreign texts. Required work includes weekly quizzes, a midterm exam, and one research-based term paper. 3 credits

EL-252 INTRO TO LITERARY TRANSLATION
This advanced creative writing workshop introduces students to the theory and practice of literary translation. This course requires extensive reading assignments, which touch on the cultural, aesthetic, and linguistic challenges of literary translation. 3 credits

EL-256 SENTIMENTAL FICTIONS: 19THC AME HEROINES
Centering on the gendered conventions of sentimental literature, this literature course explores the social reform movements surrounding 19th-century America, including emancipation and women's suffrage. Readings may include work by Catharine Maria Sedgwick, Fanny Fern, Frances Harper, Harriet Jacobs, Sarah Callahan, among others. Discussion-oriented class, readings include approximately six novels, selected poetry, and 10 critical essays, assignments include weekly papers and essay reading rubrics, researched term paper, and class participation. Prerequisites: 3 credits

EL-258 THE BEAUTIFUL AND THE DAMNED: AME MODERNIST NOVELS
This literature course will explore American expressions of Modernism from the turn of the twentieth century to World War II, making room for a wide variety of voices. Readings may include Chopin, Johnson, Hemingway, Fitzgerald, Stein, Faulker and Ellison. Discussion-oriented class, readings include approximately six novels and 10 critical essays, assignments include weekly papers and essay reading rubrics, researched term paper, and class participation. 3 credits

EL-261 ADVANCED STUDIES IN LITERATURE
This literature course offers students unique opportunity for more intensive study of literary periods, figures, genres, creative writing modes, and interdisciplinary topics. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-264 ADV. STUDIES IN CREATIVE WRIT
This creative writing course offers students the opportunity for more intensive study of a specialized topic in creative writing. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. Prerequisites: EL 110 or permission of the instructor; no prerequisite for English majors. 3 credits

EL-266 ADVANCED STUDIES IN PROFESSIONAL WRITING
This writing course offers students unique opportunity for more intensive study and practice of Professional Writing. Topics vary from semester to semester, and students should consult the registration booklet for specific descriptions of courses offered. 3 credits

EL-273 REPR CHILD IN YOUNG ADULT LIT
This topical advanced literature course explores American representations of childhood in landmark fiction. Primary texts may include Twain's The Adventures of Huckleberry Finn, James's The Turn of the Screw, Wharton's The Children, Harper's To Kill a Mockingbird, Salinger's Catcher in the Rye, and Morrison's The Bluest Eye. These writers were foundational in articulating both what adults imagined childhood to be and how children may actually act and think. Discussion-oriented class, readings include both primary texts and critical essays. Assignments include weekly short papers and essay reading rubrics, artifact analysis in coordination with the Fred Rogers Archive and researched term paper. 3 credits

EL-274 MR. ROGERS' NEIGHBORHOOD: NARRATIVE, OBJECT LESSONS, & CHILDHOOD
This course homes in Fred Rogers' children's television show, Mister Rogers' Neighborhood. Three orientations guide inquiry into Rogers' artistic vision. First, narrative strategy will be explored as we chart Rogers' whimsey as he spins out overlapping and surprising narrative arcs. Second, we consider the many everyday objects Rogers includes on his program-from puppets to plants to puzzles-which Rogers' uses to help children learn about man-made and natural things, the people who make them, and the values they evoke. Third, children, as the primary audience, will be considered. Here, the focus will be on twentieth century conceptions of childhood-currently conceived as post-childhood. In addition to watching Rogers' television program, students will complete readings about Fred Rogers, by Fred Rogers, as well as critical essays in narrative theory, new materialism, and childhood studies. Weeks to be considered might include Divorce, Families, Superheroes, Making an Opera: Windstorm in Bubbleland, Caring for the Environment, Going Away and Coming Back, Learning, or Competition Week. 3 credits

EL-300 JUNIOR SEMINAR
This course is designed to prepare English majors to complete their Senior Projects. Primarily, this preparation will be a review and practice of skills and knowledge that English majors have developed in other courses, including their ability to read an analyze primary texts, their ability to generate and shape a topic, their understanding and ability to apply literary theory, and their skills in library research. Students will complete a series of preliminary assignments that will culminate in the submission of a formal proposal for their Senior Project. 3 credits.

EL-301 ENGLISH TRAVEL
This course is a self-designed travel experience in English that provides students the opportunity to broaden their global perspective and professionalize through experiential fieldwork. The travel design and duties must be approved by the assigned faculty member. Students produce documentation and reflections on their travel experience to demonstrate career readiness. Students should enroll for this course before the semester in which they will travel. 1 credit

EL-350 INDEPENDENT STUDY--ENGLISH
In this course, topics of research are chosen and developed by the student with the guidance of the professor directing the study. May be repeated. Variable credit.

EL-400 LITERATURE CAPSTONE
In this mastery-level course, senior majors concentrating in Literature and Teaching Certification will write 20-30 essays of literary criticism under the supervision of the course's instructor and a second reader, whom the student writer will select based on that reader's expertise. The fundamental requirement of the course is the completion of the project, but students must also submit outlines and drafts, conference regularly with the instructor and/or other readers as specified and deliver a public presentation of an excerpt of their projects. Only English majors with senior standing will be admitted to this course. 3 credits

EL-401 CREATIVE CAPSTONE
In this mastery-level course, senior majors concentrating in Creative Writing and Literary Translation will write or translate works of fiction, creative nonfiction, or poetry prefaced by an aesthetics statement; students concentrating in Publishing will complete an individual publishing project of their own design, accompanied by a paper. The fundamental requirement of the course is the completion of the project, but students must also submit outlines and drafts, conference regularly with the instructor and deliver a public presentation of an excerpt of their projects. Only English majors with senior standing will be admitted to this course. 3 credits

EL-550 ENGLISH INTERNSHIP
In this course, students work in a professional setting in order to extend their learning experience beyond college into the world of work; relevant experiences can take the form of internships, field work, and cooperative programs, particularly in advertising, public relations, journalism, and communications. Students may or may not be paid, depending on the policy of the employer. May be repeated. Variable credit.

EL-551 ENGLISH TRAVEL
This course is a self-designed travel experience in English that provides students the opportunity to broaden their global perspective and professionalize through experiential fieldwork. The travel design and duties must be approved by the assigned faculty member. Students produce documentation and reflections on their travel experience to demonstrate career readiness. Students should enroll for this course before the semester in which they will travel. 1 credit

EL-552 CAREERS IN ENGLISH
This course provides students with exposure to different careers and career paths available to English majors. Students gain a panoramic view of the job market landscape as they consider their post-graduate goals. Students collaborate with Saint Vincent College English alumni to determine professional development experiences that prepare them for their job search. Class work includes the preparation of application materials. 1 credit.

ENGR-099 KENNAMETAL YOUNG ENGINEERS
The semester-long Young Engineers Program, taught in conjunction

with Kennametal, provides an opportunity for students in 11th and 12th grade to learn about engineering and technology through experiences at Kennametal's Technology Center in Latrobe and its manufacturing facilities. Students attend eight three-hour sessions led by Kennametal and other local industry partners and college educators. They participate in a field trip to one of Kennametal's manufacturing facilities and complete an engineering project under the mentorship of Kennametal engineers and Greater Latrobe Senior High School teachers. During the class time at the high school students prepare for and process their sessions at Kennametal, work on their projects, research various engineering careers and colleges, participate in STEM activities, and develop career skills such as public speaking and resume writing. College credit for the course is offered through Saint Vincent College. The topics of the eight sessions include: - Careers in technology, including a career fair - Engineering case studies - marvels and failures - Problem solving - processes, failure analysis, and innovation - Operational excellence and manufacturing economics - Engineering design - design criteria, risk analysis, and CAD/CAM - Investigative analyses, including a tour of the technology center - Systems controls and digital manufacturing technology -Ethics, law and engineering The general format of the eight sessions includes content presentation, hands-on activities, and project work. Students selected for the class are expected to have a strong foundation and interest in science and mathematics. College credit for the course is offered through Saint Vincent College.

ENGR-100 INTRODUCTION TO ENGINEERING
Introduction to the engineering discipline, with a focus on problem solving, ethics, teamwork, and design. Topics also include an overview of the engineering disciplines and an introduction to using spreadsheets for data analysis. Students will also complete team-based projects. Prerequisite: None. Offered fall semester. 3 credits

ENGR-105 ENGINEERING GRAPHICS & DESIGN
Introduction to engineering graphics and 3D design using SOLIDWORKS®. Topics include basic engineering drawing conventions and terminology, fundamentals of part modeling, assembly modeling, and engineering drawings in SOLIDWORKS®. Design projects are an integral part of this course. Prerequisites: none. Prerequisites: none. Offered spring semester. 3 credits

ENGR-115 INTRODUCTION TO ENGINGEERING COMPUTATION
Modern engineering practice makes use of a variety of computational tools to evaluate designs, simulate physical processes, collect and analyze data, and control physical hardware. This course introduces the basics of programming through the following topics: variable creation and basic calculations, user input and output, selection structures, repetition structures, matrix algebra, and dynamic simulation. May also include data collection and hardware control. Prerequisite: MA-102 and MA-103, or MA-109, or MA-111. Offered spring semester. 3 credits

ENGR-215 INTRODUCTION TO CIRCUITS AND MEASUREMENTS
Electrical circuits are a part of many modern engineering devices. Additionally, circuits play an essential role collecting data from sensors and are therefore a part of almost all modern engineering experimentation. This course introduces basic electrical circuit concepts including fundamental circuit laws, time and frequency response of RC circuits, transistors, and operational amplifiers. Measurement topics such as analog to digital conversion, data sampling, and sensors are also covered. Students prototype basic circuits and begin to develop experimental procedures. Prerequisite: ENGR 115. Offered fall semester. 3 credits

ENGR-220 ENGINEERING AND COMPUTING ETHICS
This course provides students with the knowledge to recognize ethical and professional responsibilities in engineering and computing situations. Students will also learn how to make informed judgments and to articulate the impact of engineering and computing solutions when considering the impact of engineering solutions in global, economic, environmental, and societal contexts. Course topics include basic ethical concepts, codes of ethics, ethical theories, ethical problem-solving techniques, and risk and safety. Students will analyze and discuss engineering and computing ethics case studies to reinforce the course material and to develop their skills in effective communication and the ability to acquire and apply new knowledge. Prerequisite: ENGR 100 or CS 102 or Tier 1 SLO 6 core class. Offered fall semester. 3 credits

ENGR-223 STATICS
Statics is the structural analysis of non-deformable bodies that are at equilibrium (i.e. - typically stationary). Students will use equilibrium of forces and moments to analyze various structures, including beams, trusses, and machines. Analysis of structures subjected to distributed loads is also addressed, along with methods to calculate internal shear forces and bending moments. Vectors, trigonometry, and algebra are used extensively. Prerequisites: PH 111, MA-102 and MA-103, or MA-109, or MA-111. Offered fall semester and occasional spring semester. 3 credits

ENGR-224 DYNAMICS
Dynamics is the analysis of particles, rigid bodies, and systems in motion. This course applies concepts such as kinematics, Newton's second law, work/energy, and impulse/momentum to analyze the behavior of moving particles, rigid bodies, and systems such as mechanical apparatuses. Vectors, trigonometry, calculus, and algebra are used extensively. Prerequisites: ENGR 223. Offered spring semester. 3 credits

ENGR-226 MATERIALS ENGINEERING
An introductory materials science and engineering course. Students learn about atomic bonding and how material properties are influenced by structure and inherent defects. Emphasis is placed on strength and failure of metals, phase transformations, phase diagrams, and processing. Electrical and thermal properties are also considered. Prerequisites: CH-101, MA-102 and MA-103, or MA-109, or MA-111. Offered fall semester. 3 credits

ENGR-228 MATERIALS ENGINEERING LAB.
Materials laboratory course that supports Materials Engineering (ENGR 226). Students will learn how to prepare metallic samples for mechanical testing and microstructure imaging. Students will also learn how to alter the microstructure and material properties of metallic samples through heat treatment. Students will be exposed to tensile testing and Charpy impact testing through a collaboration with an external testing facility. Failure mechanisms in metallic samples are also investigated through scanning electron microscopy (SEM). Must be taken simultaneously with or after successful completion of ENGR 226. Offered fall semester. 1 credit

ENGR-230 CHEMICAL ENGINEERING FUNDAMENTALS
This course provides an introduction to formulating and solving material and energy balances in chemical engineering systems. Topics include engineering problem analysis, material balances on single-unit and multiple-unit systems, phase equilibria related to separation processes, and the application of the first law of thermodynamics to energy balances on process systems. Examples are drawn from a variety of industries, including pharmaceutical, food processing, and

petrochemical. Prerequisites: CH-101, MA-102 and MA-103, or MA-109, or MA-111. Fall semester of even-numbered years. 3 credits

ENGR-235 INTRODUCTION TO ENVIRONMENTAL ENGINEERING
This course is an introduction to the discipline of environmental engineering. Topics include material and energy balances, applied chemistry, risk assessment, and ecosystems. Examples are drawn from water and wastewater treatment, water pollution, and solid waste management. Prerequisites: CH-101, MA-102 and MA-103, or MA-109, or MA-111. Offered spring semester of even-numbered years. 3 credits

ENGR-240 ENGINEERING DESIGN & LAB
This course will teach students the principles of engineering design and problem solving. Students learn how to approach open-ended design problems with creativity, analyze and prioritize design requirements, function as part of a problem-solving team, and document and report their progress. In the lab portion of the course, students utilize applied mathematics and science in designing and testing a product or process that meets specified criteria. Fee. Prerequisites: ENGR 100 and Sophomore standing. Offered spring semester. 4 credits

ENGR-310 ENGINEERING THERMODYNAMICS
Engineering Thermodynamics examines the phenomenon of energy and its applications to engineering problems. The principles of energy conservation, transformation, and transfer can be used to understand a large variety of processes, including power generation, building heating and cooling, chemical manufacturing, engine performance, biological processes, and more. This course will cover the first and second laws of thermodynamics, various forms of energy, entropy, heat, work, properties of substances as they relate to the above, and the use of control boundaries as a tool for problem solving. Prerequisites: PH-111, CH-101. Offered fall semester. 3 credits

ENGR-315 JUNIOR ENGINEERING LABORATORY
This laboratory course gives students the opportunity to apply topics from the core engineering curriculum. Students will prepare written laboratory reports and give an oral presentation on a self-designed experiment. Prerequisite: ENGR 215 and 223. Offered spring semester. 1 credit

ENGR-320 MECHANICS OF MATERIALS
Mechanics of materials analyzes the elastic deformations and stresses that arise in structural components from applied forces. Students will learn to analyze structures subjected to axial loads, torsion, and bending. Students will also learn to incorporate material properties and combined loading to design against mechanical failure. Prerequisites: ENGR 223. Offered spring semester. 3 credits

ENGR-327 SOFT MATERIALS
Soft materials are those which undergo large deformations with relatively small forces, and include polymers, elastomers, gels, biological materials, and even some fluids. These materials exhibit an extreme diversity of properties, behaviors, and applications, and have been increasingly utilized over the past several decades in a wide variety of consumer products and applications. This course will draw connections between the molecular structures of these materials and the properties (mechanical, chemical, optical, etc.) they exhibit, with a focus on plastics, rubbers, biological tissues, and composites. Topics of special interest may include "smart" (stimulus-responsive) materials, bio-inspired material design, adhesion, and bio-compatible materials. Prerequisites or co-requisite: ENGR 226. Offered fall semester of odd-numbered years. 3 credits

ENGR-328 RAPID FABRICATION This course introduces current manufacturing processes and rapid prototyping techniques. These include, but are not limited to, 3D printing (fusion deposition modeling and stereolithography), mold making and casting, thermoforming, laser cutting, and micro-fabrication. The class also introduces user-centered design. Prerequisites: ENGR 222. Offered spring semester. 3 credits

ENGR-330 FLUID MECHANICS
This course introduces students to the flow of fluids under both steady and unsteady conditions through mass, momentum and energy balances on finite and differential systems. Topics include pressure and fluid statics, kinematics, flow in open and closed channels, dimensional analysis and modeling, lift and drag, and turbomachinery. Students will work to formulate the models necessary to study, analyze, and design fluid systems through the application of these concepts, and to develop the problem-solving skills essential to good engineering practice of fluid mechanics in practical applications. Prerequisites: PH 111 and MA 112. Offered fall semester. 3 credits

ENGR-340 HEAT AND MASS TRANSPORT
This course investigates the transport of matter and energy within a system, using concepts from thermodynamics, physics, chemistry, and differential equations to describe the transport of thermal energy (heat) through conduction, convection, and radiation. Analogous mechanisms concerning mass transport (diffusion, flow, and separation) will also be examined. Numerous applications will be studied, including building design, heat dissipation, heat exchangers, food safety, solar heating, and phase changes. Prerequisites: MA 112, ENGR 310. Offered spring semester. 3 credits

ENGR-350 RENEWABLE ENERGY TECHNOLOGIES
This course provides a survey of alternative energy systems, including hydropower, wind energy, solar energy, biomass, ocean energy, and geothermal energy. Topics include a review of national and global energy usage and the viability of each alternative energy system. This course is balanced between theory and application, and is designed to provide students with a working knowledge of a wide variety of alternative energy systems currently in use. Prerequisite: CH-101, MA-102 and MA-103, or MA-109, or MA-111. Offered spring semester of odd-numbered years. 3 credits

ENGR-355 INDEPENDENT STUDY/ENGINEERING
Studies to be chosen and developed by the student with the guidance of the professor directing the study. May be repeated. Prerequisite: ENGR 100. Variable credit.

ENGR-357 STUDENT RESEARCH SEMINAR
Students will participate in research projects defined independently or in conjunction with Engineering faculty research programs. The expectations are approximately 3 hours of work per week, per credit. May be repeated. Credits may be counted towards the Technical Elective requirement for Engineering majors. 0-3 credits

ENGR-360 SEPARATION PROCESSES
This course provides the fundamentals of separation processes relevant to chemical engineering applications. Topics include mass transfer fundamentals, distillation, absorption, stripping, extraction, and leaching. Examples are drawn from numerous applications. Prerequisites: ENGR 230, and ENGR 310 or CH 232 or PH 215. Offered fall semester of odd-numbered years. 3 credits

ENGR-366 AUTOMATIC CONTROL SYSTEMS
Automatic control systems are devices that regulate their own behavior. Examples include home heating systems, cruise control, CNC machining, robotics, automatic material processing, and

airplane autopilot. This course introduces the basics of automatic control through the following topics: introduction of basic control structures like open-loop, on/off, and PID control, experimental modeling and simulation of first and second order systems, the Laplace transform and transfer functions, physics-based modeling, and feedback control design. Additional topics may include root locus analysis and the frequency response. Prerequisite: MA 212. Offered fall semester. 3 credits

ENGR-368 MECHATRONICS
Mechatronics is an interdisciplinary field of engineering combining principles of mechanical design, electronics, and programming. This course will expand previous coursework in the above three areas, and apply those principles to the design and fabrication of electro-mechanical devices. This course includes a substantial hands-on component. Prerequisite: ENGR 215. Offering varies. 3 credits

ENGR-413 FE EXAM PREPARATION
Weekly reviews and summaries of topics covered on the Fundamentals of Engineering Exam. 1 credit.

ENGR-420 CHEMICAL REACTION ENGINEERING
This course introduces students to the fundamentals of chemical reaction engineering including reactor sizing and design. Topics include rate laws, kinetics, isothermal and non-isothermal reactor design, and homogeneous and heterogeneous reaction systems. Prerequisites: ENGR 230 and ENGR 310 or PH 215 or CH 232. Offered fall semester of odd years. 3 credits

ENGR-425 ENGINEERING PROJECT MANAGEMENT
Introducing concepts related to engineering project management. Defining roles and responsibilities, analyzing program risk, developing schedules and budgets. Concepts of resource management, team management, stake holder management, risk management, schedule management, and knowledge management are presented and discussed using actual and conjured case studies. The course includes considerable in-class discussion and student presentation. Prerequisite: ENGR 240 or permission of instructor. Offered spring semester of even-numbered years. 3 credits

ENGR-450 JUNIOR CAPSTONE SEMINAR
This is the first of a three-semester capstone design project sequence. Students will learn teamwork, project management skills and tools, and will review the engineering design process. Around midsemester, students will be assigned to capstone teams to begin work on a comprehensive design project. The second half of the semester will focus on research, stakeholder engagement, and problem definition, culminating in a final presentation, foundation report, and preliminary action plan. Corequisite: ENGR 240. Offered spring semester. One Credit.

ENGR-451 CAPSTONE DESIGN PROJECT I
This is the second of a three-semester capstone design project sequence. This course focuses on the conceptual and preliminary design stages of the project. Students build on prior coursework to develop a solution to a complex engineering problem that meets desired needs and specifications within given constraints. Prerequisite: ENGR 450. Offered fall semester. Two credits.

ENGR-452 CAPSTONE DESIGN PROJECT II
This is the third of a three-semester capstone design project sequence. This course focuses on the testing, refinement, documentation, and delivery of a solution to a design problem. Students build on prior coursework to develop a solution to a complex engineering problem that meets desired needs and specifications within given constraints. Prerequisite: ENGR 451. Offered spring semester. Two credits.

ENGR-550 ENGINEERING INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work. Students are employed in an area related to their academic endeavor. Academic credits are awarded according to the extent of the work experience. Students may or may not be paid depending on the site. The purpose of the program is to integrate academic studies and employment activities. May be repeated. Variable credit.

ES-100 NATURE AND SUSTAINABLE RESOURCES
This course provides an overview of key concepts and skills that naturalists and environmental scientists use to understand the natural world as well as our impact on it. It covers aspects of geology, hydrology, atmospheric science, and ecology, with a focus on understanding sustainable approaches to use and manage natural resources in a way that reduces impacts on the natural environment and local communities. Environmental problems that threaten the integrity of natural cycles and systems form the broad context for this course. 3 credits.

ES-150 EARTH SYSTEMS SCIENCE
This course will explore the interconnections between the components of the Earth, the hydrosphere, the atmosphere, the lithosphere, and the biosphere. In doing this we will examine the systems that provide balance and stability to the Earth while at the same time explain processes of Earth's evolution. We will accomplish this through an interdisciplinary approach that combines resources from geology, chemistry, biology, oceanography, and meteorology. Offered spring semester. Prerequisite: CH-101 or CH-114. 3 credits

ES-152 EARTH SYSTEMS SCIENCE LABORATORY
This laboratory course is designed to illustrate and discover principles in Earth Systems Science. This will include computer simulations, physical models, and scientific investigations. Must be taken simultaneously with, or after successful completion of ES 150. 1 credit

ES-220 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS
This course will focus on examining environmental data using a computer based geographic information system (GIS). Students will learn to manipulate tabular data, query GIS databases, and present data in charts and maps. Students will utilize existing geographic data as well as develop new data sets. Offered even numbered years every other fall semester. 3 credits

ES-230 ENERGY & THE ENVIRONMENT
We will explore the relationship between energy resources and the environment. First, we will examine thermodynamics and efficiency of energy resources. Then we will examine the array of different energy resources including both fossil fuels and renewable sources. Topics of discussion will include hydraulic fracking, abandoned mine drainage, wildlife mortality, sustainability. This will be an integrated lecture laboratory to allow time for field trips and special projects. Prerequisite: CH 102. Offered odd-numbered fall semesters. 4 credits

ES-240 GEOPHYSICS
A first course on geophysical theories and applications. The course will start by introducing rock properties and geological concepts. Then it will also cover geophysical theories and methods; including seismic, electrical, electromagnetic, magnetic and gravity methods. The application of geophysical methods to Earth studies, resource

exploration and environmental/engineering testing and investigation will also be examined. 3 credits

ES-245 HYDROLOGY AND LIMNOLOGY
This course examines key physical and biogeochemical processes in stream and lake ecosystems. These include the hydrologic cycle, precipitation, evaporation, infiltration, run-off, discharge, floods, dissolution, lake stratification, lake mixing and nutrient cycling. This course also explores how these processes are affected by environmental change over varying temporal and spatial scales. Finally, current environmental problems (locally, nationally and internationally) that are linked to streams and lakes are considered through the analysis of recent scientific literature and news stories. Prerequisite: CH-102. 3 credits

ES-246 HYDROLOGY AND LIMNOLOGY LAB
This course focuses on measuring and modeling physical and biogeochemical characteristics of stream and lake ecosystems. It involves the use of common instruments and data analysis tools to examine water velocity, discharge, mixing, chemical composition and related parameters that define these dynamic ecosystems. Field sampling, laboratory experiments and computer modeling and simulations will be used to assess a variety of stream and lake systems. 1 credit

ES-250 ADVANCED ENVIRONMENTAL MAPPING
This course will require students to develop a project that uses GIS to analyze a local environmental problem. Students will learn new GIS techniques such as digitizing and vectorization, metadata documentation, network analysis, GPS data collection and processing using case studies. Offered even-numbered spring semesters. 3 credits

ES-300 RESEARCH SEMINAR I
This course will introduce the student to the research experience and will include an orientation to the library and use of reference materials. Students will be assigned articles to read and discuss. An introduction to writing and presenting a research proposal will be included. Students will be introduced to the procedure for maintaining a laboratory research notebook. Outside speakers may present seminars on selected topics. Prerequisite: Junior standing. 2 credits

ES-301 RESEARCH LABORATORY
Independent study or investigation involving intensive work with faculty guidance in the laboratory and library. This course includes an assessment of cumulative laboratory skills. Prerequisite: ES 300. 2 credits

ES-302 RESEARCH SEMINAR II
Presentation of research work completed during the previous semester; the oral presentation is made after the thesis report has been written. Outside speakers may present seminars on selected topics. Prerequisite: ES 301. 1 credit

ES-350 INDEPENDENT STUDY -- ENVIRONMENTAL SCIENCE
Studies to be chosen and developed by the student with the guidance of the professor directing the study. May be repeated. Variable credit.

ES-550 ENVIRONMENTAL SCIENCE INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work, through internships, field work and cooperative programs. Students may or may not be paid depending on the site. May be repeated up to a maximum of 3 credits. Variable credit.

FR-101 ELEMENTARY FRENCH I
For beginners in the language. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to the culture of French-speaking peoples. FR 101 offered fall semester. 3 credits

FR-102 ELEMENTARY FRENCH II
For beginners in the language. Satisfactory completion of FR 101 is a prerequisite for FR 102. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to the culture of French-speaking peoples. FR 102 offered spring semester. 3 credits

FR-200 FRENCH DUET
This course is an introduction to French language, music and culture through the historical periods and various musical and culture genres. The discussion of musical composers, forms, and French musical culture will be examined as well as the understanding of musical terminology. This course will also focus on learning key vocabulary terms and phrases related to music in English and in French. Students will also acquire basic vocabulary and linguistic structures in French to communicate their music preferences, their opinions, and engage in basic conversations that would occur in daily encounters and in relation to musical and cultural events. Etiquette will be highlighted throughout the course. N.B. No previous knowledge of the French language is required. 3 credits

FR-201 LEADERSHIP AND FRENCH DUET
For SSS-TRIO Grant Students Only. This course in an introduction to French language and culture, with emphasis on musical exploration from the Medieval Era through the 21st Century. Students explore the leading composers and their styles, and the significant historical events from each era to discover how societal and world events impact musical compositions throughout the centuries. The course will also introduce musical terms in English and French, and phrases for making introductions, exchanging greetings and giving basic information in French. No knowledge of French is required. 3 credits.

FR-202 FRENCH DUET LEADERSHIP
For Act 101 Grant Students Only. This course in an introduction to French language and culture, with emphasis on musical exploration from the Medieval Era through the 21st Century. Students explore the leading composers and their styles, and the significant historical events from each era to discover how societal and world events impact musical compositions throughout the centuries. The course will also introduce musical terms in English and French, and phrases for making introductions, exchanging greetings and giving basic information in French. No knowledge of French is required. 3 credits.

FR-203 INTERMEDIATE FRENCH I
Systematic grammar review and vocabulary building, with stress on nouns, adjectives, pronouns, and on the common tenses of regular and irregular verbs. Introduction to reading techniques suitable to college level study. Prerequisite: appropriate score on the College's language placement examination, or six (6) to eight (8) credits of college elementary French. Offered fall semester. 3 credits

FR-204 INTERMEDIATE FRENCH II
Understanding and use of the literary tenses, emphasis on the subjunctive, complex grammatical structures and idiomatic usages. Reading, compositions, and oral exercises. Both courses build an awareness of French-speaking cultures. Prerequisite: satisfactory

completion of FR 203, or appropriate score on the College's language placement examination. Offered spring semester. 3 credits

FR-305 CONVERSATIONAL FRENCH
Development of speaking and listening skills beyond intermediate level. Fosters the ability to participate in daily life situations, social interchange, and discussion of topics read in newspapers or magazines and heard from audio sources. Phonetic, grammatical and cultural components. 3 credits

FR-310 FRENCH FOR BUSINESS
Development of oral and written skills. This course presents the essentials of modern commercial French through the medium of situations commonly found in the business world. Practical themes include currency exchange, travel, job interviews, telephone etiquette and cultural expectations. 3 credits

FR-315 ADVANCED FRENCH GRAMMAR AND COMPOSITION
This course provides students with a solid foundation in French syntax. It is a writing-intensive course directed towards improvement of stylistic skills. Thorough review of tenses, complex grammatical structures and idiomatic expressions. Writing assignments progress in difficult and will include journals, compositions, and critical essays. 3 credits

FR-316 READING FRENCH
This course provides students with an introduction to reading a variety of French texts. Students have the opportunity to develop their reading, speaking and writing skills through several assignments that progress in difficulty. 3 credits

FR-320 DEVELOPING ORAL PROFICIENCY AND PHONETICS IN FRENCH
This course is designed to help students develop their oral proficiency, pronunciation and intonation in French. Course activities focus on a variety of discourse strategies, and encompass real life linguistic situations and tasks. Pronunciation skills will be enhanced through the study of phonetics. Oral proficiency will be developed through role-play, presentation, debate, and collaborative language use in a variety of content areas. 3 credits

FR-321 SURVEY EARLY FRENCH LITERATURATURE I
Survey of literary movements from the Middle Ages through the 17th century, with selections from the major writers. Grammar review, oral presentations and compositions in French. 3 credits

FR-322 SURVEY OF FRENCH LITERATURE II
Survey of literary movements from the 18th century to the present, with selections from the major writers. Grammar review, oral presentations and compositions in French. 3 credits

FR-330 READINGS IN 19TH CENTURY AUTHORS
Selected readings from Chateaubriand, Balzac, Hugo, Baudelaire, Flaubert, Stendhal, Zola and others will be covered. Emphasis will be placed on turbulent political and social movements of the century and their reflection in literature of this period. 3 credits

FR-332 READINGS IN 20TH CENTURY AUTHORS
Study of selected works by modern French authors with attention to social and historical settings and content. Readings from Camus, Colette, Gide, Green, Fournier, Mauriac, Proust, and others. 3 credits

FR-343 CONTEMPORARY FRANCE
A study of contemporary France, presenting an overview of the social and political issues. Students will expand their reading, writing and conversational skills through course readings and assignments. 3 credits

FR-350 INDEPENDENT STUDY - FRENCH
May be repeated. Variable credit.

FR-444 FRENCH CULTURE AND CIVILIZATION
A survey of French history from the 16th century to the present. The course will look at political and social movements, reform and revolution as well as the influence of religion, culture, science and literature. 3 credits

FR-445 FRANCE THROUGH THE CENTURIES
French politics, history, economics, and aspects of daily life will be discussed through the use of selected readings and authentic documents. Students will further develop their reading, writing, and speaking skills through the study of French culture. 3 credits

FR-446 CONTEMPORARY FRENCH CINEMA
This course will cover an analysis of films from major cinematic movements from 1980 to the present. Thematic units will include colonialism, marginality, immigration and polarization with an analysis of the historical context of the cinematic work and the socio-cultural impact of each film. Cinematic techniques will be analyzed in relation to the theme and setting of each production. Exams, oral presentations and papers are required. 3 credits

FR-550 FRENCH INTERNSHIP
Professional work experience in the community which complements and strengthens academic in-class learning. Academic credit is variable depending on the nature and duration of the experience. Students may or may not be compensated depending on the company/ agency/education setting. Students must receive departmental approval to participate. May be repeated. Variable credit.

FRI-301 APPLIED RESEARCH AT FRC
Students assist faculty, staff, and student researchers at the Fred Rogers Institute with various research and development projects in the area of children's development. Project focus areas include fostering children's social emotional development, improving quality of child development settings, and promoting meaningful use of technology in children's lives. Students may engage in video analysis, archival research, literature review, data collection and analysis, professional writing and communication. Prerequisites: Permission of instructor; recommended completing PY212 Child Development. Offered every semester. May be repeated. 1 credit

FRI-373 FRED ROGERS' FUNDAMENTALS OF LEARNING AND GROWING
Fred Rogers reminded us that "Although children's 'outsides' may have changed a lot over the years, their inner needs have remained very much the same." In particular, Fred Rogers, alongside author Barry Head, envisioned six fundamentals that impact and guide the ways in which children grow and learn (sense of self-worth, sense of trust, curiosity, the capacity to look and listen carefully, the capacity to play, and solitude). This course focuses on the exploration of these fundamentals and how they apply to different fields of study. Influenced by Fred Rogers archival resources, students will be able to consider the ways they encounter these fundamentals in their personal lives and future professions. This course is intended for students in the Children's Studies Minor as well as students in other academic majors with a strong interest to serve children. 3 credits

FRI-376 CREATING CHANGE FOR CHILDREN
Relationships are fundamental to the healthy development of children, and to supporting the systems around them. In this course,

we will examine how relationships can create change for children across developmental settings. Grounded in artifacts from the Fred Rogers Archive, developmental science, and real-world examples, we will explore why relationships are so important for children and how to strengthen relationships through our everyday interactions with others. We will also apply relational thinking to the systems around children and as a lens for decision making in students' future careers and lives. 3 credits

FRI-400 INDEPENDENT STUDY - CHILD STUDIES INDEPENDENT STUDY - CHILD STUDIES
This independent study provides an opportunity to deeply study a concept or research area that affects the development of children, youth, and families. Using a collaborative model, students and instructor will identify and engage in a topic of interest that results in a cumulative final product.

FRI-499 PROJECT IN CHILDREN'S STUDIES
This one-credit course will serve as a capstone experience for students completing the minor in Children's Studies. Students will work with the director to develop their own individualized project corresponding with their own interests. For instance, students may choose to complete a comprehensive research paper related to childhood. Another option may be completion of an internship experience working with children or with issues pertaining to children. Students may also propose their own idea for a capstone project to the program director. 1 credit

GCAD-676 INTERNSHIP IN SCHOOL ADMIN.
Students participate in 80 hours of fieldwork in collaboration with a curriculum supervisor and/or K-12 administrator or similar professional mentor from an approved educational setting. The student is required to generate and professionally submit a project within the field of curriculum and supervision to the educational setting in which the 80 hours are served. Supervision orientation, practical hands-on curriculum examination, shadowing and professional development opportunities are encouraged. Class meets seven (7) sessions during a 14-week semester. On-site mentor evaluations, journal entries, and other written assignments are required. Prerequisites: GCED 680 and three or more years of professional experience and teaching certification. Fall Term. 1 credit

GCAD-686 INTERNSHIP IN SCHOOL ADMIN.
Interns perform 140 hours of shadowing and performing duties in curriculum supervision or K-12 administration (all levels: central office and school building) under a mentor advisor(s) from the sponsoring K-12 school district. Candidates seeking supervision of curriculum certification may be asked to perform different fieldwork duties than those seeking K-12 school principal certification. Students are required to complete journal entries and assignments as well as attend seven (7) campus meetings during the fourteen- week semester. Interns are supervised at the site and evaluated by both the college instructor and the mentor(s). Prerequisites: GCED 680 and three or more years of professional experience with teaching certification. Spring Term. 1 credit

GCAD-696 INTERNSHIP IN SCHOOL ADMIN.
Interns perform 140 hours of shadowing and performing duties in curriculum supervision or K-12 administration (all levels: central office and school building) under a mentor advisor(s) from the sponsoring K-12 school district. Candidates seeking supervision of curriculum certification may be asked to perform different fieldwork duties than those seeking K-12 school principal certification. All students will be required to complete journal entries and assignments as well as attend seven (7) campus meetings during the summer semester. Interns are supervised at the site and evaluated by both the college instructor and the mentor(s). Prerequisites: GCED 680 and three or more years of professional experience with teaching certification. Summer Term. 1 credits

GCBA-00Z OE NON-CREDIT SEMINAR
This non-credit but mandatory course familiarizes students with operational excellence concepts, theories, principles, and tactics in a self-paced seminar setting. Students complete video lectures and readings and complete practical tasks to reinforce their understanding of basic operational excellence management system concepts. This course will equip students experientially for other operations, management, leadership, strategy, and lean applications classes. 0 credits

GCBA-607 ORGANIZATIONAL BEHAVIOR AND HUMAN RESOURCE MANAGEMENT
In today's dynamic business environment, an organization's human resources may represent their last sustainable competitive advantage because they influence a group's culture and continuous improvement initiatives. This course will provide an overview of some of the most important organizational behavior concepts related to managing human resources including: job commitment and satisfaction, emotions in the workforce, motivation, teams, communication, identity in the workforce, justice and fairness, and knowledge management among others. These major concepts will be applied to practical human resource processes in order to highlight methods of creating and sustaining a productive employee population. Additionally, students in this course will explore the complex HR regulatory environment and the importance of integrating HR management with the business strategy. 3 credits

GCBA-630 ADV. ACCT. AND FINANCE IN OE
A study of the use of accounting information in performing managerial functions including planning, capital expenditure analysis, controls, cost and financial analysis, costing behavior, and incremental costing. Emphasis is on the use of accounting as a tool for management decision making. 3 credits

GCBA-665 MANAGEMENT INFORMATION SYSTEM
This course is based on the fundamental premise that Information Systems (IS) support organizational personnel, regardless of functional area or organizational level. The aim is to teach all business majors how to use IS to master their jobs and help ensure the success of their organizations. This means not merely learning the latest concepts of IS but learning to apply those concepts to facilitate business processes. We, therefore, focus on the key components of information systems—people, software, hardware, data, communication technologies, and processes—and how they can be integrated and managed to create a competitive advantage. You'll learn valuable theories and how they relate to what's happening today. You'll also learn to apply management concepts to understand threats posed by and opportunities offered through the effective use of information systems.3 credits

GCBA-686 ORGANIZATIONAL CULTURE
This course will focus on the characteristics of organizational culture and emphasizing high performing organizations that use operational excellence as a competitive strategy. During the course, we will explore more deeply what makes up a culture, how culture can be modified, and what characteristics are useful for a culture to support an operational excellence organization. This course will focus on understanding and applying the three levels of culture: values, attitudes, and behaviors. 3 credits

GCBA-690 QUANTITATIVE ANALYSIS
This course is a survey of inferential statistics, with special emphasis

on business and economic applications. Statistical models, techniques, and tools for aiding management decisions are introduced using spreadsheets and SPSS. Topics include probability distributions, hypothesis testing, multiple regression, ANOVA, nonparametric tests and the statistical foundations of statistical process control and six sigma. 3 credits

GCBA-693 SUPPLY CHAIN MANAGEMENT
This course focuses on building an understanding of current Supply Chain Management (SCM) practices being used by businesses as they compete to bring their products and services to the marketplace in a demanding global economy. Business functions of operations, procurement, distribution, logistics, and customer relations are examined in this course. Furthermore, students in this course examine the framework of an integrated system that requires partnerships, organizational cohesion, and decisional trade-offs. Lean techniques used in planning, forecasting, replenishment, and distribution designs are addressed. These concepts are then actively applied within in-depth case studies to show how all of the different aspects of SCM and the impacts of Lean can be optimized to create value for the organization. The goal of the course is to increase the student understanding of key competencies required to function in the role of a Supply Chain Manager. 3 credits

GCBA-695 STRATEGIC MANAGEMENT
The course will give an overview of the academic debate on strategy of the last hundred years with a view to enhancing students' ability to act strategically. Concretely, the course will look at the three Harvard schools, the Environmental school, the Learning and Entrepreneurial Schools and the Cognitive School. Other schools of thought (culture, power, cybernetic, etc.) will be mentioned if there is time or when the discussion makes it opportune. The students also will be asked to reflect the theory back unto their practice and what is happening in the classroom. Almost every class session will have a lecture part and a more seminaristic part in which an original and seminal contribution will be discussed.. 3 credits

GCBA-697 LEADERSHIP AND ETHICS
The course will give an overview of the academic debate on leadership of the last hundred years with a view to enhancing students' ability to act in an ethical and effective way. The first part of the course will review some of the basic concepts in moral philosophy insofar they have a bearing on leading. Since amoral consequentialism is the perspective of "social scientific" mainstream theories, Kantian and virtue ethical ideas will play the major role here. The students also will be asked to reflect the theory back. Almost every class session will have a lecture part and a more seminaristic part, in which an original and seminal contribution will be presented. 3 credits

GCBA-698 AGILE PROJECT MANAGEMENT
Project Management is a highly rewarding profession that became widely recognized as a valuable career path in the mid-20th century. As a profession, it focuses on controlling resources to meet the requirements of projects. In the last two decades, the agile movement and its concepts have spread to diverse organizations such as manufacturing, healthcare, and others. In this course, students learn the agile project management framework building on the foundation of traditional project management with an emphasis on the various agile approaches to achieve organizational results. Topics may include the agile culture, ethics, project selection, chartering, scrum, lean, Kanban, team development, leadership retrospectives, and risk management. An essential part of the course will encourage the students to learn by doing, using their own projects for most activities as well as exploring application of the concepts through case study. The course will close with a discussion of various tools and techniques associated with error prevention/operational excellence in an agile environment. 3 credits

GCBA-704 MANAGEMENT SCIENCE
Managing and directing activities of all forms is crucial in organizations. Management can be viewed as a science concerned with designing efficient and productive processes by effectively allocating resources, controlling inventory, scheduling projects, and improving overall organizational efficiency to achieve success. Management professionals are employed by airlines, federal agencies, banks, health facilities, retailers, manufacturers, logistics companies, and consulting agencies. This course offers insight on how the students can show value in any industry by utilizing a number of quantitative and qualitative tools to successfully manage interactions across all organizational functions. Students learn how to do this in such a way that improves quality, decision making, problem solving, and productivity, among other key organizational metrics. 3 credits.

GCBA-705 CHANGE MANAGEMENT
This is an intensive course that looks at a variety of topics and conceptual frameworks for managing and leading change in organizations. The course is designed to give the student a solid understanding of how to implement change in a corporate environment. The program covers all basic change management principles and gives the student a solid understanding of change management and how it is applied in the work place. The goal of the course is to teach you the key competencies required to function in the role of a manager within a changing corporate environment. 3 credits

GCBA-706 OPERATIONS MANAGEMENT
It is geared toward building skills that can improve performance at work and an organization's bottom line. Specifically, these skills include leveraging lean manufacturing transition tools, waste identification and elimination, focusing on customer needs, visual management, etc. Key concepts include problem solving, optimizing processes, drive maximum value, adopting a continuous improvement mindset, and foundational lean tools. 3 credits

GCBA-711 TEAM DYNAMICS AND ORG. PLN.
This course analyzes the creation and utilization of effective teams and approaches to maintain and then increase team productivity. The course will explore common obstacles that can negatively impact team performance and examines approaches to counteract the forces that negatively impact team effectiveness. Additionally, this course will investigate special considerations that leaders will need to examine to foster productive teamwork in a socially conscious, technologically adept, and global marketplace. This course will also explore practical ways to develop organizational communication plans that integrate marketing, advertising and public relations strategies. The emphasis for planning is given to the dynamic process of managerial decision-making required to implement an integrated communication plan effectively in order to achieve organizational goals. 3 credits

GCBA-720 PROJECT MANAGEMENT
This course introduces students to the fundamental elements of effective project management. The required tools and techniques used to plan, measure, and control projects and the methods used to organize and manage projects are discussed. The course also introduces the fundamental concepts of scope, time management, human resource planning, and project communications as presented in the Project Management Institute's Project Management Body of Knowledge. Emphasizing both theory and practical application,

students are provided with an opportunity to apply these concepts using real-life exercises and examples. 3 credits

GCBA-725 SIX SIGMA LEAN GREEN BELT CERTIFICATION PREP COURSE
This course is designed to give a solid understanding of Lean Six Sigma principles and teach you how to effectively work within a Six Sigma team. The course is also designed to teach Lean principles to improve quality and reduce defects within an organization. You will develop a good understanding of the DMAIC process and how process changes can be implemented. The goal of the course is to provide you with a thorough understanding of how to apply the Six Sigma and Lean tools and interpret the results. You will learn the key competencies required to function in the role of a Six Sigma Lean Green Belt and to successfully pass the certification exam. 3 credits

GCBA-730 GRADUATE SAP BUSINESS ONE PROGRAM
This graduate-level hybrid course will prepare students for a career working with SAP Business One, the world's leading Enterprise Resource Planning (ERP) system for the small-to-medium sized business (SMB) segment. The class will meet once per week and will include lectures, on-line videos, exercises and a workshop. Topics covered in detail include: Business Processes (Revenue, Expenditure and Production processes); Structured Query Language (SQL); Data Transfer Workbench (DTW); and Crystal Reports. 3 credits

GCBA-750 INDEPENDENT STUDY
This course is designed for those students wishing to work on a focused, unique area of Operational Excellence with a faculty member who they have enlisted as a mentor for the course. The student must have established written goals and objectives for the course which course that must be approved by the mentor and Graduate Director prior to registering for the course. This course has limited availability and students are limited to one Independent Study during their time in the program. Duration and credits are variable.

GCBA-751 GRADUATE LEVEL INTERNSHIP IN MANAGEMENT OR OE
This is a limited availability program highly dependent upon development of a mutually beneficial and synergistic relationship between the student and an outside organization willing to sponsor the student as an intern. These internships may be either paid or unpaid. The scope of the internship, the goals and objectives, compensation if any and the master plan for the internship must be approved by the Graduate Director prior to registration for the internship. Duration and credits are variable.

GCCE-601 ORIENTATION TO COUNSELOR EDUCATION, SERVICES, AND TECHNOLOGY
This course provides candidates with the technical skills and theoretical knowledge needed to integrate technology into their work with today's students and their families. Topics for the course include: locating, interpreting and using Internet information (e-mail, WWW, newsgroups, mailing lists, chats); using databases to monitor student progress and promote academic achievement; creating and maintaining a school counseling web site; creating and hosting on-line forums for students and families; creating presentations using specialized presentation software; evaluating software and hardware; creating a technology plan for the school counseling department and program; addressing legal and ethical issues related to the use of technology and the internet by students; and using technology to monitor student progress and identify areas that require improvement. Additionally, school counselors become familiar with web sites and technology resources to support career awareness and development and the post-secondary planning process. 3 credits

GCCE-611 CAREER & LIFESTYLE COUNSELING
Theories of vocational choice, psychology and sociology of work and use of information in decision-making are presented. Particular attention is given to identification, evaluation, and utilization of resource information in guidance and orientation to occupational and educational information, and community resources. 3 credits

GCCE-621 COUNSELING OF CHILDREN & YOUNG ADULTS
This course provides an introduction to the process of counseling children and adolescents as a means of facilitating healthy development and promoting academic achievement in school. The course is designed to help graduate candidates specializing in school counseling focus on the knowledge base, skills, theories, research, models, and critical issues of contemporary school counseling. Current issues facing youth in the contemporary world are explored. 3 credits

GCCE-631 THEORY & PRACTICES OF GROUP COUNSELING
This course is designed to provide counselors with training opportunities to explore basic theoretical and practical concepts regarding the group counseling process; the behavioral dynamics that occur in groups; and the role, essential skills, and techniques of group leadership. 3 credits

GCCE-641 COUNSELING TECHNIQUES FOR VIOLENT, ADDICTIVE, & ABUSIVE BEHAVIORS
This course explores the theories and clinical applications of addressing violent, addictive, and abusive behaviors. A focus is placed on creation of psychological safety, assessment, and ethics surrounding reporting and outreach procedures. 3 credits

GCCE-651 PRE-PRACTICUM IN SCHLCOUNSE ADMINISTRATION PREK-6 OR 7-12
Counseling administration experience with students from elementary, middle, and secondary schools under the direction of a certified school counselor and college supervisor. Direct administrative counseling, supervisory conferences, weekly seminars, preparation of leadership and case reports, and analyses of tape recordings are essential elements. Prerequisite: GCCE 611. 1 credit

GCCE-661 PRACTICUM IN COUNSELOR EDUCATION: FALL TERM
Fall internship experience as a counselor (PreK-6 or 7-12) in an elementary or secondary school under the mentorship of an experienced certified school counselor and college supervisor. A total of 150 clock hours are required. Prerequisite: GCCE 651. 1 credit

GCCE-671 INTERNSHIP IN COUNSELOR EDUCATION: SPRING TERM
Spring internship experience as a counselor (PreK-6 or 7-12) in an elementary or secondary school under the mentorship of an experienced certified school counselor and college supervisor. A total of 150 clock hours are required. Prerequisite: GCCE 651. 1 credit

GCCE-681 SERVICE LEARNING AND COMMUNITY + CAREGIVING
This course will introduce service learning to support community caregiving outreaches in our society and schools. Students will be taught how to design, conduct projects, and assess service-learning initiatives in a comprehensive format that will benefit both our community and learners. Mission-focused design techniques, Funding sources, volunteer management, and other aspects to supporting service learning and community caregiving will be provided. Students will be asked to perform a needs assessment, design an authentic project, and prepare for implementation, and assessment.

Students will be asked to participate in service-learning exercises and field-based community caregiving to fully understand the complete spectrum of this field. 3 credits

GCCE-800 COMPREHENSIVE EXAM
This comprehensive examination will test the student's overall knowledge of the requirements for the Master's program. 0 credits.

GCED-600 EDUCATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT
This graduate course explores the principles and evolving practices of educational leadership and professional development in schools and workplaces. Emphasizing leadership as both relational and reflective, it prepares educators to create inclusive, nurturing, and transformative environments. Grounded in Fred Rogers' philosophy of empathy, intentionality, and respect, the course examines the power of relationships, emotional intelligence, and ethical leadership in fostering meaningful growth. Students will engage with research-based leadership frameworks, develop strategies for building collaborative professional cultures, and design professional development initiatives that support continuous learning and school and organizational improvement.. 3 credits

GCED-600UG EDUCATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENTS
Same as GCED-600 -- graduate course taken as undergraduate. The primary focus of professional development and instructional leadership is the enhancement of classroom learning coupled with other dedicated settings, in which students grow and develop to their maximum potential. Educational leadership is established within the context of the master teacher and professional educator. Self-study projects and human development workshops foster the school and community leadership potential of the master teacher. Multiple assessments are used to develop career goal objectives leading to the Master's Degree in Curriculum and Instruction. 3 credits

GCED-605 STATISTICS AND RESEARCH DESIGN
This course enables the educator to read and interpret empirical research as it is reported in periodic literature and to design educational research instruments and projects. This advanced course includes instruction in educational test and measurements that will provide the educator with the prerequisite mathematical skills to compute, read, and interpret statistical data as reported on standardized achievement tests, group and individual tests, and research monographs. The major emphasis of the course is to develop observational, investigative, and interpretive skills of a reflective educator/practitioner. 3 credits

GCED-610 CURRENT ISSUES AND TRENDS IN EDUCATION
This course is designed to involve the student in an examination and analysis of significant contemporary issues in education. Current literature and research studies are explored through independent research assignments and seminar-type group discussions. Students are encouraged to develop substantiated personal positions regarding topics such as school reform initiatives, charter schools, school violence, problems in urban/rural schools, and the integration of technology into the classroom. Research projects can be initiated in this course. 3 credits

GCED-610UG CURR. ISSUES & TRENDS IN EDUCATION
Same as GCED-610 - graduate course taken as undergraduate. This course is designed to involve the student in an examination and analysis of significant contemporary issues in education. Current literature and research studies are explored through independent research assignments and seminar-type group discussions. Students are encouraged to develop substantiated personal positions regarding topics such as school reform initiatives, charter schools, school violence, problems in urban/rural schools, and the integration of technology into the classroom. Research projects can be initiated in this course. 3 credits

GCED-615 CURRICULUM AND SYSTEMS DESIGN
This course is designed to include theories of curriculum, instruction, and the design of instructional systems. Emphasis will be on translating theory into practice, particularly for curriculum implementation in public or private schools and/or in industry training. Students will have an opportunity to design curricula for use in an educational setting. This course will involve field trips, in-field experiences, classroom lectures, technological training, and project assignments. Three credits.

GCED-615UG CURRICULUM & SYSTEMS DESIGN
Same as GCED-615 - Graduate course taken as undergraduate. This course is designed to include theories of curriculum, instruction, and the design of instructional systems. Emphasis will be on translating theory into practice, particularly for curriculum implementation in public or private schools and/or in industry training. Students will have an opportunity to design curricula for use in an educational setting. This course will involve field trips, in-field experiences, classroom lectures, technological training, and project assignments. 3 credits

GCED-620 ASSESSMENT AND DIAGNOSTICS
The fundamental principles of diagnostic theory and practice are analyzed with an emphasis on the application of said principles in a variety of educational settings. Students become acquainted with the guidelines and techniques for diagnosing students' needs and abilities by implementing and interpreting developmentally appropriate assessments, both quantitative and qualitative. Procedures and problems in test construction and in the analysis, summarization, and reporting of student outcomes are examined. 3 credits

GCED-620UG ASSESSMENT AND DIAGNOSTICS
Same as GCED-620 - Graduate course taken as undergraduate. The fundamental principles of diagnostic theory and practice are analyzed with an emphasis on the application of said principles in a variety of educational settings. Students become acquainted with the guidelines and techniques for diagnosing students' needs and abilities by implementing and interpreting developmentally appropriate assessments, both quantitative and qualitative. Procedures and problems in test construction and in the analysis, summarization, and reporting of student outcomes are examined. 3 credits

GCED-625 INSTRUCTIONAL TECHNOLOGY
Students will explore the use of technology as an important education resource. They will develop the knowledge, technical expertise, and instructional strategies necessary for effective application of technology in a variety of educational and professional settings. Hands-on experience is emphasized. 3 credits

GCED-630 MANAGING FINANCIAL AND MATERIAL RESOURCES
This course will examine the changing financial realities facing schools, especially as they relate to effective and efficient management of fiscal and material resources of schools. The influences of state, city or municipality, and the school district, with its specific governance structure will be addressed. The management principles and managerial problems of public/private education settings will be studied. Students will research various philosophies regarding resource management including: technology services,

personnel, busing, facilities, etc. Budgeting methods and school maintenance will be considered. 3 credits

GCED-635 INSTRUCTIONAL METHODOLOGY
Students will examine the rationale for and development of viable theories of instructional design; apply instructional models to various learning environments, evaluate the learning outcomes; develop an expanded and integrated repertoire of teaching strategies and techniques for use in their classrooms. 3 credits

GCED-640 CLASSROOM MANAGEMENT
This course provides an overview of management models and practical techniques that foster the creation and maintenance of a functional, effective classroom learning environment. It focuses on behavior analysis, management strategies, and the legal and/or policy constraints affecting implementation. Students examine the use of techniques in a variety of settings and apply procedures in their own classes. 3 credits

GCED-640UG CLASSROOM MANAGEMENT
Same as GCED-640. 3 credits

GCED-645 PHILOSOPHICAL AND ETHICAL PERSPECTIVES IN EDUCATION
The course will explore the idea that education reflects the wider society in which we live. Students will examine schools and classrooms and try to understand how what goes on in schools is related to the values, beliefs, and structures of the world outside school walls. During the course students will consider why children succeed or fail, the process of tracking and labeling children; what it is that we learn in school-both explicitly and covertly; how factors such as gender, social class, race and ethnicity, and sexual orientation affect our educational experiences. Students will also explore historical philosophical perspectives in American education, and how various other philosophies have developed in education. 3 credits

GCED-650 HUMAN LEARNING
Brain research and the psycho/social bases of learning from infancy to adolescence are investigated in this course. The study of cognitive learning theory, intelligence, instrumental and generative learning, the contributions of differential psychology, information processing, and expectancy theory help the educational practitioner to individualize and differentiate instructional strategies for diverse learners. Learning styles, shaping and pacing strategies, contingency management, concept learning, and problem-solving strategies are applied to lesson planning and the enhancement of instruction. The course's major emphasis is on the systematic application of the principles of learning within the learning environment. 3 credits

GCED-650UG HUMAN LEARNING
Same as GCED-650 - graduate course taken as undergraduate. Brain research and the psycho/social bases of learning from infancy to adolescence are investigated in this course. The study of cognitive learning theory, intelligence, instrumental and generative learning, the contributions of differential psychology, information processing, and expectancy theory help the educational practitioner to individualize and differentiate instructional strategies for diverse learners. Learning styles, shaping and pacing strategies, contingency management, concept learning, and problem-solving strategies are applied to lesson planning and the enhancement of instruction. The course's major emphasis is on the systematic application of the principles of learning within the learning environment. 3 credits

GCED-655 EDUCATIONAL JURISPRUDENCE
This course investigates a wide range of legal issues that influence the lives of teachers, students, parents, administrators, and school boards. The legal aspects of teaching and teacher and student rights receive extensive treatment. Contract law, conditions of employment, collective bargaining, liability, child abuse, copyright law, and constitutional provisions of the law affecting the school, the child, and the teacher are investigated. Controversial and emerging legal issues are also examined. 3 credits

GCED-655UG EDUCATIONAL JURISPRUDENCE
Same as GCED-655 - graduate course taken as undergraduate. This course investigates a wide range of legal issues that influence the lives of teachers, students, parents, administrators, and school boards. The legal aspects of teaching and teacher and student rights receive extensive treatment. Contract law, conditions of employment, collective bargaining, liability, child abuse, copyright law, and constitutional provisions of the law affecting the school, the child, and the teacher are investigated. Controversial and emerging legal issues are also examined. 3 credits

GCED-660 ADULT LEARNING
This course defines adult education and distinguishes it from other adult-learning activities. The historic, social, and pedagogic origins of adult education are surveyed, and contrasted to other types of education. Examples of curricula, selected goals and objectives, and learning activities are reviewed, and consideration is given to how these educational components are influenced by theories of adult learning. 3 credits

GCED-660UG ADULT LEARNING
Same as GCED-660 - Graduate course taken as undergraduate. This course defines adult education and distinguishes it from other adult-learning activities. The historic, social, and pedagogic origins of adult education are surveyed, and contrasted to other types of education. Examples of curricula, selected goals and objectives, and learning activities are reviewed, and consideration is given to how these educational components are influenced by theories of adult learning. 3 credits

GCED-665 CREATIVE MESSAGE DESIGN AND MOTIVATION
This course examines creativity in the learning setting from all sides: education administrators, teachers, instructional designers, presenters, and learners. Topics include a concentrated study on motivation, creativity in the classroom, innovative media presentation, divergent thinking skills, creative problem-solving methods, analogous reasoning and much more. This class is geared toward both K-12 educators and related educational professionals that work or desire to work with learners of all ages and abilities. Students are expected to participate in creative activities, demonstrate mastery of creative methods, use technology, and relate classroom topics and assignments to their personal settings. 3 credits

GCED-670 VISUAL THINKING AND LEARNING
This course introduces the students to the study and use of instructional visual modalities within the curriculum. The course emphasizes how students learn and benefit from instructionally balanced picture-based media (film, television, photography, graphic arts, computer-based instruction, 3-D imagery, and the Internet). Topics include: visual interpretation, creativity and imagination studies, instructional image manipulation and presentation techniques, social/political influences of visual imagery on children, and the role of the visual media in education. 3 credits

GCED-675 INCLUSIONARY EDUCATION
This course offers students an introduction to inclusive environments and services. Students learn the techniques and skills needed to address current inclusive classroom management issues as well as how to develop effective teaching strategies for an inclusive

classroom. This course involves practical application and discussion. 3 credits

GCED-675UG INCLUSIONARY EDUCATION
Same as GCED-675 - graduate course taken as undergraduate. This course offers students an introduction to inclusive environments and services. Students learn the techniques and skills needed to address current inclusive classroom management issues as well as how to develop effective teaching strategies for an inclusive classroom. This course involves practical application and discussion. 3 credits

GCED-680 SUPERVISION OF INSTRUCTION
Students are introduced to the basic concepts and theories of instructional supervision. Emphasis is placed on the roles, tasks, and processes involved in supervisory practice based on theory and research in education and ancillary fields such as psychology, social work, human resources management, communications, and organizational/ business administration. Prerequisite: Five or more years of teaching experience. 3 credits

GCED-680UG SUPERVISION OF INSTRUCTION
Same as GCED-680 - Graduate course taken as undergraduate. Students are introduced to the basic concepts and theories of instructional supervision. Emphasis is placed on the roles, tasks, and processes involved in supervisory practice based on theory and research in education and ancillary fields such as psychology, social work, human resources management, communications, and organizational/ business administration. Prerequisite: Five or more years of teaching experience. 3 credits

GCED-700 INDEPENDENT STUDY
An independent study may be possible by arrangement with the Graduate Program Director. Variable credit.

GCED-705 MUSEUMS IN EDUCATION
This course assists students of history and educators in developing awareness and confidence in using museum resources as a planned and significant aspects of curriculum. Opportunities to examine learning styles, learning contexts, and teaching methods around the object, exhibit, and site-based visual and interactive experiences are provided. Research and development of exhibits along with teaching methods and materials are expected of students. Students participate in traditional classroom instruction as well as field visits to historical places. 3 credits

GCED-710 SCHOOL PLANNING AND CLASSROOM DESIGN
This course instructs how design and planning impacts cognitive learning and student performance. Students investigate how to properly design classrooms and learning settings that meet the needs of 21st century students. Issues around safety, accreditations, codes, and curriculum are discussed as well as maximizing resources in fundraising and donations. Space usability and retrofitting of older settings to meet the newer instructional technology-rich classrooms are addressed. Last, students are expected to consider their own settings and devise plans to improve learning and management. Model PreK through secondary education settings are examined. 3 credits

GCED-715 CULTIVATING EQUITY AND BELONGING
Educators will examine the importance of equity and belonging in a school setting. Through individual reflection and discussion, students will be able to explore an array of topics, including equity and culturally relevant pedagogy. Students will focus on effective methods for fostering equitable, welcoming learning communities in their own classrooms. By the end of the course, educators will have the tools and strategies that will enable them to embrace the Chapter 49 Culturally Relevant and Sustaining Educators competencies in their classrooms. 3 credits

GCED-720 PERSONALIZED LEARNING WITH THE HABITS OF MIND
In this course, we will define and describe personalized learning as a simple and powerful frame that allows students to thoughtfully engage with inquiry, generate ideas, and develop challenging yet achievable performance opportunities. We will distinguish personalized learning from differentiated and individualized learning and introduce 4 attributes that provide indicators of a personalized learning environment. Participants will explore how Habits of Mind, a set of effective thinking dispositions, are essential for students as they learn in a personalized environment. We also will provide many examples in which we show how the curriculum is designed to intentionally move students to more ownership and engagement in learning experiences through personalized learning and Habits of Mind. Opportunities to interact with other students in the class is embedded in the platform plus two real time webinars to interact with the instructors. 3 credits

GCED-800 COMPREHENSIVE EXAM
At the close of the coursework, students take a comprehensive exam which is offered each term, thus enabling students to graduate year-round. An additional final competency evaluation is required along with a portfolio of experiences and resources illustrating a student's proficiency in their graduate studies. 0 credits

GCEL-602 DESIGN, ORGANIZATION, & MANAGEMENT OF EARLY CHILDHOOD SETTINGS
This master level course focuses on the design and implementation of ECE programs as well as room spaces and buildings. Best practice, trends, and stability are explored. Practice incorporating laws, codes, licensure, and accreditation are incorporated. Marketing and implementation are explored through experiential opportunities. Course requirements include an inclusive design of an ECE setting that can be implemented.

GCEL-612 EARLY LEARNING LEADERSHIP
This graduate level course is designed for early childhood professionals functioning in an administrative role. Basic business practices and skill sets unique to early learning/school age programs are covered. Broad areas of study and application include: Childcare/school age care as a business, fiscal management, risk management and strategic planning, marketing, human resources, data/technology management, facilities operation and management, fund development, and management strategies. Required for Pa Director Credential/Credential Renewal. 3 credits

GCEL-622 CREATIVE PROGRAMS AND WORKSHOP DEVELOPMENT FOR EARLY EDUCATION
This course concentrates on how to prepare, fund, and conduct creative early learning programs for children from birth through 12 years. The course prepares students on methods to enhance family relations and encourage children and teens to seek life-long learning opportunities beyond the classroom. Students will develop skills for aligning standards to summer programs, camps, field trips and outdoor ventures in addition to incorporating STEM learning and the arts. Management of interdisciplinary and enrichment learning events during wrap around, after-school and summer periods will be a focus of this course. The course will address sponsoring clubs, competitions, securing grants and fundraising, as well as other promotions that early learning centers can employ to cultivate support from families, children, and caregivers. 3 credits

GCEL-642 SERVICE LEARNING &COMMUNITY CAREGIVING
This course will introduce service learning to support community caregiving outreaches in our society and schools. Students will be taught how to design, conduct projects, and assess service-learning initiatives in a comprehensive format that will benefit both our community and learners. Mission-focused design techniques, Funding sources, volunteer management, and other aspects to supporting service learning and community caregiving will be provided. Students will be asked to perform a needs assessment, design an authentic project, and prepare for implementation, and assessment. Students will be asked to participate in service-learning exercises and field-based community caregiving to fully understand the complete spectrum of this field. 3 credits

GCEM-673 EMERGENT INFORMATION MANAGEMENT & INSTRUCTIONAL TECHNOLOGIES
This course provides an understanding of various applications and limitations of the computer and other technologies in the management process. It includes instruction in concepts such as file structure, data storage and retrieval, networking, and telecommunications. Students address internal controls that ensure accuracy, integrity and the confidentiality of information. The course also includes the use of information for effective management. 3 credits

GCIT-604 DESIGNING FLIPPED LEARNING ENVIRONMENTS
This online course is designed for students interested in deepening strategies that incorporate the Flipped Learning and other similar techniques. The course requires students to attend and participate in the annual FlipCon conference, attend to instruction presented asynchronously, and submit a final project related to engaging learners with media content. Elective. 2 credits

GCIT-614 EMERGENT INFORMATION MANAGEMENT AND INSTRUCTIONAL TECHNOLOGIES
This course examines new technologies in training and education. In addition to embracing modern technological advancements and interfaces, it examines the issues and troubleshooting techniques for today's technological applications. Networking and infrastructure design for supporting modern instructional technologies and applications is discussed. Last, development of a technological vision document and budget is explained through the assessment of needs and purpose for the intended audience albeit adult learners, industry, or education. 3 credits

GCIT-624 ASSESSMENT SYS. FOR ONLINE ED
This course prepares candidates for assessment of both learners and online systems. Topics of related to human-computer interaction, website usability, app interface development for mobile devices, and online learner assessment are covered. Students will develop skills in designing and assessing user interfaces that will support greater achievement and interaction with technologically delivered instruction. Assignments in the course will be project based around competencies of online assessment, prototyping, and heuristic evaluation. 3 credits

GCIT-684 ADVANCED INSTRUCTIONAL DESIGN FOR ONLINE EDUCATION
This course uses a systems design-based approach to developing online or computer-delivered education. Students engage in authentic instructional design activities and project management to produce online instruction using course management and module authoring tools. Students analyze instructional design problems, access a wide range of software tools and research, working with diverse teams and individuals, create real instructional design products, and give and receive constructive feedback. Students anticipate cost-benefits and training needs for delivering online instruction. Prerequisites: GCED 615 and GCED 625. 3 credits

GCIT-694 PRACTICUM IN INSTRUCTIONAL TECHNOLOGY
Students participate in 75 hours of field-based experiences in instructional technology and class seminars. Class seminars include discussions of management of instructional technology services, developing technology plans, creating in-service workshops or classes for school personnel, and budgeting for technology. Prerequisite or co-requisite: GCIT 684. 3 credits

GCLS-504 ETHICAL DEC. & DIL. IN CRIMINAL JUSTICE
This course examines the major ethical dilemmas that confront criminal justice professionals throughout their careers. Students are exposed to the philosophical principles of ethical decision making. Students also examine issues-based, practical approaches to ethical issues found in all three branches of the criminal justice system - police, courts, and corrections. Policy issues are reviewed and students are encouraged to engage in discussions of key topics in professional ethics and the delicate balance between law and justice. Students enrolled in this course will begin to think about the impact and importance of ethical decision making by criminal justice professionals. 3 credits.

GCLS-590 ADVANCED CAPSTONE
This course is an advance placement course for undergraduate transfer credits after completing a graduate level senior project. Senior projects must focus on the integration of information learned from different courses with special focus on criminal law and legal issues, theories of crime, juvenile delinquency, law enforcement, corrections, ethics, forensic science, and research methods. This course must get approval from the GCLS Graduate Director, as well as the Director of Graduate and Continuing Education. 3 Transfer credits.

GCLS-600 ADVANCED RESEARCH METHODS
This course focuses on advanced research designs for criminology-related topics and the social sciences. Special attention is given to sampling, data collection, reliability and validity threats, the rules for causation, and ethical issues concerning research in the field. 3 credits

GCLS-600UG ADVANCED RESEARCH METHODS
Same as GCLS-600 -- graduate course taken as undergraduate This is the capstone course for justice studies students. It will focus on the integration of information learned from different courses with special focus on criminal law and legal issues, theories of crime, juvenile delinquency, law enforcement, corrections, ethics, forensic science, and research methods. This course will be offered to justice studies students in their final semester in which they receive their degrees. Prerequisite: Student must be in the last semester of their Criminology, Law, and Society course work, or receive permission of instructor. 3 credits

GCLS-602 RACE AND JUSTICE
Race and Justice offers a more comprehensive examination of the modern political issues in the discourse on race and the criminal justice system. In this discussion-based course, students will be expected to read and evaluate a variety of arguments and perspectives while using research and policy recommendations to identify clear paths to progress, equity, and social change. Graduate students enrolled in the course will have increased reading and writing expectations relative to undergraduate students, but all students will

be exposed to the most influential current texts in race and criminology. 3 credits

GCLS-603 SPECIALTY COURTS
Incarceration is a temporary and expensive solution to deal with the problem of crime. However, the average incarcerated individual will eventually be released back into the community. Throughout this course we explore the various specialty courts (DUI, Mental Health, Drug, etc.) designed to significantly reduce recidivism, their origin, how they operate, and their overall effectiveness and cost saving value to the community. 3 credits

GCLS-605 CRIMINOLOGY OF HATE
This course will explore the phenomenon of hate crimes and the laws response to them. Consideration will be given of the legislative changes made to deal with hate crime scenarios and how the courts and law enforcement seek to respond to them. A discussion of the psychological basis for hate crimes will also be entertained. 3 credits

GCLS-607 SCHOOL VIOLENCE/ORIGINS AND STRATEGIES
This course is designed to provide students with an overview of the theory, practices, problems, and evaluations of issues surrounding youth and school violence. With a foundation in psychological and developmental theory moving to practical application and analysis, the course aims to outline the major causes of and responses to violence in schools. More importantly, the course examines both small- and large-scale school violence and their effects on students, teachers, and the school community. Students will engage in active discussions and create evidence-based practice and strategies that can be applied to real-world scenarios. 3 credits

GCLS-610 POLICY ANALYSIS
This course focuses on the development of legislative, judicial and social policies in the United States and the impact these policies have on society. Topics include types of policies and programs, models of analysis, and evaluations. The courses specific examines policy and program formulation, measurement, and evaluation in order to remedy current public problems in the Criminal Justice system. 3 credits

GCLS-610UG POLICY ANALYSIS
Same as GCLS-610 - graduate course taken as an undergraduate. This course focuses on the development of legislative, judicial and social policies in the United States and the impact these policies have on society. Topics include types of policies and programs, models of analysis, and evaluations. The courses specific examines policy and program formulation, measurement, and evaluation in order to remedy current public problems in the Criminal Justice system. 3 credits

GCLS-613 CRIME RATES IN AMERICA
The course will focus on understanding the trends and implications of the varying crime rates experienced in America in recent history and the policy implications as such rates are projected into the future. What caused the steep increase in crime in the 1980's? Why did crime rates plummet in the mid 1990's? Where do the rates project in the upcoming decade? The presentations will involve a number of etiological and system-oriented discussions that would include an element of international criminology, and would likely rely on the books The Great American Crime Decline, The New Criminal Justice, and Understanding Crime Statistics. 3 credits

GCLS-615 INTERNATIONAL CRIMINAL SYSTEMS
This course will be conducted largely as a seminar in which the students will focus on the criminal system of a given country, explore it thoroughly, and present it in the contrast to the comparable systems in the United States. All phases of the criminal system in these countries will be explored including the determination of what is made criminal, the kinds of investigation use, the forms of adjudication and the forms of sanction and punishment. General course work will discuss the different systems of law used in various countries to contrast them with the system developed in the United States. 3 credits

GCLS-620 ADVANCED CRIMINOLOGICAL THEORIES
Covers the major theories used in Criminology and Criminal Justice related fields. Special attention is given to the theory's history, hypothesis, assumptions, empirical validity, and policy recommendations. Classical, biological, sociological, and integrated theories are critiqued and examined in great detail. 3 credits

GCLS-620UG ADVANCED CRIMINOLOGICAL THEORY
Same as GCLS-620 - graduate course taken as undergraduate. Covers the major theories used in Criminology and Criminal Justice related fields. Special attention is given to the theory's history, hypothesis, assumptions, empirical validity, and policy recommendations. Classical, biological, sociological, and integrated theories are critiqued and examined in great detail. 3 credits

GCLS-625 SURVEY OF CYBERCRIME
The phenomenon of cybercrime has created serious challenges both for those in the cybersecurity field and the criminal justice system. This course will analyze how crimes of various types and potential national security threats are or may be committed by use of the Internet and/or other cybertechnologies. Ethical considerations in the use of such technology as a weapon to combat crime and terrorism will also be discussed, along with the statutory framework under which prosecutions of such crimes may take place. 3 Credits

GCLS-627 JUVENILE JUSTICE ADMINISTRATION
This course is meant to build upon the Juvenile Justice Course and give the students an appreciation of the complexity of the juvenile justice system and the challenges it presents to those who administer the distinct judication system which handles Juvenile cases and the programs established in the various jurisdictions to treat juveniles adjudicated by the judicial system. 3 credits

GCLS-630 LEGAL ISSUES
This course will undertake a critical analysis of issues of ongoing relevance in the prosecution and defense of criminal cases. Beyond a basic Criminal Law or Procedure course, the material covered here will examine issues of greater complexity about matters currently confounding courts and legislatures. 3 credits

GCLS-630UG LEGAL ISSUES
Same as GCLS-630 - graduate course taken as undergraduate. This course will undertake a critical analysis of issues of ongoing relevance in the prosecution and defense of criminal cases. Beyond a basic Criminal Law or Procedure course, the material covered here will examine issues of greater complexity about matters currently confounding courts and legislatures. 3 credits

GCLS-635 PUBLIC SECTOR MANAGEMENT
This course will provide an extended discussion of management techniques for government agencies and programs. It will concentrate on formulation of a mission for the agency, organize strategies to accomplish that mission and budgetary and political dimensions that would affect the capacity of the managers to carry out the mission. 3 credits

GCLS-636 MEDIA AND CRIME
Media and Crime examines the portrayal of crime and criminal justice in the media, including online streaming, television, film, newspapers,

music, video games, etc. Special attention is given both to what sorts of crime and criminal justice activities are being presented and how the media portray them. Finally, the class discusses the influence that media have on criminal justice policy and perceptions of crime and justice among the population. Class material will include consuming media in and outside of class and discussing it according to assigned readings. 3 credits

GCLS-640 STATISTICS
This course focuses on the use of statistical techniques in criminology. Special attention is given to SPSS data entry, coding, and output. Descriptive statistics and regression analyses are discussed. 3 credits

GCLS-640UG STATISTICS
Same as GCLS-640 - graduate course taken as undergraduate. This course focuses on the use of statistical techniques in criminology. Special attention is given to SPSS data entry, coding, and output. Descriptive statistics and regression analyses are discussed. 3 credits

GCLS-645 SPECIAL TOPICS
Advanced special topics courses are offered at the discretion of the department and at the approval of the Director in a wide area of subjects directly related to qualitative/quantitative research methodology, legal issues, criminological theory, policy application and specialized critical issues within the discipline. When listed for a term, the specific subject matter of the course and the professor(s) teaching it will be posted on the Saint Vincent College website (on the Master of Science in Criminology page) prior to the time registration begins and details will also be available by contacting the Criminology Department Chair. For the Summer 2020 session, for example, Professor Jachimowski will conduct an on-line course analyzing the effectiveness of Crisis Intervention Teams, encompassing policing, mental health systems and corrections. Specific focus will be placed on policy implementation and the assessment of the effectiveness on any CIT operation. 3 Credits

GCLS-645UG SPECIAL TOPICS
Same as GCLS-645. Advanced special topics courses are offered at the discretion of the department and at the approval of the Director in a wide area of subjects directly related to qualitative/quantitative research methodology, legal issues, criminological theory, policy application and specialized critical issues within the discipline. When listed for a term, the specific subject matter of the course and the professor(s) teaching it will be posted on the Saint Vincent College website (on the Master of Science in Criminology page) prior to the time registration begins and details will also be available by contacting the Criminology Department Chair. For the Summer 2020 session, for example, Professor Jachimowski will conduct an on-line course analyzing the effectiveness of Crisis Intervention Teams, encompassing policing, mental health systems and corrections. Specific focus will be placed on policy implementation and the assessment of the effectiveness on any CIT operation. 3 Credits

GCLS-650 GCLS INDEPENDENT STUDY
This three-credit course will give students the opportunity to apply their knowledge of research methodology, qualitative and quantitative data analysis, and technical writing. The coursework will involve working closely with a CLS faculty member to produce a publishable journal article that will include the student as a co-author. In addition to demonstrating and practicing their research and academic writing abilities, students will experience the publication process that includes formatting and submission to journals and the peer review process.

GCLS-651 MASTER'S COLLOQUIUM
The Master's Colloquium session is an advanced investigation into contemporary issues and/or comparative criminology. The objective of this course is to provide students the opportunity to discuss problems, concerns, questions, and solutions within the criminological field. Students interested in varying topics and perspectives should take this seminar-based course to promote the exchange and experiences held by graduate CLS students as they move toward graduation. 3 credits

GCLS-655 INTERNATIONAL CRIMINIAL LAW
This course will focus on the structures used for the prosecution of international criminals in multinational venues. Examination of international law as it impacts the substantive definition of crimes as well as the political and social dynamics of this expanding are of law will be developed. Occasional offering. 3 Credits

GCLS-660 PROFESSIONAL SEMINAR
This course provides an overview of various important and relevant issues in the field in terms of research and the administration of justice. It is designed to help students develop master's-level academic skills in Criminology and introduces students to various skills needed to become leaders in the professional world. 3 credits

GCLS-660UG PROFESSIONAL SEMINAR
Same as GCLS-660 - graduate course taken as undergraduate. This course provides an overview of various important and relevant issues in the field in terms of research and the administration of justice. It is designed to help students develop master's-level academic skills in Criminology and introduces students to various skills needed to become leaders in the professional world. 3 credits

GCLS-665 SENTENCING
A true understanding of the criminal justice system requires the recognition that the vast majority of cases that enter the system are resolved without a trial. A huge percentage of the cases are either diverted into alternative, rehabilitative programs or are the subject of guilty pleas and the imposition of a sentence. The matter of sentencing is thus a focal point for much of the theory and practice of the criminal law. This course will discuss the process of sentencing, the various goals that sentencing is supposed to achieve, the interplay between courts and legislatures in the sentencing process, and the various schemes that federal and state systems use to achieve some predictability and consistency in the sentencing process. Consideration will be given to the phenomenon of mandatory minimum sentencing as well as the guideline schemes that are used in various jurisdictions to direct (and sometimes constrain) the traditional discretion of the trial judge in fixing a just sentence. 3 Credits

GCLS-667 GENDER AND CRIME
This course will examine the notions of gender identity and development, social constructs of gender, and the ways in which femininities and masculinities may influence victimization and offending. Rooted in criminological theory, including modern feminist theories, the course will evaluate empirical research to examine the function of gender in the criminal justice system, media representation of male and female offenders, and gendered experiences as criminal justice professionals. 3 credits

GCLS-667UG GENDER AND CRIME
Same as GCLS-667 - graduate course taken as undergraduate. This course will examine the notions of gender identity and development, social constructs of gender, and the ways in which femininities and masculinities may influence victimization and offending. Rooted in criminological theory, including modern feminist theories, the course will evaluate empirical research to examine the function of gender in the criminal justice system, media representation of male and female

offenders, and gendered experiences as criminal justice professionals. 3 credits

GCLS-669 AGENCY MANAGEMENT
An analysis of the administration and management of organizations to include their structure and environment, problems of communication, motivation of personnel, leadership, personnel supervision, organizational conflict, decision-making, organizational effectiveness, and changes and innovation in administration and management. 3 credits

GCLS-670 PRED/PREVENT. OF CRIM CONDUCT
This course presents an analysis of high-profile criminals and showcases the empirical and theoretical data to support theories of criminality. Criminal behavior will be viewed through biological, psychological, social, and environmental perspectives. Violence and criminal behavior will be viewed on a developmental continuum. Contemporary issues will be discussed highlighting recent current criminal events that include competence, eyewitness testimony, criminal profiling, jury selection, false memory, and interrogation strategies. Students will be provided with the tools necessary to understand assessment procedures, determine preventative factors, and current treatment models that may help mitigate the causes and outcomes of crime and violence. 3 credits

GCLS-670UG PRED/PREVENT.OF CRIM CONDUCT
same as GCLS-670 -- graduate course taken as undergraduate. This course presents an analysis of high-profile criminals and showcases the empirical and theoretical data to support theories of criminality. Criminal behavior will be viewed through biological, psychological, social, and environmental perspectives. Violence and criminal behavior will be viewed on a developmental continuum. Contemporary issues will be discussed highlighting recent current criminal events that include competence, eyewitness testimony, criminal profiling, jury selection, false memory, and interrogation strategies. Students will be provided with the tools necessary to understand assessment procedures, determine preventative factors, and current treatment models that may help mitigate the causes and outcomes of crime and violence. 3 credits

GCLS-680 PROSECUTION OF CRIMIINAL STREET GANGS
An examination of the complex sociological, psychological and criminological dimensions of criminal street gangs, gang membership, and the problems of law enforcement in prosecuting these entities. This course will cover a wide spectrum of topics that interrelate to this complex issue in law enforcement. 3 credits

GCLS-680UG URBAN STREET GANG PROSECUTION
Same as GCLS-680 -- graduate course taken as undergraduate. An examination of the complex sociological, psychological and criminological dimensions of criminal street gangs, gang membership, and the problems of law enforcement in prosecuting these entities. This course will cover a wide spectrum of topics that interrelate to this complex issue in law enforcement. 3 credits

GCLS-685 CRIME MAPPING - GIS
This course will introduce students to the uses of geographic information systems (GIS) in the criminal justice field. Students will learn how to create crime maps and analyze spatial aspects of criminal activities. Students will learn to evaluate police beats and complete predictive analysis based off of criminal hot spots. Students will learn the processes of taking police reports from officers in the field and integrating them into an information system that allows officers, supervisors, and the public to access the data and perform their own analysis. 3 credits

GCLS-690 COMPARATIVE CRIMINAL JUSTICE/ S. AFRICA
This course offers students the unique opportunity to explore South African society, culture, and crime. Given the relatively recent end of apartheid and ongoing struggles with race relations and integration, this course will provide students the chance to examine how social and individual factors affect violent crime rates throughout the country. The experience will highlight the country's rich in ethic and cultural diversity, introduce students to international criminal justice and policing tactics, and similarities and differences in polices and practices. May be taken for 0 or 3 credits

GCLS-690UG COMPARATIVE CRIMINAL JUSTICE
Same as GCLS-690 -- graduate course taken as undergraduate. This course offers students the unique opportunity to explore South African society, culture, and crime. Given the relatively recent end of apartheid and ongoing struggles with race relations and integration, this course will provide students the chance to examine how social and individual factors affect violent crime rates throughout the country. The experience will highlight the country's rich in ethic and cultural diversity, introduce students to international criminal justice and policing tactics, and similarities and differences in polices and practices. May be taken for zero or 3 credits

GCLS-695 THESIS I
This course is designed to be the beginning stages of the thesis process for graduate students. Students will work with an advisor to select a topic, perform a comprehensive review of the existing literature, and develop a research proposal. At the end of the course, students will have complete three drafted chapters for presentation to the CLS faculty: an introduction of the issue, a literature review, and methodology. The proposal defense will allow for faculty to provide feedback, recommendations, and expectations for the completion of the thesis. 3 credits

GCLS-696 THESIS II
This course is designed to complete the graduate thesis. Students will execute the research plan and complete the three final chapters (results and discussion, policy and research recommendations, and conclusion). To successfully pass this course (and fulfill the thesis requirement for graduation), students will defend their thesis to some or all members of the CLS faculty. 3 credits

GCLS-700 COMPREHENSIVE EXAM
This comprehensive examination will test the student's overall knowledge of the core requirements for the Master's program. It will be an extended examination, in an essay format, and will be graded jointly by all professors in the department. 0 credits

GCRS-603 FOUNDATIONS OF LITERACY
The Foundations of Literacy course provides a scientifically based foundation in the cognitive, socio-cultural, linguistic, and motivational influences on literacy and language development. The course presents the key scientifically based reading research foundations needed to understand how reading develops and effective methods and strategies used to teach literacy skills to young children through young adults. Topics include understanding reading research, cognitive psychology's contributions to understanding the reading process, language development, the sequence of learning to read, the essential components of reading instruction, and an introduction to the most effective approaches to teaching reading across the grade bands. 3 credits

GCRS-613 COMPLEX TEXT & DISCIPLINARY LITERACY
This course will examine complex text as it refers to printed, visual, auditory, digital, and multimedia texts that complement each

standards-based unit, align to curricular goals, and represent an appropriate level of challenge for students. In addition, the course will support students' literacy development across disciplinary contexts. Special emphasis will be placed on analyzing the process of extracting and constructing meaning from complex text in the content areas. Course discussions and assignments will also apply theories of language and literacy development, ways of consuming as well as disseminating evidence-based practices, and how different models for reading and pedagogical approaches can inform complex text instruction in the content areas for diverse learners. Prerequisite GCRS 603. 3 credits

GCRS-623 DIAGNOSIS OF READING DIFFICULTIES
This course provides an overview of assessments and materials that may be used by the reading specialist to observe and document PrePK-12 pupils' reading performance, relate pupils' performance to appropriate reading instruction and evaluate their progress. Additionally, students will utilize assessment instruments to observe and identify the nature of children's difficulties and strengths and effectively diagnose the literacy instructional needs of diverse learners, PreK--12. Finally, students will be taught how to communicate test results properly and accurately to parents and stakeholders. Prerequisite GCRS 603. 3 credits

GCRS-633 TECHNIQUES FOR READING DIFFICULTIES AND REMEDIATION
The course focuses on evidence-based reading interventions for struggling readers. The essential components of effective reading instruction, scientifically based reading strategies, interventions for students with learning or language needs, and appropriate literacy assessments are addressed. The course will cover a variety of remediation activities and materials to address reading problems. Participants will develop remediation strategies that are based on the results of assessments and provide differentiated instruction for all learners including students with disabilities and language learners. There will be required purchases of materials and tools for assisting in reading remediation as well as introductory clinical field assignments. Prerequisite GCRS 623; Taken concurrently with GCRS 643. 3 credits

GCRS-643 READING SPECIALIST PRACTICUM (PREK-12)
This course is taught concurrently with GCRS 633, which addresses strategies for using literacy assessment data to design, implement, and evaluate reading instruction for readers with diverse literacy needs. Projects in this course are shared across both courses. Minimum of 60 hours of focused on addressing the literacy instruction needs of struggling readers and writers in PrePK-12 clinical and/or classroom settings is required. Prerequisite GCRS 623; Taken concurrently with GCRS 633. 3 credits

GCSC-608 INTRODUCTION TO INTEGRATED STEM EDUCATION
This course introduces and redefines today's science pedagogy with respect to constructivism, questioning skills, traditional and non-traditional science assessment, science curriculum development, science learning cycles, textbook analysis, teacher centered versus student centered activities and inquiry-based science education. This course investigates a wide range of historical, social and religious issues and their relationship to science education. Students explore current classroom science-education problems and learn how to overcome these issues. 3 credits

GCSC-618 FORESTRY & WILDLIFE MANAGEMENT AND FIELD TECHNIQUES
This course explores the concepts and theories of sustainable forestry and wildlife management practices. Topics include temperate forest ecology and conservation, roles of wildlife in forest ecosystems, key concepts in forest and wildlife conservation, impacts of forestry practices and landscape modification on wildlife populations, ecology and viability of wildlife populations and human uses and abuses of our natural resources. 3 credits

GCSC-628 MATERIALS SCIENCE & ENGINEERING
This course introduces the basic concepts of materials science and engineering. The concepts of atomic, crystal, micro- and macrostructure, and their control and effects on chemical, electrical, magnetic, optical, and mechanical properties. Furthermore, students study the effects of stress and temperature on structures, mechanical properties, characteristics of metals, ceramics and polymers, materials processing, electrical and optical materials, and materials selection. 3 credits

GCSC-638 CELL SYSTEMS & FUNCTIONS
This course examines cellular regulation with a focus on macromolecular events and themes centered on: cellular communication, homeostasis and response to stress. Topics cover receptor function, cell adhesion and migration, dynamics of the cellular cytoskeleton, intracellular transport, and regulation of endocrine responses. Emphasis is placed on regulation of these processes with a focus on basic properties, mechanisms, historical discoveries where relevant, and current models and controversies. 3 credits

GCSC-648 SCIENCE CLASSROOM MANAGEMENT AND LABRATORY EXPERIENCES
This course introduces and refines classroom management skills specifically related to teaching science in the classroom and laboratory setting. Topics of discussion include classroom and laboratory safety, current science safety rules and regulations, chemical storage and disposal, laboratory room design and laboratory reports. Students explore science education technology related to their specific certification. 3 credits

GCSC-658 SCIENCE PRACTICUM
The practicum provides students with a research experience of working on a large project emphasizing the synthesis of material covered in previous courses. The practicum is an off-campus field experience/laboratory based course where students work independently or in a small group on a project of realistic magnitude. The project involves the following: problem definition and design, implementation, validation, documentation, written and oral communication. Although each project will be supervised, the students are to manage their project in an independent atmosphere to ensure that project segments are completed in the time imposed. 3 credits

GCSE-607 FAMILY AND PROFESSIONAL COLLABORATION
This course focuses on the special education teacher as a team member within the field of education. Students learn about family centered practices and how to work with families from culturally and linguistically diverse backgrounds. Various models of collaboration and career consultation techniques for disabled individuals within the general community are discussed. Finally, the creation of classroom plan(s) and simulated practices for proper diffusion and implementation of professional strategies to foster public collaboration for the special education population are required. 3 credits

GCSE-617 DIAGNOSIS AND EVALUATION STUDENTS WITH HIGH INCIDENCE DISABILITIES
This course concentrates on diagnostic and evaluation techniques for to use with students who have high incidence disabilities. The use of formal and informal assessment tools in areas specific to reading, writing, and mathematics are emphasized. Students acquire knowledge of various assessment procedures used to identify students for special education and for individual education program designs implemented within the traditional or non-traditional classroom. This course requires students to perform simulated hands-on and practical implementation of assessment tools to monitor students' academic progress. 3 credits

GCSE-627 THEORY AND PRACTICE OF TEACHING STUDENTS WITH HIGH INCIDENCE DISABILITIES
This course addresses various strategies and techniques for successful teaching of students with high incidence disabilities Concentration on the special education curriculums of reading, written and spoken language, and mathematics is studied. Students are exposed to the practice of subsidiary curriculums such as sensory (art, music, physical education) and daily life (family and consumer sciences). Course requirements include practice teachings and field experiences, lesson planning and curriculum development, consultation and research of available journals and resources for teaching, and membership in a national special education organization. 3 credits

GCSE-637 METHODS OF INSTRUCTION AND ASSESSMENT FOR STUDENTS WITH SIGNIFICANT & MULTIPLE DISABILITIES
This course focuses on methods teachers use to organize curriculum and implement assessment and instruction to ensure maximum learning for students with moderate and/or severe disabilities. Students are exposed to the curriculum needs with those significant and multiple disabilities such as life, vocational, and social skills, and functional academics. Students are required to complete a significant action research project with a learner and present findings in manuscript and poster forms. 3 credits

GCSE-647 ADVANCED CLINICAL APPLICAITONS IN APPLIED BEHAVIOR ANALYSIS
This course builds upon the basic principles of learning and applied behavior analysis presented during previous coursework in Applied Behavior Analysis. The course will offer advanced coverage of special topics, including: the analysis of verbal behavior, practicing behavior analysis in applied settings such as schools and hospitals, conducting parent training; assessment and treatment procedures for improving communication skills of individuals with developmental disabilities, managing problem behaviors such as self-injury, Pediatric Feeding disorders, noncompliance and oppositional or antisocial behavior, enuresis and encopresis; and for dealing with special populations such as children with autism. 3 credits

GCSE-657 TECHNOLOGICAL APPLICATIONS FOR DIFFERENTIATED INSTRUCTION
This course provides exposure and hands-on experience with software applications and instructional medias used to improve the education and meeting needs of diverse learners. Additional course concentrations include accessing, managing, purchasing, and recommending software and emerging technologies for today's classroom. Students are required to plan a budget, and prepare technological training for professionals and aides. 3 credits

GCSE-667 ADVANCED INTERVENTION STRATEGIES IN READING, WRITING AND MATHEMATICS
This course provides an advanced application of recent research and reviews of interventions for individuals with disabilities, including mild disabilities and learning disabilities. Topics include the following: recent intervention research, effective instructional practices, learning strategies approaches, attention interventions, motivation interventions, reading instruction strategies, written expression strategies, math instruction strategies, content area accommodations, testing accommodations, and early intervention methods. Prerequisite: GCSE 627. 3 credits

GCSE-677 INTRODUCTION TO AMERICAN SIGN LANGUAGE
Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions to an audience of listeners or readers on a variety of topics. Students demonstrate an understanding of the relationship between practices, perspectives and products of the Deaf culture. Students demonstrate an understanding of the nature of language through comparisons of American Sign Language and their own language. Students demonstrate the concept of culture through comparisons of the Deaf culture with their own culture. 3 credits

GCSE-687 TEACHING STUDENTS WITH AUTISTIC SPECTRUM AND DEVELOPMENTAL DISORDERS
This course is an overview of autism spectrum disorders and methods for teaching students with these disorders. The course examines the psychological, physiological, social, and educational characteristics of individuals who have been identified as having autism, pervasive developmental disorder, Rett's disorder, Asperger's syndrome and childhood disintegrative disorder. In addition, the course will focus on teaching, diagnosis, and intervention strategies to prepare the special educator. 3 credits

GCSE-697 TEACHING CULTURALLY DIVERSE STUDENTS WITH LIMITED ENGLISH PROFICIENCIES IN THE CLASSROOM
This course is designed to build pre-service and in-service teachers' capacity to design effective content area instruction for K-12 English language learners (ELLs). Students learn research-based instructional methods and strategies that support ELLs in acquiring academic English and academic literacy skills while learning grade-level content area concepts. Students learn to make adaptations and modifications to instruction, appropriate to ELLs' grade level and English language proficiency level. Course activities and assignments are interactive and inquiry-based. This course is aligned to the PA Department of Education Accommodations for Diverse Learners Guidelines. In addition to learning and applying effective techniques for simultaneously teaching content and academic language to ELLs, students explore laws and policies that govern educating ELLs, cultural influences on learning, assessment issues, and print, web-based, and community resources for supporting this fast-growing population of students and their families. 3 credits

GCSE-697UG TEACHING CULTURRALLY DIVERSE
This course is designed to build pre-service and in-service teachers' capacity to design effective content area instruction for K-12 English language learners (ELLs). Students learn research-based instructional methods and strategies that support ELLs in acquiring academic English and academic literacy skills while learning grade-level content area concepts. Students learn to make adaptations and modifications to instruction, appropriate to ELLs' grade level and English language proficiency level. Course activities and assignments are interactive and inquiry-based. This course is aligned to the PA Department of Education Accommodations for Diverse Learners Guidelines. In addition to learning and applying effective techniques for simultaneously teaching content and academic language to ELLs, students explore laws and policies that govern educating ELLs, cultural influences on learning, assessment issues, and print, web-

based, and community resources for supporting this fast-growing population of students and their families. 3 credits

GCSE-707 INTERNSHIP IN SPECIAL EDUC
Internship in Special Education is a course that focuses on observation and demonstration of teaching competencies as well as participation in seminars that discuss the current issues in transition and special education. Students refine and increase their sophistication of teaching competencies with a qualified special educator in both a public and private school setting for a minimum of 150 hours. Students will have opportunities for practical experience in collaboration, design, and implementation of instruction for both high and low incidence disorders in the least restrictive environment. Students are expected to demonstrate competency in professional and ethical practice as well as the overall pedagogy of special education including transition services. A college supervisor will observe the practicum periodically and students are expected to keep a log of activities and submit a final written report regarding the experience. Seminar topics include: current legal issues, educational and community systems available to assist individuals with disabilities, professional and ethical practices related to special education, procedural safeguards afforded to individuals with disabilities, and transition planning. 3 credits

GCSE-717 TYPICAL AND ATYPICAL GROWTH AND DEVELOPMENT
This course will explore the variety of differences in typical and atypical growth of children. Often, educators begin to notice that a child is not making typical progress in a setting. This course will help candidates recognize signs that may indicate a concern and realize that some developmental differences are merely differences. Culture, gender, and age factors influence some of these similarities and differences and will be explored at length. In addition, candidates will be required to do a project comparing children and their growth similarities and differences. 3 credits

GCSE-727 METHODS AND ASSESSMENT FOR LIFE-SPAN TRANSITION
Special Education transitions occur from Early Intervention to Kindergarten, from elementary to middle school to high school, and from high school to post-secondary life. This course reviews various assessment tools used at each level of transition. In addition, it explores best practice and research-based strategies to assist students from various disability categories and various age ranges to meet the goals of transition throughout their school experiences. 3 credits

GCSE-737 SPECIAL EDUCATION LAW AND ETHICS
During this course, candidates will examine the Individuals with Disabilities Education Act, Pennsylvania Chapter 14, and past and current case law regarding students with disabilities. Students will be required to reach out to local administrators to garner practical knowledge of how Special Education laws affect the day-to-day administrative efforts within public education. 3 credits

GCSE-747 MENTAL HEALTH ISSUES IN SPECIAL EDUC.
Recognizing that many students with disabilities have comorbid mental health conditions alongside their intellectual, developmental or physical disabilities, this course focuses on etiology, analysis, assessment and behavioral and pharmacological intervention for mental health disorders of childhood and adolescence with an emphasis on an applied behavior analysis of disorders. 3 credits

GE-101 ELEMENTARY GERMAN I
For beginners in the language. No prerequisite for GE 101. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to the culture of German speaking peoples. GE 101 offered fall semester. 3 credits

GE-102 ELEMENTARY GERMAN II
For beginners in the language. Satisfactory completion of GE 101 is a prerequisite for GE 102. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to the culture of German speaking peoples. GE 102 offered spring semester. 3 credits

GE-203 INTERMEDIATE GERMAN I
Thorough grammar review, development of speaking, listening, reading and writing, and enhancement of cultural understanding. Prerequisite: appropriate score on the College's language placement examination, or six (6) to eight (8) credits of college elementary German. Offered fall semester. Three credits.

GE-204 INTERMEDIATE GERMAN II
Emphasis on development of reading and discussion skills, with material dealing with German culture. Written exercises, translation and discussion. Prerequisite: satisfactory completion of GE 203, or appropriate score on the College's language placement examination. Offered spring semester. 3 credits

GE-305 CONVERSATIONAL GERMAN
This course aims at improving the ability to speak and understand German, with the main emphasis on the pronunciation and intonation of German, and the expansion of active and passive vocabulary. Class sessions will revolve around conversations on a variety of topics based on personal interest, supplemented by material from the web, videos, films, short stories and magazine articles, as well as vocabulary and grammar quizzes, dictations, and oral presentations. Each student will give a midterm and final presentation on a German-related topic. 3 credits

GE-307 GERMAN FOR READING KNOWLEDGE
This course is designed for students required to prove a reading knowledge of German for graduate school. Focus on the pronunciation and intonation of German will be limited to the reading environment, with the main emphasis on the acquisition of German grammar, syntax, and vocabulary. 3 credits

GE-308 GERMAN PHONETICS
This course is designed to help students develop an as near-native as possible ability to produce individual German sounds, achieve correct word intonation, and develop a sense for various sentence rhythms, in order better comprehend and interact with native speakers. 3 credits

GE-309 HISTORY OF THE GERMAN LANGUAGE
This course will present an overview of the history of the German language, from the Indo-European origins to Old High German, Middle High German, Early New High German, and High German. The focus will be on linguistic, geographical, and historical developments, conveyed through close readings of unedited texts representative for each period. An excellent foundation course for all the other period courses. 3 credits

GE-315 ADVANCED GERMAN GRAMMAR & COMPOSITION
This course provides students with a solid foundation in German syntax. It is a writing-intensive course directed towards improvement of stylistic skills. Thorough review of tenses, complex grammatical structures and idiomatic expressions. Writing assignments progress in difficult and will include journals, compositions, and critical essays. 3 credits

GE-321 GERMAN MEDIEVAL CULTURE
This course gives an overview of the earliest literary documents of the late 8th Century, texts of the Carolingian Renaissance, as well as the courtly poetry and epics of the early 13th Century, against the backdrop of linguistic and historical developments. 3 credits

GE-322 GERMAN BAROQUE LITERATURE & CIVILIZATION
This course will focus on literary developments of the German Baroque (Language Societies, Opitz, Gryphius, Grimmelshausen), its music (Froberger, Reincken, Erlebach) and art? in particular the Dutch School, against the backdrop of conceptual and historical developments, such as the art of emblems, and the Thirty Years' War. 3 credits

GE-332 EARLY 20TH CENTURY GERMAN CULTURE
An introduction to German and Austrian literature and art from approximately 1900 - 1950. Texts under consideration will include unedited prose and poetry by representative authors such as Hofmannsthal, Heym, Benn, Joseph Roth, in addition to memoirs, interviews, letters and films. Focus on stylistic, contextual and historical analyses. 3 credits

GE-333 GERMANY IN THE 18TH CENTURY
This course will focus on the (re)discovery of classicism in German thought and literature (Goethe, Lessing, Schiller), the new standardization of the German language, the "Sturm und Drang" of literature (Klopstock, Herder, Goethe, Claudius), music (Haydn, C. P. E. Bach, Müthel, Mozart) and political adventure (Trenck), against the backdrop of significant historical developments (Friedrich's Prussia, French Revolution). 3 credits

GE-340 GERMAN ROMANTIC PERIOD
This course will focus on literary developments during the Romantic period (Brentano, Novalis, Eichendorff, Holderlin, Heine), the renewed focus on German philology and mythology (Jacob Grimm, Schlegel), and also gloss the music and art of the time, against the backdrop of historical developments. 3 credits

GE-342 19TH CENTURY GERMAN LITERATURE
An introduction to German and Swiss novels and novellas by, among others, Fontane, Storm, Keller, Mörike. Texts will be unedited; with focus on stylistic, comparative and historical analyses. 3 credits

GE-343 GERMAN SPECIAL TOPICS
The contents of this course will vary, as it will examine in greater detail one particular author (for example, Goethe), or one particular period (for example, Sturm und Drang), or one particular work (for example, Fontane's Effi Briest), or one particular topic (for example, the University system, or the spelling reform). Discussion of selected readings; written exams, oral presentations. 3 credits

GE-350 INDEPENDENT STUDY - GERMAN
May be repeated. Variable credit.

GE-550 GERMAN INTERNSHIUP
Professional work experience in the community which complements and strengthens academic in-class learning. Academic credit is variable depending on the nature and duration of the experience. Students may or may not be compensated depending on the company/ agency/educational setting. Students must receive departmental approval to participate. May be repeated. Variable credit.

GK-200 THE ODYSSEY
Students will read The Odyssey in English translation and class discussion and lectures will consider its ancient context and its place within the Western literary tradition. Students will be introduced to Ancient Greek and the discipline of Classical Philology. Topics covered will include: the question of the epic's authorship, method of composition and mode of transmission, chief themes, motifs, and archetypes. 3 Credits.

HES-101 HORSEMANSHIP I: RIDING FOUNDATIONS
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 0 or 1 credit

HES-102 HORSEMANSHIP I: FUNDAMENTALS OF EQUITATION
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 0 or 1 credit

HES-103 HORSEMANSHIP 1l MOUNTED & UNMOUNTED BASICS
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 0 or 1 credit

HES-104 HORSEMANSHIP I: EQ. ESSENT.
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 1 credit.

HES-105 HORSEMANSHIP II: EMERGINE EQUITATION
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses.

Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: Horsemanship I course or special permission by instructor. 0 or 1 credit

HES-106 HORSEMANSHIP II: NOVICE RIDER
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: Prerequisite: Horsemanship I course or special permission by instructor. 0 or 1 credit

HES-107 HORSEMANSHIP II: MOUNTED & UNMOUNTED BASICS
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: Horsemanship I course or special permission by instructor. 0 or 1 credit

HES-108 HORSEMANSHIP II: EQ TRAIN SKL
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in HES Horsemanship 1 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with HES Horsemanship 1 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: Horsemanship I course or special permission by instructor. 1 credit

HI-100 INTRODUCTION TO HISTORY MAJOR
This course introduces students to the history major at Saint Vincent College. Students will learn about the nature of history and the ways that "academic" history both resembles and differs from "popular" history. The course will introduce students to some of the disciplinary conventions as well as to the particular programs, faculty, and opportunities in the Saint Vincent College history department. Finally, the course will introduce students to some of Saint Vincent College's history. 1 credit

HI-101 HISTORICAL WRITING
The academic experience of the historian is often worked out within the realm of historical writing. Each history major at Saint Vincent College begins her/his practice of historical prose with the course, HI 303, Historical Writing. In this course, typically taken in the first semester of the sophomore year, the student is introduced to the building blocks that the instructor perceives are the basis of historical writing. The student will learn those narrative practices that historians employ and will engage finely crafted historical monographs of the instructor's choosing. Each student will compose a variety of history-related writing assignments including, but not limited to précis, gists, book reviews, article reviews, essays, etc., culminating in a longer final written project which highlights her/his mastery of the craft of historical writing learned during the semester. 3 Credits

HI-102 ANCIENT GREECE AND ROME
This course surveys the civilizations developed by the ancient Greeks and Romans, ca. 800 BC - AD 500. Topics include: the Trojan War; the rise of Greek city-states; the Persian and Peloponnesian Wars; Alexander the Great and the Hellenistic world; the Roman Republic and the formation of empire; the birth and spread of Christianity; the Roman imperial state; and the transformation of the Roman world.

HI-103 MEDIEVAL EUROPE: c500-1500
This course surveys the history of Europe, ca. AD 500 - 1700. Topics include: the Germanic migrations and the disintegration of the Roman Empire; Charlemagne and the Carolingian world; the development of secular and papal monarchy; the Twelfth-Century Renaissance; the Crusades; the Black Death; the Italian Renaissance; the Protestant and Catholic Reformations; and the Age of Exploration. 3 credits

HI-104 CONTEMPORARY EUROPE I
In this course we will focus thematically on the political, social, economic, and cultural development of Europe in the 17th-19th centuries. Lecture topics include: comparisons of different political structures present in Europe and the Americas, the geography of Europe and its colonial possessions, the Scientific Revolution and the Enlightenment, the French Revolution, the Industrial Revolution, national unification movements, Romanticism, liberal revolutions, the growth of science, and the Age of New Imperialism. Extensive use of audio/visuals. Map work. 3 credits

HI-105 CONTEMPORARY EUROPE II
In this course we will focus thematically on the political, social, economic, and cultural development of Europe from the late 19th through the end of the 20th century. Lecture topics include: World War I, the Great Depression, the Spanish Civil War, World War II, Modern Art, the loss of colonies, the Cold War and its aftermath, and European economic and political unification. Explicit comparisons will be made between the different social, economic, and political structures present in Europe and America in the 20th century. We will discuss the geography of Europe and her colonies. Extensive use of audio/visuals. Map work. 3 credits

HI-106 TOPICS IN U.S. HISTORY TO 1865
This course surveys American History from the Colonial Era to the Civil War. Using a topical approach, the class will read about and discuss a wide variety of topics in the economic, social, political, and intellectual history of the United States. 3 credits

HI-107 TOPICS U.S. HISTORY SINCE 1865
This course surveys American History from the end of the Civil War in 1865 to recent times. A variety of readings introduce students to

questions that historians are asking about the modern history of the United States. 3 credits

HI-110 ENGLISH HISTORY TO 1485
This course traces the development of British life and institutions from the Celts to the Tudor Revolution in 1485. The lectures will discuss the following topics: early invasions, Anglo-Saxon society, the Norman Conquest, kingship and the royal prerogative, the growth of common law, the development of Parliament, and the role of the Roman Church in English society. The personality of various monarchs and statesmen will be treated in respect to their contribution to the emergence of systematized government. 3 credits

HI-111 ENGLISH HISTORY: 1485 TO PRESENT
This course covers British history from the Tudors to Margaret Thatcher. Areas to be discussed include: the Reformation of Henry VIII and Elizabeth I, the Puritan Revolution, Industrialism, Victorianism, the 20th century welfare state, the rise and decline of the British empire, the position of Great Britain in the 20th century with emphasis on the British rule in Ireland, World War I, and the European Economic Community. 3 credits

HI-123 GLOBAL HISTORY I
This course surveys the origins, development, development, and decline of the world's early civilizations, empires, and regional states. Taking a comparative approach, it examines complex and diverse societies in relation to each other. What geographic, economic, social and cultural factors molded these societies? How have different peoples interpreted, depicted, and shaped the worlds in which they lived? 3 credits

HI-124 GLOBAL HISTORY II
This course focuses on the increasing interactions among the world's societies since the 15th century. It begins with the age of Columbus and ends with the contemporary world. Topics include imperialism, industrialization, nationalism, revolution, and war. 3 credits

HI-200 DIGITAL HUMANITIES
In many ways, humanities scholarship is already digital as we find it second nature to use digital resources in our reading, our research and our writing. Instead of searching through drawers of library catalogs, we use databases. We no longer write with pen and ink, but rather type our thoughts into being. The computer is part of our everyday lives. But what might we gain in humanist study if we begin to use the computer as a way to assess data rather than just access it, in a way that can only be done through computational analysis? What could we discover if we read every book published in the nineteenth century? What would we learn if we could visually break down and compare the language in newspaper stories around the globe? How would it change our understanding of crime in Victorian London if we laid it out in geographical space? Does reading sources have different meaning if you can only do it on a computer? In this course students will learn to describe the history and intellectual landscape of the types of digital scholarship that humanists are using. Topics will include the central concepts, debates, digital tools and platforms current in the discipline. Students will analyze digital tools and platforms as complex cultural objects: shaped by, and shaping, wider social concerns around race, class, gender, cultural values, political hierarchies, and the ways we construct knowledge and meaning. 3 credits

HI-201 INTRODUCTION TO PUBLIC HISTORY
This class explores the connections between historical understanding and the interpretation of history in the public realm. While studying a period of local history in traditional academic sources, students will be introduced to a wide range of professional settings that cater to public audiences of all ages. Students will learn about the opportunities and challenges of presenting history through such varied methods and mediums as archives, museums, historic preservation organizations, historic sites and historical agencies. Through readings, discussion, field trips and projects, the class will explore the development of the field of Public History. This class serves as an introduction to HI 202: Practicum in Public History but can be taken independently3 credits

HI-202 PRACTICUM IN PUBLIC HISTORY
In this course we will apply the research, analysis and writing skills of a historian in order to develop and complete a project for the use and benefit of an audience outside of academia. Students will work as a part of a team and will be responsible for all aspects of the project from defining the purpose of the project to its final presentation to the public. Possible projects include nominations of historic properties to the National Register of Historic Places, the creation of a museum exhibit, the creation of historic tourism guides and brochures, grant writing or an oral history project. 3 credits

HI-203 MODERN INTELLECTUAL HISTORY
This course will examine the history of ideas in the West from the Scientific Revolution and Enlightenment through the present. Students will consider intellectual developments in the context of history to more fully integrate their understanding of human events and the ideas that inform them. The focus of this course will be cultural, with extensive use of images, films, and primary texts. Seminar format. Discussion-based. 3 credits

HI-205 CHIVALRY & CHASTITY: LIFE AND THOUGHT IN MEDIEVAL EUROPE
This course examines various aspects of life and thought in medieval Europe, ca. 500 to 1500, through the reading of a selection of texts from the period. Topics include nobility and chivalry, women and courtly love, monastic life, philosophical thought, forms of poetry, views of space and time, art and architecture, town and country, animals and plants, education, and drama. 3 credits

HI-207 AMERICAN WOMEN, AMERICAN WARS
A study of the effects of warfare on the history of American women and of the ways that American women have influenced war. We will use class readings from both primary and secondary sources, discussion, and film analysis to study the lives and influences on women during the American Revolution, the Civil War, World Wars I and II, the Vietnam Conflict, and the modern Gulf Wars. 3 credits

HI-210 HISTORY OF LABOR IN THE US
An examination of the history of the American labor movement and working-class culture in the United States from 1800 until the present. This course will focus on the leaders and rank and file of labor as well as the economic, social, cultural, and political context for the development of the workers' movement. 3 credits

HI-211 WAR IN MEDIEVAL EUROPE
This course will examine selected aspects of European military history from the 5th through the 15th centuries. Students will study not only military campaigns and technology, but also the interplay between warfare and society during this fascinating period. 3 credits

HI-212 AMERICAN WOMEN'S HISTORY
Women's experience in the past helps us understand the history of the United States. This course will examine the themes that defined women and have helped to determine the shape of women's lives today. The lectures, readings, and films will focus on the ways that women's roles as they relate to family, work, politics, and culture have varied over time. We will consider carefully the ways that women have dealt with the definitions of the feminine that society enforced,

and will look especially at how women have altered those norms. The course will emphasize the diverse understandings of those issues. Students can expect to do extensive reading and writing, participate in class discussions, and complete a substantial research project. 3 credits

HI-213 VOICES OF MEDIEVAL WOMEN
This course examines, both collectively and individually, the lives, roles, and achievements of European women from the 5th through the 15th centuries. The goal is to understand better how medieval women fit into and often influenced the largely patriarchal society in which they lived. In particular, we will try to hear the "medieval female voice" through the writings they have left us. Topics include queens and noble ladies, monastic life, female mysticism, urban and rural women, sexuality, marriage and children, scholarship, and the practice of medicine. 3 credits

HI-214 MODERN IRELAND
This course will introduce the student to the social, political, economic, and religious dimensions of Ireland from the French Revolution to the Hunger Strikes at the Maze Prison. After brief remarks about the Ireland of Cromwell and William III, 19th century Ireland will be presented within the framework of the British Empire. Some topics are: Catholic Emancipation, Daniel O'Connell, the Famine, the problem of the land and agrarian violence, William Gladstone and the crisis of Home Rule, and the career of Charles Stewart Parnell. The second half of the course will discuss the emergence of the Republic of Ireland and the province of Ulster. Lloyd George, Eamon de Valera, the Easter Rising, and the current problems concerning Ulster are the subjects of the lectures. Can Ireland ever become a united island? 3 credits

HI-216 AMERICAN COLONIAL HISTORY
This course is designed to give students an in-depth grounding in many of the major issues relating to the creation and development of colonial North America. Placed in an Atlantic World context, we will study the social consequences of colonization, migration, and war in America from 1400-1775. Emphasis is placed on the interaction of British colonies with competing European cultures (French, Dutch, Portuguese, and Spanish) as well as with Native Americans, and with African American slaves. We will explore these interactions through lectures, readings, films and discussions. 3 credits

HI-217 CIVIL RIGHTS LEADERSHIP
This course explores the leaders and leadership styles of the Civil Rights Movement of the 1950s-1980s. It will explore well-known figures such figures as Martin Luther King, Jr., and Rosa Parks, but also lesser-known leaders such as Fanny Lou Hamer, Jo Ann Robinson, and John Lewis. We will explore the democratic leadership style of this revolutionary social movement. 3 credits

HI-219 WWII IN THE PACIFIC
This course examines the history of the war in the Pacific, on land, on the sea, and in the air, from diverse perspectives with the goal of understanding and analyzing the ways in which the war was fought and experienced from as many angles as possible. 3 credits

HI-220 THE DEVIL & THE PROBLEM OF EVIL IN WESTERN THOUGHT
This course is an examination of the problem of evil in Western thought, with special attention to the personification of evil in the devil. We will examine the historical emergence of the devil as a being distinct from God in the ancient civilizations of the Middle East. The course will then consider in turn: The devil in the Old and New Testament; his treatment in the West from medieval Christianity to the Renaissance and Reformation; the impact of the Enlightenment on the problem of evil in western thought; and the modern psychological approach to evil and the question of possession. Prerequisite: TH-119. 3 credits

HI-223 REVOLUTIONARY AMERICA 1740-1820
This course will examine the social, political, economic, cultural, and religious ferment in Colonial America that led to the transition from colonies of the British Empire to the revolutionary republic of the United States. The role of women, minorities, and indigenous people, Enlightenment ideology, the Great Awakening, the American Revolution, and the struggle over the Constitution will be highlighted. Western Pennsylvania was the stage for many of these dramatic events and this course will utilize as fully as possible local public history resources having to do with the period from the French and Indian War to the Whiskey Rebellion of 1794. The course will spend several classes on 18th and early 19th century historical interpretation in museums and historic sites and museum methodology, and explore career possibilities in museums and public history. There will also be guest speakers from local historical sites. 3 credits

HI-224 NATIVE AMERICAN HISTORY & CULTURE
This course will examine the history and cultures of selected nations of indigenous people who inhabited the North American continent beginning as early as 40,000 B.C. We will look at the sociocultural/religious, political and military history of each nation, the details of everyday life, gender relations and kinship systems, division of labor and economics. Areas of particular concern will be the relationship of indigenous nations to the European populations of America in the colonial period. We will then explore the relationship between the indigenous people of North America and the United States of America from the Revolution to the present. Designated non-Western. 3 credits

HI-226 SOCIETY AND THE ENVIRONMENT: THE AMERICAN EXPERIENCE
Students in this course will explore the way that humans have interacted with their environment in what is now the United States from pre-colonial contact to the present day. We will explore two great questions in a number of different times and places, seeking answers that should inform our interaction with the environment today. How and why has society shaped the American environment, and how and why has that environment shaped our social, cultural, economic, and political lives? Finally, we will look at ourselves looking at our interaction with the environment in our focus on the emerging environmental movement of the 20th century. 3 credits

HI-227 "BRING OUT YER DEAD!" THE MIDDLE AGES ON FILM
This course uses movies as springboards for exploring selected aspects of medieval European society and outlooks. The focus is on the relationship between the 'real' Middle Ages, how historians have reconstructed the period using primary sources, and the 'reel' Middle Ages, how filmmakers have reconstructed the period for popular consumption. Although the films used may change, in the past they have included Lion in Winter, Kingdom of Heaven, Excalibur, The Seventh Seal, and of course Monty Python and the Holy Grail. 3 credits

HI-228 20TH CENTURY AMERICA
Students will explore various developments in America from World War II until the present. The course will address different questions and topics in different semesters, but will focus on the ways that Americans strove to manifest the ideals of liberty, equality, justice, and community throughout the period. 3 credits

HI-230 HISTORY AND MEMORY
History and Memory will explore the complex relationships between individual and collective memory, myth, and history. Students will study the ways that history "frames, preserves, enshrines, and controls" the memories of significant events and how and why the process silences some voices while amplifying others. Lectures, readings, video, and discussions of major historical sites and events will be used to explore the basic concepts of historical memory and will lead students through a contemplation of how collective memory functions to sift through personal experiences to create the stories we tell, how popular culture reflects those experiences and, in turn, influences the stories. The major project for this class will be the preparation of a case study in which students will analyze the elements of historical memory and its effects. 3 credits

HI-231 THE HUNDRED YEARS WAR: 1337-1453
This course examines the causes, course, and culture of Europe's longest war: the medieval Anglo-French struggle known as the 'Hundred Years War' (1337-1453). Students will explore not only military campaigns and technology, but also the interplay between warfare and society during this crucial conflict. Topics include knighthood and chivalry; weapons and armor; strategy and tactics; logistics and recruitment; war and religion; war and literature; and the introduction of gunpowder armaments. 3 credits

HI-232 RACE & ETHNICITY IN HISTORICAL PERSPECTIVE
This course explores the role that the social phenomena of race and ethnicity have played in shaping Americans? lives in the past 400 years. We will focus on the formal legal structures that Americans established to regulate racial and ethnic experiences (slavery, restrictive covenants, laws, etc.), the less formal but often equally powerful social customs that governed people's opportunities, the experiences of those who had to navigate those formal and informal structures, as well as the efforts of those who have tried to create a society that lives out the ideals set out in the Declaration of Independence. Designated non-Western. 3 credits

HI-233 HISTORY OF LATIN AMERICA
This course will trace the history of Latin America from the major pre- Columbian civilizations through the early 19th century. The focus of the course will revolve around the conflict between cultures, their transformation, and creation of new cultures. Discussion topics include: the Maya, Inca and Aztec civilizations, the discovery and founding of Spanish and Portuguese empires in the New World, development and integration of the empires into the world economy, the creation of new American cultures, the struggle for independence, and the problems of the new nations through the 19th century. Extensive use of maps, images, and primary source readings. Designated non-Western. 3 credits

HI-236 WORLD WAR II IN EUROPE
This is a general course in the history of the European theater of the Second World War. The war's origins will be studied in some detail, beginning with the tenuous reconstruction of the European state system in the wake of World War I and the rise of the Fascist regimes that challenged this system. The historical, economic, social, and ideological determinants of German expansionism will then be discussed and related to the outbreak of war in Europe. Although much attention will be focused on the evolution of Allied and Axis strategy and the development of the military struggle between 1939 and 1945, the war's all-encompassing nature necessitates that such topics as propaganda, economic mobilization, occupation policies, and the Holocaust also be discussed. The course will conclude with an analysis of war-time diplomacy, the post-war settlement, and the onset of the Cold War. Class instruction will take the form of lectures, discussions, group activities, videos, and other instructional modalities deemed appropriate and effectual by the instructor. 3 credits

HI-242 ARTISTS, WRITERS, AND REBELS
This course will explore the development of the European Renaissance from the late Medieval period through the beginning of the Reformation. The course will explore the rebirth of European culture, Arts, Language, Religion, Architecture, Politics, and Literary movements throughout one of the richest historical periods in Western Civilization, the Renaissance. 3 credits

HI-245 COLONIES AND EMPIRE: EUROPE AND THE WORLD
This course explores the dynamic of colonialism between the 18th and mid-20th centuries. We will use a global perspective to look at the relationship between European countries and their colonial possessions during and after the colonial era. In particular, we will consider the causes and justifications for colonialism and the acquisition of empire, as well as its economic, religious, social, ethnic, and political implications for both the European and colonial nations. Extensive use of images, films, and maps. Designated non-Western. 3 credits

HI-247 CATHOLIC AND PROTESTANT REFORMATIONS
The general themes of the course will be the continuities and discontinuities of the reform movements of the 16th century (Protestant and Catholic) with the late medieval period, and the relation, variety, and interchange between the various reform movements in different regional and social contexts. Emphasis will be placed on religion in the European context, but some attention will be paid to mission fields, and the impact of the new world discoveries on church and society. 3 credits

HI-248 THE HISTORY OF THE CHRISTIAN CHURCHES I CHURCHES I TO 1500
This course will explore the development of Christianity from the first century A.D. through the end of the Renaissance period. The course will highlight such historical epochs of Christianity as the Apostolic period, the age of the Fathers of the Church, the monastic movement, the men's and women's religious movements of the Middle Ages, the Schism between the Eastern and Western Churches and the Church in the Renaissance period. Offered alternate years. 3 credits

HI-249 THE HISTORY OF THE CHRISTIAN CHURCH II: 1500 TO PRESENT
The second part of the course will explore Christianity during the periods of the Protestant Reformation, The Catholic Reformation, religious pluralism, the Enlightenment and Age of Revolutions, 19TH century movements in Christianity, the Church and the World Wars, the Second Vatican Council and Christianity in the post-modern world. Offered alternate years. 3 credits

HI-251 WAR & ENLIGHTENMENT: EUROPE IN THE 18TH CENTURY
This course deals with the so-called long eighteenth-century, which lasted from 1688 (the year of the Glorious Revolution in England) to 1815, the year of Napoleon's defeat at Waterloo. This was a crucial time, as it brought dramatic changes to the social fabric, political institutions, economies, and cultures of Western Europe. We will look at these developments in some detail, focusing on the Enlightenment, 17th and 18th century political theories and institutions, the rise of the middling classes, and the evolution of modern warfare. Treatment will be both chronological and thematic,

with ample use of films, maps and images to help set the scene for historic events. 3 credits

HI-253 RELIGION AND SOCIETY: THE AMERICAN EXPERIENCE
Opinion polls taken from the 1940s through today report annually that over 90 percent of Americans believe in God. Our earliest institutions, when they were not churches themselves, reflected a strong religious influence. Americans have felt religious competition so keenly in various times in our history that they have rioted in support of one denomination over another. Why was (is) this so? How have Americans experienced, thought about, and manifested their various religious beliefs throughout our history, and how have Americans interacted with fellow citizens of differing beliefs? How has religion influenced the development of our current institutions, and why do Americans believe what they do? This course examines these and other issues connected to American religious development. 3 credits

HI-254 DOCUMENTARY HISTORY
This course explores the video documentary as a text that conveys history. Americans increasingly learn their history from video documentaries, but historians are just beginning to address these texts in a sophisticated manner. Students will analyze historical documentaries critically by viewing the videos, reading critical analyses of them, and participating in discussions of these texts. They will then write their own critical analyses of the documentaries. The documentaries that the course examines will vary from semester to semester, but they will mostly be texts designed to convey historical information. Students will also participate in the production of a documentary on a historical event or development. 3 credits

HI-255 AMERICAN ECONOMIC HISTORY
This course examines the development of the various forms our economy has taken over the past four centuries or so, as well as upon various developments within the economy in the form it takes currently. Though we will discuss the economy as a human social construction, we will also explore other perceptions of the economic organization (is it a natural phenomena?) and pay special attention to developing Catholic perceptions of the economy and economic life. 3 credits

HI-257 MOVIES, SPORTS AND TOYS AMERICAN CULTURAL HISTORY
This course explores various American cultural manifestations in historical context. We experience our lives through cultural constructions that mediate our understanding of our world, and this course will target various forms each semester. The specific cultural forms may vary each time the course is taught, but will likely come the broad categories of recreation (sports, games, television, movies, other leisure activities), work (factories, farms, markets, transportation), religion (liturgies, revivals, devotions, sects, holidays), home (family, architecture, neighborhood), art (literature, music, painting and sculpture) and formal public expressions. 3 credits

HI-258 PENNSYLVANIA HISTORY
This course explores the development of Pennsylvania from the pre-European era to current times. The topics covered will include the diversity of the Commonwealth, Pennsylvania's key roles in the development of the United States, and the sources and methods that can be used to uncover the history of the state. 3 credits

HI-259 THE CIVIL WAR IN THE UNITED STATES
Students in this course will study the period leading up to and away from the Civil War, focusing on those areas commonly known as the ante-bellum period, the Civil War, and Reconstruction. We will address slavery, culture, and social change in the nation in the early part of 19th century, explore the political efforts to deal with these contentious areas, and study the military manifestation of that political divide. Finally, we will explore the world the war made as we study the Reconstruction era. The course will require extensive reading, discussion, and much formal writing, culminating with a substantial research paper. 3 credits

HI-263 PLAY BALL: THE HISTORY OF SPORT IN 20TH CENTURY AMERICA
This course examines the history of sports in 20th century America, with particular attention paid to the development transition from amateur to professional athletics, the emergence of women's participation in sports, and the fitness focus of the most recent three decades. Students will approach this study through class discussions based on readings and video documentaries. 3 credits

HI-264 HORSES, HARDTACK AND HEROES
This course uses Hollywood films and literature to explore some of the major themes and events of the American Civil War. Film is a major influence in mass culture and has helped to create and disseminate messages about the past. We will examine the strengths and the limitations of film and popular literature as conveyors of the truth about the past. 3 credits

HI-266 FOOD IN U.S. HISTORY
The food that people eat and the methods used to procure and store that food can help to explain much about their cultures and their values. Taught through lecture, film, discussion, exploration of material culture and through student research, this food history course will explore the evolution of the American diet and try to unravel the way that food choices influenced people's lives and the development of our nation from the colonial period until the present day. 3 credits

HI-267 HOUSES IN US HISTORY
This course examines the way Americans have housed themselves throughout our history and the ways those houses have shaped our lives. 3 credits

HI-268 BUILDING THE PAST: HISTORIC PRESERVA. PRESERVATION IN AMERICA
How might Americans best study and preserve our past? This seminar explores the history, theory, and practice of historic preservation in the United States. Using directed readings, illustrated lectures, and case studies, the course will provide students with an understanding of the origin, development, and practice of the field of historic preservation; a basic knowledge of American architectural building styles; and an exploration of the workings of the National Register of Historic Places. Students will confront the questions: What is preserved? Why is it preserved? For whom? 3 credits

HI-280 ISLAMIC CIVILIZATION I
Islamic Civilization will examine the religion, politics and culture of the Islamic world from pre-Islamic Arabia, through the 13th century Mongol invasions. Special attention will be paid to the life of the Prophet, beliefs, practices and divisions within Islam, the Caliphate, the Umayyad and Abbasid empires and successor states, historic areas of contact and conflict between Islam, Christianity and Judaism. Treatment will be both chronological and thematic, with use of films, maps and images to help set the scene for historic events. Designated non-Western. 3 credits

HI-281 ISLAMIC CIVILIZATION II
This course is designed as a stand-alone complement to HI 280. Islamic Civilization II will examine the religion, politics, and culture of the Islamic world from the Mongol invasion of the 13th century,

the rise of the Turkic peoples, the development and decline of the Ottoman Empire, through its fall at the end of WWI. Time permitting, the course will examine the independence of Middle Eastern territories, and the foundations of nationalism as a force in modern Islamic countries. Treatment will be both chronological and thematic, with use of films, maps and images to help set the scene for historic events. Designated non-Western. 3 credits

HI-282 AMERICAN CHILDHOOD HISTORY
This course explores topics in the history of American childhood. Topics will vary from semester to semester, but may include such developments as the "invention" of childhood in America, the "discovery" of the teenager, children's experiences in the home, the school, the workplace, the family, and society. It will inevitably focus on changes in childrearing patterns, the ways that society imagined and presented children through media, and children's legal status. 3 credits

HI-285 OFF WITH THEIR HEADS!
This course examines the historical epoch of English history beginning in 1485 with the ascension of Henry VII as the first monarch of the Tudor dynasty through the death of the last Stuart monarch, Queen Anne, in 1714. During this important period of English history, England advanced from a small kingdom to a United Kingdom and a major world power. The course pays special attention to that transformation of the small realm of England into a new entity: The Kingdom of Great Britain. The course will cover such major topics and themes as the reigns Henry VIII, Mary I, and Elizabeth I James I, James II, Charles I, and William and Mary; as well as the English Reformation, the rise of the Stuart Dynasty, the Union of Crowns, the growth of puritanism, the English civil War, Oliver Cromwell and the Protectorate, and the Glorious Revolution of 1688. The course readings will be drawn from primary sources. Prerequisites: EL-102 and any 100-level History course. 3 credits

HI-286 TITANIC IN HISTORY & CULTURE
For over 100 years, the story of the sinking of the ocean liner Titanic has fascinated and captivated people from around the world. A culmination of marine engineering and architecture when build in 1912, the ship did not complete her maiden voyage, striking an iceberg in the middle of the North Atlantic and sinking in just short of three hours. 1,496 souls perished with her while 712 survived to tell the tale. The story of her sinking has been told and retold, and the disaster itself has become an iconic cultural phenomenon all its own, embodied in countless books, television specials, and films. The discovery of the wreck in 1985 opened a new chapter in the story, one filled with scientific advancements and discoveries. This course seeks to examine the Titanic from historical and cultural viewpoints, situates it into the larger history of the early 20th century, and examines the impact the ship, her story, and her wreck have had on fields all across the spectrum of study. 3 credits

HI-287 SACRE BLEU: FRENCH REVOLUTION
This course examines the history of France during the early modern period. The course traces French history beginning in 1589 with the ascension of the first Bourbon monarch, Henri IV, through the final defeat of Emperor Napoleon I at Waterloo in 1815. Special attention is paid to the topics of life, politics, gender, and education during the ancient régime, as well as absolutism, the French Enlightenment, Jansenism, the Huguenots, French peasant life, the French revolutions, and the First Empire. This course provides a careful study of the lives of prominent figures of early modern France, including Henri IV, Richelieu, Voltaire, Louis XIV, Marie Antoinette, Madame de Staël, Vincent de Paul, Abbé Saint-Cyran, Robespierre, Danton, Napoleon I, and Joséphine de Beauharnais among many others. The course readings will draw from primary source documents as well as particular scholarly studies. 3 Credits

HI-288 HISTORY OF GLOBAL HEALTH
This course examines historical and current global health priorities, including emerging infectious diseases, poverty, conflicts and emergencies, health inequities, health systems reforms, and major global initiatives for disease prevention and health promotion. We will explore the importance of understanding and addressing global health through multidisciplinary frameworks of the natural sciences, social-behavioral sciences, and humanities. This course is required for the public health minor. 3 credits

HI-289 WOMEN'S VOICES GENDER HISTORY
This course examines early modern European history through the lens of gender and the experiences of women, among which but not limited to, education, gender roles, sexuality, professions, religion, agency, and ritual. Through class lectures, frequent discussions, and writing assignments, students will be exposed to early modern gender history, and through primary sources and historical monographs, challenged to discover, discuss, and relate the experiences of early modern women within the broader context of European history. 3 credits

HI-290 PEACE & JUSTICE IN HIST. PERSPECTIVES
This course introduces students to key concepts of peace and justice studies and ways that people have understood them over time. We will examine case studies taken primarily from American history, and these cases may vary from semester to semester. This is also a service-learning class that asks students to join a peace and justice organization to introduce them to the kind of efforts undertaken in today's world. In addition, this course serves as one of two gateway courses to the Peace and Justice Studies minor program. 3 credits

HI-292 MODERN EUROPE AND GENDER: 1815-1939
The history of modernity is, in part, a history of restoration and revolution. Among the battlegrounds of Europe in the nineteenth and early twentieth centuries, lie a significant struggle for gender equality, voting rights, education, and citizenship. This course picks up after the final defeat of Napoleon Bonaparte and deeply explores the topic of Gender and movements of equality in Europe through the long nineteenth century ending at on the eve of the Second World War. Students will be exposed to early gender literature, gender theory in history, and the many movements which embodied the European search for equality in the Modern period. Language and Rhetoric and A 100 level history course are pre-requisites for this course. 3 Credits

HI-293 MUSEUM STUDIES: AN INTRODUCTION
This course introduces students to the professional world of museums, which are among the most significant institutions for preserving and interpreting historical, artistic, and scientific resources. Students will forge a deeper and more complex understanding of topics such as exhibit development, educational programming, collections management, archiving, ethics, and the history of museums. At the same time, these topics will raise important discussions about how museums of various types are sharing knowledge, encountering challenges, and creatively engaging the public in the 21st century. Students considering a career in museum work, who have a love for museums, or who would like to know more about these important institutions are encouraged to take the course. 3 credits

HI-294 HISTORY OF ENGLISH COMMON LAW 600-1800
The Common Law of England was created over many centuries by kings and judges seeking to provide a uniform legal structure to

adjudicate disputes, avoid feuds and reckless bloodshed and raise revenues for royal coffers. This course surveys the evolution of this legal tradition in Britain, including its pre-Roman, classical, ecclesiastical and Germanic antecedents, from King Aethelbert of Kent's sixth century code, through to Sir William Blackstone's Commentaries of the eighteenth century. We will chart the development and growth of Common Law and Courts of Common Law within historic and especially political contexts using both primary sources and secondary analyses. While the course is explicitly about the legal history of Britain, by the end of the semester we will touch on the application and transferal of common law to Britain's empire, and through that, modern American jurisprudence, politics and history. 3 credits

HI-297 ARCHIVES IN THE DIGITAL AGE
Archives serve a fundamental role as institutions of social memory and preservation. Rapid technological change has spurred immense developments in the management, dissemination, retrieval, and preservation of archival material. This course introduces traditional archival theory and practice and explores the principles of digital archives. Topics covered include basic archival principles and methodologies, digitization, born-digital collections, preservation and records management tools, archival metadata standards, legal issues, intellectual property rights, and social media outreach. 3 credits

HI-298 INTRODUCTION TO ORAL HISTORY
Introduction to Oral History will explore the theory and practice of oral history. Students will learn basic methodological techniques and study the special characteristics and possible uses of oral history interviews. We will address how to critically evaluate oral evidence and integrate it with other forms of historical evidence. We will explore the ways oral history sources have provided new perspectives on old historical debates and how they can bring neglected subjects to the light of historical investigation. Lectures, readings, and discussions will emphasize the theory of and practical issues influencing oral history as well as the legal and ethical issues involved in this methodology. We will examine a variety of historical works based on oral sources in order to explore the ways they can be put to use in, for example, scholarly monographs, documentaries, radio shows, exhibits, and other forms of public presentation. Each student will conduct fieldwork entailing the entire process of oral history, including conceptualization, research, interviewing, transcribing, editing, evaluating the historical significance of the work, and writing/designing a presentation of that work. Three credits.

HI-300 THE HISTORIANS PROFESSION
History majors will take this introduction to the profession in the fall or spring semester of their sophomore year. In the course, students will become acquainted with varieties of internships and career paths available to history majors. Students will also receive intensive instruction in basic research methods for historians, including such things as developing a research plan, thoroughly learning the library's layout, becoming familiar with finding aids, using historical journals, understanding ILL, evaluating and using the Internet as a research tool, proper use of primary and secondary sources, and mastering citation practices. Finally, students will become familiar with ethical issues and expectations related to historical writing and careers. Majors only. 3 credits

HI-301 JUNIOR RESEARCH SEMINAR
History majors will take this the spring semester of their junior year. The purpose of this seminar is two-fold. The primary goal will be for the student to prepare to write the senior thesis. Students will be asked to identify a research topic of interest, and then develop a viable thesis topic. Following that, students will complete preliminary source identification, write a literature review (historiographical essay), thesis outline, and bibliographies. By the end of the semester, students will be well poised to complete the thesis in HI 302 the following fall term. The second goal of the Junior Research Seminar will be the mastery of types of writing typically encountered in the profession, as well as conventions and considerations that go along with historical scholarship and writing. Majors only. 3 credits

HI-302 SENIOR WRITING SEMINAR
History majors will take this course in the fall semester of their senior year. The purpose of this seminar is to produce a scholarly piece of research and writing. The senior project, or thesis, must be organized around a scholarly thesis statement or question, utilize appropriate primary and secondary sources, and adhere to the conventions of historical writing learned in HI 300 and HI 301. The thesis will be completed by the end of the fall semester. Students will have the opportunity to present a version of the final project at spring conferences or colloquia. Majors only. 3 credits

HI-303 HISTORICAL WRITING
The academic experience of the historian is often worked out within the realm of historical writing. Each history major at Saint Vincent College begins her/his practice of historical prose with the course, HI 303, Historical Writing. In this course, typically taken in the first semester of the sophomore year, the student is introduced to the building blocks that the instructor perceives are the basis of historical writing. The student will learn those narrative practices that historians employ and will engage finely crafted historical monographs of the instructor's choosing. Each student will compose a variety of history-related writing assignments including, but not limited to précis, gists, book reviews, article reviews, essays, etc., culminating in a longer final written project which highlights her/his mastery of the craft of historical writing learned during the semester. 3 Credits

HI-306 INTRODUCTION TO NONPROFITS AND FUNDRAISING
The purpose of this course is twofold: to familiarize students with the structure, unique characteristics, and operating environment for non-profit organizations; and to provide students with a brief history of philanthropy, familiarize them with the principles of fundraising, and help them develop skills and competency in fundraising methods, special events, direct mail, major gifts, grant writing, capital campaigns, and planned giving within a competitive funding environment. This course is appropriate for students who may work or volunteer with non-profits in the future as well as for those who are currently working with non-profit organizations in a staff or volunteer capacity. This does not fulfill history major 200-level requirements. This course does fulfill public history minor credit requirements and elective requirements. 3 credits

HI-350 INDEPENDENT STUDY--HISTORY
May be repeated. Course requirements to be developed in consultation with supervising faculty. Variable credit.

HI-550 HISTORY INTERNSHIP
Professional work experience in the community, which complements and strengthens academic in-class learning. Academic credit is variable depending on the nature and duration of the experience. Students may or may not be compensated depending on the company/ agency. Students must receive departmental approval to participate. This course will additionally serve as the capstone course in the Public History Minor. May be repeated. Variable credit.

HI-555 PEACE & JUSTICE STUDIES INTERNSHIP
Students enrolling in this program will work with a program, organization, institution, company or entity that advances the values

of peace and/or justice in cooperation with a supervising faculty member. Variable credit.

HP-100 HONORS GATEWAY SEMINAR
Honors Gateway Seminar serves as the entry point for the honors program and is required of all Honors Program students who began their studies at Saint Vincent College in the fall 2021 semester or later. It will orient students to the Honors Program, introduce them to the Honors Program student learning outcomes, initiate them into the Honors Program community, and provide an interdisciplinary experience that helps students to see the broad scope of liberal arts studies at Saint Vincent College. 1 credit

HP-201 HONORS INTERMEDIATE SEMINAR I
The Honors Intermediate Seminar is taken in the sophomore year of study. The Intermediate Seminar provides the Honors Program Student with further opportunity to study pertinent subjects, topics, authors, books, studies, art, etc., that contribute to the overall life in academic community and the enrichment of the life of the mind. 1 credit

HP-202 HONORS INTERMEDIATE SEMINAR II
The Honors Intermediate Seminar II is taken preferably in the junior year of study. The Intermediate Seminar II provides the Honors Program Student an in-depth academic experience of the life of the mind through intentional academic discussions, writing, and the integration of honors activities such as, but not limited to: concerts, plays, trips, community service, speaker series, social justice events, writing workshops, etc. All with the goal of integration of the overall life in an intentional academic community as well as enriching the life of the mind. 1 credit

HP-400 HONORS PROGRAM CAPSTONE SEMINAR
This is the capstone course of the flagship honors experience at Saint Vincent College, namely, The Saint Vincent College Honors Scholars Program. The capstone seminar sits at the apex of the Honors Program seminar sequence. The goal of the capstone seminar is to acknowledge the work that the honors student has done in their undergraduate career through topical readings and the writing of a 15-page capstone essay, while also preparing the honors student for a lifetime of study and inquiry into the life of the mind and the human condition. This course is designed to be comparable to a graduate school liberal arts seminar. The onus for the work and reading and hosting of the class is placed upon the honors seniors. The instructor will choose appropriate readings and experiences that will serve as a foundation for the capstone essay. Lastly, this course seeks to refine the honor's students' intellectual skills through reading, writing, and discussion. The culmination of the seminar will be an original essay of at least 15 pages composed by each honors student. This course is mandatory for completion of the honors program and may be taken in the spring of the junior or senior year of study. 3 credits

HP-450 INDEPENDENT STUDY: HONORS CAPSTONE SEMINAR
Students will complete the first third of the requirements for the Honors Capstone Seminar

HPE-103 FIELD EXP. I: HEALTH & PHYSICAL ED.
This field-based course combines thematic lectures and case study analyses with systematic observation in a variety of Health and Psychical Education classroom settings. The goal of this course is to provide an overview of the various dimensions of modern HPE teaching. In addition to field site experiences, students will be introduced to online teaching practices and techniques using web conferencing and other tools. Tubercular check, FBI, Act 151 and Act 34 clearances must be obtained before beginning the class. This course meets three hours per week. Approximately 20 hours of fieldwork are involved. 1 credit

HPE-120 EMERGENCY CARE & PREVENTION OF INJURY
This course will provide a broad overview of emergency care and prevention of injury. The course will introduce students to essential areas of emergency care. Students will be able to recognize signs and symptoms of specific sports injuries and conditions. Topics of study will include, but not limited to, how to avoid accidents and injuries, immediate and long-term care of injuries, and medical administration procedures. Students will earn the instructor CPR/First Aid/ AED certification. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 3 credits

HPE-125 GYMNASTICS & SYSTEMATIC EXERCISE
This course provides an overview of the developmentally appropriate gymnastics and systemic exercise for PreK-12 students. The educational gymnastics approach emphasizes utilization of movement concepts appropriate for teaching children body awareness and body control. Students will learn skill progressions, spotting techniques, and biomechanical principles involved in a variety of gymnastic and systemic exercise skills. Students will learn how to perform these skills. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-130 SWIMMING & WATER SAFETY
This course is designed to provide physical activity and direct experience in swimming and water safety. Students will demonstrate the basic knowledge of water safety, synchronized swimming, and the different swimming strokes. This course is designed for students to perform the various swimming strokes and create a synchronized swimming routine. Students will be lifeguard certified by the end of the course. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-135 RACQUET SPORTS
This course is designed to provide physical activity and direct experience in racquet sports, such as, tennis, badminton, squash, table tennis, and pickle-ball. Students will demonstrate the basic knowledge of the rules for each of the racquet sports and any safety measures. This course is designed for students to execute the different racquet sports. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-140 BASEBALL AND SOFTBALL
This course is designed to provide physical activity and direct experience in baseball and softball. Students will acquire a knowledge of the rules, positions, and techniques involved in both sports. Topics related to managing an amateur team will also be explored. Throughout the course, candidates will show their proficiency through a variety of playing and coaching demonstrations. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-150 TEAM SPORTS I
This course provides Health and Physical Education majors with a comprehensive understanding of the principles, skills, and instructional methods associated with a variety of team sports including basketball, soccer, football, lacrosse, rugby and field hockey. Emphasis is placed on skill development, game strategies, rules and regulations, teaching methodologies, and assessment techniques. Students will explore the physical, cognitive, and social benefits of team sports while learning how to create inclusive and developmentally appropriate experiences for diverse populations. Practical application through skill demonstrations, officiating

practice, and peer teaching will prepare students to implement effective team sports instruction in K-12 educational settings. Additionally, the course will highlight the importance of sportsmanship, leadership, and teamwork in fostering a positive and engaging environment for lifelong participation in physical activity. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. Variable 0 to 3 credits.

HPE-210 VOLLEYBALL AND BASKETBALL
This course is designed to provide physical activity and direct experience in volleyball and basketball. Students will demonstrate the basic knowledge of the rules, the various positions, and plays involved in both sports. This course is designed for students to play in volleyball and basketball games. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-215 SOCCER AND LACROSSE
This course is designed to provide physical activity and direct experience in soccer and lacrosse. Students will demonstrate the basic knowledge of the rules, the various positions, and plays involved in both sports. This course is designed for students to play in soccer and lacrosse games. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-220 FOOTBALL AND RUGBY
This course is designed to provide physical activity and direct experience in football and rugby. Students will demonstrate the basic knowledge of the rules, the various positions, and plays involved in both sports. This course is designed for students to play in football and rugby games. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-225 WRESTLING & TRACK/FIELD
This course is designed to provide physical activity and direct experience in wrestling and track and field. Students will demonstrate the basic knowledge of the rules, different field and track events, and wrestling moves. This course is designed for students to participate in wrestling matches and track and field events. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-230 STRENGTH & WEIGHTLIFTING
This course is designed to provide the health and physical education candidates with experience in strength and weightlifting training. Topics will include: safe lifting techniques, strength training and programming, a basic understanding of anatomy and cell fuel metabolism, and the physics of human force production. Assessments in this course will be academic and performance-based. Performance based assessments require candidates to safely demonstrate the primary lifts and basic coaching skills. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit.

HPE-250 TEAM SPORTS II
This course equips Health and Physical Education majors with a thorough understanding of the principles, skills, and instructional strategies essential for teaching a variety of team sports, including baseball, softball, racquet sports, wrestling, track and field, and more. Emphasizing skill development, game strategies, rules and regulations, and effective teaching methodologies, students will gain the knowledge and practical experience needed to foster active and inclusive learning environments. The course explores the physical, cognitive, and social benefits of team sports while preparing students to design developmentally appropriate instruction for diverse K-12 populations. Through skill demonstrations, officiating practice, and peer teaching, students will refine their ability to lead engaging and meaningful team sports activities. Additionally, the course highlights the role of sportsmanship, leadership, and teamwork in promoting lifelong participation in physical activity. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. Variable 0 to 3 credits.

HPE-260 COMPREHENSIVE MOVEMENT AND FITNESS
This course provides Health and Physical Education majors with a broad and in-depth exploration of movement and fitness activities, including gymnastics, dance, games, and alternative sports. Students will develop the knowledge and skills necessary to teach and promote lifelong physical activity through a variety of movement-based experiences. Emphasis will be placed on skill acquisition, instructional strategies, safety considerations, and the integration of these activities into school and community programs. Through hands-on practice, lesson planning, and peer teaching, students will learn to create engaging, inclusive, and developmentally appropriate physical education experiences that align with national and state standards. Special focus will be given to fostering creativity, teamwork, and individual expression within movement activities to encourage participation across diverse populations. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. Variable 0 to 3 credits.

HPE-270 PERSONAL & COMMUNITY HEALTH
This course is designed to give the student an understanding of customized training and of assessment techniques used in physical education. Students will learn how to create various different customized training plans for K-12 students. In addition, students will learn the various techniques used for assessing student performance. This course provides the opportunity for students to use several of the computer application related to physical education. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 3 credits

HPE-315 DANCE & AEROBICS
This course is designed to provide physical activity and direct experience in dance and aerobics. Students will demonstrate the basic knowledge of various different styles of dance and aerobic exercises. This course is designed for students to participate in the different styles of dance and aerobic exercises. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-320 GAMES, ATHLETIC ATIVITIES & RECREATION
This course is designed to provide physical activity and direct experience in games, athletic activities, and recreational activities. Students will learn about the self-discipline, willingness to try, and personal commitment involved in these types of physical activities. Coursework includes flexibility exercise, cooperative games and non-games, group initiatives, trust activities, and hiking. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-325 ADAPTIVE PHYSICAL EDUCATION
This course is designed to provide knowledge related to handicapping condition and the effects of these handicaps upon motor development and the performance of motor activities. The types of conditions considered orthopedic handicaps, learning disabilities, cardio-respiratory disorders, behavioral disorders, sensory impairments, and other temporary and permanent handicapping conditions. Students will understand physical fitness concepts and be able to make adaptions to meet the fitness needs of individuals with

disabilities. In addition, students will understand the importance of developing positive socialization through Special Olympics. The course provides an overview of the importance of a positive self-concept and emotional well-being related to the diversity of special populations. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 3 credits

HPE-330 SPECIAL TOPICS: ALTERNATIVE SPORT
This course is designed to provide physical activity and direct experience in alternative sports, such as, yoga, archery, bowling, and dodge ball. Students will demonstrate the basic knowledge of the rules, safety protocols, and exercises involved in the different alternative sports. This course is designed for students to participate/perform in the different alternative sports. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. 1 credit

HPE-340 CUSTOMIZED TRAINING & ASSESSMENT
This course is designed to give the student an understanding of customized training and of assessment techniques used in physical education. Students will learn how to create various different customized training plans for K-12 students. In addition, students will learn the various techniques used for assessing student performance. This course provides the opportunity for students to use several of the computer application related to physical education. Tubercular check, FBI, Act 151, and Act 34 clearances must be obtained before beginning the class. Variable 0 to 4 credits

HSCI-101 INTRO TO HEALTH SCIENCE
This course will begin the academic program for Integrated Science majors. Students will participate in discussions, case studies, and collaborative projects to explore the integration of the science disciplines to tackle local and global problems. In additions students will examine career options and develop an academic plan. Finally, students will begin developing a portfolio that showcases their own integration of science and technology. Offered Fall semesters. 1 credit

HSCI-201 MEDICAL TERMINOLOGY
A hybrid course that introduces students to a variety of medical terms. Students will complete on-line assignments and tests. Offered Fall semesters. 1 credit

HSCI-210 HEALTHCARE SYSTEMS
A comprehensive overview of U.S. health care systems covering structure, finance, governance, personnel, history, and cultural values. Examination of critical challenges and interactions with economic, technological, political, and social forces to include the health care systems' response to these influences. 3 credits

HSCI-222 HUMAN ANATOMY & PHYSIOLOGY I
This course is an introduction to the structure and function of the human body. The focus will be on the skeletal, muscular, integumentary, and nervous systems. Students will examine the interrelationships between the anatomical structure and function of the body. Pre-requisite: HSCI-201 required and BL-150/151 or CH-125/127. 3 credits

HSCI-223 HUMAN ANATOMY & PHYSIOLOGY LAB I
This laboratory course investigates the structure and function of the human body. Students will utilize physical and computer models, dissections, and computer data acquisition software. The focus will be on the skeletal, muscular, integumentary, and nervous systems. Students will examine the interrelationships between the anatomical structure and function of the body. Must take with HSCI 222. Pre-requisite: HSCI-201 required and BL-150/151 or CH-125/127. 1 credit

HSCI-224 HUMAN ANATOMY AND PHYSIOLOGY II
This laboratory course investigates the structure and function of the human body. The focus will be on the circulatory, respiratory, digestive, excretory, endocrine and reproductive systems. Students will examine the interrelationships between the anatomical structure and function of the body. Pre-requisite: HSCI 222. 3 credits

HSCI-225 HUMAN ANAT. & PHYSIO. LAB II
This laboratory course investigates the structure and function of the human body. Students will utilize physical and computer models, dissections, and computer data acquisition software. The focus will be on the circulatory, respiratory, digestive, excretory, endocrine and reproductive systems. Students will examine the interrelationships between the anatomical structure and function of the body. Pre-requisite: HSCI 222. 1 credit

HSCI-230 HEALTH ANALYTICS
Using a multi-disciplinary approach, the student will gain knowledge and skills in planning, collecting, analyzing, storing, and disseminating health care data and information. In addition, the student will gain an understanding of methods and techniques of enhancing health care data management systems. Three credits.

HSCI-250 WELLNESS AND NUTRITION
This course is designed to provide a broad understanding of the basic principles of nutrition and wellness. It will identify the essential nutrients and their functions, as well as describe nutritional behaviors and their relationship to health. This course will also introduce wellness topics including personal fitness, consumer safety, and mental and emotional health. No prerequisites. Offered spring even years. 3 credits.

HSCI-255 ACUTE CARE AND EMERGENCY RESPONSE
This course focuses on the immediate care and emergency response techniques required in health and wellness settings, including athletic facilities, clinics, and community environments. Students will learn to recognize, assess, and manage acute injuries and medical emergencies, ensuring proper stabilization and referral. Emphasis will be placed on the practical application of emergency protocols, including CPR, first aid, and the use of automated external defibrillators (AED). The course will also cover injury prevention strategies, legal considerations, and an understanding of the emergency management system Pre-requisite: HSCI -201. Offered odd spring semesters. 3 credits

HSCI-300 HEALTH SCIENCE SEMINAR
The capstone course for Health Science majors will include research, analysis, and synthesis leading to a comprehensive paper on a specific health topic. In addition, students will examine primary literature and evaluate case studies in collaborative groups. Finally, students will complete a portfolio of their academic work, shadowing experiences, and internships that will include a reflection on the integration of their coursework and professional goals. Offered Fall semesters. Three credits.

HSCI-550 HEALTH SCIENCE INTERNSHIP
Work experience program extending the learning experience beyond college into the world of work through internships, field work, and cooperative programs. Students may or may not be paid depending on the site. May be repeated up to a maximum of three credits. Variable Credit.

IT-101 ELEMENTARY ITALIAN I
For beginners in the language. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an

introduction to the culture of Italian-speaking peoples. IT 101 offered fall semester; 3 credits

IT-102 ELEMENTARY ITALIAN II
For beginners in the language. The entire two-semester course aims at acquisition of the usual basic language skills of listening, speaking, reading and writing. Presentation of basic grammar and an introduction to the culture of Italian-speaking peoples. IT 102 offered spring semester. 3 credits

IT-200 DANTE'S DIVINE COMEDY
Students will read the "Inferno" in English translation and study the commentary that accompanies it. In class students will discuss the poem, canto by canto, taking into consideration its medieval context and its place in the Western literary tradition. Students will be introduced to the Italian language and to the study of philology, pointing out, in the bilingual text, the precise meaning of the verses in the original and the beauty that Dante achieves. 3 credits.

IT-203 INTERMEDIATE ITALIAN I
Systematic grammar review and vocabulary building, emphasizing the major components of grammatical forms and syntax, always within the context of the spoken and written forms of the language. Prerequisite for IT 203: appropriate score on the College's language placement examination, or six (6) to eight (8) credits of college elementary Italian. Offered fall semester. 3 credits

IT-204 INTERMEDIATE ITALIAN II
Understanding and use of all the tenses with emphasis on the subjunctive mood in both the spoken and written language. Readings, written and oral exercises, discussion. Prerequisite for 204: satisfactory completion of IT 203 or appropriate score on the College's language placement examination. Offered spring semester. 3 credits

IT-305 DEVELOPING ORAL PROFICIENCY IN ITALIAN
This course is designed to help students develop their oral proficiency. The activities will focus on a variety of discourse strategies, will encompass real-life linguistic situations and tasks, and will be developed through role play, presentation, debate, and collaborative language use in a variety of content areas. 3 credits

IT-315 STYLISTICS: TECHNIQUES OF COMPOSITION AND INTERPRETATION
This course is designed to improve the student's ability to write Italian correctly and with a certain elegance of style. Selections from modern authors will be analyzed for their effectiveness and manner of expression. Sensitivity to appropriate register of language will be stressed, as well as distinctions between the written and spoken language. Written assignments will include linguistic exercises, short translations, from English to Italian, summaries, compositions, comments, and interpretations of a variety of texts. 3 credits

IT-321 INTRODUCTION TO ITALIAN LITERATURE
An introduction to writing and reading in Italian that will prepare the student for a more systematic introduction to literary analysis in later courses. Basic inquisitive reading skills and clarity of written expression are stressed in this course. Students will study texts so that they will be able to reconstruct the process of literary creation as well as be introduced to some of the general vocabulary of poetics, genre, and literary criticism. Some of the authors to be studied are: Ungaretti, Ginzburg, Petraca, Eco, Primo Levi, Deledda, et al. 3 credits

IT-330 L'ITALIA AL CINEMA
Film is a legitimate means for discovering the language and culture of any country, and Italy is no exception. This course will look at some of the classic as well as contemporary films of Italy in order to improve oral / aural skills as well as expand the student's understanding of certain cultural or linguistic aspects of Italian through cinema. 3 credits

IT-343 AN INTRODUCTION TO CONTEMPORARY ITALY
This course will afford the opportunity to expand conversation, writing, and reading skills while consolidating knowledge of the more difficult points of grammar. The contextual focus of the course is contemporary Italian culture, including contemporary history and politics, the economy, the division between North and South, immigration from developing countries, environmental issues, and popular music, among others. Italian films, music, and articles from newspapers, newsmagazines, and short stories, will enhance and complete the learning experience. 3 credits

IT-350 INDEPENDENT STUDY -- ITALIAN
May be repeated. Variable credit.

LA-200 METHODS & TECHNIQUES OF RESEARCH FOR LIBERAL ARTS
This course will introduce the student to techniques of research, investigation and writing, evaluation of sources, library use, and bibliography. The course will also focus on the Liberal Arts project: choice of subject, methodology, outline, and bibliography. Meetings with individual members of the Liberal Arts faculty will help the student define and clarify the project. Students will present their plan of studies for the major to the Liberal Arts faculty during a formal presentation. Fall semester. 3 credits

LA-225 TRUTH AND INTERPRETATION
What is the meaning and value of truth and how do we obtain it? How do we deal rightly with diverse perspectives and interpretations and with the growing prevalence of "disinformation" and conspiracy theories? This course introduces basic theories of knowledge (epistemology) and interpretation (hermeneutics) relevant for interdisciplinary research. The inquiry into truth invariably connects with different disciplinary perspectives and "methods" (methodos, way or path toward truth). We will explore the original rationale of the seven liberal arts disciplines, the reason certain disciplines came to be considered more or less foundational, and the ideal of a "unity of knowledge" with respect to the development of the modern meaning of "humanities." 3 credits

LA-250 SEMINAR: READINGS FOR LIBERAL ARTS MAJORS
The seminar will focus on the development of the topic and form of the project and will culminate individual student presentations to the Liberal Arts Faculty who will approve their project proposals. Further, this reading seminar will focus on the academic disciplines represented by participants? minors and concentrations. Students will study and analyze representative reading selections in the framework of class presentations, class discussions and written reports. Spring semester. 3 credits

LA-275 RESEARCH AND COMPOSITION IN THE LIBERAL ARTS AND SCIENCES
LA-275 is a course that reinforces the writing skills introduced and practiced in Core-1500, Core Writing, and builds upon those skills with assignments that require students to practice multiple strategies for critical reading and analysis of advanced interdisciplinary texts. This course enables students to understand and practice advanced research strategies and apply their research to inform their argumentative writing. Students will also continue to strengthen and

master their knowledge of grammatical principles and rhetorical modes. Each assignment will require students to follow a process approach to composition and to participate in a critique of their own and their peers' work. All assignments will be compiled in a final portfolio, and students will synthesize their learning outcomes in a final reflection of their coursework. 3 credits

LA-325 SENIOR SEMINAR FOR LIBERAL ARTS MAJORS
This course is designed for the student who is in the final stages of the Liberal Arts Project. The course will utilize a workshop format and class meetings will focus on the stylistic and technical aspects of the senior project. A BSN student who is pursuing the dual degree from Saint Vincent will create a portfolio as the final project and that portfolio will include a reflection of the core curriculum. Fall semester. 3 credits

LA-350 INDEPENDENT STUDY -- LIBERAL ARTS
May be repeated. Variable credit.

LA-550 LIBERAL ARTS INTERNSHIP
Professional work experience in the community which complements and strengthens academic in-class learning. Academic credit is variable depending on the nature and duration of the experience. Students may or may not be compensated depending on the company/agency. Students must receive departmental approval to participate. May be repeated. Variable credit.

LT-101 ELEMENTARY LATIN
For beginners in the language. No prerequisite for LT 101. The entire two-semester course aims at the acquisition of the basic language skills of a highly inflected language such as Latin. Emphasis will thus be placed on morphology, syntax, vocabulary culture, and the unique sentence structure that is so characteristic and inherent in Latin. LT 101 offered fall semester. 3 credits

LT-102 ELEMENTARY LATIN II
For beginners in the language. Satisfactory completion of LT 101 is a prerequisite for LT 102. The entire two-semester course aims at the acquisition of the basic language skills of a highly inflected language such as Latin. Emphasis will thus be placed on morphology, syntax, vocabulary culture, and the unique sentence structure that is so characteristic and inherent in Latin. LT 102 offered spring semester. 3 credits

LT-200 VERGIL'S AENEID IN ENGLISH
This course offers a study of Vergil's Aeneid, one of the fundamental texts of the Western Tradition and one of the most beautiful works of world literature. Students will read the poem in English translation, discussing its meaning and artistry episode by episode. Attention will be paid to its ancient context and its historical significance. The instructor will introduce the students to Latin and to the study of philology, pointing out, in the original text, the precise meaning of the verses and the beauty and profound sense of humanity that Vergil achieves. 3 credits.

LT-203 INTERMEDIATE LATIN I
Systematic review of basic morphology, syntax, and vocabulary is presented. The indicative and imperative moods are presented in their entirety. There are also presentations on cultural elements and vocabulary expansion. Reading passages reflect Græco- Roman culture and mythology as well as passages from Christian literature. Prerequisite for LT 203: appropriate score on the College's language placement examination. 3 credits

LT-204 INTERMEDIATE LATIN II
Building on material covered in LT 203, more complex grammatical structures will be covered with special emphasis on the use of participles, e.g., ablative absolutes, periphrastic, etc. Reading passages will reflect material covered and be taken from both classical and Christian literature, the latter through the medium of Gregorian chant. Prerequisite: satisfactory completion of LT 203. Exceptions may be made by the Modern Language Department and a qualifying exam may be required. Offered spring semester. 3 credits

LT-315 ADVANCED LATIN GRAMMAR
This course provides students with a comprehensive review of basic Latin syntax thorough a review of tenses and moods, idiomatic expressions, complex grammatical structures, and stylistic devices so that the student will be able to more easily read extant passages of classical Latin prose and poetry. 3 credits

LT-321 LATIN HYMNS OF THE ROMAN CHURCH
The Good News of the Incarnation began with a hymn when the angels sang Gloria in excelsis Deo. Hymns are at the center of Jewish and Christian worship. This course will look at some of the most famous biblical hymns of both testaments as well as those written by some of the greatest Latin poets of the Roman Church: Saint Ambrose, Prudentius, Pope Saint Gregory the Great, Venantius Fortunatus, et alii. These hymns will be studied at two levels: textual and musical. The basics of Gregorian chant will also be presented. 3 credits

LT-335 CICERO I
This course focuses on the four Catilinarian orations delivered in 63 B.C. before the Senate and the People of Rome during the turbulent final years of the Republic. Due consideration will be given to the historical, political, social environment as well as the literary style of this great Roman orator. 3 credits

LT-337 CICERO II
Students will read the Pro Archia poeta oratio in which Cicero gives a brilliant defense of the role of literature and the humanities in society. His perspective will be compared to those of Cardinal Newman and Alexander Solzhenitsyn. 3 credits

LT-340 ROMAN POETRY I
A study of style and theory in late Republican poetry. Selections to be read are taken from the major Republican and Augustan poets Catullus and Ovid and will investigate the role of intertextuality in the reading of Roman poetry. 3 credits

LT-350 INDEPENDENT STUDY -- LATIN
May be repeated. Variable credit.

LT-443 AENEID I
Books I -VI of the great Roman epic will be studied. Students will review dactylic hexameter and develop their metrical skills so as to be able to read aloud this masterpiece of Roman literature. 3 credits

MA-102 CALCULUS I WITH REVIEW PART A
This is the first course of a two-semester course sequence that covers the material in MA 109 Calculus with Applications I. This sequence is designed for students who would benefit from additional practice and review of precalculus and algebra. The necessary skills for Calculus will be taught and reviewed as needed for each Calculus topic. Topics covered in MA 102 include functions, factoring, limits, and derivatives. Successful completion of MA 102 and MA 103 fulfills all MA 109 requirements. 3 credits.

MA-103 CALCULUS I WITH REVIEW PART B
This is the second of a two-semester course sequence completing the material covered in MA 109, continuing from the content in MA 102. This will include topics such as derivatives, graphing, applications of

derivatives, and basic integration, while also covering and reviewing precalculus topics as needed. Successful completion of MA 102 and MA 103 fulfills all MA 109 requirements. 3 credits. Pre-requisite: MA 102.

MA-104 ELEMENTARY FUNCTIONS
This is a one-semester course whose main ideas are emphasized in the presentation of the polynomial, rational, trigonometric, exponential, and logarithmic functions. The core of the course is derived from materials best described as a compendium of college algebra, trigonometry, and analytic geometry, which would reinforce those skills essential to calculus. No longer offered regularly. 3 credits

MA-106 INTRODUCTION TO MATHEMATICAL THINKING
This course investigates various aspects of mathematics. Students will be expected to do simple proofs involving number theory, study the lives and contributions of key mathematicians, and recognize mathematics in nature as well as unusual connections of math concepts. Topics include rational and irrational numbers, sizes of infinity, sequences and series, and fractals. 3 credits.

MA-107 QUANTITATIVE REASONING
Quantitative Reasoning is designed to meet the requirements for a liberal arts mathematics course. This course covers a range of topics that connect mathematics to the world around us. Students will learn about critical thinking, set theory, basic probability, finances, and basic statistics. 3 credits.

MA-108 PRECALCULUS
This is a one-semester course whose main ideas are emphasized as a prelude to calculus. We will review topics in algebra and trigonometry including rational and exponential expressions, functions and their graphs, exponential and logarithmic functions, and trigonometric functions and identities. 3 credits

MA-109 CALCULUS WITH APPLICATIONS I
The elementary functions, limits, the derivative and its applications, the definite integral, techniques of integration. Applications are presented from the areas of biology and the social sciences. 4 credits

MA-110 CALCULUS WITH APPLICATIONS II
Probability, vectors, partial differentiation, multiple integration, sequences and series. Offered spring semester. Prerequisite: MA-102 and MA-103, or MA-109, or MA-111. 4 credits

MA-111 ANALYTICAL CALCULUS I
The real number system. Limits and continuity. The concepts of differentiation and integration. Differentiation of algebraic and trigonometric functions and applications. The Mean Value Theorem. The definite integral and the Fundamental Theorem of Calculus. Applications of the definite integral. 4 credits

MA-112 ANALYTICAL CALCULUS II
Various techniques of integration: integration by substitution, integration by parts, trigonometric integrals, trigonometric substitution, partial fractions. Improper integrals. Approximations of definite integrals. Differential Equations: separation of variables, first order linear. Sequences. Series. Geometric series. Telescoping series. Series tests for convergence. Taylor series. Maclaurin series. Prerequisite: MA-111. 4 credits

MA-121 BASIC APPLIED STATISTICS
The ideas and tools of practical statistics using data in context. Methods and strategies for exploring data graphically and quantitatively. Statistical reasoning and the tools of inference that go beyond the data to draw conclusions about a wider population with attention paid to the uncertainty of these conclusions. Students will conduct standard one and two sample statistical analyses. Offered Spring Semester. 3 credits

MA-211 ANALYTICAL CALCULUS III
Parametric functions. Polar coordinates. Three-dimensional vectors and surfaces. Lines and Planes. Multi-variable functions and partial differentiation. Double and triple integrals and applications. Line Integrals. Green's Theorem. Offered fall semester. Prerequisite: MA 112. 4 credits

MA-212 ORDINARY & PARTIAL DIFFERENTIAL EQUATIONS
First order equations and applications, classical and numerical methods; second order linear equations and applications; solution in series; Laplace transform solutions; higher order equations; introduction to partial differential equations and Fourier series. Offered spring semester. Prerequisite: MA 112. 4 credits

MA-231 METHODS OF PROOF
An introduction to the theoretical aspects of mathematics. The course will focus on the construction and analysis of mathematical proofs, including direct proof, proof by contrapositive, proof by contradiction, and mathematical induction. The basics of some mathematical logic and sets will be covered as subject matter for the proofs. Prerequisite: MA 112. Offered spring semester. 3 credits

MA-241 STATISTICS I
An introduction to statistics including some probability. Topics include set theory, combinations and permutations, laws of probability, measures of central tendency and dispersion, probability functions, confidence intervals, hypothesis testing, and linear regression. Prerequisite: MA-102 and MA-103, or MA-109, or MA-111. Offered Fall Semester. 3 credits

MA-242 STATISTICS II
Students will learn to build statistical models and develop skills for implementing regression analysis in real-world problem. Topics include multiple regression models (including first-order, second-order and interaction models with quantitative and qualitative variables), regression difficulties and residual analysis. Additional topics will be covered if time permits. Students will gain experience not only in the mechanics of regression analysis (often by means of a statistical software package) but also in deciding on appropriate models, selecting inferential techniques to answer a particular question, interpreting results and diagnosing problems. Prerequisite: MA-241. Offered Spring Semester.

MA-251 LINEAR ALGEBRA
Matrices and systems of linear equations. Vector spaces and linear transformations. Determinants. Inner product spaces, eigenvalues and eigenvectors. Offered Fall Semester. Prerequisite: MA 110 or MA 112. 3 credits

MA-301 HISTORY OF MATHEMATICS
This course will be a survey of mathematics from ancient times to modern times. We will also look at the historical context and implications of various mathematical discoveries, in addition to exploring the lives of the mathematicians Responsible for these breakthroughs. Topics may include ancient counting systems, Euclidean and non-Euclidean geometry, algebra, calculus, probability, number theory, logic and set theory. Additional topics will be covered as time permits. Offered spring semester. Prerequisite: MA 110 or MA 112. 3 credits

MA-311 PROBABILITY AND STATISTICS I
Discrete probability including such topics as independence,

conditional probability, Bernoulli trials, and Bayes Theorem, Calculus of probabilities including random variables, discrete and continuous distributions, expectance and variance. Prerequisite: MA 110 or MA-112. Offered fall semester. 3 credits

MA-312 PROBABILITY AND STATISTICS II
The second of a two course sequence in mathematical probability and statistics. Focuses on continuous random variables. Offered spring semester. Prerequisite: Both MA 211 and MA 311. 3 credits

MA-321 COMPLEX VARIABLES
The complex number system the Cauchy-Riemann equations, contour integrals, the Cauchy integral theorem and formula, sequences, power series and Laurent series, residue theory and conformal mapping. Prerequisite: MA 211. Offered fall semester of odd-numbered years. 3 credits

MA-341 GRAPH THEORY
Graph theory is the study of networks and their connections. Topics studied will include trees, matchings, connectivity and Hamiltonicity, coloring, planarity. Additional topics will be covered as time permits. Offered fall semester of even-numbered years. Prerequisite: MA 231 3 credits

MA-350 INDEPENDENT STUDY--MATHEMATICS
May be repeated. Variable credit.

MA-421 REAL ANALYSIS I
A rigorous study of calculus. Sequences. Limits of sequences. Subsequences. Cauchy sequences. Functions. Limits of functions. Continuity. Uniform continuity. Absolute continuity. Differentiation. Properties of differentiable functions. The Riemann integral. Offered fall semester of even-numbered years. Prerequisite: MA 231. 4 credits

MA-422 REAL ANALYSIS II
Infinite series. Sequences of functions. Series of functions. Fourier series. Metric spaces. Topological spaces. Connectedness. Compactness. Banach fixed point theorem. Offered spring semester of odd-numbered years. Prerequisites: MA 211 and MA 421. 4 credits

MA-451 ABSTRACT ALGEBRA I
Integers, Euclidean algorithm, congruences, rings, ring homomorphisms, integral domains, fields, ideals, quotient rings, polynomial rings, basic properties of groups, cyclic groups. Prerequisite: MA 231. Offered fall semester of odd-numbered years. 4 credits

MA-452 ABSTRACT ALGEBRA II
Groups, cyclic groups, subgroups, normal subgroups, quotient groups, Lagrange's Theorem, isomorphism theorems, direct products, finite Abelian groups. Prerequisite: MA 451. Offered spring semester of even-numbered years. 4 credits

MA-501 CAPSTONE COURSE I
Students will perform searches through the Latimer Library to gain a deeper understanding of how to find academic journals or books containing mathematical content beyond the Math Department course offerings. We will explore various paths taken by mathematics majors, including areas of mathematical modeling, applied mathematics, pure mathematics, math research, and math education. By the end of the course, students will put together an abstract and a project proposal. Offered spring semesters, 1-2 credits. Pre-requisite: MA 231.

MA-502 CAPSTONE COURSE II
This second Capstone course allows students to explore areas of mathematics beyond the Math Department course offerings. Students will base their projects off of abstract and project proposal from MA-501. In addition, students will give an oral presentation of their work. Offered spring semesters, 1-2 credits. Pre-requisite: MA 501.

MA-550 MATHEMATICS INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work. Students are employed in an area related to their academic endeavor. Academic credits are awarded according to the extent of the work experience. Students may or may not be paid depending on the site. The purpose of the program is to integrate academic studies and employment activities. May be repeated. Variable credit.

METR-140 FOUNDATIONS IN METEOROLOGY
An introductory course in meteorology covering a wide array of topics including the composition of the Earth's atmosphere, the forces governing air motion, atmospheric stability and the development of weather systems commonly observed in and around North America. Real-time data and real-world events will be explored along with the conceptual topics. 4 credits

MU-00X PIANO PROFICIENCY FOR MUSIC MAJORS
All Music Majors whose primary instrument is not keyboard are required to pass a piano proficiency examination by the end of the 1st semester (Fall) of their Senior year. The proficiency exam will include major and minor scales, triads, arpeggios in all keys, and sightreading as well as two prepared compositions. This examination can be taken at any time but MUST be passed by the end of the fall semester of the student's Senior year. May be repeated. Zero credits. Pass/Fail.

MU-090 RECITAL ATTENDANCE
Because attending live musical performances are a key element of a music student's education, all music majors and minors are required to attend six performances each semester. These concerts should not only include SVC Concert Series, but also SVC Ensembles, such as Jazz Ensemble, Concert Band, Opera, Choir, and the Musicals, as well as student club productions. Outside concerts are permitted. Many classical and non-classical venues give discounts on student admissions, and all Department of Music and Performing Arts sponsored concerts are free to Saint Vincent students. Required for all music majors and minors every semester. May be repeated. Offered every semester. 0 credits

MU-101 MUSIC APPRECIATION
A survey of the music of western European and non-western cultures which is frequently generically called "Classical" music and "World" music, but in reality includes Medieval, Renaissance, Baroque, Classical, Romantic, Modern, Contemporary, and cultural stylistic periods. The course is designed to teach students how to listen to music and how to discuss music's aesthetic nature and purpose. Representative composers, works, and traditional music practices from the major periods of music and countries will be placed in their historical and cultural context, studied and discussed. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered every Fall semester. 3 credits

MU-106 WORLD MUSIC
A survey of the music of the world and an introduction to ethnomusicology. Students explore the music of the world through performance analysis, case studies, and listening to live and recorded performances. The course also looks at the cultural aspects of a society and how they effect the music that the society creates. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered fall semester in odd-numbered years. 3 credits

MU-108 MUSIC HISTORY AND LITERATURE: MEDIEVAL TO CLASSICAL PERIODS
This course is designed to help the student of music to discover the characteristics of Western European Art music from Medieval to Classical styles; to discuss the forms, styles, and compositional techniques of the period; and to identify representative composers and their major works. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered fall semester in the even-numbered years. 3 credits

MU-109 MUSIC HISTORY AND LITERATURE: ROMANTIC AND CONTEMPORARY PERIODS
This course is designed to help the student of music to discover the characteristics of Western European Art Music from Romantic and Contemporary styles; to discuss the forms, styles, and compositional techniques of each period; and to identify representative composers and their major works. Prerequisite of MU-108 or permission of instructor. Fulfills the Core Curriculum Fine Arts requirement. Offered spring semester in the odd years. 3 credits

MU-110 MU HIST./MEDIEVAL TO RENAISSANCE
This course covers the musical history of the Medieval and Renaissance Periods. Representative composers, musical works, and historical events will be discussed in detail. Historical performance practice and critique of performances will be highlighted. 3 credits

MU-112 MUSIC THEATRE HISTORY OPERA
This course offers students the chance to explore the history of opera and musical theater. Aspects of historical performance practice and the study of specific operas and musicals will be covered. The American musical will be discussed in light of historical and cultural developments. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered spring semester in odd numbered years. 3 credits

MU-115 FUNDAMENTALS OF MUSIC THEORY
This course consists of a thorough and unified presentation of music principles such as notation, intervals, scales, chords, rhythms and simple piano familiarization. Through interactive classroom and board work, the student will acquire a firm foundation for the study of harmony and all other music courses which follow. Although it is the first music theory course required for all music majors and minors, no prior musical training or knowledge is required so it is equally appropriate for the general student who wishes to gain a basic working knowledge of the fundamentals of music. No prerequisites. Fulfills the Core Curriculum Fine Arts requirement. Offered fall semester. 3 credits

MU-121 INTRODUCTION TO PIANO
This course is a group piano class for students with no prior keyboard experience; it is not intended for those who have studied piano in the past. Topics covered include reading music notation, playing by ear, harmonizing, improvisation, and basic repertoire (solos, duets, and full class ensemble playing). Fulfills the Core Curriculum Fine Arts requirement. Offered Every Fall. 3 credits

MU-125 APPLIED LESSONS FOR NON-MAJORS/MINORS AND SECONDARY INSTRUMENTS
This instruction is for non-music majors and non-music minors at any skill level, as well as for Music Majors who are pursuing a secondary instrument. One-half hour (1 credit) or one-hour (2 credits) of individual weekly instruction in piano, organ, voice, guitar, cello, flute, clarinet, and trombone is available. Can fulfill the Core Curriculum fine arts requirement if a total of three credits of lessons on the same instrument are taken. Permission of the instructor and chair required. May be repeated. Offered both semesters. Fee. 1 or 2 credits

MU-172 CONCERT BAND
The SVC Concert Band rehearses and performs traditional and contemporary band music. The ensemble is composed of woodwinds, brass, and percussion. The course is designed for musicians of all majors who want to continue their performance careers in band. Students learn individual and group performance skills through weekly rehearsals and multiple concerts throughout the year. Enrollment is open to any student with previous band experience. Auditions are for chair-seating purposes only.0 to 1 credits.

MU-175 JAZZ ENSEMBLE
The SVC Jazz Ensemble rehearses and performs music from the American and Latin American jazz idioms. The ensemble is composed of trumpets, trombones, saxophones, guitar, piano, bass, and drums. The course is designed for musicians of all majors who want to begin or continue their development as jazz performers. Students learn jazz interpretation and improvisation skills through weekly rehearsals and multiple concerts throughout the year. Enrollment is open to any student who completes a successful audition or receives permission from the instructor. May be repeated. Zero or 1 credit.

MU-180 SAINT VINCENT COLLEGE SINGERS
Saint Vincent College Singers is an ensemble that explores the various genres of secular vocal music throughout all periods with an emphasis on popular song and American music. The ensemble is open to majors and non-majors and rehearses once a week. Several concerts are presented each semester. Can fulfill the Core Curriculum Fine Arts requirement if a total of three credits of the same ensemble are taken. Permission of the instructor is required. May be repeated. Offered both semesters. 0 or 1 credit

MU-181 MUSICAL THEATER WORKSHOP
In this course students participate in every aspect of producing a musical theater production. Aspects of production that will be covered will be musical preparation, stagecraft, and acting. Can fulfill the Core Curriculum Fine Arts requirement if a total of three credits of the same ensemble are taken. Permission of the instructor is required. May be repeated. Offered both semesters. 0 or 1 credit

MU-182 OPERA WORKSHOP
This course will offer the experience of participating in either an opera scenes program or in a full opera production. Students will be involved in musical preparation including the correct use of the diction of the language in which the piece is composed. Other aspects covered will be acting, stagecraft, and historical performance practice. Can fulfill the Core Curriculum Fine Arts requirement if a total of three credits of the same ensemble are taken. Permission of the instructor is required. May be repeated. Offered both semesters. 0 or 1 credit

MU-205 SIGHT SINGING, EAR TRAINING AND SOLFEGGIO
This is the first course in learning the ability to sing melodic and harmonic pitches at sight and to be able to recognize these pitches when heard. Melodic and rhythmic dictation is included and the study of the effective use of solfegge syllables, in both rhythmical and tonal articulation, provides a sturdy foundation for a more precise performance of music. Offered spring semester in even-numbered years. 3 credits

MU-206 SIGHT SINGING, EAR TRAINING II SOLFEGGIO II
This is the second course in the series that continues with a more advanced study of the singing of melodic and harmonic pitches at sight. More rigorous melodic and rhythmic dictation and a greater facility of solfegge syllabification enables the student to attain musical precision both rhythmically and tonally, which is essential for the realization of a more mature and professional performance. Prerequisite MU 205. Offered spring semester in odd numbered years. 3 credits

MU-208 HARMONY I AND KEYBOARD
Harmony I introduces the student to the harmonic language of Western music. The approach will emphasize composing four-part harmonic phrases, but will also regularly incorporate singing, harmony at the keyboard, ear training, movement, and harmonic analysis. The goal of the study of Harmony is to acquire fluency with musical vocabulary (chords) and musical grammar (chord progressions and modulations), understanding both as necessary components of musical literacy. Topics include Major Mode, Minor Mode, and Dissonance Treatment. Prerequisites: MU 115 or permission of instructor. Offered Spring semester, every other even year. 3 credits

MU-209 HARMONY II AND KEYBOARD
Harmony II is a continuation of Harmony I, again emphasizing the composition of four-part phrases, together with singing, playing, ear training, movement, and analysis exercises. Topics include Modulation, Harmony and Rhythm, Chromatic Harmony, Cadences, Harmonization of chorale melodies and of figured basses. Prerequisites: MU 208 or permission of the instructor. Offered Spring Semester every other odd year. 3 credits

MU-220 FORM & ANALYSIS AND KEYBOARD
The study of musical form, traditionally called "Form & Analysis", integrates previous courses in Music Theory with the student's study of musical repertoire. The goals of Form & Analysis are first, to introduce the student to the most common and significant musical forms, and second, to develop each student's "sense of form". The repertoire to be studied will include an historical survey of a selection of musical forms from Gregorian Chant to the Contemporary period. The development of a "sense of form" comes with active listening, movement exercises, simple composition exercises, and the application of these in musical performance. Prerequisites: MU 209 or permission of the instructor. Offered Spring semester, every other even year. 3 credits

MU-243 MUSIC TECHNOLOGY
This course will introduce students to the technologies and resources utilized in the twenty-first century music industry. Throughout the semester, learners will trace the historical influence of technology on music, explore a myriad of relevant emerging technologies, and thoroughly investigate the functions of MIDI. This course's primary assignments will require students to compile an annotated list of pertinent resources, utilize computer software to edit and arrange pieces of music, and use multiple technologies to create an original work. Offered every Spring semester. 3 credits

MU-317 DICTION FOR SINGERS: ITALIAN, SPANISH AND LATIN
This course deals with the correct articulation of diction and the pronunciation of words for singers as they are sung in Italian and English. Students will learn the International Phonetic Alphabet. Required for all music majors whose primary instrument is voice. Offered Spring semester of even years. 1 credit

MU-318 DICTION FOR SINGERS: GERMAN, ENGLISH, AND FRENCH
This course deals with the correct articulation of diction and the pronunciation of words for singers as they are sung in German and French. Students will learn the International Phonetic Alphabet. Required for all music majors whose primary instrument is voice. Offered Spring semester of odd years. 1 credit

MU-330 JUNIOR RECITAL
Music Performance majors are provided with an invaluable opportunity to perform a solo recital on his or her major instrument during the junior year of study. Required for music performance majors. Offered as needed. Fee. 1 credit

MU-350 INDEPENDENT STUDY--MUSIC
Topics of research are chosen and developed by the student with the guidance of the faculty member directing the study. For junior or senior music majors and minors only. May be repeated. Permission of the instructor and chair required. Offered as needed. Variable credit.

MU-410 SENIOR RESEARCH PROJECT/THESIS/ RECITAL FOR MUSIC STUDIES MAJORS
This Senior Research Project/Thesis takes several forms depending upon the student's major and interest. For instance, Arts Administration majors with a Performing Arts Concentration are guided through the writing of a thesis or documenting of a research project; whereas Music majors or Music Performance majors may wish to do further study, one-on-one with a faculty member in such areas as musical composition, choral or orchestral conducting techniques, music theory, or music history. Whatever form the course takes, the student will work closely with a faculty member who will serve as the advisor. The finished project will be submitted to a committee for review. Offered fall semester, or as needed. 3 credits

MU-430 SENIOR RECITAL
The Senior Recital is the culmination of the Music Performance major's course of study, providing the challenge and prestige of a solo recital on the major instrument. Required for music performance majors. Offered as needed. Fee. 2 credits

MU-525 APPLIED MUSIC LESSONS FOR MUSIC MAJORS/MINORS - PRIMARY INSTRUMENT
This instruction is for the music major or music minor's instrument of study. Individual instruction in piano, organ, voice, guitar, flute, clarinet, cello, and trombone. Other instruments of study may be arranged through the department chair. May be repeated. Offered every semester. Fee. 1, 2, or 4 credits. Music Minors may take 1 (30-min) OR 2 (1-hour) credits, Music Studies may take 2 (1-hour) credits, + Music Performance may take 4 (1-hour) credits. Offered every semester.

ND-101 CAREER EXPLORATION & PLANNING
The course is designed for students who are undecided or questioning their major or career choice. Career options will be explored through self-reflection activities and assignments. Students will receive individual career consultation on career paths, resume creation, Linked In profiles, and more. Guest speakers from within SVC and employers in the surrounding community enhance the classroom experience by providing practical tips and advice. Students will grow both personally and professionally. First-year students.1 credit.

ND-108 MINDFULNESS & MENTAL HEALTH
Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us. Studies have found that students who engage in mindfulness activities show increased

academic performance, improved mental health, increased confidence, better sleep, improved physical health, and heightened focus in class. This course seeks to help students deal with stress inside and outside of the classroom, along with learning how to deal with anxiety in healthy ways. Different mindfulness activities will be taught throughout the semester by various faculty and staff on campus. 1 credit

ND-110 HORSEMANSHIP I: PART A
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 1 credit

ND-111 HORSEMANSHIP I: PART B
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 0 or 1 credit

ND-112 HORSEMANSHIP II: PART A
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: EQ 101 or special permission by instructor. Students can take EQ 102 and 103 at the same time. 1 credit

ND-113 HORSEMANSHIP II: PART B
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: ND 110, ND 111, or ND 112 or special permission by instructor. 0 or 1 credit

ND-114 HORSEMANSHIP III
Students in Horsemanship III must join the Intercollegiate Horse Show Association, have over 50 hours of riding experience (any level), and highly committed to regular weekend competitions. A riding test will be required of all students enrolled in this course. Students will participate in hunt seat, English show lessons, and be expected to participate in all club and team activities including assisting in lessons for beginners. Students will compete in the IHSA. All members will be required to purchase riding lessons, obtain the proper show attire required by the College, and pay all fees related to entering IHSA shows. All riders must purchase an ASTM helmet and wear appropriate footwear for the stable. A signed release and health information is required of all students. Showing and riding fees will be announced the semester prior and are required to be prepaid before the course begins. Prerequisite: EQ 101 or special permission by instructor. 2 credits

ND-115 HORSEMANSHIP I: PART C
Students will participate in weekly lessons on basic horsemanship and handling. Students will learn how to properly ride a horse at the halt, walk, trot, individual canter, and over small obstacles. Students will experience grooming, handling, exercising, and caring for horses. Trail riding and riding skill games will be included as part of the lessons. All students are required to participate in club activities in addition to lessons. Students should plan to arrange for his or her own transportation or plan to carpool with other classmates. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. No riding or horse experience is necessary. 0 or 1 credit

ND-117 HORSEMANSHIP II: PART C
This course is designed for students interested in preparing for horse ownership, improving already taught riding skills, and/or participating in local horse shows, campus riding, or trail events. This course will deepen the concepts taught in EQ 101 to allow students to enjoy more advanced involvement and scholarship with horses. Western and bareback riding, drill riding, hunter schooling, introductory cross-country riding, horse nutrition, basic training, and equine science instruction will be included in this course. Students will be expected to arrange for transportation, participate in all club activities, and assist with EQ 101 lessons. All riders must purchase an ASTM helmet and wear appropriate attire for the stable. A signed release and health information is required of all students. Prerequisite: ND 110, ND 111, or ND 112 or special permission by instructor. 0 or 1 credit

ND-120 ENCOUNTERING JAMAICA
During the one-week immersion experience, students will encounter the people, spirituality, and culture of Jamaica in both urban and rural settings. An aspect of this week will be actively engaging with, listening to, and learning from the people of Jamaica by working with various organizations that strive to improve the well-being and autonomy of the people of Jamaica. Participants will also learn about the impact that efforts to develop the island economy has on the environment of Jamaica. Students will also have opportunities to reflect on how the relationship between the United States and Jamaica impacts the people of Jamaica, and how they can impact this relationship at the local level. 1 credit

ND-125 INTERNATIONAL STUDENT SEMINAR
The International Student Seminar aims to provide students new to the U.S. with structured, cross-cultural and multidisciplinary opportunities to explore SVC resources, American culture, and students' personal development. Students will participate in group discussions and independent reflection activities as well as on and off-campus learning experiences. 0 or 1 credit

ND-126 FINANCIAL WELLNESS
This course is designed to familiarize SSS-TRIO students with key financial opportunities and challenges they will face upon graduation. Students will learn the basic skills they will need to begin careers, manage their finances, and apply for graduate studies. Topics of study include: Money management (budgeting); consumer credit (loans, credit cards, leases, credit scores); major purchases (housing/autos); insurance/risk management (auto, home, health, life); personal investing (stocks, bonds, mutual funds); investing for major goals; and career preparedness (resumés, cover letters, interviews). This is a basic level course meant to teach students the fundamentals of managing their day-to-day expenses to live successfully. Course will also include opportunities for professional networking. 2 credits

ND-142 THE SCIENCE OF STRENGTH
This multidiscipline course introduces the practical acquisition and application of human strength. Students will demonstrate basic understanding of the musculoskeletal system, basic physiology and a basic understanding of human mechanics. Students will learn about the theory and benefits of strength accumulation and will demonstrate competency in the methods for acquiring force production. 1 credit

ND-150 BENEDICTINE LEADERSHIP
This seminar presents students with a framework for planning various types of service projects. Readings, reflections and group discussion will help students integrate course material into the planning process. Students will be engaged in a service project during the semester. This project will provide a field experience and compliment the material discussed in class. Offered in the fall semester. 1 credit

ND-160 HEALTHY RELATIONSHIPS
Learn how to establish and nourish healthy friendships and romantic relationships in a confidential, comfortable and enjoyable format. 0 or 1 credit

ND-177 EMERGING ADULTHOOD/LEADERSHIP
This course introduces students to the emerging adulthood developmental stage and basic leadership concepts. Week one focuses on understanding the emerging adulthood stage, major life events, identity formation, and career choices. Week two focuses on increasing awareness of health, wellness, and adjustment, including identifying stressors, coping skills, and mental health symptoms. The recent development of Positive Psychology is also explored. Week three focuses on the development of leadership, including different leadership styles, leadership traits, and motivation. The course utilizes in-class lectures, worksheets, videos, and small and large group discussions to help students process and apply learning. 1 credit

ND-178 PRINCIPLES OF ACADEMIC SUCCES
Principles of Academic Success (ND 178) is a one credit course designed to assist the students in developing the reading and study skills necessary for success in college. Course work includes test taking, note taking, and study strategies. Students will learn to manage their time, become "solution finders," and strive to become independent thinkers and achievers. The students will be expected to apply the strategies presented in the class to their other course work throughout the semester. In addition to the material presented by the instructor, occasional guest lecturers will give presentations. 1 credit

ND-201 INTRO TO MILITARY LEADERHSIP ROTC
This is an entry level course that provides a first introduction into leadership and management. This includes instruction in survival techniques, first aid, military practice and organization, and the role and branches of the US Army. This is taught by Army ROTC personnel. This course requires class instruction, laboratory exercises, and physical fitness training. 0 to 3 credits.

ND-202 FOUNDATIONS OF MILITARY LEADERSHIP ROTC
This is an entry level course in military leadership and management, drills and ceremonies, land navigation, and organization and the role of the US Army Reserve and National Guard units. This is taught be Army ROTC personnel. This course requires class instruction, laboratory exercises, and physical fitness training. 0 to 3 credits.

ND-203 LEADERSHIP DYNAMICS & APPLICATION ROTC
This is an intermediate level course in military leadership and management. This includes instruction in the total Army concept, Army rank and structure, leadership and management, land navigation, and drills and ceremonies. This is taught by Army ROTC personnel. This course requires class instruction, laboratory exercises, and physical fitness training. Prerequisite ND 201 or ND 202. 0 to 3 credits.

ND-204 APPL. LEADERSHIP/COMBAT POWER
This course prepares the army ROTC student for commissioning into the U.S. army as a second lieutenant. Course instruction is coupled with practical exercises in tactical and technical military subjects with particular emphasis on leadership development, problem solving and decision making. 0 to 3 credits.

ND-205 ARMY DOCTRINE AND TEAM DEVELOPMENT
Course instruction includes group communication, decision making and problem-solving techniques, military history, leadership and management and land navigation. 0 to 3 credits.

ND-206 TRAINING MANAGMEENT & WARFIGHTING
Functions This course prepares the Army ROTC student for commissioning into the U.S. Army as a Second Lieutenant. Course instruction is coupled with practical exercises in tactical and technical military subjects with particular emphasis on leadership development, problem solving and decision making. 0 to 3 credits.

ND-207 THE ARMY OFFICER
This course prepares the Army ROTC student for commissioning into the U.S. Army as a Second Lieutenant. Course instruction is coupled with practical exercises in tactical and technical military subjects with particular emphasis on leadership development, problem solving and decision making. 0 to 3 credits.

ND-208 COMPANY GRADE LEADERSHIP
This course continues to prepare the Army ROTC student for commissioning into the U.S. Army as a Second Lieutenant. Course instruction emphasizes military justice and professional ethics. 0 to 3 credits.

ND-401 PROJECT IN CHILDREN'S STUDIES
This one-credit course will serve as a capstone experience for students completing the minor in Children's Studies. Students will work with the director to develop their own individualized project corresponding with their own interests. For instance, students may choose to complete a comprehensive research paper related to childhood. Another option may be completion of an internship experience working with children or with issues pertaining to children. Students may also propose their own idea for a capstone project to the program director. 1 credit

ND-410 LSAT PREPARATION
Designed to assist students in preparing to take the examination in

conjunction with their application to law school, this course will focus on instruction in the areas of analytical reasoning, problem analysis and reading comprehension. The course is designed to help students become confident in their approach to this type of standardized exam. Enrollment is limited to 20 participants, but space may be available for Saint Vincent alumni and students of other institutions. P/F only. 1 credit

NSCI-100 ASTRONOMY
This course provides an introduction to the study of Astronomy focusing on the development of our understanding of the universe. Subjects of emphasis include the development of classical mechanics as an explanation of the motion of the planets; the structure, formation and evolution of the sun and other stars; and our modern understanding of cosmology. This course provides a more advanced application of the scientific process.3 credits

NSCI-101 ASTRONOMY LAB
This course consists of hands-on laboratory exercises chosen to illustrate topics in modern astronomy. Topics of the exercises may include stellar photometry, observation and measurement of star clusters and galaxies, and observation of the Moon and planets. Offered in conjunction with NSCI 100 Astronomy. 1 credit

NSCI-103 THE BIOLOGY IN ART
This course will provide the students with a scientific understanding of the properties of the materials used in the creative arts and the relationship to the biological processes involved in the synthesis of these materials. The course will focus on properties of the fibers used in the arts and allow the students to understand how this relates to their proper use of the materials. In the laboratory portion of the course, the students will be instructed in the scientific method and use this to investigate the properties of the fibers and compare the uses of the fibers with differing biological origin. Students are expected to have a better appreciation of the features of the fibers and how this affects their use in the creative arts. 4 credits

NSCI-107 BIOLOGY OF BIRDS
This course provides an introduction to ornithology, the study of birds. Lecture topics include the evolutionary history of birds from dinosaur ancestors; avian anatomy and physiology; the physics of bird flight; patterns of migration; reproductive cycles and behavior; and how birds set up territories, find food and avoid predators. Each class will obviously be filled with avian examples, but the general concepts learned may be applied to other animals as well. Lab sessions include dissection of preserved specimens, capture and release of live birds, bird feeder observations, bird song experiments, and bird identification skills. Student learning will be assessed through tests, reading assignments, lab reports, and a class presentation. Offered even-numbered years, spring semester. 4 credits

NSCI-120 INTRODUCTION TO BIOLOGY
This course provides insight into the organization of living systems at the molecular, cellular, organismal and population levels. Emphasized are the structural and functional characteristics common to most organisms, organismal diversity, biological evolution, and interactions between organisms and their environment. The laboratory is designed to introduce the process of science and the characteristics of scientific knowledge. Students learn to formulate questions and hypotheses, design simple experiments, interpret results, draw conclusions and present their work in scientific formats. No prerequisite. Formerly BL 100. 4 credits

NSCI-123 LEADERSHIP AND ENVIRONMENTAL CONSERVATION
This course provides students with an appreciation and understanding of the fundamental concepts and theoretical background of environmental science. It involves the study of traditional environmental problems and their application to current local and global issues. The class begins with the study of the intertwining relationships of ecology and how they apply to Western Pennsylvania's ecosystem. Then, students explore other topics including past and current global issues, dwindling resource supplies, and pollution. At the conclusion of this class, students will have developed an understanding of how nature and humankind can coexist to ensure the existence of a sustainable planet. In addition, they will have examined their personal actions and develop an environmental leadership plan that will foster stewardship of the natural world. ACT 101 Grant. 3 credits

NSCI-124 LEADERSHIP AND ENVIRONMENTAL CONSERVATION LAB
This laboratory course will provide students an opportunity to experience and interact with science as it relates to the environment. The goals of this introductory course are to introduce students to various concepts in environmental science, including ecology, biology, sustainability, and energy-use, and to develop laboratory skills, such as observation, experimentation, evaluation, and data collection and analysis. During the course, students will have several opportunities to go out into the environment and gather samples, take measurements, and interact with nature. At the conclusion of each lab, students will analyze how leadership is intuitively recognized as important for motivating a change in human behavior toward more sustainable practice. They will determine how to be part of a successful response to pollution, natural resource management, climate change, and other environmental concerns. ACT-101 Grant 1 credit

NSCI-125 INTRO TO ENVIRONMENTAL SCIENCE LECTURE AND LAB
This course is designed to introduce non-science majors to the physical processes and interrelationships between air, water, soil, and biota. Issues such as over population, pollution, and risk assessment will be covered. Offered fall semester. Formerly ES 115. 4 credits

NSCI-126 INTRO TO ENVIRON. SCI. LAB
Laboratory exercises are designed to physically illustrate the principles discussed in NSCI 125. Must be taken simultaneously with, or after successful completion of NSCI 125. Offered fall semester. Formerly ES 117. 1 credit

NSCI-127 ENVIRONMENTAL CONSERVATION AND LEADERSHIP
This course provides students with an appreciation and understanding of the fundamental concepts and theoretical background of environmental science. It involves the study of traditional environmental problems and their application to current local and global issues. The class begins with the study of the intertwining relationships of ecology and how they apply to Western Pennsylvania's ecosystem. Then, students explore other topics including past and current global issues, dwindling resource supplies, and pollution. At the conclusion of this class, students will have developed an understanding of how nature and humankind can coexist to ensure the existence of a sustainable planet. In addition, they will have examined their personal actions and develop an environmental leadership plan that will foster stewardship of the natural world. 3 credits

NSCI-128 ENV.IRONMENTAL CONSERVATION AND LEADERSHIP LAB
This laboratory course will provide students an opportunity to

experience and interact with science as it relates to the environment. The goals of this introductory course are to introduce students to various concepts in environmental science, including ecology, biology, sustainability, and energy-use, and to develop laboratory skills, such as observation, experimentation, evaluation, and data collection and analysis. During the course, students will have several opportunities to go out into the environment and gather samples, take measurements, and interact with nature. At the conclusion of each lab, students will analyze how leadership is intuitively recognized as important for motivating a change in human behavior toward more sustainable practice. They will determine how to be part of a successful response to pollution, natural resource management, climate change, and other environmental concerns. 1 credit

NSCI-130 INTRODUCTION TO PHYSICS
This course introduces students to the methods and techniques used to scientifically describe the world around us. Special emphasis is placed on the field of mechanics the study of motion. Students become comfortable solving general problems such as projectile motion, energy, and momentum. These problems are solved using only algebra, neither trigonometry nor calculus is a prerequisite. Other topics may include modern physics, optics, electricity and magnetism, and fluid motion. 3 credits

NSCI-131 INTRODUCITON TO PHYSICS LAB
This course consists of hands-on laboratory exercises chosen to illustrate concepts of classical and modern physics. Topics may include falling objects, the motion of a pendulum, collisions, projectile motion, the physics of flight, and simple optics. Offered in conjunction with NSCI 130 Introduction to Physics. 1 credit

NSCI-140 SCI. & GLOBAL SUSTAINABILITY
This course will examine key scientific concepts related to three major aspects of the broader issue of global sustainability - global climate change, feeding the world's population, and threats to world health. Each of these aspects will serve as the focal point for several weeks of the course. Basic concepts of biology, chemistry, and physics will be introduced as appropriate within the context of each aspect. No prerequisites. Formerly CH 121. Offered fall semester. 3 credits

NSCI-141 SCI. & GLOBAL SUSTAIN. LAB
The laboratory exercises are designed to physically illustrate the principles discussed in NSCI 140 and to provide students with experience in the process of doing science - asking questions, forming hypotheses, and data analysis. Must be taken simultaneously with, or after successful completion of NSCI 140. Formerly CH 123. Offered fall semester. 1 credit

NSCI-199 SCIENCE WRITING
This course is designed to introduce students to formal writing and presentation in the sciences. The course will focus on concepts related to the process of science writing including finding appropriate resources and organization into scientific papers (abstract, introduction, methods, results, discussion). In addition, the construction of presentations, critical review of self and other's work, and ethical considerations when presenting scientific data will be explored. 3 credits

NSCI-200 ALL ABOUT DRUGS
Almost all of us use drugs, whether over-the-counter drugs, prescription drugs, or recreational drugs. Drugs impact our lives, as well as the lives of our family and friends. In this course, the pharmacology of drugs, including their mechanisms of action, side effects, and therapeutic uses will be discussed. The abuse potential of recreational drugs, tolerance and addiction, and the ethical issues surrounding modern drug discovery also will be discussed. The laboratory component is designed to reinforce lecture concepts. Formerly BL 113. Offered spring odd-numbered years. Four credits.

NSCI-205 CHEMISTRY OF COOKING
Chemistry of Cooking focuses on the chemistry involved in the structure, preparation, color, flavor, aroma, and texture of the foods we eat everyday. The emphasis in this course will be understanding chemical concepts such as physical and chemical changes, chemical bonding, solubility, energy, acids and bases, and an introduction to the structure and function of organic molecules. Students will also be introduced to laboratory methods dealing with measurement, the chemical analysis of foods, classification of physical and chemical changes, and the synthesis and reactions of organic molecules specific to food chemistry. This course does not require math skills beyond pre-algebra. Offered spring semester odd-numbered years. 4 credits

NSCI-207 ENERGY AND CLIMATE CHANGE
Global climate change is an interdisciplinary field of science that can and should be understood by the non-scientist. In this integrated lecture/laboratory course students will explore how energy drives the Earth's climate and how humankind's use of energy contributes to climate change. Students will explore the data and models that have contributed to scientists' current understanding of global climate change. Students will also explore the range of alternative energy sources that reduce emissions that contribute to climate change. Offered fall semesters of even-numbered years. No prerequisites. 4 credits

NSCI-208 SUSTAINABLE LIVING & LEADERSHIP
This course provides students with an appreciation and understanding of the fundamental concepts and theoretical background of the individual, community, and global solutions to living more lightly on the planet. Within the framework of environmental science, students will be able to understand ecological processes that are the basis for common sustainable practices, such as, composting, green energy, recycling, and gardening. Students will be able to evaluate the impact of their own consumption of natural resources in relationship to ecological processes and human need for material goods and services. The class will strengthen critical thinking skills related to future actions and decision making with sustainability in mind to discover how their own actions can be applied in their own home and community. 3 credits

NSCI-209 SUSTAINABLE LIVING & LEADERSHIP LAB
This laboratory course will provide students with the opportunity to explore scientific questions related to sustainability. Students will examine topics surrounding sustainable living such as alternative energy, recycling, composting, gardening, emissions, water management, and responsible cleaning products. The lab will provide students the opportunity to relate their impact on the local and global environment. Students will have the knowledge to become leaders in their community and help develop and share a more environmentally sustainable way of living. 1 credit

NSCI-210 CHEMISTRY AND CRIME
This is a non-major science course which will focus on the chemistry concepts of forensic science. These concepts will help explain how various forms of evidence can be left at the scene of a crime, how the evidence is found, and how the laboratory can determine the relevancy of that evidence. We will be studying basic chemical principles such as chemical bonding, solubility, and the structure and function of organic molecules. This course does not require math skills beyond pre-algebra. Formerly CH 118. Offered spring semester. 3 credits

NSCI-211 CHEMISTRY AND CRIME LAB
This lab provides the student basic methods dealing with evidence collection and analysis. We will look at the chemical analysis of fingerprints, paints, fluids, and many other types of evidence which can be collected and analyzed. Must be taken simultaneously with, or after successful completion of NSCI 210. Formerly CH 119. Offered spring semester. 1 credit

NSCI-212 ENVIRONMENTAL LEARNING AND LEADERSHIP
This course provides students with an appreciation and understanding of the fundamental concepts and theoretical background of environmental science. It involves the study of traditional environmental problems and their application to current local and global issues. The class begins with the study of the intertwining relationships of ecology and how they apply to Western Pennsylvania's ecosystem. Then, students explore other topics including past and current global issues, dwindling resource supplies, and pollution. At the conclusion of this class, students will have developed an understanding of how nature and humankind can coexist to ensure the existence of a sustainable planet. In addition, they will have examined their personal actions and develop an environmental leadership plan that will foster stewardship of the natural world. 3 credits

NSCI-213 ENVIRONMENTAL LEARNING AND LEADERSHIP LAB
This laboratory course will provide students an opportunity to experience and interact with science as it relates to the environment. The goals of this introductory course are to introduce students to various concepts in environmental science, including ecology, biology, sustainability, and energy-use, and to develop laboratory skills, such as observation, experimentation, evaluation, and data collection and analysis. During the course, students will have several opportunities to go out into the environment and gather samples, take measurements, and interact with nature. At the conclusion of each lab, students will analyze how leadership is intuitively recognized as important for motivating a change in human behavior toward more sustainable practice. They will determine how to be part of a successful response to pollution, natural resource management, climate change, and other environmental concerns. 1 credit

NSCI-215 CHEMISTRY OF DAILY LIFE
This course is designed for the non-science major and is an introductory study of the structure and function of organic molecules, including examples from biochemistry and everyday life. Topics include: basic hydrocarbons, functional group chemistry, proteins, carbohydrates and lipids. Selected topics in biochemistry and how drugs work are presented as well as chemical aspects of current issues such as nutrition, and diabetes. This course does not require math skills beyond pre-algebra. Formerly CH 107. Offered spring semester. 3 credits

NSCI-216 CHEMISTRY OF DAILY LIFE LAB
This lab provides non-science majors with an introduction to some elementary methods dealing with the synthesis and reactions of organic molecules, pharmaceutical synthesis, chemical analysis of foods, and characterization of biochemical compounds. Must be taken simultaneously with, or after successful completion of NSCI 215. Formerly CH 108. Offered spring semester. 1 credit

NSCI-224 HUMAN ANATOMY & PHYSIOLOGY II
This laboratory course investigates the structure and function of the human body. The focus will be on the circulatory, respiratory, digestive, excretory, endocrine and reproductive systems. Students will examine the interrelationships between the anatomical structure and function of the body. Pre-requisite: INTS 222. 3 credits

NSCI-227 FORESTRY/FOREST MANAGEMENT
Forestry and Forest Management provides a broad overview of forests, forestry, forest engineering, and wood science and engineering. This course is designed for all students, especially those interested in forest resources and human uses of those resources. It provides an overview of forest attributes and issues worldwide, with strong emphasis on the United States and especially the Northeast. Emphasis will be placed on the importance of forests in sustaining human societies and a consideration of the appropriate roles of humans in managing and conserving forests for the numerous products, values, and amenities they provide. Offered fall semesters. 3 credits

NSCI-228 FORESTRY/FOR.MGMT.LAB
This laboratory course will give students an opportunity to do science as it relates to the aspect of forestry. The goals of this course are to introduce students to various concepts in forestry and forest management and to develop laboratory skills such as observation, experimentation, evaluation, and presentation. The class will culminate with a student designed presentation and a lab practical. During the semester, students will have several opportunities to visit forest ecosystems and gather samples, take measurements, and interact with the environment. Students will spend several of the laboratory periods outside even when the weather is not sunny and dry. Should be taken simultaneously with NSCI 227. 1 credit

NSCI-230 GENES, CELLS & COMPUTERS
This course provides an introduction to the intersection of biology and computers that is reshaping the arenas of biology, biotechnology, and medicine. Topics covered include cellular structure and function, gene structure and function, genetics, molecular evolution, and quantitative and computational approaches to biology. In addition, ethical and social issues presented by new technologies such as genetic engineering and personalized genomic sequencing will be discussed. No prior college-level biology or computing experience is assumed. Formerly BIN 110. Offered spring semester. 3 credits

NSCI-231 GENES, CELLS & COMPUTERS LAB
This course is the companion laboratory course to NSCI 230. The labs will consist of both "wet lab" experiments and computational labs. In the wet labs students will carry out basic molecular biology techniques such as purifying their own DNA, PCR analysis, and molecular cloning, while in the computational labs they will use software to analyze DNA sequences. No prior college-level biology or computing experience is assumed. Must be taken concurrently with NSCI 230. Formerly BIN 111. Offered spring semester. 1 credit

NSCI-235 HUMAN ANATOMY AND KINESIOLOGY
Human Biology and Laboratory Course Description: The human body is remarkable in many ways. We will explore its inner workings by addressing how we are constructed, what we eat, how we burn calories, how exercise modifies our muscles and bones, and how we repair injuries and fight off diseases. Other topics include the cardiovascular, nervous, endocrine, and reproductive systems. In lab, students will study respiration, heart function, bacterial infection, and digestion. Along with individual homework assignments, student groups will design and conduct their own experiment, and present the results to their peers. Formerly BL114. 4 credits

NSCI-237 THE GALILEO AFFAIR
The Galileo Affair has long been central to discussions about the relationship between religion and the empirical sciences, but there are few historical events less well understood. This course will allow

students to explore the theology and the science that were at issue in the 1633 condemnation of Galileo's work by the Catholic Church. What really happened? And why did it happen? What room is there in the Catholic Intellectual Tradition for the natural sciences? Students will learn the Ptolemaic and Copernican models of the solar system, planetary motion, optics of glass lenses and telescopes, observational astronomy, and various astronomical objects. Students will read such things as St. Augustine's On the Literal Interpretation of Genesis, The Summa of St. Thomas Aquinas, primary sources such as Galileo's letters to Castelli and Christina, The Starry Messenger and Dialogue on Two World Systems, Cardinal Bellarmine's Letter to Foscarini, selected trial documents, the Magisterial documents of Vatican I and II, Providentissimus Deus and Divino Afflante Spiritu, and Pope John Paul II's addresses to the Pontifical Academy of the Sciences. 3 credits

NSCI-238 THE GALILEO AFFAIR LAB
The Galileo Affair has long been central to discussions about the relationship between religion and the empirical sciences, but there are few historical events less well understood. This course will allow students to explore the theology and the science that were at issue in the 1633 condemnation of Galileo's work by the Catholic Church. What really happened? And why did it happen? What room is there in the Catholic Intellectual Tradition for the natural sciences? Students will learn the Ptolemaic and Copernican models of the solar system, planetary motion, optics of glass lenses and telescopes, observational astronomy, and various astronomical objects. Students will read such things as St. Augustine's On the Literal Interpretation of Genesis, The Summa of St. Thomas Aquinas, primary sources such as Galileo's letters to Castelli and Christina, The Starry Messenger and Dialogue on Two World Systems, Cardinal Bellarmine's Letter to Foscarini, selected trial documents, the Magisterial documents of Vatican I and II, Providentissimus Deus and Divino Afflante Spiritu, and Pope John Paul II's addresses to the Pontifical Academy of the Sciences. 1 credit

NSCI-247 LIFE & THE UNIVERSE
Are we alone in the universe, or is the universe teeming with life? This course will explore the unknown but possible answers to that question from a variety of perspectives. The physical, astronomical, chemical, and geological conditions necessary for life on a planet will be investigated. We will examine historical and modern searches for life outside of Earth, including the search for extraterrestrial intelligence. We will also consider some of the social, philosophical, and religious implications of the possibility of life elsewhere. Classes will utilize the Taiani Planetarium to enhance our exploration of this subject. Must be taken with NSCI-248. 3 credits

NSCI-248 LIFE & THE UNIVERSE LAB
The origins of life on this planet and the possibility of life elsewhere will be explored with a variety of experiments and observations. Labs will include topics in astronomy, biology, physics, and geology, that are related to the search for extraterrestrial life. Some of the labs will utilize the Taiani Planetarium, and the Physics Department telescopes. This laboratory course accompanies NSCI-247. 1 credit

NSCI-250 SCI. ABANDONED MINE DRAINAGE
In this integrated lecture-laboratory course, we will explore the science of coal mining and its aftermath: mine drainage. The course will use field trips (museums, mines, streams, treatment sites), video, class discussions, computer models, Internet explorations, and recent publications to understand coal mine drainage. We will see firsthand how new technologies have been developed to treat mine drainage. Lab explorations will include computer modeling, stream sampling, experiments on formation of mine drainage, its impacts on streams, and the efficiency of treatment methods. A final group project will examine a mine drainage site and develop a plan for remediation. Through the study of abandoned mine drainage we will examine the interrelationships in nature and see that by working together we can make a difference in our environment. Formerly ES 111. Offered fall semester. 4 credits

NSCI-252 SCIENCE OF SUSTAINABLE LIVING
In Science of Sustainable Living, students will examine individual, community, and global solutions to living more lightly on the planet by exploring a variety of sustainable living practices, theories, technologies, and programs. Within the framework of environmental science, students will be able to understand ecological processes that are the basis for common sustainable practices, such as composting, green energy, recycling, and gardening. Students will be able to evaluate the impact of their own consumption of natural resources in relationship to ecological processes and human need for material goods and services. No pre-requisites. Offered spring semester. 3 credits

NSCI-253 SCIENCE OF SUSTAINABLE LIVING LAB
This laboratory course will explore scientific questions related to sustainable living. Students will examine topics such as recycling, composting, green energy, and organic gardening. Some labs will require outside work and or field trips to local sites. Must be taken simultaneously with NSCI 253. Offered spring semester. 1 credit

NSCI-255 SCIENCE OF COMPUTING
This course establishes computing as a science and affirms the connection between computing and the sciences. Topics include the scientific method, methodologies used in computer science for evaluating hypotheses, as well as how computing is used as a tool in other fields of science. The course includes a lab component in which students will get hands-on experience investigating computer science problems. Programs will be set up for students to run so they can test different hypotheses. It will be possible to configure the programs with different parameters to see the impact of running over more data sets, running different algorithms, running in different environments, etc. The experiments involve generating and collecting data that can be analyzed to determine whether preliminary hypotheses are true or false. The data, analysis, and conclusions will be written up as lab reports. Formerly CS 104. 4 credits

NSCI-265 SCI FOR INTERNATIONAL DEV
This course focuses on how scientific technologies are employed in humanitarian and environmental service to address both acute (disaster-related) and chronic problems, particularly in areas affected by poverty and lacking key infrastructure. A series of case studies is used to examine appropriate and unsuitable approaches to address these types of problems. Laboratory sessions offer opportunities to design, implement and assess potential solutions. Topics include acceptance of technology, sanitation, shelter, agricultural development and water access and treatment. 3 credits

NSCI-270 GEOLOGICAL SCIENCE AND ASTROPHYSICS
This course will introduce a variety of scientific topics in geology, environmental science, and astrophysics and apply those topics to Iceland. Iceland's unique position on the globe allows important geologic, environmental, and astrophysical processes to be observed. Forces that shape and sustain the earth are visibly at work on this island in the North Atlantic. Students in the course will learn fundamentals of plate tectonics, landform formation and evolution, the magnetic properties of the earth, and climate modeling to appreciate and understand what they will also see firsthand. This course and the laboratory (NSCI 271) fulfill one of the two core curriculum courses required for the natural sciences. Students in the

course must be registered for the spring break trip to Iceland. This course is hybrid/online. 3 credits

NSCI-271 GEOLOGY/ASTROPHYSICS OF ICELAND LAB
This laboratory course will focus on developing scientific skills in geology and astrophysics. Students will use the process of science to explore plate tectonics, volcanoes, earthquakes, island building, earth's magnetic field, auroras borealis, climate modeling and sustainable energy. Students must be registered for the spring break trip to Iceland. 1 credit

NSCI-300 CRIMINALISTICS
Criminalistics is the collection and examination of evidence of crime and is an application of many scientific disciplines. This course provides an introduction to the methodologies and applications used in the forensic context. Topics discussed include organic and inorganic chemical analyses of physical evidence, principles of serology and DNA analysis, identification of fresh and decomposed human remains, ballistics, fingerprint analysis, facial reconstruction, drug analysis, and forensic entomology. 3 credits

NUR-100 FRESHMAN NURSING SEMINAR
This seminar marks the beginning of a transformative chapter in a nursing student's life by facilitating adjustment to college and acquainting students with the skills and resources available to promote success. The primary focus will be engaging students in learning and orienting them to the campus scholarly community as they initiate their undergraduate studies in a way that will bridge to later experiences in the nursing major and facilitate the high expectations, demanding workload, and other aspects of transition to college life. Seminar content will engage students in multiple learning activities, focused discussions, and selected experiences that will provide entering nursing students with an overview of the nursing program, the nursing profession, and overarching concepts essential to the practice of nursing. Included is the opportunity to earn a Micro-credential: Introduction to the Science of Systems Thinking. 0 credits.

NUR-101 PRINCIPLES OF APPLIED NUTRITION
Principles of Applied Nutrition encompasses the introductory study of nutrition principles and their relationship to health and chronic disease. The course is designed for allied health professionals. Topics include plant-based diets, nutrition-related chronic diseases, eating disorders, common digestive conditions, and nutritional needs across the lifespan. Strategies for evaluation of nutrition-related issues in the media will prepare students to formulate informed choices for healthy lifestyle practices. Students will complete a food insecurity volunteer experience emphasizing the importance of adequate, healthy nutrition practices. 3 credits.

NUR-211 INTRODUCTION TO CLINICAL REASONING IN NURSING PRACTICE I: HEALTH ASSESSMENT
This course is designed to provide the knowledge and skills necessary to perform a comprehensive health assessment encompassing physical, psychosocial, cultural, and developmental components of assessment. Emphasis is placed on client-centered care and the development of communication and interviewing skills, decision making and safety. Students apply health theory, the nursing process, and Benedictine wisdom to the care of an individual assuming the beginning roles of practitioner, teacher, leader, and consumer of research. Emphasis is placed on the development of clinical reasoning, effective communication, decision making, safety and comfort in the implementation of the nursing process. Computer instructions and laboratory simulations enable the student to develop psychomotor competencies basic to nursing practice. Experiential learning occurs in a simulated clinical environment. 2 CREDITS.

NUR-212 PERSPECTIVES ON NURSING
This course provides a broad overview and synthesis of the issues and trends most relevant to the practice of professional nursing. The focus is on the nurse as a professional, a clinician, and as a leader. Components of professional nursing values and core practice competencies are presented. Historical, contemporary, and potential future influences on professional nursing practice are reviewed. An emphasis on the unique and varied roles of nurses in today's interdisciplinary health care environment are examined within the context of individual, family, community, and global health. Characteristics and major changes in health care delivery systems (federal, state, and local) are discussed. Emphasis is placed on the importance of personal and professional communication. The concept of an evidence-based approach to clinical practice is introduced. Critical thinking strategies are introduced in the context of the nursing process. 2 CREDITS.

NUR-213 INTRODUCTION TO CLINICAL REASONING IN NURSING PRACTICE II: FUNDAMENTALS OF ASSESSMENT, NURSING CARE AND CLINICAL PRACTICE
This course builds upon the theory and skills learned in Nur 211 and NUR 221. The focus of this course is on the application of the nursing process and clinical reasoning to psychomotor nursing skills. Students learn fundamental nursing theory and concepts related to hygiene and comfort, asepsis, infection prevention, intravenous therapy, medication administration, and various nursing therapies in preparation for practice and demonstration in a simulated and actual clinical environment. Approaching patients from the students' perspective of Benedictine wisdom is explored. 2 CREDITS.

NUR-214 INTRODUCTION TO EVIDENCED BASED AND NURSING SCIENCE
This course introduces students to evidence-based practice (EBP). Common EBP process models are presented. The course focuses on the role of research in evidence-based practice. Students gain an understanding of the research process, critically appraising the quality of published research studies, and the applicability of research findings to clinical practice. Students identify a clinical problem, frame a clinical question based on the problem using the PICO (patient/population, intervention, comparison, and outcome) format, search the literature for information to answer the clinical question, and select published research studies that provide evidence that could be used in clinical practice to address the question. Students also gain an understanding of the role of quality improvement (QI) initiatives in improving patient outcomes and how QI differs from research and evidence-based practice. 2 CREDITS

NUR-221 INTRODUCTION TO CLINICAL REASONING IN NURSING PRACTICE I: PRACTICUM
This course is designed to provide students the opportunity to apply the theory and concepts learned in the course NUR 211 to clinical experiences in the skills and simulation lab. Students will apply the nursing process and develop proficiency in history taking and physical examination of an adult or older adult utilizing a client centered care approach. Clinical reasoning, evidence-based practice, and research findings are used as the framework for decision making as students interpret subjective and objective data and begin to manage the clients actual and/or potential health problems. Experiences are designed to foster the development of therapeutic and interdisciplinary communication, as well as an awareness of safety, developmental and cultural factors. 1 CREDIT.

NUR-223 INTRODUCTION TO CLINICAL REASONING IN NURSING PRACTICE II: PRACTICUM
This course provides the opportunity for students to apply the theory

and concepts learned in NUR 213 to the performance of psychomotor nursing skills in a simulated and actual clinical environment. Students will learn, practice, and demonstrate competency in the performance of identified nursing skills and procedures. Management of the environment for safety, developmental and cultural considerations are integrated into the performance of skills. 1 CREDIT.

NUR-311 NURSING CARE OF ADULTS WITH ACUTE AND CHRONIC DISORDERS
Students integrate knowledge from previous nursing, basic science, and humanities courses with new content about a variety of acute and chronic health problems commonly seen in adults to develop the knowledge base needed to evaluate clients, plan, and deliver evidence-based care, and evaluate outcomes in these disorders. Content will include the role of nutrition in the prevention, development, and manage of common acute and chronic health problems. Emphasis will be on the utilization of the nursing process and the role of the nurse as a member of the interprofessional team. 3 CREDITS.

NUR-312 NURSING CARE OF WOMEN, NEWBORNS, AND FAMILIES
Students integrate knowledge from previous nursing, basic science, and humanities courses with new content about the care of women across their lifespan. Knowledge will be applied to build an understanding of the needs and nursing care of women and families during pregnancy, labor, delivery, and the postpartum period; newborns; and women with common gynecologic health issues. The importance of the social determinants of health in providing care to this population will be emphasized. Content will include the nutrition needs of pregnant and nursing women and newborns, health teaching, and family-centered care. 2 CREDITS.

NUR-3121 NEUROPSYCHIATRIC & MENTAL HEALTH NURSING
Junior level theory/clinical course concerned with mental health care of individuals, families, groups, and communities in both episodic and distributive settings. One focus is on nursing care that promotes mental health. A second is on the nursing care that assists persons experiencing disturbances in social and occupational functioning. The third focus is on nursing care that eases the impact of chronically ineffective behaviors. Current issues, trends, and research relevant to professional psychiatric nursing practice roles and mental health policy issues are addressed. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: NU 2161 NU 2162 NU 2171 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO-215) COREQUISITE: NU 3122

NUR-3122 NEUROPSYCHIATRIC & MENTAL HEALTH NURSING CLINICAL
Junior level theory/clinical course concerned with mental health care of individuals, families, groups, and communities in both episodic and distributive settings. One focus is on nursing care that promotes mental health. A second is on the nursing care that assists persons experiencing disturbances in social and occupational functioning. The third focus is on nursing care that eases the impact of chronically ineffective behaviors. Current issues, trends, and research relevant to professional psychiatric nursing practice roles and mental health policy issues are addressed. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: COMPLETION OF ALL SOPHOMORE LEVEL COURSES.

NUR-313 GENETICS AND PRECISION HEALTH
This entry level course explores fundamental principles of genetics, genomics, and the utilization of omics-informed clinical tools. Concepts are selected to encourage students to maximize their personal health and wellness, as well as integrate genetically-informed perspectives in the healthcare setting. Although designed for nursing students, the content is presented in a plain language format and is appropriate for students in non-clinically oriented majors. This course combines a traditional lecture format to introduce concepts with class discussion, interactive activities, and case studies to facilitate a deeper understanding of the subject matter. Topics explored in this course include the basic principles of DNA structure and function, the importance and impact of genetic variation, the genetic underpinnings of single gene disorders (ex., why mutations in the CFTR gene causes cystic fibrosis), the influence of genetics in multifactorial conditions (ex., how the contributions of many different genes ultimately influence type 2 diabetes risk), the utilization of family health history to promote health and understand disease risk, the interactions between one's genes and environment that influence genetic expression, the advantages, disadvantages, and ethical considerations of provider-initiated genetic testing (ex., prenatal genetic tests) and direct-to-consumer genetic tests (ex., 23andme), the impact of one's unique genetic composition on drug metabolism and medication response, and the impact of social determinants of health in driving disparities in disease burden, genetic research, and precision medicine efforts. Topics will be explored both scientifically and through the lens of Catholic social justice philosophy, with special emphasis placed on the legacy of the Catholic church's contributions to genetics, the importance of optimizing wellness and reducing inequality in vulnerable populations, and the Benedictine value of promoting the common good. 2 CREDITS.

NUR-314 NURSING CARE OF VULNERABLE POPULATIONS
This course explores the concepts and issues related to nursing care of vulnerable populations, defined as those who are at increased risk for poor health outcomes due to social, economic, environmental, or personal factors. Students will integrate knowledge from previous coursework with new content to learn to identify, assess, and intervene with vulnerable populations in various settings, using evidence-based practice, cultural competence, and advocacy skills. Students will also examine the causes and consequences of health disparities, food insecurity, and the role of nurses in promoting health equity and social justice. 2 CREDITS.

NUR-315 NURSING CARE OF CHILDREN, ADOLESCENTS, AND THEIR FAMILIES
This course will integrate knowledge from previous nursing, basic science, and humanities coursework with theories and practices relevant to the care of infants, children, and adolescents within the context of the family unit and society. Critical components from lifespan development, such as growth and development parameters, are applied. Benedictine values, such as hospitality, as emphasized while respecting children and families receiving nursing care. 2 CREDITS.

NUR-316 APPLIED EPIDEMIOLOGY IN NURSING
This course builds on the principles of public health to explore how principles of epidemiology are applied to nursing care of individuals and populations. The agent/host/environment triad is explored, along with basic applications of odds ratios, relative risk, sensitivity and specificity, and cohorts. 1 CREDIT.

NUR-3161 NURSING CARE OF CHILDREN & ADOLESCENTS
Junior level theory/clinical course focusing on the biopsychosocial needs of children and adolescents. Based on nursing theories and research, emphasis is placed on the nurse's role in providing health

promotion, prevention, and therapeutic and restorative care to children and adolescents from diverse cultures in a variety of settings. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: NU 2161 NU 2162 NU 2171 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO 215) COREQUISITE: NU 3162

NUR-3162 NURSING CARE OF CHILDREN AND ADOLESCENTS CLINICAL
Junior level theory/clinical course focusing on the biopsychosocial needs of children and adolescents. Based on nursing theories and research, emphasis is placed on the nurse's role in providing health promotion, prevention, and therapeutic and restorative care to children and adolescents from diverse cultures in a variety of settings. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: COMPLETION OF ALL SOPHOMORE LEVEL NURSING COURSES.

NUR-3171 WOMEN'S HEALTH AND NEONATAL NURSING
Junior level theory/clinical course focusing on the nursing care needs of women across the lifespan and care of the mother/baby dyad in clinical and community settings. Emphasis is placed on the physiologic and psychosocial adaptations that occur in women from adolescence through older adulthood. The impact of pregnancy and childbirth is highlighted. Health promotion of the mother/baby dyad and the developing family is emphasized. Gynecologic topics and the impact of gender on selected disorders are discussed. Nursing care, health policy, cultural, and ethical factors which impact the health of women and newborns are examined. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: NU 2161 NU 2162 NU 2171 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO 215) COREQUISITE: NU 3172

NUR-3172 WOMEN'S HEALTH AND NEONATAL NURSING CLINICAL
Junior level theory/clinical course focusing on the nursing care needs of women across the lifespan and care of the mother/baby dyad in clinical and community settings. Emphasis is placed on the physiologic and psychosocial adaptations that occur in women from adolescence through older adulthood. The impact of pregnancy and childbirth is highlighted. Health promotion of the mother/baby dyad and the developing family is emphasized. Gynecologic topics and the impact of gender on selected disorders are discussed. Nursing care, health policy, cultural, and ethical factors which impact the health of women and newborns are examined. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) PREREQUISITE: COMPLETION OF ALL SOPHOMORE-LEVEL NURSING COURSES.

NUR-3181 NURSING CARE OF ADULTS I
Junior level theory/clinical course examining the professional nursing care of adults experiencing acute and chronic health alterations specific to the cardiovascular, respiratory, neurologic, and pulmonary systems. Emphasis is placed on the use of the nursing process to identify physiologic, psychosocial, educational, and cultural needs of this population and the development of nursing interventions to support adaptation. Additional foci include the three levels of prevention, the identification of health policies that relate to each unit of study, and the application of nursing research. The clinical practice component of this course occurs in a variety of care environments. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) WITH NU 3191/3192 PREREQUISITE: NU 2162 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO 215) COREQUISITE: NU 3182 PREREQUISITE or COREQUISITE: BIO 307

NUR-3182 NURS. CARE OF ADULTS I CLINIC
Junior level theory/clinical course examining the professional nursing care of adults experiencing acute and chronic health alterations specific to the cardiovascular, respiratory, neurologic, and pulmonary systems. Emphasis is placed on the use of the nursing process to identify physiologic, psychosocial, educational, and cultural needs of this population and the development of nursing interventions to support adaptation. Additional foci include the three levels of prevention, the identification of health policies that relate to each unit of study, and the application of nursing research. The clinical practice component of this course occurs in a variety of care environments. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) WITH NU 3191/3192 FULFILLS SKILLS INTEGRATION REQUIREMENT. PREREQUISITES: COMPLETION OF ALL SOPHOMORE-LEVEL SUPPORT AND NURSING COURSES.

NUR-3191 NURSING CARE OF ADULTS II
Junior level theory/clinical course examining the professional nursing care of adults experiencing acute and chronic health alterations specific to the gastrointestinal, immunological, endocrine, and musculoskeletal systems. Emphasis is placed on the use of the nursing process to identify physiologic, psychosocial, educational, and cultural needs of this population and the development of nursing interventions to support adaptation. Additional foci include the three levels of prevention, the identification of health policies that relate to each unit of study, and the application of nursing research. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) WITH NU 3181/3182. PREREQUISITE: NU 2161 NU 2162 NU 2171 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO 215) COREQUISITE: NU 3192 PRE or COREQUISITE: BIO 308

NUR-3192 NURSING CARE OF ADULTS II CLINICAL
Junior level theory/clinical course examining the professional nursing care of adults experiencing acute and chronic health alterations specific to the gastrointestinal, immunological, endocrine, and musculoskeletal systems. Emphasis is placed on the use of the nursing process to identify physiologic, psychosocial, educational, and cultural needs of this population and the development of nursing interventions to support adaptation. Additional foci include the three levels of prevention, the identification of health policies that relate to each unit of study, and the application of nursing research. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) WITH NU 3181/3182 FULFILLS SKILLS INTEGRATION REQUIREMENT. PREREQUISITE: NU 3181/3182.

NUR-320 NURSING RESEARCH
An introduction to the principles of nursing research. The process of scientific inquiry and an appreciation of the usefulness of the scientific method of problem solving and decision-making in nursing practice are discussed. The application of quantitative and qualitative research processes is explored. The course assists students in becoming intelligent consumers of research. Beginning skills to critique current research related to the delivery of nursing care are presented. CARLOW NURSING STUDENTS ONLY. 3 credits (3 theory, 0 clinical) PREREQUISITE: MAT 115 NU 2161 NU 2162 NU 2171 NU 2172 NU 223 NU 224 PY 122 and SO 152 (or SO 215)

NUR-321 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF ADULTS WITH ACUTE AND CHRONIC DISORDERS: PRACTICUM
This practicum occurs in hospital and simulation lab settings. Students apply knowledge from previous nursing, basic science and

humanities courses and NUR 311 to the evaluation and management of adults with acute and chronic health problems. There is an emphasis on the development of clinical reasoning skills, i.e., assessing clients, processing the information collected to determine the clinical problem(s), planning, and implementing evidence-based nursing interventions, and evaluating outcomes. Students are encouraged to reflect on learn from this process to build their clinical reasoning skills. Students will begin dialoging with other health care professionals. 3 CREDITS

NUR-322 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF WOMEN, NEWBORNS, AND FAMILIES: PRACTICUM
This practicum occurs in hospital, outpatient settings and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 312 to the evaluation and care of women, newborns, and families. There is an emphasis on development of clinical reasoning skills, i.e., assessing women and newborns, processing the data collected to identify actual or potential clinical issues, planning and implementing nursing interventions, and evaluating outcomes in relation to the care of women and newborns during labor, delivery and postpartum, as well as the care of women with gynecologic issues. Students are encouraged to reflect on and learn from this process to build their clinical reasoning skills. Students will dialogue with other health care professionals. 2 CREDITS.

NUR-324 CLINICAL REASONING AND PERSONALIZED CARE TO THE NURSING CARE OF VULNERABLE POPULATIONS: PRACTICUM
This practicum occurs in hospital, outpatient settings and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 314 to the evaluation and care of individuals at risk for poor health outcomes due to social, economic, environmental, and personal factors. There is an emphasis on development of clinical reasoning skills, i.e., assessing vulnerable individuals, processing the data collected to identify actual or potential clinical issues, planning and implementing nursing interventions, and evaluating outcomes. Students will work with other members of the interprofessional team to address the health issues of these individuals. Students are encouraged to reflect on and learn their practicum experiences to build their clinical reasoning skills. 2 CREDITS.

NUR-325 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF CHILDREN, ADOLESCENTS, AND THEIR FAMILIES: PRACTICUM
This practicum occurs in hospital, outpatient settings and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 315 to the evaluation and care of infants, children, and adolescents. There is an emphasis on development of clinical reasoning skills, i.e., assessing infants, children, and adolescents; processing the data collected to promote wellness and identify actual or potential health issues; planning and implementing nursing interventions; and evaluating outcomes of care. Students will work with other members of the interprofessional team to promote wellness and address the health issues. Students are encouraged to reflect on and learn their practicum experiences to build their clinical reasoning skills. 2 CREDITS.

NUR-400 INDEPENDENT STUDY
An exploration of an area of study in nursing that is not already offered as a course. Students design the course with the consent of a faculty member. Credits vary.

NUR-411 NURSING CARE OF INDIVIDUALS WITH PSYCHIATRIC, BEHAVIORAL AND MENTAL
This course introduces the student to the specialty of psychiatric mental health nursing across the lifespan. Students will integrate knowledge from previous nursing, basic science, and humanities coursework with psychiatric mental health nursing concepts related to the care to individuals with psychiatric, behavioral, and mental health conditions within the context of the family unit and society. 2 CREDITS.

NUR-4111 LEADERSHIP INTO PROFESSIONAL NURSING
Senior level course combining leadership theory with a precepted integrative clinical experience. It includes an examination of leadership and management principles in nursing. Contemporary issues relevant to nursing practice are analyzed. Transition to the professional nursing role is promoted. CARLOW NURSING STUDENTS ONLY. 2 credits PREREQUISITE: NU 4171/4172.

NUR-4112 LEADERSHIP INTO PROFESSIONAL NURSING CLINICAL
Senior level course combining leadership theory with a precepted integrative clinical experience. It includes an examination of leadership and management principles in nursing. Contemporary issues relevant to nursing practice are analyzed. Transition to the professional nursing role is promoted. CARLOW NURSING STUDENTS ONLY. 2 credits PREREQUISITE: NU 4171/4172.

NUR-412 NURSING CARE OF POPULATIONS
This course introduces the concepts and principles of population health nursing, which focuses on improving the health outcomes of groups of people within a specific geographic area or with shared characteristics. Students will learn about the roles and functions of community health nurses, the determinants of health and illness, the epidemiology of communicable and non-communicable diseases. They will learn to assess the health status, needs, and resources of populations, and to design, implement, and evaluate interventions that address the identified health problems. Students will also explore the role of the nurse as a leader, collaborator, advocate, and change agent in promoting population health. 2 CREDITS.

NUR-413 LEADERSHIP IN SYSTEMS OF CARE
This course focuses on the application of theory to nursing roles, care management, leadership, organizational excellence, interprofessional communication and collaboration across the care continuum. Additionally, the nursing role in health advocacy and policy is explored. Students synthesize their knowledge about professional, clinical, and leadership roles to increase their understanding and responsibility for ensuring high quality and safe nursing care to individuals, families, communities, and populations as an advanced beginner. This course is the didactic complement to NUR 425 Professional Immersion. 2 CREDITS.

NUR-414 NURSING CARE OF ADULTS AND POPULATIONS WITH MULTIPLE AND COMPLEX HEALTH DISORDERS
Nursing Care of Adults and Populations with Multiple and Complex Health Disorders is intended to provide the senior baccalaureate nursing student with an overview of patient diseases that present to the emergency department or as a life-threatening condition requiring immediate nursing and medical intervention. The course will offer an opportunity for the student to develop critical thinking by integrating knowledge, assessment, intervention and management of various complex diseases. The course is designed to give students a chance to gain a basic understanding of critical care nursing and the role of the professional nurse as a member of the interdisciplinary heath care

team in meeting the various complex needs of the critically ill patient and family. The senior student nurses' critical thinking skills are expanded through lecture/discussion, high fidelity human simulation scenarios, selected case studies and classroom presentations. 2 CREDITS.

NUR-415 NCLEX SEMINAR 1
This course will provide an in-depth review in preparation for taking the NCLEX- RN exam. The course includes a review of the structure and scoring on the NCLEX-RN. CARLOW NURSING STUDENTS ONLY. 1.5 credits.

NUR-415 APPLICATION OF DATA ANALYTICS INFORMATICS, AND HEALTHCARE TECHNOLOGY
This course focuses on informatics methods and techniques with applications specific to the field of nursing. The course starts with foundational principals of nursing informatics and the history of nursing informatics. Topics covered will include the Learning Health System, and how Big Data, Artificial Intelligence and analysis of healthcare data can transform nursing practice, knowledge, and ultimately patient care. Discussion will also involve improvement of clinical practice guidelines using informatics principles. Diagnostic coding systems commonly used in healthcare and the effects on analytical pipelines important for nursing informatics will be introduced. Natural language processing with a focus on nursing informatics will be touched upon. Benedictine values will be reflected in social and ethical issues discussed in the context of nursing informatics and clinical information systems. Learners will also engage in some evolving technologies as relevant from the field of consumer health informatics with a special focus on their impact on nursing informatics and the Learning Health System, defined by the Agency for Healthcare Research and Quality (AHRQ) as "a health system in which internal data and experiences are systematically integrated with external evidence, and the knowledge is put into practice". 1 credit.

NUR-4151 NCLEX SEMINAR 2
This course will provide an in-depth review in preparation for taking the NCLEX- RN exam. The course includes a review of the structure and scoring on the NCLEX-RN. CARLOW NURSING STUDENTS ONLY. 1.5 credits.

NUR-416 SENIOR CAPSTONE
This course is the culminating experience of the undergraduate nursing program. It provides students with an opportunity to integrate and apply their knowledge, skills, and attitudes from previous courses to a clinical practice setting. Students will work with a preceptor and a faculty mentor to design, implement, and evaluate a capstone project that addresses a clinical problem or issue of interest. The course will also help students prepare for the transition from student to professional nurse. Students will participate in seminars, workshops, and portfolio development activities to enhance their professional development and career readiness. 1 CREDIT.

NUR-4181 COMMUNITY HEALTH NURSING
Senior level course focusing on the health of the community and various community health nursing roles through which the health care needs of the individual, family aggregate, and community can be met. Both community-based and community-focused approaches are included. The levels of prevention, health promotion, epidemiological process, health education, and public health issues and practices are discussed so the student can apply the nursing process in distributive health care settings. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) Fulfills Skills Integration requirement in the DAY Program only. Prerequisite: Completion of all junior level nursing courses.

NUR-4182 COMMUNITY HEALTH NURSING CLINICAL
Senior level course focusing on the health of the community and various community health nursing roles through which the health care needs of the individual, family aggregate, and community can be met. Both community-based and community-focused approaches are included. The levels of prevention, health promotion, epidemiological process, health education, and public health issues and practices are discussed so the student can apply the nursing process in distributive health care settings. CARLOW NURSING STUDENTS ONLY. 4 credits (3 theory, 1 clinical) FULFILLS SKILLS INTEGRATION AND SERVICE-LEARNING REQUIREMENTS. PREREQUISITE: COMPLETION OF ALL JUNIOR-LEVEL NURSING COURSES.

NUR-420 LEGAL, ETHICAL, & POLITICAL ISSUES IN HEALTH CARE
Focus is on legal, ethical, and political issues in health care. Legal and ethical principles that guide health care practice issues are discussed. Political forces that influence change in contemporary health care are examined. Global differences and their relationship to American health care practice are explored. The student takes an active role in the policy process. CARLOW NURSING STUDENTS ONLY. 2 credits. FULFILLS GLOBAL REQUIREMENT. PREREQUISITE: COMPLETION OF ALL JUNIOR LEVEL NURSING COURSES.

NUR-421 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF INDIVIDUALS WITH PSYCHIATRIC, BEHAVIORAL AND MENTAL HEALTH CONDITIONS: PRACTICUM
This practicum occurs in hospital, outpatient settings, and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 411 to the evaluation and care of individuals across the lifespan with psychiatric and mental health disorders. There is an emphasis on development of clinical reasoning skills, i.e., assessing individuals, processing the data collected, identifying actual or potential health issues, planning and implementing nursing interventions, and evaluating outcomes of care. Students will work with other members of the interprofessional team to promote wellness and address psychiatric and mental health issues. Students are encouraged to reflect on and learn their practicum experiences to build their clinical reasoning skills. 2 CREDITS."

NUR-4211 COMPLEX PROBLEMS I
This senior level theory/clinical course focuses on the professional nursing care and management of adults experiencing acute, complex, multisystem health alterations specific to cardiovascular, respiratory, neurological and renal systems. This course builds on previous knowledge and experiences learned in Nursing Care of Adults I and II. Emphasis is placed on the expansion of both critical thinking and clinical reasoning utilizing the nursing process in the patient-centered care of adults experiencing high-risk and/or complex health problems. The clinical practice component of this course occurs in high-acuity care environments. CARLOW NURSING STUDENTS ONLY. 5 credits (3 theory, 2 clinical) PREREQUISITE: COMPLETION OF ALL JUNIOR-LEVEL NURSING COURSES.

NUR-4212 COMPLEX PROBLEMS I CLINICAL
This senior level theory/clinical course focuses on the professional nursing care and management of adults experiencing acute, complex, multisystem health alterations specific to cardiovascular, respiratory, neurological and renal systems. This course builds on previous knowledge and experiences learned in Nursing Care of Adults I and II. Emphasis is placed on the expansion of both critical thinking and clinical reasoning utilizing the nursing process in the patient-centered

care of adults experiencing high-risk and/or complex health problems. The clinical practice component of this course occurs in high-acuity care environments. CARLOW NURSING STUDENTS ONLY. 5 credits (3 theory, 2 clinical) PREREQUISITE: COMPLETION OF ALL JUNIOR-LEVEL NURSING COURSES.

NUR-422 COMPLEX PROBLEMS II
This senior level theory course focuses on the professional nursing care and management of adults experiencing acute, complex, multisystem health alterations specific to gastrointestinal, immunological, hematological, integumentary, musculoskeletal systems and end of life care. This course builds on previous knowledge and experiences learned in Nursing Care of Adults I and II. Emphasis is placed on the expansion of both critical thinking and clinical reasoning utilizing the nursing process. CARLOW NURSING STUDENTS ONLY. 2 credits (2 theory, 0 clinical) PREREQUISITE: NU 4211/4212.

"NUR-422 CLINICAL REASONING THAT ADDRESSES POPULATION HEALTH: PRACTICUM
This practicum occurs in community settings and in simulation lab settings. Students will integrate knowledge from previous coursework with concepts and principles of community and public health nursing to focus on promoting and protecting the health of populations and communities. There is an emphasis on development of clinical reasoning skills in the assessment and planning of community health interventions, and the evaluation of health outcomes. Through the perspective of Benedictine values, students will also develop skills in health education, advocacy, and interprofessional collaboration, as well as cultural competence and ethical decision-making. 2 CREDITS."

NUR-423 PROFESSIONAL NURSING IMMERSION-LEADERSHIP IN SYSTEMS OF CARE
This practicum occurs in a variety of clinical settings across the care continuum and is designed to facilitate the transition from student into professional practice. Students integrate the knowledge from previous didactic courses and practicum experiences to increase their accountability for the delivery and delegation of the nursing care of groups of clients and under the guidance of a registered nurse preceptor. Students synthesize knowledge about the professional, clinical and leadership roles while increasing accountability and responsibility for delivering high quality, safe and effective nursing care for individuals, families, communities, and populations. Interprofessional experiences will be provided to enhance requisite skills for transitioning into the advanced beginner role in professional practice. Self-reflection from a Benedictine perspective is explored. Simulation scenarios will augment the clinical practice setting. Emphasis will be on leadership, delegation, teamwork, interprofessional collaboration and communication including handoffs and organizational excellence to ensure quality and safety. 8 CREDITS.

NUR-451 INTRODUCTION TO EPIDEMIOLOGY ISSUES
In Health Care This course provides an introduction to the basic principles, terms and concepts of epidemiology. Concepts of risk, risk assessment models, disease distribution in populations and causality are explored. Measures of disease states and risks (e.g., mortality, morbidity, attributes risk, and relative risk ration) are presented. Applications of epidemiological data are explored in relation to health promotion and disease prevention. The students will gain an understanding of the interaction of personal, biological, behavioral, genetic, and environmental factors in the development of disease. Concepts include both description and application of epidemiology. CARLOW NURSING STUDENTS ONLY. 3 credits

NUR-463 EVIDENCE-BASED CAPSTONE
This capstone project course is a culmination of the learning experiences of the senior student in the baccalaureate Nursing program. The course focuses on the Quality and Safety Education for Nurses (QSEN) Competencies Knowledge, Skills, and Attitudes and the Hospital Consumer Assessment HealthCare Providers and Systems (HCAHPS) frameworks. The student will develop a written proposal for a quality improvement project derived from evidence-based practice (EBP) that will enhance patient-centered outcomes. The proposal focuses on a potential resolution of an issue/problem identified during the Leadership Practicum Experience in NU 4112 that is significant to professional nursing and links daily nursing practice to research. The proposal includes a problem description, resolution, implementation plan, evaluation plan, and dissemination plan. The capstone project proposal will reflect synthesis and integration of course content, informatics, and professional practice. The capstone project is guided by the baccalaureate program student learner outcomes. CARLOW NURSING STUDENTS ONLY. 1 credit

NUR-5111 INTRO TO PATHOPHYSIOLOGY AND PHARMACOLOGY
This course introduces students to interrelated disciplines, namely pathophysiology and pharmacology. Pathophysiology refers to the study of the development of disease states, the risk factors that increase the likelihood of the emergence of a disease state, and the principles of pathology related to injury of physiological structures and/or systems. This course will introduce students to specific nursing interventions aimed at improving outcomes germane to a specific pathology. A common intervention is the delivery of pharmacological agents that address deficits related to a specific pathology. Consequently, this course also introduces students to pharmacology, which studies the principles of drug actions, effects, and classification, with a special emphasis on an introductory treatment of the utilization of drugs within classes to address pathophysiological conditions. A special emphasis will be placed upon the role of the nurse in proper utilization and evaluation of drug therapy. 3 credits.

NUR-5212 PERSPECTIVES OF NURSING: PAST, PRESENT, AND FUTURE
This course provides a broad overview and synthesis of the issues and trends most relevant to the practice of professional nursing. The focus is on the nurse as a professional, a clinician, and as a leader. Components of professional nursing values and core practice competencies are presented. Historical, contemporary, and potential future influences on professional nursing practice are reviewed. An emphasis on the unique and varied roles of nurses in today's interdisciplinary health care environment are examined within the context of individual, family, community, populations, and global health. Characteristics and major changes in health care delivery systems (federal, state, and local) are discussed. Attention is placed on the importance of personal and professional communication. The concept of an evidence-based approach to clinical practice is introduced. Critical thinking strategies are introduced in the context of the nursing process. 1 credit.

NUR-5213 FOUNDATION OF CLINICAL REASONING IN NURSING PRACTICE
The course is designed to provide the knowledge and skills necessary to perform a comprehensive health assessment encompassing physical, psychosocial, cultural, and developmental components of assessment. Based on the comprehensive assessment, students apply health theory, the nursing process, and Benedictine hallmarks to the care of an individual in the roles of novice practitioner, teacher, leader, and consumer of research. Emphasis is placed on client-

centered care and the development of communication and interviewing skills during the execution of psychomotor nursing skills and care delivery. Clinical reasoning, effective communication, decision making, safety, and comfort in the implementation of the nursing process are taught while learning fundamental nursing theory and concepts related to hygiene and comfort, asepsis, infection prevention, intravenous therapy, medication administration, and various nursing therapies. Computer instructions and laboratory simulations enable the student to develop psychomotor competencies basic to nursing practice. Experiential learning occurs in simulated clinical, long-term care, and hospital environments. 4 credits.

NUR-5214 INTRO TO EVIDENCE BASED PRATICE AND NURSING SCIENCE
This course introduces students to evidence-based practice (EBP). Common EBP process models are presented. The course focuses on the role of research in evidence-based practice. Students gain an understanding of the research process, critically appraising the quality of published research studies, and the applicability of research findings to clinical practice. Students identify a clinical problem, frame a clinical question based on the problem using the PICO (patient/population, intervention, comparison, and outcome) format, search the literature for information to answer the clinical question, and select published research studies that provide evidence that could be used in clinical practice to address the question. Students also gain an understanding of the role of quality improvement (QI) initiatives in improving patient outcomes and how QI differs from research and evidence-based practice. 2 credits.

NUR-5223 FOUNDATIONS OF CLINICAL REASONING IN NURSING PRACTICE: LAB
This course is competency-based and designed to ensure that students are practice ready by graduation. Students will apply the theory and concepts learned in NUR 5213 to clinical experiences in simulated and clinical environments. Students apply the nursing process and develop proficiency in history taking and physical examination of an adult or older adult utilizing a client centered care approach. Students will practice and demonstrate competency in the performance of identified nursing skills and procedures. Management of the environment for safety, developmental and cultural considerations are integrated into the performance of skills. Clinical reasoning, evidence-based practice, and research findings are used as the framework for decision making as students interpret subjective and objective data and begin to manage the clients actual and/or potential health problems. Experiences are designed to foster the development of therapeutic and interdisciplinary communication, as well as an awareness of safety, developmental and cultural factors. Experiential learning occurs in various healthcare settings. 2 credits.

NUR-5311 NURSING CARE OF ADULTS WITH ACTUE AND CHRONIC DISORDERS
Students integrate knowledge from previous nursing, basic science, and humanities courses with new content about a variety of acute and chronic health problems commonly seen in adults to develop the knowledge base needed to evaluate clients, plan, and deliver evidence-based care, and evaluate outcomes in these disorders. Content will include the role of nutrition, unsafe behaviors in the prevention, development, and management of common acute and chronic health problems. Emphasis will be on the utilization of the nursing process and the role of the nurse as a member of the interprofessional team while providing individualized patient centered care. 3 credits.

NUR-5312 NURSING CARE OF WOMEN, NEWBORNS, AND FAMILIES
This course builds on the concepts of previous nursing courses with emphasis on utilizing the nursing process in dealing with women's health and maternity, and newborn health. Students will explore the concepts of health promotion, disease prevention, and alterations in health related to maternity and birth of a newborn and the care of women. Emphasis is on whole-person care of childbearing families. Management and planning of the nursing process will include concepts from a variety of culturally diverse settings and nursing in the community. 2 credits.

NUR-5313 GENETICS AND PRECISION HEALTH
This entry level course explores fundamental principles of genetics, genomics, and the utilization of omics informed clinical tools. Concepts are selected to encourage students to maximize their personal health and wellness, as well as integrate genetically-informed perspectives in the healthcare setting. Although designed for nursing students, the content is presented in a plain language format and is appropriate for students in nonclinical oriented majors. This course combines a traditional lecture format to introduce concepts with class discussion, interactive activities, and case studies to facilitate a deeper understanding of the subject matter. Topics explored in this course include the basic principles of DNA structure and function, the importance and impact of genetic variation, the genetic underpinnings of single gene disorders (ex., why mutations in the CFTR gene causes cystic fibrosis), the influence of genetics in multifactorial conditions (ex., how the contributions of many different genes ultimately influence type 2 diabetes risk), the utilization of family health history to promote health and understand disease risk, the interactions between one's genes and environment that influence genetic expression, the advantages, disadvantages, and ethical considerations of provider-initiated genetic testing (ex., prenatal genetic tests) and direct-to-consumer genetic tests (ex., 23andme), the impact of one's unique genetic composition on drug metabolism and medication response, and the impact of social determinants of health in driving disparities in disease burden, genetic research, and precision medicine efforts. Topics will be explored both scientifically and through the lens of Catholic social justice philosophy, with special emphasis placed on the legacy of the Catholic church's contributions to the field of genetics, the importance of optimizing wellness and reducing inequality in vulnerable populations, and the Benedictine value of promoting the common good. 2 credits.

NUR-5314 NURSING CARE OF VULNERABLE POPULATIONS
This course explores the concepts and issues related to nursing care of vulnerable populations, defined as those who are at increased risk for poor health outcomes due to social, economic, environmental, racial, ethnic status, sexual preferences, and personal factors. Students will integrate knowledge from previous coursework with new content to learn to identify, assess, and intervene with vulnerable populations in various settings, using evidence-based practice, cultural competence, and advocacy skills. Students will also examine the causes and consequences of high risk, underserved, health disparities, food insecurity, homelessness, underaged individuals who are victims of sexual trafficking and the role of nurses in recognizing, promoting health equity and social justice. 2 credits.

NUR-5315 NURSING CARE OF CHILDREN, ADOLESCENTS, AND FAMILIES
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. The purpose of the course is to provide students with clinical knowledge for nursing practice to provide person- centered and evidenced based care for children and their families. The foundation of the course will provide students with the necessary skills to care for children across the span of pediatrics including from the newborn stage into young adulthood.

The emphasis of this course includes the ability to provide care that is specific to comprehensive health promotion, acute, chronic, and restorative needs of pediatric patients and their families. 2 credits.

NUR-5321 NURSING CARE OF ADULTS WITH ACUTE AND CHRONIC DISORDERS: PRACTICUM
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. This practicum occurs in hospital and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 5311 to the evaluation and management of adults with acute and chronic health problems. There is an emphasis on the development of clinical reasoning skills, i.e., assessing clients, processing the information collected to determine the clinical problem(s), planning, and implementing evidence-based nursing interventions, and evaluating outcomes. Students are encouraged to reflect on learning from this process to build their clinical reasoning skills. Students will begin dialoging with other health care professionals. 2 credits.

NUR-5322 CLINCAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF WOMEN, NEWBORNS, AND FAMILIES: PRACTICUM
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. Students in this course study the role and scope of practice of the registered nurse in the care of childbearing families, especially those at high risk for complications. Content and learning objectives are designed to utilize critical thinking and the nursing process to meet nurse's responsibilities in the provisions of holistic, safe, competent nursing care for the childbearing family during the preconception, antepartum, intrapartum, postpartum, and newborn periods. Focus is placed on the student's attainment of the necessary knowledge and skill sets to provide direct care and teaching/learning opportunities to clients/families and communities within their environments to maintain optimal health. 1 credit.

NUR-5324 CLINICAL REASONING AND PERSONALIZED CARE OF VULNERABLE POPULATIONS: PRACTICUM
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. The practicum occurs in hospital, outpatient settings and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 314 to the evaluation and care of individuals at risk for poor health outcomes due to social, economic, environmental, and personal factors. There is an emphasis on development of clinical reasoning skills, i.e., assessing vulnerable individuals, processing the data collected to identify actual or potential clinical issues, planning, and implementing nursing interventions, and evaluating outcomes. Students will work with other members of the interprofessional team to address the health issues of these individuals. Students are encouraged to reflect on and learn their practicum experiences to build their clinical reasoning skills. 1 credit.

NUR-5325 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF CHILDREN, ADOLESCENTS, AND FAMILIES: PRACTICUM
Cultural, spiritual, and diverse influences will be discussed to prepare students to provide inclusive and respectful care. Students will learn how to properly assess, diagnosis, plan, implement, and reassess a plan of care for pediatric patients. Students will also learn how to properly communicate with patients and their families across the pediatric lifespan. Content from this course will work collaboratively with NUR 5315 to allow for multimodal learning in both the didactic and clinical setting. 1 credit.

NUR-5411 NURSING CARE OF INDIVIDUALS WITH PSYCHIATRIC, BEHAVIORAL, AND MENTAL HEALTH CONDITIONS
This course introduces the student to the specialty of psychiatric mental health nursing across the lifespan. Psychiatric mental health nursing concepts are explored both on an individual and family level. 2 credits.

NUR-5412 NURSING CARE OF POPULATIONS
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. Students are guided to differentiate population health, public health, and community health. Course content explores population focused nursing to enhance individual, family, and community well-being by analyzing and incorporating social and cultural characteristics that impact health. The political, economic, environmental, and cultural factors impacting health and healthcare incorporating a global nursing perspective are discussed. 2 credits.

NUR-5413 LEADERSHIP IN SYSTEMS OF CARE
This course focuses on the application of theory to nursing roles, care management, leadership, organizational excellence, interprofessional communication and collaboration across the care continuum. Additionally, the nursing role in health advocacy and policy is explored. Students synthesize their knowledge about professional, clinical and leadership roles to increase their understanding and responsibility for ensuring high quality and safe nursing care to individuals, families, communities and populations as an advanced beginner. This course is the didactic compliment to NURS 423 Professional Clinical Immersion. 2 credits.

NUR-5414 NURSING CARE OF ADULTS AND POPULATIONS WITH MULTIPLE AND COMPLEX HEALTH DISORDERS
Nursing Care of Adults and Populations with Multiple and Complex Health Disorders is intended to provide the senior baccalaureate nursing student with an overview of patient diseases that present to the emergency department or as a life-threatening condition requiring immediate nursing and medical intervention. The course will offer an opportunity for the student to develop critical thinking by integrating knowledge, assessment, intervention and management of various complex diseases. The course is designed to give students a chance to gain a basic understanding of critical care nursing and the role of the professional nurse as a member of the interdisciplinary heath care team in meeting the various complex needs of the critically ill patient and family. The senior student nurses' critical thinking skills are expanded through lecture/discussion, and selected case studies. 2 credits.

NUR-5416 APPLICATION OF DATA ANALYTICS, INFORMATICS. AND HEALTHCARE TECHNOLOGY
This course focuses on informatics methods and techniques with applications specific to the field of nursing. The course starts with foundational principles of nursing informatics and the history of nursing informatics. Topics covered will include the Learning Health System, and how Big Data, Artificial Intelligence and analysis of healthcare data can transform nursing practice, knowledge, and ultimately patient care. Discussion will also involve THE IMPROVEMENT of clinical practice guidelines using informatics principles. Diagnostic coding systems commonly used in healthcare and the effects on analytical pipelines important for nursing informatics will be introduced. Natural language processing with a focus on nursing informatics will be touched upon. Social and ethical

issues in the context of nursing informatics and clinical information systems more generally will also be discussed. Learners will also engage in some evolving technologies as relevant from the field of consumer health informatics with a special focus on their impact on nursing informatics and the Learning Health System. 1 credit.

NUR-5421 CLINICAL REASONING AND PERSONALIZED CARE IN THE NURSING CARE OF INDVIDUALS WITH PYSCHIATRIC, BEHAVIORAL, AND MENTAL HEALTH CONDITIONS: PRACTICUM

This practicum course is competency-based and designed to ensure that students are practice ready by graduation. The practicum occurs in hospital, outpatient settings and simulation lab settings. Students apply knowledge from previous nursing, basic science and humanities courses and NUR 5411 to the evaluation and care of individuals across the lifespan with psychiatric and mental health disorders. There is an emphasis on the development of clinical reasoning skills, i.e., assessing individuals, processing the data collected, identifying actual or potential health issues, planning and implementing nursing interventions, and evaluating outcomes of care. Students will work with other members of the interprofessional team to promote wellness and address psychiatric and mental health issues. Students are encouraged to reflect on and learn their practicum experiences to build their clinical reasoning skills. 1 credit.

NUR-5422 CLINICAL REASONING THAT ADDRESSES POPULATION HEALTH: PRACTICUM

This practicum course is competency-based and designed to ensure that students are practice ready by graduation. This course complements the didactic version of the course which is based on Population Health Nursing Theory. Within the context of clinical experiences this course examines the roles and functions of nurses within the community. Emphasis is given on the application of community/public health concepts and design and implementation of nursing systems of care for individuals, families, and populations. 1 credit.

NUR-601 ADVANCED PHARMACOLOGY ACROSS THE LIFESPAN

This course builds upon the pharmacology foundations covered in Nursing 5111, Introduction to Pathophysiology and Pharmacology. It will focus upon the pharmacological principles of pharmacokinetics and pharmacodynamics and their connection to the efficacy of pharmacotherapy in the treatment of diseases in various populations across the lifespan. This course will also place an emphasis on the importance of the proper integration of nursing with pharmacological principles to improve the efficacy of therapeutic interventions and treatment outcomes. 3 credits.

NUR-602 ADVANCED HEALTH/PHYSICAL ASSESSMENT ACROSS THE LIFESPAN

This course focuses on a comprehensive physical examination of patients throughout their lifespan built on the foundation of baccalaureate essentials for practice. Emphasis will be on the techniques and processes of performing a diagnostic physical exam based on principles of growth and development. Comprehensive assessment with include health history and documentation of findings. Recognition and interpretation of clinical assessment data will be used to formulate differential diagnoses as a basis for health promotion, disease prevention and/or initiation of treatments. 2 credits.

NUR-603 ADVANCED ASSESSMENT LAB

This course is designed to provide opportunities to reinforce essential components of a comprehensive physical examination of patients across the lifespan. Emphasis will be on the performance and written documentation of the comprehensive and diagnostic health history and physical exam. ONLINE learning sessions and physical assessment lab practice sessions will be provided concurrent with didactic lectures. Individualized practicum experiences are incorporated in clinical hours. 1 credit.

NUR-604 ADVANCED PATHOPHYSIOLOGY ACROSS THE LIFESPAN

This course offers an advanced understanding of concepts in human physiology and pathophysiology as a foundation for preparing a nurse for an advanced nursing practice specialty role, The focus of this course is on principles, theories, and current research central to understanding the maintenance of health and the prevention and management of disease in diverse populations across the lifespan. Content on cellular function, genetics, immunology, inflammation, infection, and stress and adaptation provides the framework on which further specialty content knowledge is constructed. Emphasis is on the diagnosis and management of disease processes associated with pathophysiologic dysfunction/alterations in people of various ethnic/cultural groups across the lifespan. 3 credits.

NUR-611 CONTEMPORARY ISSUES IN NURSING AND CNL PROFESSIONAL ROLE FORMATION

This course focuses on major contemporary issues facing the nursing profession and provides context to the role of the CNL as a nursing leader within today's dynamic and evolving healthcare environment. The CNL's role impacting quality, safety, education, and leadership aspects are considered as patient care delivery moves into nontraditional settings, including the influence of socioeconomic, ethical, legal, and political variable and professional values. Through a variety of teaching strategies, students will explore and share experiences with contemporary nursing issues such the future of nursing education, retention of professional staff, growth in elder care, and global economics in health care. 2 credits.

NUR-612 FOUNDATIONS OF HEALTH PROMOTION, DISEASE PREVENTION, AND PUBLIC HEALTH

This course focuses on the assessment and identification of health risks and evidence-based interventions to address these risks with the goal of promoting health and preventing or limiting the effects of diseases. Public health and epidemiological principles are discussed as a basis for health promotion assessment and interventions. Health risk assessment, identification and management are discussed at the individual, family, and population levels including diverse and underserved populations. Methods to promote behavioral change to address health risks are discussed from a theoretical and clinical perspective. Health promotion and disease prevention risks and interventions at the global level focus on developing countries. Students access and analyze local, national, and international health-related data and compare findings to relevant benchmarks to identify health risks in the community, nation and globally. Public health emergencies and activities to protect population health are discussed. 2 credits.

NUR-613 ORGANIZATIONAL EXCELLENCE AND QUALITY IMPROVEMENT

This course focuses on the theories, models, standards and processes intended to engage care providers to consistently achieve outstanding performance in the delivery of healthcare services across the continuum of care. Organizational excellence and performance improvement concepts along with the nursing role in leading and managing to achieve superior outcomes is explored. Students will learn how to critically appraise evidence and generate innovative methodologies to drive practice change to improve care outcomes across communities and populations. 2 credits.

NUR-614 ROLE OF THE CNL: EDUCATOR
This course is designed to develop a theoretical, practical, and evidence-based foundation for Clinical Nurse Leader students in the education of clients/patient/families, nurse colleagues, students, and other health care providers. The role and function of preceptor, development, and clinical instructor as a vital component in nursing education will be discussed. Students will broaden their knowledge base of the teaching/learning process, formative and summative assessment, motivation and coaching, curriculum design, and pedagogical theories which are fundamental to leaning and behavior change and sustaining that change. Content includes analysis of learning styles, current methods of instruction, and application of a competency model will be emphasized. The AACN 's CNL 2021 Essentials and Recommendations of CNL competencies provide the framework. 2 credits.

NUR-615 PRO WRITING IN HEALTHCARE
This course is designed to introduce students to formal writing and presentation in the sciences. The course will focus on concepts related to the process of science writing including finding appropriate resources and organization into scientific papers (abstract, introduction, methods, results, discussion). In addition, the construction of presentations, critical review of self and other's work, and ethical considerations when presenting scientific data will be explored. 2 credits.

NUR-616 PROFESSIONAL WRITING WORKSHOP
This workshop provides students with an opportunity to apply knowledge gained in NUR 615 Professional Writing in Healthcare to develop their class project into a publishable article that will be submitted to an appropriate professional journal. The workshop will guide students to utilize best practices for pre-writing, organization, genre, and academic discourse. 1 credit.

NUR-617 HEALTHCARE SYSTEM ORGANIZATION, POLICY, AND FINANCE
This course is an integration of components. The healthcare system organization component concentrates on how the nursing profession and specifically, nursing leadership, can improve healthcare by examining the serious issues facing the United States Health Care system today. The health policy component of the course presents an analysis of the functions of the public and private sector in creating and implementing health policy across diverse patient populations. The role of political and social philosophy in defining nursing and health services is examined. The course includes exploration of areas in which policy made by multiple branches of government and types of government and private organizations, significantly affect nursing as a profession and its ability to deliver care; regulation of professional practice; and management of patient outcomes. The component of this course relating to finance provides basic business and financial acumen needed to develop convincing plans for practice-level clinical initiatives that will improve the safety of patients and quality of care across diverse populations and settings. Methods for evaluating the cost effectiveness of clinical programs will be examined, along with basic business planning strategies for clinical initiatives. 2 credits.

NUR-618 CARE DELIVERY LEADERSHIP AND LEADING TEAMS ACROSS THE HEALTHCARE CONTINUUM
This course explores the principles of organizations and systems leadership and management strategies for the advanced nursing practice specialty registered nurse in a variety of healthcare settings. Content will provide the conceptual and theoretical framework for examining the concept of leadership within the contexts of health systems, health professionals and health policy. It will focus on characteristics of personal and professional leadership, change theory, and the application of critical thinking to the analysis of work environments, systems, and the politics of health. Additional emphasis will be on the skills necessary to facilitate group dynamics, personnel management, and the coordination of care of clients and health care personnel. Current quality improvement and safety standards that differentiate health care organizations and the use of advanced technology to analyze and synthesize information to make critical decisions will also be examined. 2 credits.

NUR-619 HEALTHCARE ETHICS
This course covers the theoretical foundations of health care ethics including definitions of ethics, history of bioethics and nursing ethics, and the influence of religion, psychology of moral development and philosophy in the development of ethical theory. Nursing code of ethics, changing ideas in ethics, and discussion of the developing profession of nursing are included. We will also be discussing cultural competencies and how those intersect with the field of ethics and ethical healthcare as it pertains to nursing. 2 credits.

NUR-621 CONTEMPORARY ISSUES IN NURSING AND CNL PROFESSIONAL ROLE FORMATION: PRACTICUM
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. This course will provide each student with a practicum experience in role development for the Clinical Nurse Leader. Students will assimilate the Clinical Nurse Leader's unique skill set of quality, safety, education, and leadership in a variety of healthcare settings across the continuum of care with members of the intra and inter disciplinary team. The practicum hours of this course will be completed in an acute care faculty and will commence upon completion of clinical hours in NUR 6423: Professional Nursing Immersion - Leadership in Systems of Care. The AACN's 2021 Essentials for graduate nursing programs and the 2023 revisions in CNL Competencies provide the framework for the competences included in this course. 1 credit.

NUR-622 CNL ROLES IMMERSION I
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. The course is designed to focus on the role of the Clinical Nurse Leader's unique skill set of quality, safety, education, and leadership within diverse healthcare environments. The CNL's professional practice trends will be emphasized with special emphasis on process improvement at the micro, macro, and mesa levels, customer satisfaction, patient-centered care, interprofessional healthcare teams, risk management strategies, information technology. outcomes management and evidence-based practice. The CNL's role to advocate for organizational policies that contribute to social change, promotion of physical and mental health, professional growth while upholding moral, legal, and ethical principles will be stressed. The AACN's CNL 2021 Essentials and Recommendations of CNL Competencies provide the framework. 3 credits.

NUR-623 CNL ROLES IMMERSION II
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. This course continues the assimilation of the issues and trends to transition into the role of the CNL in various healthcare settings. CNL Role Immersion II is designed to analyze factors that have an impact on specialty nursing practice with emphasis on the scope of practice of the CNL as a professional that promotes self-care, personal/professional growth, and a safe practice environment, while recognizing current and future health care trends, and professional practice issues. The AACN's CNL 2021 Essentials and Recommendations of CNL Competencies provide the framework. 4 credits.

NUR-624 CAPSTONE: MISCROSYSTEM PROJECT I
This practicum course is competency-based and designed to help ensure that students are practice ready by graduation. It is designed to focus on the role of the clinical nurse leader in developing quality improvement strategies utilizing national safety resources to lead team-based change initiatives, with special emphasis on process improvement at the micro and macro levels. Projects will focus on quality, safety, customer satisfaction, patient centered care, inter-professional healthcare teams, cost effective outcomes and evidence-based practice. The AACN's CNL 2021 Essentials and Recommendations of CNL Competencies provide the framework. 1 credit.

NUR-625 CAPSTONE: MICROSYSTEM PROJECT II
This practicum course is competency-based and designed to ensure that students are practice ready by graduation. It is a continuation of NUR 624 Capstone Microsystem I Project. The course is designed to focus on the role of the clinical nurse leader in implementing and evaluating quality improvement strategies utilizing national safety resources to lead team-based change initiatives, with special emphasis on process improvement at the micro and macro levels. Project results will be disseminated to stakeholders at the micro, macro or mesa levels while advocating for policy changes that leverage social change, promote wellness, improve care outcomes and reduce costs. The AACN's CNL 2021 Essentials and Recommendations of CNL Competencies provide the framework. 1 credit.

NUR-6423 PROFESSIONAL NURSING IMMERSION - LEADERSHIP IN SYSTEMS CARE
This course is designed to immerse the student into the practice of professional nursing through preceptorships with designated registered nurses in diverse clinical settings across the care continuum including a variety of acute, ambulatory and home/palliative care settings. Simulation scenarios will augment learning experiences in the clinical practice setting. Students synthesize knowledge about the professional, clinical and leadership roles while increasing accountability and responsibility for delivering high quality, safe and effective nursing care for individuals, families, communities and populations. Interprofessional experiences will be provided to enhance requisite skills for transitioning into the advanced beginner role in professional practice. Emphasis will be on leadership, delegation, teamwork, interprofessional collaboration and communication including handoffs to ensure quality and safety. 1 credit.

PH-100 PHYSICS SEMINAR
Discussions of topics in contemporary physics. 1 credit

PH-109 COLLEGE PHYSICS I
This is the basic course for those majoring in the biological sciences and allied health fields. Kinematics, Newton's Laws of Motion, Energy, Momentum, and Rotation are introduced and treated with methods of algebra and calculus. Problem solving with algebra is emphasized. Prerequisite: MA-102 and MA-103, or MA-109, or MA-111. Offered fall semester. 3 credits

PH-110 COLLEGE PHYSICS II
A continuation of PH-109. Electricity, Magnetism, and Optics are introduced and treated with methods of algebra and calculus. Problem solving with algebra is emphasized. Prerequisite: PH-109. Offered spring semester. 3 credits

PH-111 GENERAL PHYSICS I
This is the basic course for those majoring in the physical sciences, mathematics, and engineering. Kinematics, Newton's Laws of Motion, Energy, Momentum, and Rotation are introduced and treated with applications of calculus. Prerequisite: MA-111. Offered every semester. 3 credits

PH-112 GENERAL PHYSICS II
A continuation of PH 111. Electricity, Magnetism, and Optics are introduced and treated with applications of calculus. Prerequisite: PH 111. Offered every semester. 3 credits

PH-113 PHYSICS I LABORATORY
Laboratory to accompany PH-109 and PH-111. Laboratory experiments include applications to kinematics, Newton's Laws of Motion, and Energy. Emphasis is placed on learning to take notes in the laboratory setting. Offered every semester. 1 credit

PH-114 PHYSICS II LABORATORY
Laboratory to accompany PH-110 and PH-112. Laboratory experiments include applications to optics, electricity, and magnetism. Emphasis is placed on learning to take notes in the laboratory setting. Offered every semester. 1 credit

PH-202 GALILEO & THE RISE OF MODERN SCIENCE
The Italian scientist Galileo Galilei is called the father of modern science for his numerous contributions to astronomy, physics, instrumentation, methodology, and the philosophy of science. He is a central character in the development of a dramatic new view of the universe that emerged in the 16th and 17th centuries. Galileo's discoveries and opinions made him a celebrity, but he was also perceived as challenging long established scientific and philosophical truths. Opposition to Galileo grew until he was finally put on trial by the Inquisition in 1633, for suspicion of spreading heresy with his scientific ideas. What were Galileo's experiments and discoveries? Why did his work draw both high praise and deep criticism? Why did a Pope who initially admired Galileo and his work, eventually put his friend on trial for heresy? What have been the scientific and religious repercussions of the Galileo affair for the past four centuries? An ideal way to understand the discoveries and opinions of Galileo is to learn and employ the same methods he used during his scientific career. Our investigations will proceed in Italy, where Galileo spent his entire life. We will perform some of Galileo's pivotal experiments that changed the course of science. We will visit the most significant sites of the Galileo affair in Rome, all within easy reach from our classroom at Sant'Anselmo. We will also visit Florence, the city Galileo called home. 3 credits.

PH-211 MODERN PHYSICS I
A survey of atomic and nuclear physics including relativity, radiation and matter, and quantum physics. Prerequisites: PH 112, MA 112. Must be taken with PH 213. Offered spring semester. 3 credits

PH-213 MODERN PHYSICS I LABORATORY
Laboratory to accompany PH 211. Laboratory experiments stress basic subjects such as atomic and classical scattering, the particle and wave nature of both radiation and matter, radioactivity, and spectroscopy. Offered spring semester. 1 credit

PH-215 THERMODYNAMICS
A study of the basic concepts of both classical and statistical thermodynamics. Topics include work, energy and entropy, the laws of thermodynamics, the Carnot cycle, heat engines, kinetic theory, and classical and quantum statistics. Prerequisites: PH 112 and MA 211. Offered spring semester of alternate years. 3 credits

PH-221 CLASSICAL MECHANICS
A study of the fundamental principles of the motion of particles and rigid bodies, including vibrational motion, an introduction to the equations of Lagrange and Hamilton, the two-body problem, and

non-inertial frames of reference. Prerequisites: PH 112 and MA 212. Offered fall semester of alternate years. 3 credits

PH-241 OPTICS
A study of the basic principles of physical optics. Studies in refraction, polarization, interference, and diffraction based on the theory of electromagnetic radiation. Prerequisites: PH 112, MA 211. Offered spring semester of alternate years. Must be taken with PH-243. 3 credits

PH-243 OPTICS LABORATORY
Laboratory to accompany PH 241. Topics include lenses, mirrors, and prisms, as well as reflection, refraction, polarization, interference, diffraction, and holography. Must be taken with PH-241. 1 credit

PH-244 ADVANCED LABORATORY
Experiments in various fields of physics focused on developing and applying a variety of common data acquisition and analysis skills. Offered spring of alternate years. Pre-requisite PH-112. 1 credit

PH-252 ELECTROMAGNETIC FIELDS
An intermediate course in electromagnetic field theory. Extensive use is made of vector calculus. The differential forms of Maxwell's equations are developed. Methods of solution of Laplace's equation are investigated as well as electric fields in matter, current and Ohm's Law, and magnetostatics. Prerequisites: PH 112 and MA 212. Offered fall semester of alternate years. 3 credits

PH-261 ELECTRONICS
Covers the fundamental aspects of electronic circuits. Topics include voltage and current sources, measurement techniques, impedance, Kirchhoff's Rules, Thevenin's Theorem, semiconductors, solid-state devices, amplifiers and feedback, boolean algebra, digital logic, programmable logic, memory, and microcontrollers. Extensive use is made of Electronic Design Automation (EDA) software to allow students to follow circuit design from prototype to finished printed circuit board. Must be taken with PH 263. Prerequisites: PH 112 and MA 112. Offered fall semester. 3 credits

PH-263 ELECTRONICS LABORATORY
Laboratory course to accompany PH-261 Electronics. Provides hands-on experience with real world circuits alongside the more theoretical development presented in PH-261. Includes measurement techniques, passive filters, transistor and operational amplifiers, combinational and sequential digital logic, and microcontrollers. Also includes design and fabrication of printed circuit boards and soldering techniques for both through-hole and surface- mount components. Must be taken with PH-261. 1 credit

PH-311 MODERN PHYSICS II
Covers the study of the solution of the Schrödinger equation for both one-and three- dimensional systems, the spin and orbital angular momentum for both one- and multi-electron atoms, quantum statistics, the strong interaction and Yukawa potential, and an introduction to elementary particles. Prerequisite: PH-211. Offered fall of alternate years. 3 credits

PH-322 QUANTUM MECHANICS
Quantum mechanics developed from a review of modern physics. Topics include the eigenvalue problem, expectation values, particle in a box with applications in the areas of expectation values and transitions, Hilbert spaces, superposition, commutators, symmetries and conservation laws, and angular momentum (spin, orbital) operators and eigenstates. Prerequisite: PH-211. Offered fall semester of alternate years. 3 credits

PH-341 CONDENSED MATTER PHYSICS
Covers topics including crystal structure, Bragg scattering, scattering amplitude and form factors, the reciprocal lattice, lattice vibrations and quantization, phonon heat capacity, free electron gas, and energy bands in solids (Brillouin zones, Bloch functions, and the Kronig-Penney model). Prerequisite: PH 211. Offered spring semester of alternate years. 3 credits

PH-350 INDEPENDENT STUDY--PHYSICS
May be repeated. Variable credit.

PH-355 INDEPENDENT RESEARCH
Independent theoretical and/or experimental investigation. May be repeated. Permission of instructor and chair required. Variable credit.

PH-370 MATHEMATICAL PHYSICS
An advanced course in the mathematical analysis of physical systems. Methods using linear algebra, complex variables, Fourier analysis, Laplace transforms, and other special functions are studied. Analytical software, such as Mathematica, may be used. Prerequisites: PH-211, and MA-212. Offered spring semester of alternate years. 3 credits

PH-381 RESEARCH (CAPSTONE PROJECT)
Investigation and experimentation or an approved internship leading to the completion of the required senior capstone project. 1 credit

PH-550 PHYSICS INTERNSHIP
Work experience program extending the learning experience beyond the college into the world of work. Students are employed in an area related to their academic endeavor. Academic credits are awarded according to the extent of the work experience. The purpose of the program is to integrate academic studies and employment activities. May be repeated. Variable credit.

PL-102 THE ART OF SOCRATIC DIALOGUE
We are told that part of being a good citizen or friend depends on whether we can respond charitably to others even when we disagree. "Civic" or "civil" dialogue is championed as the standard mode of communication in public and private spheres, even when there may be few examples we can name of civil or civic discourse in action. How, then, can we know and recognize what true dialogue is as distinct from everyday conversation, debate, or purely rhetorical speech-giving? This course will take students through the principles, practice, and end of authentic dialogue, primarily through the lens of a self-proclaimed lover of speeches, Socrates. Socrates is sometimes called the founder of a certain "method" or "art" of conversation aimed at uncovering truth-we even call his way of progressing through an argument "the Socratic method." But what exactly is this art? What are its criteria and how do we recognize true dialogue and dialectic? How do we distinguish Socrates' mode of conversation from rhetoric? What are tools available in the structure of our language that allow for us to construct true and beautiful arguments? What role does the principle of charity have in dialogue? Finally, what is the fundamental end of Socratic dialectic? In this course, students will have the opportunity to reflect on the answers to these questions as they learn to write and speak with excellence according to principles of good, charitable conversation. 3 credits

PL-120 LOGIC
This introductory course seeks to formalize the everyday use of logic to distinguish correct and incorrect forms of reasoning. After setting general terms for argument analysis, the distinguishing features of deductive and inductive arguments are noted. Language as the vehicle of logic is considered, including the purposes and types of definition and recognition of common informal fallacies. The balance of the

course is devoted to deduction, with special consideration given to Venn diagrams as a mechanical test of the validity of categorical syllogisms. Periodically offered as an honors course. 3 credits

PL-121 LOGIC/PHILO OF KNOWLEDGE
This course is an introduction to the liberal art of logic, teaching you how to reason effectively, analyze arguments, and question assumptions in the pursuit of knowledge. The focus is on syllogistic logic, and thus will help you learn the methods of reasoning at the heart of a liberal arts education. While logic can be used, and often abused, by those who seek power or to persuade others to accept their point of view, its true aim is to help one form the habits necessary for pursuing the Truth that alone can set one free. In order to focus on this liberating objective of logic, we will structure our study around the three acts of the mind by which one obtains knowledge. 3 credits

PL-201 ANCIENT PHILOSOPHY
Ancient philosophy begins in the sixth century BC with Thales' attempt to discover the first principle(s) of the universe, and ends in the third century AD with the Neoplatonists' pursuit of the One. This course explores this birth of philosophy in the West, focusing on the major movements and figures that characterize this period. Attention will be given to the Presocratics, Plato, Aristotle, the Hellenistics (such as Stoicism, Scepticism, and Epicureanism), and Neoplatonism. The course serves both as a freestanding consideration of this important period of thought as well as the introduction to the history sequence offered by the philosophy department.3 credits

PL-202 MEDIEVAL PHILOSOPHY
While it is difficult to provide specific dates for the beginning and ending of Medieval Philosophy (roughly 4th century AD to 15th century AD), this period is characterized by attempts to bring Abrahamic religions (Judaism, Christianity, and Islam) into dialogue with the Greco-Roman philosophical tradition. Such thinkers as St. Augustine, Moses Maimonides, Averroes, St. Anselm, St. Thomas Aquinas, and Duns Scotus were noted for their systematic attempts to use both revelation and reason in the pursuit of Wisdom. This course explores this period in the history of philosophy. 3 credits

PL-203 MODERN PHILOSOPHY
This course considers philosophical thought from the late 16th century to the end of the 18th century--a period marked by profound intellectual, religious, and political revolutions. Through a radical critique of late medieval philosophy, modern philosophers created the new science that evolved into the natural sciences that we know today. And through a complex rethinking of the relationship between freedom, community, and law, they contributed to the political, moral, and religious transformations that set the stage for our contemporary culture. At the discretion of the instructor, this course will consider thinkers such as Montaigne, Bacon, Galileo, Descartes, Spinoza, Leibniz, Locke, Berkeley, Rousseau, Hume, and/or Kant. 3 credits

PL-204 KANT AND HIS SUCCESSORS
This course begins with a study of the monumental work of the 18th-century philosopher, Immanuel Kant, and then proceeds to consider the various reactions to this work in the following century. It is difficult to overestimate the influence of Kant, who not only set the terms for the debates that followed him, but provided a narrative of modern philosophy that continues to dominate discussions of the thought that preceded him. Although best known for his revolutionary critique of reason, which radically limits the access that the human subject has to the world-in-itself, Kant himself was equally concerned with questions about the moral, political, and aesthetic experience of the human subject. He insisted that human beings are agents with equal and inviolable dignity, and he reconceived of history as humanity's self-education in freedom. In so doing, he initiated a philosophical discussion emphasizing human subjectivity, individual freedom and self-expression, and a philosophy of history itself. This discussion was carried forward by numerous 19th-century thinkers, including Fichte, Schelling, Hegel, Schopenhauer, Marx, and Nietzsche. The course will consider some of these thinkers (and possibly others), at the discretion of the instructor. Prerequisite: PL101. 3 credits

PL-205 CONTEMPORARY PHILOSOPHY
This course examines the philosophical thought of the 19th and 20th centuries. It takes as its starting point the rebellion against the Kantian world view, and focuses on the increasingly important roles played by history and human individuality in philosophical reflection. In pursuing this theme, the approaches of positivism, existential phenomenology, and the Anglo-American analytic movement will be examined. The course considers, among others, such thinkers as Hegel, Marx, Nietzsche, Russell, and Heidegger. Prerequisite: PL101. 3 credits

PL-206 CONTEMPORARY PHILOSOPHY (1800-PRESENT)
In the 19th and 20th century, western philosophy underwent a marked fragmentation of both theme and approach. The common divide between "continental" and "analytic" philosophy only partially captures the complexity of the philosophical landscape during this period. It is a period coming to grips with the aftermath of Kant's revolutionary thought, increased recognition of the historicity of humanity, the rise of political nationalism, economic revolutions, and scientific advancements on a grand scale. The responses to this situation include (but are not limited to) the strong emphasis on historicity and subjectivity that we find in existentialism and phenomenology, the grappling with the philosophy of history in such thinkers as Marx, Hegel, and Collingwood, and the scientific and "linguistic turn" that characterizes much of both early and late analytic philosophy. This course will focus on some portion of this varied landscape, in accordance with themes chosen by the instructor. 3 credits

PL-210 PHILOSOPHICAL ANTHROPOLOGY
The attention of this course is directed at the question: What does it mean to be a human being? The course will systematically examine some of the leading views of human existence set forth over the last 24 centuries. The guiding perspective for the investigation will come from contemporary suggestions. Thinkers of this century have urged that we must pay close attention to the fact that while humans do have the capacity to act independently of the constraints of instinctual and biologically determined behavior, we are embodied, and thus must acknowledge the historical, linguistic, and cultural elements of our being. Within this context, the course will reflect on the objective, subjective, or ultimately fluid character of human nature. It will examine the variously suggested rational, passionate, playful, moral, religious, or gender-based character of humanity. 3 credits

PL-211 LOGIC OF LEADERSHIP
This course considers some of the philosophical underpinnings of leadership, broadly construed. We will consider various contexts of leadership, for example, political, business, communal leadership, in a way that is rooted within the mission of the college. 3 credits

PL-214 LOVE, DIGNITY, AND JUSTICE
This course focuses on questions concerning the meaning of "human dignity" and what constitutes potential violations of dignity, for example, in oppressive, dehumanizing, and depersonalizing practices.

What is the value of the person, and what is the source of that value? How should answers to these questions guide the way we treat, and what we owe to, each other? The course challenges students to demonstrate understanding of relevant ethical theory, with particular focus on theories of love and justice, and articulate and defend ethical commitments that can ultimately be brought forth into action and service. The course will (1) philosophically clarify and historically situate the guiding concepts of justice, dignity, and love and (2) work to align these concepts with ongoing factors and social dynamics with an eye to avenues of concrete expression and service. 3 credits

PL-215 ETHICS
Ethics is practical philosophy indicating, in general, what humans ought to do in the light of appropriate rules of conduct and suitable ends. Some fundamental views of right and good are considered in their classical formulations by such thinkers as Plato, Aristotle, Aquinas, Hume, Kant, and Mill. Problems and examples are used to illustrate these views and to provoke judgments regarding concrete issues. Periodically offered as an honors course. 3 credits

PL-216 ETHICAL PROBLEMS
This course will consider opposing viewpoints on contemporary issues such as abortion, racism, sexual morality, the environment, capital punishment, hunger, legislation, and public policy. Students will also be asked to review concepts such as subjectivism, psychological and ethical egoism, the relationship between morality and religion, and the possibility of objectivity in ethics. Prerequisite: PL101. 3 credits

PL-217 ENVIRONMENTAL ETHICS
This course investigates the different ways that human beings think of the environment and the influence that these various conceptions have upon defining what, if any, responsibility human beings have to the natural world. Special attention will be given to the source and meaning of the term "value" as well as to the specifications that are used to assign or distribute this term. The principal environmental theories that indicate the origin and range of value that will be examined include: anthropocentrism, individualism, holism, biocentrism, ecocentrism, speciesism and ecofeminism. Some practical concerns that will be examined in order to consider the implications of the various value theories are urban growth, poverty, use of natural resources, energy production, food production and distribution, pollution and population control. 3 credits

PL-218 BIOETHICS
This course will examine the ethical issues surrounding such postmodern technologies as genetic manipulation, human and animal cloning, and the "creation" of transgenic organisms as well as the moral dilemmas that result from gene therapy, contraception, stem cell and fetal tissue research, and the use of animals and humans as test subjects. 3 credits

PL-219 ETHICS AND TECHNOLOGY
New technology always carries with it new questions about the use and ramifications of such technology. This course addresses various morally relevant questions and problems that arise on account of technological advancement. It will survey the history and philosophy of technology and explore ethical theory with respect, but not limited, to cybertechnology and new media, robot technology and artificial intelligence, and biotechnology. Our goal is to consider certain moral frameworks in terms of how well they can provide directives in the face of growing automation. 3 credits

PL-220 THEORIES OF KNOWLEDGE
This course explores, both topically and historically, the various avenues which philosophical thought has followed in its attempts to understand how humans gain knowledge of themselves and the world in which they are situated. Representative views of classical thought, continental rationalism, British empiricism, transcendental idealism, 20th-century realism, and phenomenology will be examined. In each case, the structure of consciousness and the relation of consciousness to objects known will be explored. Flowing from this will be a consideration of their respective accounts of perception, conception, memory, judgment, and truth. Throughout the course, each of the views will be critically evaluated as to its adequacy of the human experience. This course provides serious and advanced study in the discipline. 3 credits

PL-225 PHILOSOPHY OF NATURE
This course is designed to acquaint pre-theology students with the rudiments of philosophical inquiry. In addition to an overview of the basic questions, concepts and approaches of the various philosophical disciplines (e.g. epistemology, ethics, metaphysics), special emphasis is placed on presenting philosophy as a propaedeutic to theological studies. In the grand tradition of Saint Anselm's fides quaerens intellectum, the course seeks to guide the student along the border regions where faith and reason touch. Philosophy majors and minors only; prerequisite: 3 credits in Philosophy. 3 credits

PL-226 PHILOSOPHY OF EMOTION
This course will examine the history, nature, and importance of the emotions from various philosophical perspectives. Topics to be addressed include: What are the emotions, and how, if at all, do they differ from the passions? What theories (past and present) of emotions are available and viable? How do our emotions relate to our reason? Why are emotions so important to us? What is the relationship between the emotions and morality, and emotions and art? We will also discuss specific emotions, such as joy, grief, pride, and humiliation. The course is an appropriate second course in philosophy but also should be of interest to more advanced students. 3 credits

PL-227 PHILOSOPHY OF LOVE
In this course participants will seek to explore the puzzling relationship between Eros and philia. We will lay down a foundation by seeking traditional philosophical answers as to how to embrace the paradoxical aspects of love, looking for advice from such diverse thinkers as Plato, Augustine, Rousseau, Hegel, Nietzsche, and Freud. After establishing this footing we will extend our investigation by listening to the counsel of psychologists, psychoanalysts, artists and poets. Finally, we will look to contemporary contributions made by those employing the tools of feminism and post structural analysis. Interspersed throughout the course we will concretize our theoretical reflections with examinations of specific issues such as the dialectic between the erotic and the pornographic and the multivalenced direction of sexuality. Prerequisite: PL101. 3 credits

PL-230 METAPHYSICS
This course is designed to introduce the student to some of the basic metaphysical themes. It will be concerned with various areas of theoretical philosophy, considering questions regarding: the nature of the world, knowledge and truth, freedom, the mind-body view of man, and various conceptions of God. The approach of the course will be problem-oriented, and the medium will be the views of various major thinkers in Western Philosophy. This course provides serious and advanced study in the discipline. 3 credits

PL-232 AESTHETICS
In this course students will consider major theories in the philosophy of art, working to gain a pluralistic understanding of aesthetics. These concepts, from classical, contemporary and post-modern sources, will

be applied to works of art from a variety of media. Prerequisite: PL101. 3 credits

PL-235 PHILOSOPHY OF GOD
This course discusses the term "god" as used among different peoples and cultures, with special emphasis, of course, on the Judeo-Christian understanding of it. Distinct from sacred theology, it examines by the light of reason the proofs for the existence of God and related questions. The course also considers modern problems about theism and atheism. Prerequisite: PL101. 3 credits

PL-240 INFLUENCE OF PHILOSOPHY ON THEOLOGY THEN AND NOW
The course traces some of the effects which Platonic, Aristotelian, and Stoic philosophies have had on such theological questions as the nature of (the Christian) God, God's relationship to the world, the understanding of the human person, as well as some ethical doctrines which permeate Western thinking. Some solutions are suggested. 3 credits

PL-245 PHILOSOPHY OF SCIENCE
This course is designed to address the general question of what it means to take up the world in a "scientific" way. It traces the historical genesis of this special way of knowing, examining how scientific thought came to set itself apart from "non-scientific" engagement with the world. Of particular concern is the division of science, begun in the 19th century, into three branches: the natural, social, and human sciences. The justifications for this division are examined, giving careful attention to their divergence as well as to the question of an underlying commonality. Reflection on the ongoing ramifications of this rift for contemporary life brings the course to its close. Readings will be drawn from across the history of the philosophy of science, including such thinkers as Aristotle, Galileo, Bacon, Comte, Mill, Dilthey, Mach, Carnap, Popper, and Kuhn. Prerequisite: PL101. 3 credits

PL-250 SYMBOLIC LOGIC
The course begins with basic propositional logic using truth table tests for arguments, then moves to the validation of arguments with the aid of simplification and inference rules. Attention is then directed to propositional proofs, including indirect and conditional proofs. Basic quantification logic follows, beginning with quantificational formulas, translations, proofs, and refutations. The next step is quantificational logic employing identity and relational translations, and arguments. As time permits, a study of modal logic will follow. Two previous courses in philosophy recommended. 3 credits

PL-251 PHILOSOPHY AND FILM
Courses in many disciplines use non-print media such as music and film on an ad hoc or as-useful basis. The purpose of this course, in contrast, is to explore systematically and intentionally some relationships between traditional philosophical documents and cinematic "texts." Each section of the course explores a theme such as (but not limited to) philosophy and science fiction, existentialism, humor/comedy, God and religion, the works of Jane Austen, and so forth. Films shown as classroom assignments are treated as serious texts for analysis and critique, just as the philosophical texts that complement it are treated. 3 credits

PL-260 GOOD AND EVIL IN PHILOSOPHY, LITERATURE AND FILM
From our youth we have been nurtured on tales of good and evil; of the just overcoming the wicked; and of the ultimate victory of goodness. Yet is this just so much fantasy? Does good overcome evil in the real world? Are the just rewarded and the wicked punished? Even further, does evil really exist? Such are the questions we will address in this course. The course will be structured around a novel and some films on the theme of good and evil; philosophical texts will be used to elucidate the topics raised. 3 credits

PL-2604 ETHICS AND TECHNOLOGY
New technology always carries with it, new questions about the use and ramifications of such technology. This course addresses various morally relevant questions and problems that arise on account of technological advancement. It will survey the history and philosophy of technology and explore ethical theory with respect, but not limited, to cybertechnology, or surveillance technology and new media; robot technology and artificial intelligence; and biotechnology. Our goal is to consider certain moral frameworks in terms of how well they can provide directives in the face of growing automation. 3 credits

PL-261 CONFRONTING DEATH: LIT/PL/FILM
Just before facing execution, Socrates made the bold claim that philosophers do not fear death and even welcome it as a blessed release from bodily existence. Why do those of us who lack Socrates's courage fear death? What exactly are we afraid of? How do we live in the face of death? How do we confront it? This class explores such questions through the use of literature, philosophy, and film. 3 credits

PL-262 MUSIC AND THE SOUL
"Without music, life would be a mistake" (Friedrich Nietzsche). We lovers of music know exactly what Nietzsche means here: we have been moved, disturbed, made joyous, or despairing, by the muse of melody and poetic verse. Why does music have this effect on us? What does it MEAN for us? Can music be good or bad for us? Is there a moral aspect to creating music or to listening to it? Such are the questions that inspire this course, which offers a reflection on music as a liberal art and in relation to our Catholic and Benedictine mission. 3 credits

PL-263 OUTDOOR LEADERSHIP: PHIL AND PRACT
Outdoor leadership as a pedagogical movement can be traced to Kurt Hahn and to the Outward-Bound system of schools he helped to found in the 1940s. Since then, this unique form of education has developed into a variety of forms, and a wealth of philosophical principles have been developed to guide its implementation. Additionally, Benedictine monasticism is connected with outdoor education both historically and in contemporary scholarship. In this travel course, we will look at some of the key figures and philosophical ideas that guide outdoor leadership, and put them into practice ourselves during a fall break backpacking trip. Our course will consist of three components: first, study of the philosophical texts that have shaped the outdoor leadership movement and examination of their connections to Benedictine monasticism; second, backpacking, first aid, and wilderness training; and third, a 35-40 mile backpacking trip over fall break on the Laurel Highlands Trail that emphasizes the moral, physical, philosophical, and spiritual components of outdoor leadership. 3 credits

PL-264 OUTDOOR LEADERSHIP II
This course allows students to build upon their understanding of the philosophy and practice of outdoor leadership. Building upon what they learned in PL-263 (Outdoor Leadership: Philosophy and Practice), they will engage in research and take on greater leadership roles on the backpacking trip. PL-263: required pre-requisite. 3 credits.

PL-270 POLITICAL PHILOSOPHY
A survey of the history of reflection on fundamental political goods by both classical and modern writers. Readings will normally include, but not be limited to, material from a subset of these philosophers: Plato, Aristotle, St. Thomas Aquinas, Machiavelli, Hobbes, Locke, Rousseau, and Marx. Common themes may include the nature of law, justice and rights, the social contract, purposes and justifiability of economic institutions, cultural influences on the identification and attainment of social values, the possibility of political objectivity or neutrality, and the like. Prerequisite: PL101. 3 credits

PL-271 CATHOLIC POLITICAL THOUGHT
Catholicism has a long tradition of political inquiry that has made many important theoretical and practical contributions to the way we live. From a philosophic perspective, it bears a close resemblance to ancient political philosophy yet diverges in significant ways from modern political philosophy. This divergence raises an important practical question: How can Catholics in America reconcile faith and citizenship? This class is designed to answer that question. To do so we will read important contributors to the Catholic intellectual tradition, contemporary authors, as well as political rhetoric in America. Cross-listed with PS-261. 3 credits

PL-272 PHILOSOPHY OF LAW
What is law, and what is its purpose? Is human law dependent upon a higher, Divine law? What is the relationship between law and morality, and what makes a law binding? Is it ever morally acceptable to disobey the law, and, if so, when? Such are among the central questions of the philosophy of law, and philosophers have been reflecting on them for thousands of years. In this course, we will look at some of the central theories of law that have shaped our legal culture, and which still register in the legal and political debates we have today. 3 credits

PL-273 ROMAN POLITICAL THOUGHT
Ancient Rome's contributions to civilization are legion. Among the most visible are the ideas and practices that continue to influence the political philosophy and civil and legal institutions of many nations, including the United States. This course seeks to understand the Roman conceptions of such things as statesmanship, law, citizenship, virtue, rhetoric, civil religion, and imperialism, through a close reading of primary sources written by those who shaped or later reflected upon Rome. Authors might include Cicero, Lucretius, Livy, Virgil, Tacitus, Marcus Aurelius, Plutarch, St. Augustine, Machiavelli, Shakespeare, Gibbon, and Publius. This course is designed to be taught in Rome. It will continue readings and trips to places of historic importance in Rome and other places in Italy, particularly Florence. 3 credits

PL-280 THOMISTIC PHILOSOPHY
St. Thomas Aquinas is a thinker and saint for all times, in the words of Pope St. John Paul II, "a master of thought and a model of the right way to do theology." The Church upholds Aquinas as the Common Doctor and those who want to understand Her teachings must have a solid grasp of his methodology, technical vocabulary, and theoretical framework. This class serves as an introduction to Aquinas's thought, focusing specifically on his practical philosophical theology (moral, economic, and political thought). 3 credits

PL-281 JUSTICE AND CHARITY
While all of the virtues play important roles in moral action, justice and charity stand apart as the two virtues that allow us to secure the good of the community. It is through justice that we give to others what is due, and through charity that we direct our actions to the highest good of eternal happiness. This course provides a thorough study of these two virtues and their role in moral, economic, and political life. It will do so via a close examination of one of the greatest exponents of virtue theory, St. Thomas Aquinas. After a systematic study of Aquinas' key principles and concepts, the final section of the course will show how his insights can be applied to contemporary issues and to the study of Catholic Social Teaching. 3 credits

PL-290 IRELAND AND THE LIBERAL ARTS
In the 1850s, John Henry Newman became involved in a project to found a new university in Dublin, Ireland that would serve the marginalized Catholic population. To this end, determined to set forth the guiding principles of the school he would be so instrumental in founding, he gave a series of lectures on the nature of a university. These lectures eventually were worked into the book The Idea of a University. In addition to the impact of these lectures on the Irish educational system, his writings are still held up today all around the world as a model articulation of the mission of higher education. After a look at the primary texts that have shaped Irish intellectual life, we will then turn to Newman himself and his contribution to the pressing questions of Irish education in his times and into the Irish present, and conclude our course by thinking on how these lessons from the Land of Saints and Scholars could be applied to our globalized world. The travel component of this course will take us to the Emerald Isle itself. Over the course of a week during Christmas break, we will visit historic sites associated with the great figures and Institutions shaping Irish intellectual life, paying special attention to the Dublin campus Newman established. Prerequisite: 3 credits in either Philosophy or Politics. 3 credits

PL-303 EASTERN THOUGHT
This course is designed to provide an overview of the basic teachings and historical development of major streams of Eastern thought including Confucianism, Daoism and Buddhism. Emphasis will be placed on a comparative approach, noting the complex historical and conceptual relationships to be found between and within the systems. The course will also examine the congruencies (as well as the disparities) of these approaches with important developments in Western thought. 3 credits

PL-305 SPECIAL TOPICS IN PHILOSOPHY
These courses provide an opportunity for faculty and students to work together in advanced study in areas of particular expertise and interest. Accordingly, the specific topic of these courses will vary from semester to semester. For the current topic, students should consult with the department or Office of the Registrar. Prerequisite: two courses in philosophy or the permission of the instructor. 3 credits

PL-306 NIETZSCHE
This course will examine various aspects of the thought of Friedrich Nietzsche, his critical reception and ongoing influence. For the specific themes to be addressed during a given semester, please consult with the instructor. Prerequisite: two courses in philosophy or the permission of the instructor. 3 credits

PL-325C PHILOSOPHY OF THE HUMAN PERSON
A study of the nature of the human person as a being with potential to know, choose, and relate to others. 3 credits

PL-350 INDEPENDENT STUDY--PHILOSOPHY
Independent study is primarily intended for the student who has advanced past a basic understanding of the field. It provides an opportunity to explore in greater depth and sophistication a specific philosophical topic or question of the student's choice. Selection of the topic of study is initiated by the student, while the structuring of the course is done in consultation with the instructor. Variable credit.

PL-373 ROMAN POLITICAL THOUGHT
Ancient Rome's contribution to political thought and practice would be difficult to exaggerate. Western civilization, including the United States, and much of the East have inherited the Roman conceptions of civitas, statesmanship, law, citizenship, virtue, rhetoric, civil religion, and imperialism. Accordingly, this course will focus on the primary texts of those who shaped or later reflected upon Rome. Potential authors may include but are not limited to Cicero, Lucretius, Livy, Virgil, Tacitus, Marcus Aurelius, Plutarch, St. Augustine, Machiavelli, Shakespeare, and Gibbon. 3 credits.

PL-400 SOCRATIC SEMINAR
This discussion-based course is offered each semester and focuses on a topic or philosopher as determined by the philosophy department's colloquium speaker. Thus, this course presents an opportunity to come together as a community of fellow learners in pursuit of Truth. 1 credit

PL-440 SENIOR CAPSTONE EXAM
In this independent study course the student will work with a faculty member in the department who will serve as his or her advisor. The student will meet periodically with this advisor to aid in his or her preparation for the exam. These meetings may include practice exams. The exam itself will take place towards the end of the semester. It will be an oral examination, usually lasting about 60 minutes, conducted by the student's advisor and at least one other member of the philosophy department. Should the student's performance be unsatisfactory, she or he will be given one other opportunity to re-enroll in the course and pass the exam. PL 440 is taken in the second semester before graduation. P/F. 3 credits

PL-450 SENIOR THESIS
In this independent study course the student works closely with a faculty advisor to fully develop the capstone project in philosophy, the Senior Thesis. This process prepares the student for work beyond the undergraduate, developing the skills of independent scholarship: informed philosophical research, skillful analysis, thoughtful synthesis and fluent written work. PL 450 is taken in the second semester before graduation. 3 credits

PL-500 PHILOSOPHY -- INTERNSHIP
The internship is an opportunity for philosophy majors and minors to gain work experience, and discern a future career path. In consultation with a faculty member in the department, a suitable employer will be found and a determinate number of hours established for the semester. For every 45 hours of work, the student will receive one course credit, with a maximum of three per semester. The student must submit a summary of the work done and reflection on the experience at the end of the semester. This course may be repeated, but this course does not count toward the fulfillment of the major or minor requirements. 1 to 3 credits. Majors and minors only.

PS-100 INTRODUCTION TO AMERICAN GOVERNMENT
Politics raises fundamental questions: how ought we, as human beings, to live? Put another way, what is the nature of good and evil, right and wrong, justice and injustice? Implicit in these questions, at the practical level of government, are further questions as to how we in fact live, how we should organize ourselves in communities, and who ought to govern in the communities in which we, as political beings, dwell. The American constitutional order represents one set of answers to these fundamental questions. This course examines the genesis of this constitutional order through a close study of the writings, speeches, and deeds of those who were responsible for its creation. It also elucidates the relationship of the regime to the larger tradition of Western political thought. The course will aid students in understanding the American regime as its founders understood it and in evaluating that understanding. The course will also pay attention to the extent to which the regime as it currently operates either does or does not reflect this original understanding. Offered every semester. 3 credits

PS-110 LINCOLN & DEMOCRATIC LEADERSHIP
This course will examine the political leadership of Abraham Lincoln in his handling of the slavery crisis of the 1850's and the Civil War. Particular emphasis will be paid to the relationship between statesmanship and democratic government. We will discuss Lincoln's actions as well as the political thought revealed in some of his speeches and writings. 3 credits

PS-170 TRIAL ADVOCACY
Trial Advocacy is art and profession, theory and application. Students of Trial Advocacy are a multifaceted group, interested in developing and presenting confident, compelling arguments. Trial Advocacy is open to students of all majors. Those interested in logic, history, law, presentation skills, team competition, and public speaking are excellent candidates for the class and the related, and required, Mock Trial Team. Each year, the Mock Trial Team offers students the opportunity to present both sides of a criminal or civil case, while competing on an intercollegiate level, with awards presented to top competitors. The course offers graded credit, at two credits each semester, for a maximum of eight credits. Every semester. 2 credits

PS-200 PROFILES IN STATESMANSHIP
Drawing on classical and modern sources in political philosophy, political biography, and literature, this course will examine the ideas and actions of great statesmen. Confronting the most complex and often perilous circumstances imaginable, these political and military figures altered the direction of history. This course might include readings by or about Pericles, Aristotle, Cicero, Plutarch, Charlemagne, Shakespeare, Elizabeth I, Gibbon, Burke, Washington, Hamilton, Webster, Lincoln, Marshall, MacArthur, Churchill, Roosevelt, and Thatcher, among others. Questions as to the nature of statesmanship - its practices, principles, and virtues - as well its place in democratic times, will be raised. The course should be of particular interest to anyone concerned with leadership and the elements of human greatness, including students of politics, business, history, philosophy, English, psychology, and theology. 3 credits

PS-205 CLASSICAL POLITICAL THOUGHT
A survey of important works of classical political philosophy from the Western tradition, this course examines competing ideas about the political good. Readings will normally include selections from Plato, Aristotle, Augustine, and Aquinas. Offered Fall semester, even years. 3 credits.

PS-210 MODERN POLITICAL THOUGHT
A survey of important works of modern political philosophy from the Western tradition, this course examines competing ideas about the political good. Readings will normally include selections from Machiavelli, Hobbes, Locke, Rousseau, Kant, Hegel, and Nietzsche. **Offered Fall semester, odd years. 3 credits.**

PS-222 STATE AND LOCAL GOVERNMENT
The structures, functions, and relationships of the various units of state and local government are presented, and their linkage to the federal government is analyzed. Important policy issues are analyzed and office-holders are invited to speak in class. Offered fall semester, odd years. 3 credits

PS-242 INTERNATIONAL POLITICS
This course studies international politics through texts drawn from, or conversant with, the primary sources in the history of political thought and the American tradition. The themes of the course

include the ends of international politics, how states understand their political and economic relationships with one another, how they craft foreign policy, and how human nature both responds to and shapes international politics. Offered fall semester, even years. Offered fall semester, even years. 3 credits

PS-244 COMPARATIVE POLITICS
This course studies how different regime types might be compared with one another. Special attention is paid to what preserves or destroys regimes, the lives that different regimes encourage their citizens to lead, and how we might distinguish good from bad regimes. Texts are drawn from the history of political thought as well as more contemporary sources. Offered Fall semester, odd years. 3 credits

PS-261 CATHOLIC POLITICAL THOUGHT
Catholicism has a long tradition of political inquiry that has made many important theoretical and practical contributions to the way we live. From a philosophic perspective, it bears a close resemblance to ancient political philosophy yet diverges in significant ways from modern political philosophy. This divergence raises an important practical question: How can Catholics in America reconcile faith and citizenship? This class is designed to answer that question. To do so we will read important contributors to the Catholic intellectual tradition, contemporary authors, as well as political rhetoric in America. Cross-listed with PL-271. 3 credits

PS-262 TOPICS IN POLITICAL PHILOSOPHY
This seminar style course concentrates on a particular topic in political philosophy. Topics vary from year to year, and typically include an in-depth examination of a particular work, philosopher, or idea of central significance to the development of political thought or practice. May be repeated. 3 credits

PS-274 SHAKESPEARE AS POLITICAL THINKER
Shakespeare's plays and poetry are helpful for understanding politics because they deal with different regime types. Shakespeare leads us to wonder which, if any, regime would be the best-a question at the very heart of political thought. Readings might include Julius Caesar, Henry V, King Lear, Hamlet, Othello. 3 credits

PS-295 AMERICAN POLITICAL THOUGHT I
The first half of a two-course sequence that examines important themes, questions, and developments in American political thought from the American Founding to the present. Significant attention will be paid to enduring questions and debates about the proper ends and means of American government. The course may proceed either thematically or chronologically. Offered Spring semester, even years. 3 credits.

PS-298 AMERICAN POLITICAL THOUGHT II
The second half of a two-course sequence that examines important themes, questions, and developments in American political thought from the American Founding to the present. Significant attention will be paid to enduring questions and debates about the proper ends and means of American government. The course may proceed either thematically or chronologically. Offered Spring semester, odd years. 3 credits.

PS-310 PUBLIC OPINION AND ELECTIONS
This course examines the fundamental roots and role of public opinion in America, and its influence on politics and public policy. This influence is examined by addressing elections and the operation of the party system, as well as the use of polls and the role of the media. 3 credits

PS-325 ROMAN POLITICAL THOUGHT
Ancient Rome's contribution to political thought and practice would be difficult to exaggerate. Western civilization, including the United States, and much of the East have inherited the Roman conceptions of civitas, statesmanship, law, citizenship, virtue, rhetoric, civil religion, and imperialism. Accordingly, this course will focus on the primary texts of those who shaped or later reflected upon Rome. Potential authors may include but are not limited to Cicero, Lucretius, Livy, Virgil, Tacitus, Marcus Aurelius, Plutarch, St. Augustine, Machiavelli, Shakespeare, and Gibbon. 3 credits.

PS-335 THE U.S. PRESIDENCY
A study of the constitutional design and practical operation of the U.S. Presidency. The selection of presidents, the rise of the modern presidency, the character of executive power, and the nature of democratic statesmanship will be examined. Offered Spring semester, even years. 3 credits.

PS-341 GLOBAL TERRORISM
This course analyzes the growing phenomenon of terrorism. Students examine diverse perspectives from governments, scholarly experts and the terrorists themselves. The course covers the source and growth of terror, tactics of terror, key terrorist incidents, specific terrorist groups, and profiles of key leaders within groups. Students study and discuss government policy related to terror, including how the U.S. and other countries counter terrorism. Finally, the course examines the social and political problems associated with terrorism. 3 credits

PS-345 CONGRESS AND PUBLIC POLICY
This course examines Congress, the administrative state, and the public policy process, and considers the political principles, interests, and empirical evidence behind differing policy positions. Readings might be from social theorists, public policy analysts, politicians, commentators and scholars. Offered Spring semester, odd years. 3 credits

PS-368 CONSTITUTIONAL LAW NATIONAL POWERS
Analysis of the historical development of American constitutional law dealing with powers of the national government. U.S. Supreme Court decisions regarding issues of federalism, separation of powers, executive authority, national security and war, the commerce clause, etc. will be considered. Debates in constitutional interpretation and the intended role of the U.S. Supreme Court may also be examined. Offered Spring semester, odd years. 3 credits

PS-369 CONSTITUTIONAL LAW: CIVIL LIBERTIES
An analysis of Bill of Rights guarantees, with special emphasis on U.S. Supreme Court rulings. First Amendment issues-free speech, freedom of religion, and freedom of associations, as well as 14th Amendment issues - equal opportunity, voting, and civil rights legislation are explored. Federal policies and politics in this area are analyzed. Offered Spring semester, even years. 3 credits

PS-375 INTERNATIONAL LAW
This course concentrates on international law and policy, including international organizations and transnational governance. The course examines treaties including the GATT and the WTO, and review specific trade laws and case studies considering the relationship between trade law and other regulatory areas, including product standards and intellectual property protection. This course also addresses U.S. trade policy and trade agreements, unfair trade practices, political restrictions on trade, and national security implications of exporting technology. 3 credits.

PS-390 ENVIRONMENTAL LAW AND POLICY
A survey of the history and present status of laws seeking to establish

acceptable safety levels for air, water, chemicals, and land use. Methodologies of standard-setting, alternate policies, financial costs, and future developments will be discussed. 3 credits.

PS-395 WHAT IS POLITICAL SCIENCE?
This class has two parts. First, students will study the purpose and current state of political science as an academic discipline. They will read examples of books and essays that provide meaningful analyses of political theory, American politics, constitutional law, international politics, comparative politics, and other subfields of political science. Some of these readings will be chosen based upon the interests of the students. Second, this course will prepare students to make their own contribution to the study of politics. The final product of the course is a prospectus for students' senior thesis. Junior/Senior majors only, or by permission. Offered fall semester. 3 credits

PS-440 CONSTIT. LITIGATION/ANALYSIS
The course develops in students an understanding of some of the critical issues in constitutional law, as well as a sense of how those issues are argued in a proper legal context. The course gives students a sense of how to analyze legal issues and present them in a thoughtful, authoritative way. Students learn that the Constitution is not just a statement of political theory, but a law to be applied in courts to help people face practical problems that arise in dealing with the government. 3 credits

PS-470 GEORGE WASHINGTON FELLOWSHIP I
The George Washington Fellows Program is named after our nation's first president in order to concentrate on the theme of citizenship. Washington emphasized in his writings and addresses that the success of the new American republic would depend upon the nation's ability to become a sacred union of citizens. The fellowship seeks to attract students interested in scholarly inquiry into the key questions of American citizenship, paying careful attention to the duties and responsibilities of individuals in a free, well-ordered society. Applications for projects in the following areas will be considered: American political thought, American economic thought, political or economic thought generally, American culture and religion, and American constitutionalism. Zero credit

PS-471 GEORGE WASHINGTON FELLOWSHIP II
This course serves as the second half of the George Washington Fellowship Program. Spring semester. By permission. Prerequisite: PS 470. 0 credit.

PS-480 SENIOR THESIS
This course facilitates the writing of the senior thesis, which is the culminating project for politics and public policy majors. Special care will be taken to aid students in utilizing their research and writing skills so that they may produce a high-quality thesis. Offered spring semester. 3 credits

PS-480 SENIOR CAPSTONE IN POLITICAL SCIENCE
This course facilitates the writing of the senior thesis--or alternatively, study for a comprehensive exam--as the culminating project for politics and public policy majors. Offered spring semester. 0 credit

PS-500 INDEPENDENT STUDY--POLITICAL SCIENCE
Supervised study in areas of special interest to students. Offered to those students whom the department judges ready for such responsibility. May be repeated. Variable credit (not to exceed three credits per semester).

PS-525 AURELIUS SCHOLARS EXPERIENCE IN WESTERN CIVILIZATION
Sponsored by SVC's Aurelius Scholars in Western Civilization, this course offers an educational travel experience for students interested in liberal education and the Western intellectual tradition. Student trips might include domestic or foreign destinations and might be accompanied by academic requirements, e.g. common readings, seminars, writing assignments, etc. 0-2 credits.

PS-550 POLITICS INTERNSHIP
Internships constitute a practicum to supplement academic learning. The number of credits and the hours involved vary depending on the nature of the internship. Please see the Career Development Center staff for current procedures that must be followed. Departmental approval and supervision must also be secured. Pass/Fail option only. Students are subject to the McKenna School's Student Guide to Internship Procedures and Requirements. See the Business Administration section of this Bulletin for a detailed description. May be repeated. Variable credit up to three credits.

PY-100 INTRODUCTION TO PSYCHOLOGICAL SCIENCE
Introduction to the field of psychology, the scientific study of mind, body, and behavior. Topics are chosen by the instructor and may include research methods, biological bases of behavior, personality, learning, memory, social behavior, development, and behavior disorders. Offered both semesters. 3 credits

PY-203 STATISTICS I
This first course in statistics introduces students to some of the basic statistical procedures that are most commonly used in the social sciences. The course begins with basic measures of central tendency and variability and progresses into the study of probability and the logic of hypothesis testing. Analyses such as t-tests and Pearson correlations develop from these topics. Offered every fall. 3 credits

PY-204 STATISTICS II
A continuation of the first course in statistics, this course introduces more advanced procedures including analysis of variance and multiple regression. Nonparametric statistical tests such as the chi-square test are also covered. Most statistical tests will be conducted by hand as well as using specialized computer software (SPSS). Prerequisite: ED-201 or PY-203 or equivalent course. Offered every spring. 3 credits

PY-212 CHILD DEVELOPMENT
This course examines human development from conception to the beginning of adolescence. The topics span cognitive, social, emotional, and physical development. In addition to the major theories and methods that have shaped the field of child development, we will become familiar with today's leading issues affecting children in family, school, and society. Offered every semester. 3 credits

PY-214 ADOLESCENT DEVELOPMENT
This course examines biological, cognitive, and social development during adolescence. Covering roughly the developmental period from puberty through the late teens or early twenties, students will study family and peer relationships, sexuality, moral development, career issues, and various psychological and behavioral problems as they pertain to adolescents. Offered spring semester. 3 credits

PY-218 LIFE-SPAN DEVELOPMENT
This course examines human development from conception until death. The course is an introduction to the science of lifespan psychology emphasizing physical, psychological, interpersonal, and cognitive development. These issues are explored using scientific research, theoretical perspectives, and practical applications. Offered fall semester. 3 credits

PY-219 INTRODUCTION TO COUNSELING
This course provides an introduction to the skills, methods, and

procedures of counseling and psychotherapy, including effective interaction and communication between therapist and client and the development of student self-awareness and self-assessment. The course also provides an overview of the major theoretical models of individual and family therapy, including psychodynamic, cognitive-behavioral, Gestalt, and humanistic-existential models. Usually offered spring semesters. 3 credits

PY-230 INTRODUCTION TO POSITIVE PSYCHOLOGY
This introductory course provides an overview of topics and concepts related to happiness and the positive aspects of human experience. From this perspective, psychology is a study of strengths, optimism, happiness, hope and other positive emotions and states of well-being. Positive psychology requires a focus on strength and in building the best things in life as in repairing the worst, and as much attention to fulfilling the lives of healthy people as to healing the wounds of the distressed. Offered variably. 3 credits

PY-243 ABNORMAL PSYCHOLOGY
This course provides an introduction to psychological disorders. All major disorders are discussed in terms of specific symptoms, as well as the impact of the disorder on the individual's life. Etiology and treatment are also studied. Special emphasis is placed on understanding the classification system used in developing a diagnosis, and the role of principles of learning in the development and maintenance of symptoms. Offered fall semester. 3 credits

PY-250 ADDICTIVE BEHAVIORS
The focus of one's addiction varies based on generational effects, cultural effects, and myriad other individual characteristics; yet addiction remains a stable issue across time. The primary goal of this course is that at its conclusion, students will leave with an empirically sound understanding of addiction and a more nuanced view of the individual struggling with addiction. To that end, this course aims to provide a broad overview of the study of addictive behaviors. The primary focus will be on substance use disorders. Secondary attention will be given to process addictions such as gambling disorder, time permitting. The course will cover the following topics: neurobiology of addiction, risk factors for addiction, the effects of addiction on the family, common conceptualizations of addiction, adolescent-specific issues, substance-specific considerations, and comorbidity. Attention to important cultural and ethical considerations will be embedded throughout the course. 3 Credits. Typically offered Fall Semester.

PY-251 FAMILY SYSTEMS
This course examines the major family systems theories, their assessment techniques, and associated therapies. Emphasis is placed on the features of a functional and dysfunctional family system. Separated/divorced, substance abusing, sexually abusing, and violent family systems and their dynamics are studied in detail. Offered spring semester. 3 credits

PY-252 REHABILATATIVE TREATMENT SYSTEMS
This pre-professional course introduces students to rehabilitative treatment systems currently used by chemical dependency programs. Topics include case management and treatment planning with various populations (e.g., youth, families), ethical and legal issues, the role of family and workplace in treatment, and community resources. Offered fall semester. 3 credits

PY-260 SOCIAL PSYCHOLOGY
An introduction to both classic and contemporary social psychological research and theories. Topics include research methods, the self as a social construction, perceiving social others, persuasion, and aggressive and altruistic behavior. Offered every spring. 3 credits

PY-275 SPORT PSYCHOLOGY
In this course students will learn the theories, concepts and intervention techniques of sport psychology. The course will cover all populations including youth, senior athletes, and college and professional athletes. Topics covered will include, but not be limited to, motivational climate, goal orientation, anxiety, aggression, team dynamics, coaching, leadership, overtraining, injuries and other challenges. Students will acquire an understanding of (1) Psychological theories, research and research methods in sport psychology, (2) How psychological factors influence performance, (3) How athletes and coaches can improve psychological and communication skills for greater success, (4) The impact sports and athletes play in our society, and (5) The role of sport psychologists. Offered in even-numbered fall semester. 3 credits

PY-280 INTERPERSONAL & GROUP PROCESSES
This experiential-learning course is designed to introduce the art and skill of interpersonal communication and the organization and dynamics of groups to students interested in business management and in human services (e.g., psychology, education, and social work). This is primarily a skill-based course that emphasizes learning and practicing skills in active listening, open communication, problem-solving, and conflict management. The weekly format of the course includes a theory session followed by an experiential-learning laboratory. Enrollment is limited due to the nature of the experiential laboratory. Prerequisite: Seniors Only. Offered spring semester. 3 credits

PY-300 DIRECTED RESEARCH
Students assist faculty and senior psychology majors with their various research projects. Depending on the status of the research at the time of enrollment, students might read the literature, assist in the development of research ideas, design empirical studies, collect, enter, and analyze data, and contribute to the preparation of manuscripts. P/F only. Prerequisites: Permission of instructor. Offered every semester. May be repeated. 1 credit

PY-308 COGNITIVE PSYCHOLOGY
An analysis of human cognition, including such topics as attention, perception, pattern recognition, memory, language production and comprehension, problem solving, creativity, and artificial intelligence. Offered fall semester. 3 credits

PY-309 LEARNING
An overview of processes that cause human behavior to change in response to the environment. Animal models of learning are discussed, along with their application to human behavior. Topics include natural selection, classical and operant conditioning, biological constraints on learning, observational learning, and applications of the principles of learning to therapeutic approaches to behavior change. Offered spring semester. 3 credits

PY-311 EYEWITNESS MEMORY
Eyewitness testimony is heavily weighted in our legal system, but how accurate is eyewitness memory? According to the Innocence Project, nearly 70% of wrongful convictions involved eyewitness misidentifications. In this course we will explore the processes that are involved in the formation, maintenance, and retrieval of memory for events and persons by reviewing both primary and secondary scientific sources. We will discuss the applications and limitations of these studies from a scientific perspective. Students will participate in exercises simulating some of the studies we talk about to get a sense of what it is like to be a witness and a research participant. Offered variably. 3 credits.

PY-320 FORENSIC PSYCHOLOGY
A survey of topics in forensic psychology, a specialized subfield involving the interface between psychology and law. Topics include forensic assessment, civil competence, eyewitness testimony, criminal responsibility, psychology of criminal behavior, criminal profiling, jury issues, expert witness issues, police issues, and career paths in forensic psychology. Offered variably. 3 credits

PY-322 HEALTH PSYCHOLOGY
This course introduces students to affective, behavioral, and cognitive influences on health. The biological, psychological, and social influences on health, and health-improving interventions, will be recurrent themes throughout the course. Additional topics of study are decided by the class and vary by semester. Possibilities include the effects of stress, eating behaviors, substance abuse, specific diseases/disorders, and the patient/health care provider relationship on health. Offered every spring. 3 credits

PY-331 BIOLOGICAL PSYCHOLOGY
This course introduces students to the ways in which behaviors are based on biological processes occurring within our bodies. An introduction to neurons, neurotransmitters, psychopharmacology, and the central nervous system forms the foundation of the course. Additional topics of study vary by semester. Possibilities include sensory processes, motor behavior, reproductive behavior, emotion, learning and memory, and biological bases for psychological disorders. Offered fall semester. 3 credits

PY-333 SENSATION & PERCEPTION
This course introduces students to the ways in which stimuli from our environments (e.g., a vibration in the air or a chemical molecule) are detected and interpreted by creatures, with a specific focus on humans. Course topics will be examined by studying the relevant physiology and neurology, and the psychological implications for understanding and behavior. Prerequisite is PY-331 or BL-151 is recommended. Offered variably. 3 credits

PY-335 PSYCHOPHARMACOLOGY
This course will focus on many topics related to psychopharmacology: the psychiatric and neurological conditions that are treated with psychoactive drugs; nervous system biology and the mechanisms by which these drugs work; the physical, behavioral, and neurological effects of these drugs; the prescription and use of drugs as part of the treatment process; critiquing research related to drugs; areas of controversy with the use of drugs; and lastly, ethical and societal issues in the psychopharmaceutical industry. Offered variably. 3 credits

PY-341 RESEARCH METHODS IN PSYCHOLOGICAL SCIENCE
The purpose of this course is to introduce students to the various tactics of performing research within the field of psychology. Although the emphasis is on psychological research methods, the procedures developed are applicable to all areas of scientific research. Course work includes hands-on experience conducting psychological research, analyzing data, and reporting results. Prerequisites: PY 203 and PY 204. Offered both semesters. 4 credits

PY-343 ABNORMAL PSYCHOLOGY II
Building upon the material in the introductory Abnormal Psychology course, this more advanced course provides students with an intense examination of mental illness and the issues surrounding it. Disorders covered in detail include Post traumatic Stress Disorder, Anxiety Disorder, Major Depressive Disorder, Schizophrenia, and Eating Disorders, among others. Psychology Majors and Minors Only. Typically offered spring semesters. 3 credits

PY-350 INDEPENDENT STUDY--PSYCHOLOGY
May be repeated. Variable credit.

PY-370 SEMINAR: ETHICAL ISSUES IN PSYCHOLOGY
This upper division seminar course examines the prominent professional and ethical issues in psychology. Issues primarily surround work with patients; however, research and teaching issues are also covered. This is a seminar course in which students read and discuss articles from scholarly journals. Prerequisite: psychology major. Offered fall semester. 3 credits

PY-371 SEMINAR: COLLABORATIVE RESEARCH ON A SPECIAL TOPIC
Students read and discuss primary sources on a topic selected by the instructor and then collectively design a research project. The final paper for the course is a collaborative research proposal with pilot data and preliminary analyses. Completion of the entire project is expected to yield a publication-quality manuscript or a professional conference presentation. Students interested in continuing their involvement in the research beyond PY 371 may do so through PY 350 Independent Study. Prerequisites: Instructor's permission. Other prerequisites may be recommended depending on the semester's topic. Offered variably. 3 credits

PY-376 CREATING CHANGE FOR CHILDREN
How do we change the world and make it a better place for children? This is the central question for this interdisciplinary seminar. We will examine the science and practice of creating and sustaining social change from across the disciplines of psychology, education, public health, media, and communication. This course is intended for students in the Children's Studies Minor as well as students in other academic majors with a strong interest to serve children. The class activities include learning and discussing ideas from different fields, examining case studies, and working in teams to create and critique social change concepts. The class will be hosted at the Fred Rogers Center. 2 Credits

PY-382 PSYCHOLOGICAL ASSESSMENT
This course provides an introduction to the field of psychological assessment. Assessment includes a variety of psychological tests and other approaches designed to gain a better understanding of the human person. Includes personality and intellectual testing, as well as standardization and construction. Prerequisite: PY 203. Typically offered spring semesters. 3 credits

PY-390 HISTORY & SYSTEMS OF PSYCHOLOGY
An examination of the major systems and trends in the history of psychology. Special attention is given to the various schools of philosophical thought that preceded the emergence of psychology as a science. Although the contributions of particular psychologists are considered, the primary emphasis is on the major systems or schools of thought that have influenced the development of psychology as a science. Prerequisite: Twelve previous credits in psychology. Offered variably. 3 credits

PY-395 PROFESSIONAL DEVELOPMENT IN PSYCHOLOGICAL SCIENCE
This course is intended to serve as a bridge for students from college to post-college life. We will explore student career interests, cover psychology degrees and career options, discuss job outlooks, and convey skills that employers want. We will also do practical assignments, such as conducting job searches, creating resumes and curriculum vitas, engaging in mock interviews, writing cover letters and personal statements, and more. Information will be presented on how to apply to and navigate graduate school. We will discuss topics that psychology graduates may encounter in the workplace related to

stigma, ethics, diversity, stress, and workplace culture. Lastly, this course will help prepare students for life post-college by covering topics such as professional development, budgeting, student loans, moving to a new location, insurance, re-building your social network, developing good credit, and more. 3 credits.

PY-401 CAPSTONE: RESEARCH REVIEW AND ANALYSIS
In this capstone course, students write a literature review and analysis of a topic in the field of psychology. Students identify and examine primary sources and use these sources to develop a critical analysis of the topic area. Psychology majors completing PY 405 are exempt from this requirement. Prerequisite: PY 341. Offered both semesters. 3 credits

PY-405 CAPSTONE: RESEARCH THESIS I
Junior psychology majors design an empirical study and submit an APA-style research proposal and IRB application. Students conduct an extensive review of the literature, synthesize existing theory and research to build a rationale for their study, develop specific hypotheses, devise appropriate methodology and statistics, and obtain or construct supporting materials. Prerequisites: PY 341, 3.5 Psychology GPA, and permission of the Department Chair. Offered spring semester. 3 credits

PY-406 CAPSTONE: RESEARCH THESIS II
In this follow-up to Research Thesis I, students conduct the empirical study that they designed in PY 405. Students recruit participants; collect, analyze, and interpret data; compose the results, discussion, tables, and figures; and revise all earlier portions of the paper to produce an empirically based APA-style research thesis. Prerequisite: PY 405. Offered fall semester. 3 credits

PY-550 PSYCHOLOGY INTERNSHIP
Students engage in professional work experience in the community that complements and strengthens academic learning. The number of credits earned and the academic requirements are variable, depending on the duration of the experience. Students may or may not receive monetary compensation depending on the organization. Students must receive approval from their academic advisor and complete all paperwork with the Career Center before registering for or beginning the internship. May be repeated. Offered both semesters. Variable credit.

SO-101 INTRODUCTION TO SOCIOLOGY
This course is an overview and survey of the scientific study of human interactions in society. The course explores the basic concepts that are the foundation of the discipline. Students are introduced to research methods, theoretical perspectives, culture, socialization, social interaction, deviance, and inequality. Typically offered every semester. 3 credits

SO-105 CHEMICAL DEPENDENCY
The course provides an overview of addictive disorders and investigates three models of dependency: the psychosocial, the bio-medical, and the socio-cultural. Emphasis is on a holistic understanding of the confounding variables of the phenomenon of addiction. Topics include the individual's decent into dependency, the impact of chemical dependency on the family, drugs on the streets of our local communities, cross-cultural drug wars, and prevention, intervention, and treatment strategies. Typically offered Fall semester. 3 credits

SO-106 SOCIOLOGY AND GLOBAL ISSUES
This course is an introduction to sociological perspectives on globalization and the global dimensions of problems facing contemporary society. The course will review globalization theories and trends, and the processes and structures of globalization. While the emphasis is on theoretical frameworks and data from sociology, this course takes an interdisciplinary approach to the issues surrounding globalization. Prerequisite: SO 101 recommended. Typically offered Fall semester. 3 credits

SO-161 FOUNDATIONS OF SUSTAINABILITY
This course is designed as an introductory course on environmental sociology. The course will examine the varied forces and perspectives that have an impact on environmental policy making. Subject areas include environmental policy- making, the concepts of ecology and sustainability, renewable and nonrenewable resources, pollution, energy policy, and global environmental degradation. Offered every fall semester. 3 credits

SO-200 RACE AND ETHNICITY
This course explores the causes and consequences of prejudice and discrimination in America. We will connect the historical emergence of racial and ethnic groups to the social, cultural, political, and economic forces that shaped their experiences. The continuing role of these social forces will be highlighted in order to nurture a sociological vision of contemporary minority group life. The course will also accent relations between racial and ethnic groups and the evolution of social movements that resist oppression. Typically offered fall semester. 3 credits

SO-204 SOCIOLOGY OF CRIME

This course begins with an overview of sociological theories of deviance and applies the different theoretical perspectives to current topics in deviance. A variety of definitions, key theoretical perspectives, and concepts are presented and analyzed in an effort to understand the numerous ways that deviant behavior may be defined, explained and interpreted. The field of deviance provides an opportunity to study interesting and important substantive areas of sociology, as well as an opportunity to study basic concepts and theoretical approaches in sociology. Typically offered every other spring semester (even-numbered years). 3 credits

SO-207 VIETNAM ERA: SOCIETY, CONFLICT & CHANGE
This course will examine social/cultural conflict and change in the U.S. during the Vietnam Era. Although we will look at the war itself from the perspective of the Burns and Novick documentary "The Vietnam War," the course includes a discussion of many of the significant social trends of that time. Juniors and Seniors only. 3 credits

SO-208 AGE, AGING AND LIFE COURSE
This course will offer an overview of the changes in the social roles, social relationships, biological functioning, and psychological processes that occur as people grow older. The emphasis of the course lies on the social factors that play a role in the aging process: how the experience of older age is shaped by our gender, race, social class, historical context, public policies, and our own resources. 3 credits

SO-217 SOCIOLOGY OF RELIGION
All forms of religious experience are connected to a social environment. The focus of the course is the impact of the social context upon religious belief and behavior. Special topics include apocalyptic movements, Catholics and modernity, cults, sects, fundamentalism, Satanism, conversion experiences, the charismatic movement, and the changing role of women in religious institutions. Typically offered every other spring semester (odd-numbered years). 3 credits

SO-235 INEQUALITY AND SOCIAL PROBLEMS
This course is an introduction to stratification, class theory, and social inequality, with an emphasis on the United States. We will explore relevant sociological theories and research findings concerning economic, political, and gender disparities, and the social problems created by these structures of inequality. Typically offered fall semester. 3 credits

SO-243 CREATING CHANGE FOR CHILDREN
How do we change the world and make it a better place for children? This is the central question for this interdisciplinary seminar. We will examine the science and practice of creating and sustaining social change from across the disciplines of psychology, education, public health, media, and communication. This course is intended for students in the Children's Studies Minor as well as students in other academic majors with a strong interest to serve children. The class activities include learning and discussing ideas from different fields, examining case studies, and working in teams to create and critique social change concepts. The class will be hosted at the Fred Rogers Institute. 3 credits

SO-248 FUNDAMENTALS OF EPIDEMIOLOGY
This course covers the fundamentals of epidemiology as the study of the distribution and determinants of diseases, health conditions, or events among populations and the application of that study to prevent and control health problems. 3 credits

SO-276 SOCIOLOGY OF GENDER
This course explores the social formation of gender inequality as well as the accompanying cultural construction of masculine and feminine ideologies and identities. Our investigations will focus on the following themes: the institutionalization of patriarchy; the intersection of class, power, and racial disparities between men and women; sexual violence against women; the transformation of gender roles; and the social movements and organizations that resist discrimination. Prerequisite: SO 101 recommended. Typically offered every other fall semester (odd-numbered years). 3 credits

SO-280 STRESS, HEALTH, AND ILLNESS
This course explores the role of stress in the onset and progression of physical and mental illness. Sociological theories and research are used to make sense of the distribution of stress and disease across groups in society. The main goal of the course is to show how social conditions like poverty, economic inequality, discrimination, and environmental pollution can produce harmful levels of stress and illness. The course will also consider the role of public policy as a strategy for reducing stress, improving health, and alleviating suffering. 3 credits.

SO-307 SOCIOLOGICAL THEORY
This course traces the origin and development of sociological theory from the Enlightenment to the 21st century. The first part of the course will investigate the primary works of the classical theoreticians, focusing on Marx, Durkheim, and Weber. The second part of the course explores contemporary theories that have shaped sociology since the early 1900s, focusing on functionalism, conflict theory, and symbolic interactionism. Additional theories such as social exchange theory, phenomenology, and postmodernism will also be discussed. Prerequisite: SO 101, junior or above. Typically offered every other spring semester (even-numbered years). 3 credits

SO-311 RACE GENDER, CLASS & MEDIA
This course explores the representations of race, gender, and class within media content, as well as audience interpretations of these portrayals. Students will be introduced to the sociological and communicative lenses that scholars employ to examine these representations, as well as the cultural influences that shape them. Additionally, students will be encouraged to consider the role of media literacy and activism in countering particular mediated representations and shaping our culture. 3 credits

SO-350 INDEPENDENT STUDY--SOCIOLOGY
Independent investigation and research into a special topic for selected students. Topics are determined by both student and professor. Prerequisite: permission of faculty member and departmental chair. May be repeated. Variable credit.

SO-356 QUANTITATIVE RESEARCH METHODS
This course is an overview of research methodology in the social sciences. The general subject areas include research design, sampling, quantitative and qualitative methods, ethical issues, and computer assisted analysis of results using SPSS. The emphasis will be on quantitative methods. Occasional offering. 3 credits

SO-375 SPECIAL TOPICS IN SOCIOLOGY
Topics vary, but the focus of this course is an in-depth examination of specific social issues and/or developments in sociology. Prerequisite: junior or senior standing. Occasional offering. 3 credits

SO-405 SENIOR SEMINAR I
This is a required course for senior Sociology majors. The seminar will review each step of the research process, and students will complete an original research project. Prerequisite: AN 360 or permission of instructor. Typically offered fall semester. 3 credits

SO-406 SENIOR SEMINAR II
This is a required course for senior Sociology

SO-550 SOCIOLOGY INTERNSHIP
Students may arrange to receive credit for employment experience in various non-college settings. It is also possible to have paid or unpaid professional work entered into the transcript as "no credit." Prerequisite: permission of the departmental coordinator. May be repeated. Variable credit.

SP-105 ELEMENTARY SPANISH
Prerequisite: Appropriate score on the College's language placement examination or permission of instructor. A one-semester course which emphasizes vocabulary, grammar and cultural awareness. This course is for beginners or for those with little or no prior knowledge of Spanish. Offered spring semester. 3 credits

SP-203 INTERMEDIATE SPANISH I
Systematic grammar review and vocabulary building, with stress on nouns, adjectives, pronouns, and on the common tenses of regular and irregular verbs. Introduction to reading techniques suitable to college level study. Prerequisites: Six (6) to eight (8) credits of college Elementary Spanish, SP 105 or appropriate score on the College's language placement examination. Offered fall semester. 3 credits

SP-204 INTERMEDIATE SPANISH II
Further understanding of Spanish syntax with emphasis on the subjunctive, complex grammatical structures and idiomatic usages. Reading, compositions, and oral exercises. Both courses build an awareness and appreciation of the variety of Spanish cultures. Prerequisite: satisfactory completion of SP 203 or appropriate score on the College's language placement examination. Offered spring semester. 3 credits

SP-208 SPANISH FOR HEALTH CARE
This course continues to develop listening, speaking, reading and writing skills in Spanish. Emphasis is on vocabulary building and developing appropriate strategies to communicate in a variety of

health care settings. Students will have the opportunity to engage in role-play scenarios that are common to the health care field. 3 credits

SP-215 SPANISH FOR HEALTH PROFESSIONALS I
This course develops listening, speaking, reading, and writing skills in Spanish within the context of health care. Students begin to explore the significance of cultural perspectives in medical encounters. Emphasis is on developing vocabulary and basic conversation skills. Students have the opportunity to engage in typical role-play scenarios from the patient's perspective as well as that of health professionals. 3 credits

SP-216 SPANISH FOR HEALTH PROFESSIONALS II
This course continues the development of skills necessary for communication within a healthcare setting. Through cultural readings, dialogues and videos students explore beliefs, customs, traditions, and health issues among Latinos. Role-plays enable students to practice communication skills while demonstrating intercultural competence and sensitivity. 3 credits

SP-315 ADVANCED SPANISH GRAMMAR AND COMPOSITION
This course provides students with a solid foundation in Spanish syntax. It is a writing-intensive course directed towards improvement of stylistic skills. Thorough review of tenses, complex grammatical structures and idiomatic expressions. Writing assignments progress in difficult and will include journals, compositions, and critical essays. Offered fall semester. 3 credits

SP-317 INTRO TO SPAN. LITERARY ANALY
This class in an introduction to the literary analysis of the four major genres in Peninsular and Spanish American literature: narrative (prose), poetry, drama, and essay. Different texts will be discussed and analyzed in conjunction with their respective sociocultural contexts. Students will acquire the necessary terminology and tools for a formal literary analysis in Spanish. They will be able to recognize the major Peninsular and Spanish American writers and literary movements, discuss and analyze the different genres, and present their findings in written and oral form. Offered spring semester. Prerequisite: SP-315 or approval of department chair. 3 credits

SP-318 SPANISH FOR BUSINESS
Development of oral and written skills. This course presents the essentials of modern commercial Spanish through the medium of situations commonly found in the business world. Practical themes include currency exchange, travel, job interviews, telephone etiquette and common types of written business correspondence. Emphasis on cross-cultural understanding and exploration of business practices in Hispanic countries and the United States. Prerequisite: SP 315 or approval of department chair. 3 credits

SP-320 DEVELOPING ORAL PROFICIENCY AND PHONETICS IN SPANISH
Development of listening, speaking and pronunciation skills through the study of phonetics. Familiarity with dialectal variations. Advanced practice in oral expression. Topics may include current events, films and daily situations. Prerequisite: SP 315 or prior approval of department chair. 3 credits

SP-321 PANAROMA OF PENINSULAR LIT
Survey of literary movements in Spain from the Middle Ages through the 19th century, with reading and discussion of selections from the major writers. Grammar review, oral presentations and composition in Spanish. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-322 PANORAMA OF LATIN-AMERICAN LITERATURE
Survey of Spanish American literary movements starting in the Pre-Columbian era and continuing in the Colonial period through the 19th century, with reading and discussion of selections from the major writers. Grammar review, oral presentations and compositions in Spanish. Prerequisites: SP 317 or approval of department chair. 3 credits

SP-326 PANORAMA OF PENINSULAR LITERATURE II
Survey of literary movements in Spain in the 20th century, with reading and discussion of selections from the major writers. Grammar review, oral presentations and composition in Spanish. 3 credits

SP-327 PANORAMA OF SPANISH AMERICAN LIT II
Survey of Spanish American literary movements of the 20th century, with reading and discussion of selections from the major writers. Grammar review, oral presentations and compositions in Spanish. 3 credits

SP-332 PENINSULAR LITERATURE OF XIX CENTURY
This course provides students with an understanding of the Spanish literary tradition of 19th century Spain. Students will study major literary movements and authors of the period. This course can be a survey including all major literary movements and authors; or it may be offered as a topics class, where the focus is on the discussion of a specific issue such as social class, gender, economics, etc., or devoted to one specific literary genre. 3 credits

SP-333 PENINSULAR LITERATURE OF THE XX CENTURY
This is a literature class intended for the student to understand the Spanish literary tradition of the XX century. This class can be a survey including all major literary movements and authors; or it may be offered as a topics class, where the focus is on the discussion of a specific issue such as social class, gender, economics, etc., or devoted to one specific literary genre. 3 credits

SP-350 INDEPENDENT STUDY - SPANISH
May be repeated. Variable credit.

SP-410 SPANISH GOLDEN AGE DRAMA: LA COMEDIA
This class focuses on the reading and analysis of the canonical texts of Golden Age Drama. We will examine the most representative texts of seventeenth-century Spanish Comedia along with their historical, cultural, religious, and philosophical contexts. Students will acquire a thorough understanding of this unique genre and its influence on the literature and tradition of many different countries. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-415 COLONIAL SPANISH AMERICAN LITERATURE
This course explores some of the most important and provocative texts written in the Spanish American Colonial period. The first part of the course focuses on texts that offer different historical accounts of the "Conquista" of the so-called "New World." The second part presents texts from the perspective of native and mestizo writers, as well as texts from significant "criollo" authors. Students will acquire a more complete understanding and appreciation of this essential period in history, its cultural and religious repercussions, and its connection to the identity of Latin American people. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-420 SPAN. GOLDEN AGE HYBRID MASTERPIECES
This class studies Spanish Renaissance and Baroque masterpieces, and focuses on issues related to hybrid genres in the different texts. Among the books students will read are the well-known "Tragicomedia", La Celestina, and the founder of the Spanish

Picaresque Novel, El Lazarillo de Tormes. All the texts are studied in relation to their historical, cultural, religious, and philosophical contexts. Students will get an appreciation for the texts responsible for some of the most transcendent archetypes in Hispanic literature and culture. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-423 CERVANTES' DON QUIXOTE
Spanish 423 focuses on the study and analysis of Cervantes' masterpiece, Don Quixote. The main goal of the course is the thorough reading of the text itself, although its historical, cultural, philosophical, and religious context will also be considered. Cervantes' biography will also be examined since it relates to the book and the way in which it was conceived. The close reading and analysis of Don Quixote will take us to the consideration of previous literary influences, as well as to comparisons to subsequent works of art. We will also explore the way in which the text has been portrayed in the visual arts, including movies. Overall, students will attain an enhanced awareness of Cervantes' aesthetic achievement and a better understanding of the continuous popularity of Don Quixote and its place among the best texts in World Literature. 3 credits

SP-425 SPANISH AMERICAN SHORT STORY OF THE XX CENTURY
This class focuses on some of the short stories that were written by several well-respected writers in this genre in the 20th century. Students will develop an awareness of the various writers' significant contributions to the literature from Latin America through an overview of the canonical texts and figures in this genre. Prerequisites: SP 317 or approval of department chair. 3 credits

SP-426 PENINSULAR SHORT STORY
This class focuses on some of the short stories that were written by several well-respected writers in this genre in the 19th and 20th century. Students will discuss issues related to this genre in Peninsular Literature. Students will develop an awareness of the various writers' significant contributions to the literature from Spain through an overview of the canonical texts and figures in this genre. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-427 SPANISH AMERICAN POETRY
This class focuses on some of the poems that were written by several well- respected authors in this genre in the XIX and XX centuries. Students will discuss issues related to this genre in Spanish American Literature. Students will develop an awareness of the various writers' significant contributions to the literature from Latin America through an overview of the canonical texts and figures in this genre. 3 credits

SP-428 PENINSULAR POETRY
This class focuses on some of the short stories that were written by several well-respected authors in this genre in the XIX and XX centuries. Students will discuss issues related to this genre in Peninsular Literature. Students will develop an awareness of the various writers' significant contributions to the literature from Spain through an overview of the canonical texts and figures in this genre. 3 credits

SP-430 CERVANTES' NOVELAS EJEMPLARES
In this course we will study a very significant part of Cervantes prose, his Novelas Ejemplares. Cervantes is well-known for his Masterpiece Don Quixote, but his importance in the development of this genre is considerable since he is the first one to write such innovative literature in Spanish. Students will analyze the different texts and its diverse characters, along with their historical, cultural, religious, and philosophical contexts. They will learn to appreciate this genre and its importance in the development of the short story. Prerequisite: SP 317 or approval of department chair. 3 credits

SP-435 SPANISH AMERICAN DRAMA
This class focuses on the reading and analysis of important dramatic plays written by several well- respected authors in this genre in the XIX and XX centuries. Students will discuss issues related to this genre in Spanish American Literature. Students will develop an awareness of the various writers' significant contributions to the literature from Latin America through an overview of the canonical texts and figures in this genre. 3 credits

SP-444 PENINSULAR CULTURE AND CIVILIZATION
This course is a survey of the major historic events that shaped Spain. It includes discussions of different historic periods and cultural influences and movements. Prerequisite: SP 315 or approval of department chair. 3 credits

SP-445 SPANISH AMERICAN CULTURE & CIVILIZATION
This course is a survey of the major historic events that shaped Spanish America. It includes discussions of different historic periods and cultural influences and movements. Prerequisite: SP-315 or approval of department chair. 3 credits

SP-550 SPANISH INTERNSHIP
Professional work experience in the community which complements and strengthens academic in-class learning. Academic credit is variable depending on the nature and duration of the experience. Students may or may not be compensated depending on the company/ agency/ educational setting. Students must receive departmental approval to participate. May be repeated. Variable credit.

STAB-099 STUDY ABROAD PRE-DEPARTURE
This course is required for all students engaging in four-week or more summer or semester programs. The orientation begins midway through the semester prior to study abroad and ends the final week of classes. Students and International Education Office staff will meet regularly to discuss important orientation topics such as scholarship applications, cultural awareness and sensitivity, health and safety, career application, etc. Variable (0-1) credit. P/F only.

STAB-100 STUDY ABROAD PROGRAM
This is the placeholder course for direct or third-party study abroad program enrollment. Permission from Director of International Education required. Federal, state, and non-institutional financial aid may be applied; scholarship funding may be available. Fee. Prerequisite: STAB-099. Credits vary according to term and program. Minimum 12 credits for semester programs. P/F only.

STAB-200 STUDY ABROAD
This is the placeholder course for exchange study abroad program enrollment. Permission from Director of International Education required. Federal, state, and institutional aid may be applied; scholarship funding is available. Fee. Prerequisite: STAB-099 Study Abroad Pre-Departure. Credits vary according to term and program. Minimum 12 credits for semester programs. P/F only.

STAB-300 SVC SUMMER INSTITUTE IN ROME
This is the placeholder course for SVC Summer Institute in Rome enrollment only. Study and live in Rome for five weeks at the Benedictine monastery Sant' Anselmo on the Aventine Hill, just south of the Colosseum and walking distance from Saint Peter's Basilica, the Pantheon, the Roman Forum, and much else. Enjoy day trips, experience Italian culture and food, discover the centrality of Rome to Western Civilization and the Catholic Church, and grow in

friendship with fellow Saint Vincent students. Permission from Director of International Education and Director for Center of Catholic Thought and Culture required. Additional fee. Variable credit. P/F only.

STAB-550 INTERNSHIP -- STUDY ABROAD
Students work in a supervised internship supervised by the Study Abroad Coordinator. Variable credit.

TH-201 TORAH
This course will provide a comprehensive study of the first five books of the Bible (Genesis, Exodus, Leviticus, Numbers, and Deuteronomy). It will explore the ancient world of these texts (making use of comparative ancient Near Eastern works) as well as their literary character and theological meaning. Attention will be given to key themes such as creation and covenant, and the course will focus on how these themes resonate in the contemporary world. 3 Credits

TH-204 PSALMS AND WISDOM LITERATURE
This course offers an in-depth study of the Book of Psalms and the Wisdom tradition of the Old Testament. It explores ancient Israel's approach to worship and moral formation as well as its approach to questions about human righteousness and suffering. This historical study provides the foundation for discovering the meaning and value of Israel's prayers and wisdom in contemporary thinking and practice. 3 Credits

TH-205 PROPHETS
This course will offer an overview of biblical prophecy, focusing on the Former, Latter, and Minor Prophets and how these individuals functioned in their societies. Special attention will be given to the historical settings of the prophets, their desire for social justice and the modern-day implications of their works. Offered alternating spring semesters. 3 credits

TH-406 BOOK OF GENESIS
This course investigates the history, literary artistry, and theology of the book of Genesis. We will also explore representative post-biblical interpretations of the book in theology, literature, art, and film. 3 credits.

TH-207 WOMEN IN THE OLD TESTAMENT
This course explores the shape and meaning of the Old Testament by examining its portrayal of women. It will investigate the historical realities which shaped the lives of these ancient women. In addition, this course will ask theological questions about gender in relation to major biblical themes such as creation, covenant and salvation. 3 credits

TH-212 THE SYNOPTIC GOSPELS
A deeper look into the methods of Gospel criticism including an historical approach to the life of Jesus. An introduction to the background and theology of each of the three synoptic gospels, Matthew, Mark, and Luke. 3 credits

TH-214 JOHANNINE LITERATURE
An introduction to the historical context, literary analysis and theological themes of the Gospel and Letters of John, and an interpretation of the apocalyptic message of the Book of Revelation. 3 credits

TH-215 EPISTLES OF SAINT PAUL
A study of the background and arguments of the Pauline writings. Reading and interpretation of the major epistles, especially as they regard Christian living. 3 credits

TH-217 BIBLICAL APOCALYPSE, THEN AND NOW
This course will investigate the origins and development of apocalyptic thinking by engaging in an in-depth study of biblical apocalypses (Daniel, Revelation) and related texts. We will explore the history and artistry of biblical apocalypses as a means of deepening our understanding of their theology, that is, what they say about God. Moreover, we will seek to draw connections between the ancient and the contemporary by analyzing contemporary apocalypses to demonstrate the persistence and influence of apocalyptic imagination. This course will reinforce understanding of the theological foundations of the Catholic, Benedictine tradition through critical engagement with scripture in relation to enduring theological questions. 3 credits

TH-231 BIBLICAL FOUNDATIONS
This course is a survey of the Bible, studying selections of biblical texts in the Torah, the Prophets, Wisdom Literature, the Gospels, and Epistles of Paul, with a focus on how these texts inform lived expressions of Christian faith. 3 credits.

TH-235 WOMEN IN THE NEW TESTAMENT
An exploration of the roles and responsibilities of women as they are reflected in the texts of the New Testament. Attention will be given to issues of language, power, economics and gender role expectations with a focus on the ways in which early Christianity attempted to liberate people from oppression as well as the ways in which it compromised with the dominant society. 3 credits

TH-240 HIST./BIBLICAL INTERPRETATION
This course will explore the various ways that the Christian Scriptures have been used in the Church as the "soul of sacred theology." Special attention will be given to particular passages of Scripture which have provided inspiration for significant movements in church history, as well as particular methods which have arisen at various time periods in the history of the Church. 3 credits

TH-250 INTRODUCTION TO MORAL THEOLOGY
This course is to introduce students to the basic concepts of Catholic moral theology: natural law, conscience and decision making, and the virtues. 3 credits

TH-251 INTRODUCITON /CATHOLIC SOCIAL TEACHING
The course examines seven areas of social life from the perspective of Catholic social teaching: The Life and Dignity of the Human Person; The Call to Family, Community and Participation; The Option for the Poor and Vulnerable; the Link Between rights and Responsibilities; Solidarity with all People; The Care for God's Creation; and the Dignity of Work and Workers. Participants will examine and discuss how each of the seven topical areas is related to the core values of Catholic social teaching of: human dignity, the common good, solidarity, subsidiarity, and the universal destination of goods. 3 credits

TH-254 SOCIAL JUSTICE AND LEADERSHIP
This course will explore the foundations of Catholic Social Teaching (CST), particularly as it applies to contemporary issues confronting local communities. Particularly, the course will explore leaders who have advocated for issues connected to CST: human dignity, dignity of work, preferential option for the poor, and solidarity in peacemaking. 3 credits. No prerequisites.

TH-255 RELIGION AND POLITICS
This course will study the Catholic Church social doctrine as it relates to issues of politics. It will also focus on the recent history of the Church thought and its interaction with the political culture of the United States. 3 credits

TH-256 PROFILES IN CATHOLIC SOCIAL JUSTICE
This course introduces the Catholic social justice tradition-and, by extension, elements of Catholic social teaching-through exemplary lives. The course will pay particular attention to the interplay of this tradition with varying histories and contexts, whether American or global, as well as how the Catholicism of these figures gives rise to and shapes their thirst for social justice. As a result, this course will introduce to students how these profiles in Catholic social justice exemplify ethical commitments for the service of self, neighbors, and creation in hopes of helping students formulate their own rational defense of self, neighbors, and creation in today's world. 3 credits

TH-258 RACE, RACISM, AND CATHOLIC SOCIAL THOUGH
This course considers the significance of the Catholic theological tradition for contemporary discussions on race and racial identity. Questions guiding inquiry in this course include: What does it mean to be human according to the Catholic Church? What are principles of the social doctrine of the Catholic Church? How does the Church struggle to combine personal piety and public witness? What is a Catholic framework for pursuing justice? What is a Catholic critique of racism and critical race theory? How might Christians critique the ideologies of "colorblindness" and "anti-racism"? 3 Credits

TH-265 GOD, WORK, AND MONEY
Purpose of the course is an exploration of the Catholic Church's social doctrine on and contemporary theological discussions of poverty, work, and economics. 3 credits

TH-266 THE SEVEN DEADLY SINS
This course explores the seven deadly sins as identified by the Catholic tradition. It uses a Thomistic framework to understand why they are considered sins and examines their application to contemporary life. 3 credits

TH-270 CATHOLIC MARRIAGE
The purpose of the course is to explore the theological foundations and implications of marriage and family. 3 credits

TH-272 THEOLOGY OF CHILDREN
This course explores the various Christian understandings of children and the implications of these perspectives for church, society, parents, and teachers. It also explores the theological views of Mr. Rodgers. 3 credits

TH-273 ETHICS OF AQUINAS
This course explores the moral theology of Thomas Aquinas. It covers his though on natural law and the virtues, situating them in his overall theological system. 3 credits

TH-274 GREEN DISCIPLESHIP
This course explores the Catholic church's teachings on the environment. With a focus on integral ecology, the course examines the ways that the environment connects to all aspects of life and thus how Christian discipleship includes care for creation. 3 credits

TH-275 CATHOLIC SEXUAL ETHICS
This course will present the understanding of human sexuality and of sexual morality as it has been developed in the continuing Catholic Tradition. This course will explore the broad meaning of human sexuality and the differences in male and female sexuality and the significance of these differences. Furthermore, we will examine the development of the Catholic Tradition regarding sexual morality, beginning with the Scriptures, continuing with the Fathers and medieval theologians. The course will also examine the debates over contraception, the response of the magisterium to these debates in Humane Vitae and the reaction to this magisterial document. Offered every spring semester. 3 credits

TH-280 CATHOLIC BIOETHICS
This course introduces students to how the Catholic moral tradition, grounded in the Judeo-Christian understanding of the sanctity of life, can provide a framework for assessing bioethical issues, including health, health care, death, suffering, and medicine. 3 credits

TH-282 CHRISTIAN FAITH & TECHNOLOGY
Social media, artificial intelligence, and the digitization of data are just a few markers of our new technological age. This course considers how, today, our use of technology might shape Christian theology and spirituality as well as how Christian theology and spirituality might shape our use of technology. 3 credits

TH-290 CONTEMPORARY APPROACHES IN CHRISTIAN ETHICS
This course will engage students in a rigorous study of contemporary scholarly approaches in Christian ethics. Ethical approaches to be considered may include Latin American liberation theology, feminist theology, womanist theology, black liberation theology, postcolonial theology, and others. Consideration of these various-and sometimes radical-hermeneutical frameworks will challenge students to question their own ethical presuppositions and delve more deeply into scholarly theories and methods trending in the academy today. Any student who intends to study any of the humanities disciplines in graduate school will find this course helpful. 3 credits

TH-291 REL/ETH THOUGHT OF MLK
A captivating preacher, courageous thinker, and prophetic leader, Martin Luther King Jr.'s presence looms large for us today. In a society that struggles stridently to liberate itself from the shackles of slavery and bondage of racism, we have much to learn from the man who gave his life for this very struggle-a struggle that we cannot fully understand without understanding him. In this course, we will study the development of King's religious and ethical thought from his childhood as the son of a preacher in Atlanta through his assassination at the Lorraine Motel in Memphis. We will encounter King as a man deeply engaged in a Christianity inextricable from ethical engagement with the world. 3 credits

TH-297 PRISON MINISTRY: DIRECTED READING/PRACT
This course will explore the intersection between contemporary theology and the field of prison ministry. The course includes numerous readings on the US prison system as well as texts focuses specifically on the challenges and practices of prison ministry. Additionally, the course includes on a ministry practicum at a local state correctional institution. 3 credits

TH-303 DIRECTED READINGS: THEOLOGY AND MENTAL HEALTH
This course will explore the intersection between contemporary theology and the field of mental health, including topics such as trauma, depression, and identity. 3 credits

TH-307 CHURCH HISTORY: 500-1789
This course explores the development of Christianity form the Middle Ages to the Enlightenment. Topics explored in this course include the growth of the papacy, medieval heresies, new religious orders, Mysticism, religion during the Renaissance, Martin Luther, John Calvin, radical reformers in Europe, the English Reformation, the Council of Trent and the Catholic Reformation, and the Enlightenment. 3 credits

TH-308 CHURCH HISTORY: 1789-1962
This course is an in-depth study of the Christian churches during the nineteenth and twentieth centuries with an emphasis on Roman Catholicism. Nineteenth century topics include the French Revolution and its impact on religion, English Roman Catholicism, the Oxford Movement, Pius IX and Vatican Council I, church and state relations in France, Germany and Italy, Anglican Orders, and Leo XIII. Twentieth century topics emphasize the role of the papacy in European society and will conclude with the pontificate of Pius XII and the Second World War. 3 credits

TH-310 THEOLOGY OF EARLY CHRISTIANITY
This course will trace the history and thought of the first 500 years of Christianity. Topics of study include Christians? tenuous relationship with Roman society, Church order and practice, and the development of doctrine. 3 credits

TH-312 CHRISTIAN MARTYRDOM
This course will explore the witness of Christian martyrs from the early Christian period to contemporary times. The study will include consideration of varying definitions of martyrdom, accounts of martyrdom, and the context in which martyrdom occurs. 3 credits

TH-320 THEOLOGY OF MEDIEVAL CHRISTIANITY
The development of Western Christianity from 700 to 1400 is the crucible from which modern civilization grew. This course traces the development of Christian thought and life in this period, including the development of doctrine, theological method, and the emergence of new religious orders. The main focus is on select theologians such as Saints Anselm of Canterbury, Bonaventure and Thomas Aquinas. 3 credits

TH-321 THEOLOGY OF THOMAS AQUINAS
St. Thomas Aquinas is viewed by many as the lodestar for Catholic theology. With an eye towards Aquinas's biography and focusing on his Summa Theologiae (though supplementing it with his other writings), this course offers a close reading of Aquinas on themes like the relationship of faith and reason, the nature of God, the Trinity, Creation, theological anthropology, Christology, and the sacraments. The aim of the course will be to capture the overarching vision of this theological master, a dynamic vision at once mystic and radical as well as one that has shaped indelibly the theological foundations of the Catholic, Benedictine tradition. 3 credits

TH-324 MODERN CATHOLIC THEOLOGY
This course examines significant texts, figures, developments, and debates of Catholic theology in the modern era. It focuses particularly on the twentieth century, a time of great social and religious change that presented both opportunities and challenges for Catholicism. Authors that could be considered include Karl Rahner, Joseph Ratzinger (later Pope Benedict XVI), Hans Urs von Balthasar, and Henri de Lubac. Understanding these modern presentations of Catholic theological foundations will help students better understand the current state of Catholicism into the twenty-first century. 3 credits.

TH-330 CATHOLIC SACRAMENTS
The course begins with an investigation of the theological foundation of the sacraments as actions of Christ and the Church. The individual sacraments are studied with an emphasis on historical development and liturgical practice as keys to understanding them. Special emphasis is given to the sacraments of initiation: Baptism, Confirmation and Eucharist. A special unit is devoted to the marriage preparation process and the liturgical options of the wedding ceremony. 3 credits

TH-331 EUCHARIST: SOURCE AND SUMMIT
The Second Vatican Council calls the Eucharist the "source and summit of the Christian life." This course explores that claim by examining the meaning of the Eucharist, the theology that lies beneath it, and its concrete implications for living. This course offers students an in-depth study of what stands as an essential theological foundation of the Catholic, Benedictine tradition. The course then will reinforce students' knowledge of those theological foundations. 3 credits

TH-332 ECCLESIOLOGY
A theological study of the teaching of the Catholic Church concerning the origin and meaning of the Church of Jesus Christ. Primary emphasis is placed upon biblical testimony and the teaching of the Second Vatican Council. The study also includes an overview of the Church in history as well as contemporary issues. 3 credits

TH-333 THE MODERN PAPACY
This course covers the role and theology of the papacy from Pius IX to the present. 3 credits

TH-334 CHRISTOLOGY
A biblical study of the life and teaching of Jesus. An examination of various portraits of Jesus from earliest Christianity through the Middle Ages to contemporary images. 3 credits

TH-335 CHRISTIAN DOCTRINE OF GOD
The course will examine the historical development of the Christian doctrine of God and will explore attempts by contemporary theologians to appropriate this doctrine. 3 credits

TH-337 GOSPEL OF LIFE, GOSPEL OF CREATION
To the surrounding culture, Christianity proclaims the "good news" that human beings are creatures made in God's image and positioned within a world deemed very good. Using biblical, theological, and magisterial sources-in dialogue with insights from the natural and human sciences-this course develops a theological anthropology and a theology of creation that, together, express this good news. In so doing, this course can bring the "Gospel of Life" (Pope John Paul II) and "Gospel of Creation" (Pope Francis) to bear on contemporary-indeed, timeless-questions. 3 credits

TH-340 BASICS OF CATHOLIC FAITH
Based on the Catechism of the Catholic Church, this course addresses the most basic elements that together make up the living reality of Catholic faith: Gospel, Jesus of Nazareth, Church, Jewish roots, liturgy, doctrine, Christian moral life, tradition, and the Kingdom of God. Offered every semester. 3 credits

TH-342 BENEDICTINE HERITAGE
This course combines a study of Benedictine Monasticism and the local history of Saint Vincent College. It begins with Boniface Wimmer and the nineteenth century revival of monastic life leading to the founding of Saint Vincent Archabbey and College. It then shifts to a study of monastic sources in particular the Rule of Saint Benedict as an animating "Wisdom document" of the SVC community. The course includes field trips to nearby religious communities and walking tours of little-known parts of the Saint Vincent campus. 3 credits

TH-343 MARIOLOGY
This course offers a theological study pertaining to the Church's teachings on the Virgin Mary. This study will include: pertinent texts from Sacred Scripture, post-canonical literature, teachings from the early councils, Mary and the Patristics, scholastic Mariology, Mary and the Protestant Reformation, dogmas concerning the Immaculate Conception and the Assumption, Mary in Art, Marian devotions,

Marian apparitions, and Mary within the context of the Second Vatican Council with subsequent articulation. 3 credits

TH-344 CLASSICS OF CATHOLIC THEOLOGY
The course will focus on five major periods in the history of Roman Catholic theology: the Patristic Period, the Middle Ages, the Counter Reformation, the Modern Period, and the Contemporary or "Postmodern" Period. The course will focus on one major work from an author associated with each of the five aforementioned periods. Offered alternating fall semesters. 3 credits

TH-345 CHRISTIAN SPIRITUAL WRITINGS
This course will survey a selection of Christian spiritual texts from the early Church period to contemporary writings. Students will learn to read primary texts theologically by attending to doctrinal, spiritual, and pastoral issues. 3 credits

TH-346 THOMAS MERTON: SPIRITUAL MASTER
An exploration of the life and thought of Thomas Merton (Cistercian monk, writer, social critic, poet, pioneer in cross-religious dialogue) in the context of 20th century history and theology. 3 credits

TH-348 FILM, FICTION, AND FAITH
This course examines both the distinctive ways film and literary fiction explore the basic tenets of the Christian faith and the way Christian theology understands film and literary fiction. 3 credits

TH-349 SCIENCE AND RELIGION: FRIENDS OR FOE?
This course examines the relationship between natural science and religion from a Catholic, theological perspective. The course covers topics such as historical interactions between these two discourses (e.g. the Galileo Affair), evolution and creation, randomness and divine providence, or religious belief and scientism. The course will pay particular attention to the distinct methods of inquiry employed by scientific and religious discourse respectively. Indeed, by exploring the relationship between these two discourses, this course will help students better understand and thus begin to put into practice methods appropriate to the arts and sciences to question, investigate, and reason. 3 credits

TH-358 CATHOLIC-JEWISH DIALOGUE
In a world torn by violence and pain the need for a living conversation aimed at Shalom, a peace of wholeness and understanding, is the goal of this course. The course is inspired by the dialogue between Catholic and Jewish scholars initiated by the Second Vatican Council. By dialogue is meant a fourfold activity: dialogue of life (living together in solidarity as neighbors); dialogue of action (working together for the common good); dialogue of theological exchange (exploring together in friendship different religious traditions); and dialogue of religious experience (sharing in common prayer or in religious practice). Participation in class discussions will be expected of students enrolled in this course. It is hoped that this course will help students become active participants in a life of dialogue. 3 credits

TH-359 JEWS, CHRISTIANS, & MUSLIMS
This course will explore the historical development of the three Abrahamic traditions and how they have come to understand engage one another over the centuries. Special focus will be paid to the Catholic theology of interreligious dialogue as express in nostra Aetate and other Magisterial documents. 3 credits

TH-360 PROTESTANT TRADITIONS
A course dealing with the foundations which the Reformation Period laid for Protestantism in Europe. Luther and basic Protestant tenets will be explored as well as the Wesleyan movement in England and 19th-century American revivalism. Offered every semester. 3 credits

TH-362 RELIGION IN AMERICA
A study of the American experience from the colonial period to the present from the perspective of religion and its relation to the individual and society. 3 credits

TH-364 20TH CENTURY PROTESTANT THOUGHT
This course will explore major trends in Protestant theology during the twentieth century. That goal will be pursued by looking at several important theological figures which were a part of these themes and time. 3 credits

TH-369 THE BLACK CHURCH IN AMERICA
This course is designed to examine the history of the Black Church Community in America. It begins with the religious customs slave brought with them from Africa. Those traditions were then integrated into Christian traditions such as Methodist, Baptist and Catholic churches. The Civil War freed slaves and introduced the age of Reconstruction which meant Jim Crow for black churches. The twentieth century brought separate but equal communities which enforced prejudice even in church groups. In the late twentieth century the black church became the headlight for civil rights in America. This course will examine the preaching, music, worship life, structure and leadership of this evolving theological community. 3 credits

TH-380 WORLD RELIGIONS
A survey of the world religions including Hinduism, Buddhism, Islam, as well as Shintoism, Confucianism and Taoism. Included will be the religious practices, customs and beliefs of each tradition. This course also addresses Catholic responses to the significance and meaning of the diversity of world religions. 3 credits

TH-385 BUDDHISM
This course is intended to give the student as overview of The Buddhist Tradition. It will examine the life of Siddhartha Gautama the historical Buddha. The basic views and beliefs of Buddhism along with the variations of the three traditions of Buddhism will be discussed. This course will also examine the life of the current Dali Lama, emphasizing his life as well as his thinking for the twenty first century. Comparisons with The Christian Tradition will be explored. 3 credits

TH-388 FAITH, WORK, & GOD IN INDIA
This one-credit class is a short-term travel service-learning course. Students will travel to Kolkata, India to work with the Missionaries of Charity in various houses of ministry. The class then moves through the northern Indian cities of Bod Gaya (the birthplace of Buddhism) and Allahabad/Varanasi (major Hindu pilgrimage centers), and Jaipur (an ancient Moghul city). In preparation for the trip, students will engage classical and contemporary texts on Indian religion, history, and culture. 1 credit

TH-401 SAPIENTIAL TH/SPIRIT WRT OF TH MERTON
This seminar will analyze the sapiential theology of Thomas Merton through an advanced study of his spiritual writings. The class will focus on a theological analysis of Merton's reflections on monasticism, silence, solitude, prayer, inter-religious dialogue, Christology, and theological anthropology. 3 credits

TH-402 THEOLOGY OF JOSEPH RATZINGER
This course explores the theology of Joseph Ratzinger as professor, as Prefect of the Congregation for the Doctrine of Faith, and as Pope Benedict XVI. Through a close reading of primary texts, themes covered in the course may include: theological method, Christology, ecclesiology, eschatology, liturgy, Vatican II, and modernity. 3 credits

TH-403 THE BOOK OF JOB
This course will explore the book of Job throughout its history of interpretation. This study will provide a foundation for discussions of the broader task of biblical interpretation as such. 3 credits.

TH-404 VATICAN II HISTORY AND THEOLOGY
This course provides students with a historical and theological overview of the Second Vatican Council as well as an examination of the council's major documents. The perspective taken is that Vatican II represents an important moment in the development of the Catholic tradition, representing both theological innovation as well as signaling fundamental continuity in the life of the Church. 3 credits

TH-405 SPIRITUAL AUTOBIOGRAPHY
This course will explore diverse autobiographical writings as expressions of faith. Attention will be given to the way theology is expressed through spiritual autobiography and the interactions between theological understanding and the author's lived experience. 3 credits.

TH-407 SEM/DIR RD: THEO/SOTERIOLOGY
This course will explore the development of the Christian doctrine concerning the work of Christ for the salvation of the world and will explore the contemporary reconfigurations of this doctrine. 3 credits

TH-499 THEOLOGY THESIS
This seminar course requires majors to complete a research project under the direction of the faculty member.

TH-500 INDEPENDENT STUDY -- THEOLOGY
Theological study of a topic to be chosen and developed by the student with guidance of the directing professor. Course requirements to be developed in consultation with supervising faculty. May be repeated. Variable credits.

TH-550 THEOLOGY INTERNSHIP
In conjunction with the chairperson, the student pursues an internship which enables the student to implement various teaching skills. It is expected that the student can utilize acquired academic knowledge and manifest leadership abilities in a religious education setting. Offered every semester. 1 to 3 credits

Notice of Rights Under FERPA and its Implementing Regulations

The Family Educational Rights and Privacy Act (FERPA), enacted by 20 U.S.C. § 1232g, is a conditional funding law that prohibits federal education funding to educational agencies or institutions unless certain policies involving inspection, review, access, and protection of student education records are in place. 20 U.S.C. § 1232g(e) mandates that institutions of higher education effectively inform students of the rights accorded to them by FERPA. This notice is meant to inform students pursuant to 34 C.F.R. § 99.7, the implementing regulation of 20 U.S.C. § 1232g(e), of these rights.

A. Student Rights under FERPA

1. Eligible students are afforded certain rights with respect to their education records. An "eligible" student" under FERPA is a student who is 18 years of age or who attends a postsecondary institution. As used in this notice, "student(s)" means "eligible student(s)."

2. All students at Saint Vincent College have the right to inspect and review their education records within 45 days after the day Saint Vincent College receives a request for access. A student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request or an in-person verbal request that identifies the record(s) the student wishes to inspect. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. The student may be required to show proof of identification at the time of or prior to inspection. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

3. All students at Saint Vincent College have the right to seek amendment of their education records that the student believes to be inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the school to amend a record should write the school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If Saint Vincent College decides not to amend the record as requested, Saint Vincent College will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

4. All students at Saint Vincent College have the right to provide written consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA and 34 C.F.R. § 99 authorize disclosure without consent. Consistent with FERPA and its implementing regulations, Saint Vincent College may, without written consent of the student, disclose the following:

i. Directory information, as defined in § C.3 of this notice, containing personally identifiable information about a student unless that student opts out of directory information disclosure under the procedures outlined in § C.4 of this notice; and

ii. Education records containing personally identifiable information under the conditions specified in 34 C.F.R. § 99.31. Those conditions are listed in § D.1 of this notice.

5. All students at Saint Vincent College have the right to file with the Family Compliance Office of the Department of Education under 34 C.F.R. §§ 99.63 and 99.64 concerning alleged failures by the educational institution to comply with the requirements of FERPA and 34 C.F.R. § 99. The address of the Family Compliance Office is: Family Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW., Washington, DC 20202.

i. A complaint must contain specific allegations of fact giving reasonable cause to believe that a violation of FERPA or 34 C.F.R. § 99. has occurred. A complaint does not have to allege that a violation is based on a policy or practice of the educational institution, other recipient of Department of Education funds under any program administered by the Secretary, or any third party outside of an educational institution.

ii. A timely complaint is defined as an allegation of a violation that is submitted to the Family Compliance Office within 180 days of the date of the alleged violation or of the date that the complainant knew or reasonably should have known of the alleged violation. The Family Compliance Office may extend this time limit for good cause shown.

B. Education Records

1. FERPA protections extend to education records. Therefore, it is important for students to know what constitutes an "education record" within the meaning of FERPA. 34 C.F.R. § 99.3 defines education records as follows:

i. The term "education records" means those records that are:

a. Directly related to a student; and

b. Maintained by an educational institution—i.e. Saint Vincent College—or by a party acting for the institution.

ii. The term "education records" does not include

a. Records that are kept in the sole possession of the maker, are used only as a personal memory aid, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record.

b. Records of the law enforcement unit—i.e. the Department of Public Safety at Saint Vincent College—if those records, files, documents, or other materials are (1) Created by a law enforcement unit;

(2) Created for a law enforcement purpose; and

(3) Maintained by the law enforcement unit.

c. Records of a law enforcement unit does not mean

(1) Records created by a law enforcement unit for a law enforcement purpose that are maintained by a component of the educational institution other than the law enforcement unit;

or

(2) Records created and maintained by a law enforcement unit exclusively for a non-law enforcement purpose, such as a disciplinary action or proceeding conduct by the educational institution.

d. Records relating to an individual who is employed by an educational institution that (1) Are made and maintained in the normal course of business;

(2) Relate exclusively to the individual in that individual's capacity as an employee; and

(3) Are not available for any other purpose.

e. Records relating to an individual in attendance at the institution who is employed as a result of his or her status as a student are education records and thus are not excepted under (3)(i–iii) of this subsection.

f. Records on a student attending an educational institution that are (1) Made or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her capacity or assisting in a paraprofessional capacity;

(2) Made, maintained, or used only in connection with treatment of the student; and

(3) Disclosed only to individuals providing the treatment. For the purpose of this definition, "treatment" does not include remedial educational activities or activities that are part of the program of instruction at the institution.

g. Records created or received by an educational institution after an individual is no longer a student in attendance and that are not directly related to the individual's attendance as a student.

h. Grades on peer-graded papers before they are collected and recorded by a teacher.

C. Directory Information

1. FERPA requires Saint Vincent College, with certain exceptions, to obtain written student consent prior to disclosing personally identifiable information about the student. However, Saint Vincent College may disclose "directory information" without written student consent unless the student has advised Saint Vincent College to the contrary in accordance with College procedures. The primary purpose of directory information is to allow Saint Vincent College to include this type of information from students' education records in certain school publications. Examples include, but are not limited to, the following:

- News releases informing the public about events at Saint Vincent College
- Dean's Lists and other honors/recognitions
- Updates regarding athletics and athletes
- Commencement programs

2. Directory information can also be disclosed to outside organizations without a student's prior written consent.

3. Saint Vincent College's definition of directory information is modeled after the definition contained in 34 C.F.R. § 99.3:

i. Directory information means information contained in an education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed.

ii. Saint Vincent College considers the following information pertaining to a student to be directory information:

- Name
- Address (local, home, and email)
- Telephone listing (local, mobile, and home)
- Photograph
- Date and place of birth
- Major field of study
- Class level
- Enrollment status (e.g., undergraduate or graduate, full-time or part-time);
- Dates of attendance
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams
- Past and present participation in officially recognized activities and sports
- Degrees, honors, and awards received
- Previous institutions attended
- Home parish, church, synagogue, mosque, temple, or any other place of worship

iii. Directory information does not include a student's

a. Social security number; or

b. Student identification (ID) number, except as provided in (1) and (2) of this subsection (1) Directory information includes a student ID number, user ID, or other unique personal identifier used by a student for purposes of accessing or communicating in electronic systems, but only if the identifier cannot be used to gain access to education records except when used in conjunction with one or more factors that authenticate the user's identity, such as a personal identification number (PIN), password or other factor known or possessed only by the authorized user; and

(2) Directory information includes a student ID number or other unique personal identifier that is displayed on a student ID badge, but only if the identifier cannot be used to gain access to education records except when used in conjunction with one or more factors that authenticate the user's identity, such as a PIN, password, or other factor known or possessed only by the authorized user.

4. If a student does not want Saint Vincent College to disclose directory information from his/her education records without his/her prior written consent, he/she must notify Saint Vincent College by filing a written statement in the Registrar's Office. Failure to file a written statement may result in the routine disclosure of directory information.

5. A student may not opt out of directory information disclosures to (1) prevent Saint Vincent College from disclosing or requiring a student to disclose the student's name, identifier, or institutional email address in a class in which the student is enrolled; or (2) prevent Saint Vincent College from requiring a student to wear, to display publicly, or to disclose a student ID card or badge that exhibits information that may be designated as directory information.

D. Disclosure of Education Records Notice

1. FERPA permits the disclosure of personally identifiable

information from students' education records, without consent of the student, if the disclosure meets certain conditions found in § 99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, § 99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose personally identifiable information from the education records without obtaining prior written consent of the student –

i. To other school officials, including teachers, within Saint Vincent College whom the school has determined to have legitimate educational interests. This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in § 99.31(a)(1)(i) (B)(1) - (a)(1)(i)(B)(2) are met. (§ 99.31(a)(1))

a. Saint Vincent College defines "school official" in the following way: A school official is a person employed by Saint Vincent College in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel, health staff, head coaches, assistant coaches, and residence life staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official may also include a volunteer or contractor outside of Saint Vincent College who performs an institutional service of function for which Saint Vincent College would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of personally identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks.

b. Saint Vincent College defines "legitimate educational interest" in the following way: A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for Saint Vincent College

ii. To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of § 99.34. (§ 99.31(a)(2)) a. Saint Vincent College forwards education records to other agencies or institutions that have requested the records and in which the student seeks or intends to enroll or is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer.

iii. To authorized representatives of the U. S. Comptroller General, the U. S. Attorney General, the U.S. Secretary of Education, or State and local educational authorities, such as a State postsecondary authority that is responsible for supervising the university's State-supported education programs. Disclosures under this provision may be made, subject to the requirements of § 99.35, in connection with an audit or evaluation of Federal- or State-supported education programs, or for the enforcement of or compliance with Federal legal requirements that relate to those programs. These entities may make further disclosures of personally identifiable information to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their behalf. (§§ 99.31(a)(3) and 99.35)

iv. In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§ 99.31(a)(4))

v. To organizations conducting studies for, or on behalf of, Saint Vincent College, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§ 99.31(a)(6))

vi. To accrediting organizations to carry out their accrediting functions. ((§ 99.31(a)(7))

vii. To parents of an eligible student if the student is a dependent for IRS tax purposes. (§ 99.31(a)(8))

viii. To comply with a judicial order or lawfully issued subpoena. (§ 99.31(a)(9))

ix. To appropriate officials in connection with a health or safety emergency, subject to § 99.36. (§ 99.31(a)(10))

x. Information that Saint Vincent College has designated as "directory information" under § 99.37. (§ 99.31(a)(11))

xi. To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of § 99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§ 99.31(a)(13))

xii. To the general public, the final results of a disciplinary proceeding, subject to the requirements of § 99.39, if Saint Vincent College determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the school's rules or policies with respect to the allegation made against him or her. (§ 99.31(a)(14))

xiii. To parents of a student regarding the student's violation of any Federal, State, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if Saint Vincent College determines the student committed a disciplinary violation and the student is under the age of 21. (§ 99.31(a)(15))

2. Saint Vincent College encourages students to learn what their rights are under FERPA and its implementing regulations. The following websites are helpful in this regard. However, these websites should not be construed as Saint Vincent College offering legal counsel, advice, or representation. Saint Vincent College encourages students to seek the assistance of private legal counsel where appropriate.

i.http://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html

ii. http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html

iii. http://www2.ed.gov/policy/gen/guid/fpco/index.html

Bachelor of Science in Accounting

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
MA-109**/111	Calc (T1 SLO3)	4

Course Number	Freshman Spring	Credits
T1 SLO1	Tier 1 - Theology	3
T1 SLO 2	Tier 1 - History	3
T1 SLO 2	Tier 1 - Language & Culture	3
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
T1 SLO3	Tier 1 - Natural Science	3

Course Number	Sophomore Fall	Credits
BA-200	Intermediate Accounting	3
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
EC-101	Principles of Microeconomics (T1 SLO3)	3
BA-320	Corporate Finance	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
T1 SLO2	Tier 1 - Literature	3
T1 SLO 6	Tier 1 - Philosophy	3
BA-201	Intermediate Accounting II	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
EC-102	Principles of Microeconomics	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
T2 SLO1	Tier 2 - SLO 1	3
CORE-3401	Capstone Seminar(T3 SLO4)	3
BA-300	Cost Accounting I	3
BA-310	Taxes I	3
BA-340	Business Law	3
XX-XXX	Elective Course	3

Course Number	Junior Spring	Credits
XX-XXX	Elective Course	3
PS-100	Intro to American Gov. (T1 SLO2)	3
XX-XXX	Elective Course	3
T2 SLO2	Tier 2- SLO2	3
BA-Elective	Accounting Elective *	3

Course Number	Senior Fall	Credits
T2 SLO5	Tier 2 - SLO5	3
XX-XXX	Internship	1
BA-305	Business Ethics	3
BA-400	Advanced Accounting	3
BA-405	Auditing	3

Course Number	Senior Spring	Credits
T2 SLO3	Tier 2 - SLO3	3
T2 SLO6	Tier 2- SLO6	3
XX-XXX	Elective Course	3
BA-470	International Accounting	3
BA-495	Business Policy & Strategy	3

Total Credits:	129

Recommended Electives

** Accounting Elective: Take one of the following courses: BA-311, BA-325, BA-406, or BA-420.*
***MA-102 and MA-103 can be taken in place of MA-109.*

Bachelor of Arts in Art Education

Course Number	Freshman Fall	Credits
AR-101	Caves to Cathedrals	3
AR-130	Drawing I	3
AR-131	Two- Dimensional Design	3
CORE-1500	Core Writing (T1 SLO5)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
ED-100	Foundations of Education (T1 SLO3)	3

Course Number	Freshman Spring	Credits
AR-102	Art History II: Baroque to Present	3
AR-225	Painting I	3
AR-135	Materials and Process	3
AR-xxx	Art Elective	3
T1 SLO1	Tier 1 - Theology	3
ED-103 or 207	Field Experience I K-12/7-12	3

Course Number	Sophomore Fall	Credits
AR-325	Painting II	3
AR-238	Clay and Pottery	3
T1 SLO2	Tier 1 - History, PS-100, Literature, or Language & Culture (select one)	3
ED-115	Educational Psychology	3
AR-XXX	Art Elective	3

Course Number	Sophomore Spring	Credits
AR-XXX	Art Elective	3
T1 SLO 3	Tier 1 - Natural Science	3
ED-205	Strategies & Techniques of Instruction	3
ED-142	Math for Teachers (T1 SLO3)	3
ED-206	Field Experience II	1

Course Number	Junior Fall	Credits
T2 SLO5	Tier 2- SLO5 *	3
T2 SLO1	Tier 2 - SLO1 OR SLO 6 (select one)	3
T1 SLO6	Tier 1 - Philosophy	3
ED-390	Promote Youth Cultural Competence and Diversity	3
AR-404	Senior Studio	3
ED-290	Psychology of Exceptional (T2 SLO3)	3

Course Number	Junior Spring	Credits
PY-214	Adolescent Development	3
AR-405	Senior Exhibition	3
CL-129	Young Adult Literature (T2 SLO2)	3
ED-381	Educational Testing	3
ED-208	Classroom Partnerships and Inclusion	3
ED-322	Field Experience III	1

Course Number	Senior Fall	Credits
ED-220	Reading, Writing, and Dif. In Content	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
ED-304	Teaching of Science 7-12	3
ED-400	Field Experience IV	2
ED-401	Pre- Student Teaching Seminar	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives
* See approved listing of approved AR Tier 2 SLO 5 courses. These courses can double count between CORE and Major requirements.

Bachelor of Science in Aviation Management - Professional Piloting

Course Number	Freshman Fall	Credits
AVIP160	Private Pilot Flight Theory	7
*AVIP170	*Private Pilot Flight Certification	3
CORE1500	Core Writing (T1 SLO5)	3
CORE1400	Listening Seminar (T1 SLO4)	3
BA100	Financial Accounting I	3

Course Number	Freshman Spring	Credits
AVIP120	Foundations and Development of Aviation	3
CIST100	Introduction to Information Technology	3
MA109**/111	Calculus I (T1 SLO3)	4
T1 SLO1	Tier 1 - Theology	3
PS100	Intro to American Government (T1 SLO2)	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
AVIP180	Instrument Flight Theory	7
*AVIP190	*Instrument Flight Rating	2
BA350+BA350A	Statistics and Analytics I & Excel I Lab	4
EC101	Principles of Microeconomics (T1 SLO3)	3
T1 SLO2	Tier 1 - Language & Culture	3
BA199	Professionalism I	1

Course Number	Sophomore Spring	Credits
AVIP205	Aircraft Engines & Systems	4
MERT140	Meteorology	4
BA150	Managerial Accounting	3
EC102	Principles of Macroeconomics	3
T1 SLO2	Tier 1 - Literature	3
BA299	Professionalism II	1

Course Number	Junior Fall	Credits
AVIP215	Commercial Flight Theory	5
*AVIP220	*Commercial Flight Certification I	3
BA220	Principles of Marketing	3
BA170	Organizational Behavior	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Spring	Credits
*AVIP225	*Commercial Flight Certification II	3
AVIP260	Human Factors Theory	3
AVIP270	Aerodynamics of Flight	3
T1 SLO3	Tier 1 - Natural Science	3
T2 SLO1	Tier 2 - SLO1	3
BA320	Corporate Finance I	3

Course Number	Senior Fall	Credits
TWO OF *AVIP250 or *AVIP280 or *AVIP285	TWO OF *Multi-Engine Flight Rating or *Certified Flight Instructor - Airplane or *Certified Flight Instructor - Instruments	4
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO6	Tier 2 - SLO6	3
BA265	Management Information Systems	3
AVIP275	Certified Flight Instructor Theory	2

Course Number	Senior Spring	Credits
BA495	Capstone Class: Business Policy and Strategy	3
CORE3400	Capstone Seminar (T3 SLO4)	3
BA305	Business Ethics	3
BA304	Business Law	3
BA250	Global Business	3
T2 SLO5	Tier 2 - SLO5	3

Total Credits:	147

Recommended Electives
***MA-102 and MA-103 can be taken in place of MA-109.*

Bachelor of Science in Aviation Management – Advanced Piloting

Course Number	Freshman Fall	Credits
AVIP180	Instrument Flight Theory	7
*AVIP190	*Instrument Flight Rating	2
CORE1500	Core Writing (T1 SLO5)	3
CORE1400	Listening Seminar (T1 SLO4)	3
BA100	Financial Accounting I	3

Course Number	Freshman Spring	Credits
AVIP120	Foundations and Development of Aviation	3
CIST100	Introduction to Information Technology	3
MA109**/111	Calculus I (T1 SLO3)	4
T1 SLO1	Tier 1 - Theology	3
PS100	Intro to American Government (T1 SLO2)	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
AVIP215	Commercial Flight Theory	5
*AVIP220	*Commercial Flight Certification I	3
BA350+BA350A	Statistics and Analytics I & Excel I Lab	4
EC101	Principles of Microeconomics (T1 SLO3)	3
T1 SLO2	Tier 1 - Language & Culture	3
BA199	Professionalism I	1

Course Number	Sophomore Spring	Credits
AVIP202	Aircraft Engines Theory	3
AVIP204	Aircraft Systems Theory	3
*AVIP225	*Commercial Flight Certification II	3
BA150	Managerial Accounting	3
EC102	Principles of Macroeconomics	3
BA299	Professionalism II	1

Course Number	Junior Fall	Credits
*AVIP250	*Multi-Engine Flight Rating	1
AVIP260	Human Factors Theory	3
AVIP270	Aerodynamics of Flight	3
BA220	Principles of Marketing	3
BA170	Organizational Behavior	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Spring	Credits
AVIP275	Certified Flight Instructor Theory	2
TWO OF *AVIP280 or *AVIP285 or *AVIP288	TWO OF *Certified Flight Instructor-Airplane or *Certified Flight Instructor-Instruments or *Certified Flight Instructor-Multi-Engine	4
T1 SLO3	Tier 1 - Natural Science	3
T2 SLO1	Tier 2 - SLO1	3
BA320	Corporate Finance I	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Senior Fall	Credits
METR140	Foundations in Meteorology	4
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO6	Tier 2 - SLO6	3
BA265	Management Information Systems	3

Course Number	Senior Spring	Credits
BA495	Capstone Class: Business Policy and Strategy	3
CORE3400	Capstone Seminar (T3 SLO4)	3
BA305	Business Ethics	3
BA304	Business Law	3
BA250	Global Business	3
T2 SLO5	Tier 2 - SLO5	3

Total Credits:	140

Recommended Electives
***MA-102 and MA-103 can be taken in place of MA-109.*

Bachelor of Science in Biochemistry

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry + Lab (T1 SLO3)	4
BL-150/1	General Biology + Lab	4
MA-111	Calculus I (T1 SlO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
BL-152/3	General Biology II + Lab	4
MA-112	Calculus II	4
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
CH-221/3	Organic Chemistry I + Lab	4
PH-111/3	General Physics I + Lab	4
T1 SLO2	Tier 1- Language and Culture	3
T1 SLO2	Tier 1 - Literature	3
T SLO2	Tier 1 - History	3

Course Number	Sophomore Spring	Credits
CH-222/4	Organic Chemistry II + Lab	4
CH-216/218	Quantitative Analysis + Lab	4
PH-112/4	General Physics + Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1- Social Science	3

Course Number	Junior Fall	Credits
CH-231/3	Physical Chemistry I + Lab	4
CH-251/3	Proteins and Metabolism + Lab	4
BL-xxx	Upper Level Biology with Lab *	4
T1 SLO6	Tier 1 – SLO6	3

Course Number	Junior Spring	Credits
CH-232	Physical Chemistry II	3
CH-282	Advanced Physical Methods	3
CH-252/4	Nucleic Acids and Membranes + Lab	4
CH-300	Research Seminar I	1
T2 SLO5	Tier 2 – SLO5	3

Course Number	Senior Fall	Credits
CH-301	Research Lab	2
BL-214/5	Molecular Genetics + Lab	4
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO 2	3
T2 SLO3	Tier 2 - SLO3	3

Course Number	Senior Spring	Credits
CH-302	Research Seminar II	1
T2 SLO6	Tier 2 - SLO6	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
	Electives	5

Total Credits:	124

Recommended Electives
* Upper Level Biology with Lab: Take 4 credits from: BL-212/213, BL-222/223, BL-226/227, BL-208/209.

Bachelor of Arts in Biology – Cell and Molecular

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1- History	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
T1 SLO3	Tier 1 - Social Science	3

Course Number	Sophomore Spring	Credits
BL-224/5	Upper-level Biology class + lab	4
CH-222/4	Organic Chemistry II + Lab	4
T1- SLO2	Tier 1 - Language & Culture	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
BL-214/5	Molecular Genetics or other upper level biology + Lab	4
PH-109/3	College Physics I + Lab	4
T2 SLO1	Tier 2 - SLO1	3
XXX	Elective	3
XXX	Elective	3

Course Number	Junior Spring	Credits
BL-224/5	Upper-level Biology class + lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2- SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
BL-214/5	Molecular Genetics or other upper level biology + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
XX-XXX	Elective	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
Internship (BL550); Proteins and Metabolism (CH); Bioethics course (PL or TH). **MA-102 and MA-103 can be taken in place of MA-109.*

Bachelor of Science in Biology – Cell and Molecular

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
BL-224/5	Upper-level Biology class + lab	4
CH-222/4	Organic Chemistry II + Lab	4
MA-110	Calculus II with Application	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
BL-214/5	Molecular Genetics or other upper level biology + Lab	4
PH-109/3	College Physics I + Lab	4
T1 SLO3	Tier 1 - Social Science	3
XX-XXX	Elective	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
BL-224/5	Upper-level Biology class + lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
BL-214/5	Molecular Genetics or other upper level biology + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
BL	Upper-level Biology class	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	125

Recommended Electives
Internship (BL550); Proteins and Metabolism (CH); Bioethics course (PL or TH or CORE). *MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Arts in Biology - Organismal

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO 4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1SLO2	Tier 1- Literature	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
BL-224/5	Physiology or other upper level biology + Lab	4
CH-222/4	Organic Chemistry II + Lab	4
T1 SLO3	Tier 1 - Social Science	3
PS-100	Intro to American Gov.(T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
BL	Upper-level Biology class + Lab	4
PH-109/3	College Physics I + Lab	4
T2 SLO1	Tier 2 - SLO1	3
XXX	Elective	3
XXX	Elective	3

Course Number	Junior Spring	Credits
BL-224/5	Physiology or other upper level biology + Lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2- SLO3	3
T2 SLo5	Tier 2- SLO5	3

Course Number	Senior Fall	Credits
BL	Upper-level Biology class + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
XX-XXX	Elective	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
Internship (BL550); Proteins and Metabolism (CH); Bioethics course (PL or TH or CORE). **MA-102 and MA-103 can be taken in place of MA-109*

Bachelor of Science in Biology – Organismal

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
T1 SLO3	Tier 1 - Social Science	3

Course Number	Sophomore Spring	Credits
BL-224/5	Physiology or other upper level biology + Lab	4
CH-222/4	Organic Chemistry II + Lab	4
MA-110	Calculus II with Application	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Junior Fall	Credits
BL	Upper-level Biology class + lab	4
PH-109/3	College Physics I + Lab	4
T1 SLO6	Tier 1 - Philosophy	3
XX-XXX	Elective	3
T2 SLO1	Tier 2- SLO1	3

Course Number	Junior Spring	Credits
BL-224/5	Physiology or other upper level biology + Lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
BL	Upper-level Biology class + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2 SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
BL	Upper-level Biology class	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	125

Recommended Electives
Internship (BL550); Proteins and Metabolism (CH); Bioethics course (PL or TH) **MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Arts in Biology - Population

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab (T1 SLO3)	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1- Language & Culture	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Spring	Credits
BL-234/5	Evolution or other upper level biology + Lab	4
CH-222/4	Organic Chemistry II + Lab	4
T1 SLO3	Tier 1 - Social Science	3
T1 SLO2	Tier 1 - History	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
BL	Upper-level Biology class + Lab	4
PH-109/3	College Physics I + Lab	4
T2 SLO1	Tier 2 - SLO1	3
XXX	Elective	2
XXX	Elective	3

Course Number	Junior Spring	Credits
BL-234/5	Evolution or other upper level biology + Lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
BL	Upper-level Biology class + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2- SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
XXX	Elective	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	123

Recommended Electives
Internship (BL550); Bioethics course (PL or TH). *MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Biology - Population

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1- History	3

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I with Application (T1 SLO3)	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
BL-234/5	Evolution or other upper level biology + Lab	4
CH-222/4	Organic Chemistry II + Lab	4
MA-110	Calculus II with Application	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Fall	Credits
BL	Upper-level Biology class + Lab	4
PH-109/3	College Physics I + Lab	4
T1 SLO 6	Tier 1 - Philosophy	3
XX-XXX	Elective	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
BL-234/5	Evolution or other upper level biology + Lab	4
PH-110/4	College Physics II + Lab	4
BL-301	Research Proposal (capstone)	2
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
BL	Upper-level Biology class + Lab	4
BL-302	Research (capstone project)	2
T2 SLO6	Tier 2- SLO6	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
BL	Upper-level Biology class	3
BL-303	Thesis (capstone)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	125

Recommended Electives
Internship (BL550); Bioethics course (PL or TH). **MA-102 and MA-103 can be taken in place of MA-109*

Bachelor of Science in Biology Education

Course Number	Freshman Fall	Credits
BL-150/1	General Biology I + Lab	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO 1	Theological Foundations	3

Course Number	Freshman Spring	Credits
BL-152/3	General Biology II + Lab	4
CH-102/4	General Chemistry II + Lab	4
T1 SLO 2	History, Culture, Politics	3
ED-100	Foundation of Education (T1 SLO3)	3
ED-115	Educational Psychology	3
ED-103/207	Field Experience I: 7-12	1

Course Number	Sophomore Fall	Credits
BL-208/9	Cell Biology + Lab	4
CH-221/3	Organic Chemistry I + Lab	4
MA-109*	Calculus I (T1 SLO3)	4
T1 SLO 6	Ethics and Service	3
T2	Tier 2: Select 1 course from SLO 1, 2, or 6	3

Course Number	Sophomore Spring	Credits
PY-214	Adolescent Development	3
CH-222/4	Organic Chemistry II + Lab	4
ES-150/1	Earth System Science + Lab	4
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategies	1
CL-129	Young Adult Literature (T2 SLO2)	3

Course Number	Junior Fall	Credits
ED-390	Promote Youth Cultural Competence and Diversity	3
BL-214/5	Concentration B: Molecular Genetics + Lab	4
PH-109/13	College Physics I + Lab	4
ED-220	Reading, Writing and Differentiation	3
T2	Tier 2: Select 1 course from SLO 1, 5, or 6	3
ED-322	Field Experience III: K-12	1

Course Number	Junior Spring	Credits
ED142	Math for Teachers (T1 SLO3)	3
PH-110/4	College Physics II + Lab	4
ED-304	Teaching of Science 7-12	3
BL-301	Junior Research Seminar	2
ED-208	Classroom Partnerships and Inclusion	3
ED-290	Psychology Exceptional Student (T2 SLO3)	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar	3
ED-400	Field Experience IV: Pre Student	2
BL-220/1	Concentration C: Vert Anatomy + Lab	4
BL-302	Research Project	2
ED-401	Pre-Student Teaching Seminar	3
BL-232/3	Concentration A: Ecology + Lab	4

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3
BL-303	Research Thesis	1

Total Credits:	135

Recommended Electives
**MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Business Administration

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109*/111	Calc I (T1 SLO3)	4

Course Number	Freshman Spring	Credits
BA-150	Managerial Accounting	3
BA-220	Principles of Marketing	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Language & Culture	3

Course Number	Sophomore Fall	Credits
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov (T1 SLO2)	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
BA-344	Intro to Operational Excellence	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-250 or 251	Global Business Management or International Business	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO3	Tier 1 - Natural Science	3
EC-102	Principles of Macroeconomics	3
T1 SLO2	Tier 1 - Literature	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-340	Business Law	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	2
BA-384	Lean Theory & Applications	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
BA-320	Corporate Finance	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
BA-305	Business Ethics	3
T2 SLO5	T2 - SLO5	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	1
XX-XXX	Internship or Elective	2

Course Number	Senior Spring	Credits
BA-495	Business Policy and Strategy	3
T2 SLO 3	Tier 2 - SLO3	3
T2- SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Business Data Analytics

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
DS-100	Intro to Data Science and Analytics	3
MA-111 or 109***	Calc I (T1 SLO3)	4
PS-100	Intro to American Gov (T1 SLO2)	3

Course Number	Freshman Spring	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
T1 SLO1	Tier 1 - Theology	3
BA-107	Relational Databases for Business Analytics	3

Course Number	Sophomore Fall	Credits
BA-106	Data Visualization	3
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
CS-190	Programming Language Lab: Python	1
EC-102	Principles of Macroeconomics	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-320	Corporate Finance I	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3
DS-300	Methods of Data Science and Analytics	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-220	Principles of Marketing	3
BA-340	Business Law	3
T1 SLO3	Tier 1 – Natural Science	4
DS-350	Data Mining	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Junior Spring	Credits
BA-305	Business Ethics	3
EC-360/1	Econometrics + Lab	4
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA-xxx	Business Elective **	3
BA-xxx	International Course *	3
T2 SLO3	Tier 2 - SLO3	3
BA-355	Advanced Business Analytics	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Course Number	Senior Spring	Credits
BA-495	Business Policy and Strategy	3
BA-XXX	Business Elective	3
T2 SLO5	Tier 2- SLO5	3
T2 SLO6	Tier 2 - SLO6	3
DS-400	Data Science and Analytics Capstone	3

Total Credits:	125

Recommended Electives
* International Course. Take 1 of the following: BA-250, BA-251, BA-353, OR BA-395. **Business Elective. Take 1 of the following: BA-335, BA-364, BA-368 BA-397, CA-344 or BA-420. ***MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Business Economics

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109*/111	Calc I (T1 SO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-170	Organizational Theory	3
EC-102	Principles of Macroeconomics	3
EC-200	Environmental Economics	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Sophomore Fall	Credits
BA-220	Principles of Marketing	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
EC-201	Microeconomic Theory	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO1	Tier 1 - Theology	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
EC-202	Macroeconomic Theory	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-305	Business Ethics	3
EC-353	International Finance	3
EC-380	Game Theory	3
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO3	Tier 1 - Natural Science	4

Course Number	Junior Spring	Credits
BA-320	Corporate Finance I	3
BA-340	Business Law	3
EC-310	Labor Economics	3
EC-360/361	Econometrics + R Lab	4
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Fall	Credits
BA-495	Business Policy and Strategy	3
EC-390	Experimental Economics	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Spring	Credits
EC-331	Public Finance	3
EC-480	Senior Thesis	3
T2 SLO6	Tier 2 - SLO6	3
T2 SLO3	Tier 2 - SLO3	3

Total Credits:	124

Recommended Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Chemical and Biological Analysis

Course Number	Freshman Fall	Credits
CH 101	General Chemistry I & Lab (T1 SLO3)	4
MA 109**/111	Calculus I (T1 SLO3)	4
CORE 1400	Listening Seminar (T1 SLO4)	3
CORE 1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
CH 102/104	General Chemistry II & Lab	4
MA 110/112	Calculus II	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
CH 221/223	Organic Chemistry I & Lab	4
BL 150/151	General Biology I & Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Spring	Credits
CH 216/218	Quantitative Analysis & lab	4
BL 152/153	General Biology II & Lab	4
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Fall	Credits
BL 208/209	Cell Biology & Lab	4
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Major Elective 1 *	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
BL 260	Biostatistics	3
CH 300	Research Seminar I	1
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3
XX-XXX	Major Elective 2 *	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
PH 109/113	College Physics I & Lab	4
CH 550	Internship	2
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Major Elective 3 *	3
XX-XXX	Electives	5

Course Number	Senior Spring	Credits
PH 110/114	College Physics II & Lab	4
CH 302	Research Seminar II	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Electives	8

Total Credits:	124

Recommended Electives
*Major Electives - Complete 9 credits from CH-222/224, BL-214/215, CH-251/253, CH-242, BL-212/213, CH-277, CH-245, DS-100, CS-109. **MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in Chemistry

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry + Lab (T1 SLO3)	4
MA-111	Calculus I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
MA-112	Calculus II	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 2 - Literature	3

Course Number	Sophomore Fall	Credits
CH-221/3	Organic Chemistry I + Lab	4
PH-111/3	General Physics I + Lab	4
MX-XXX	Math Course*	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Sophomore Spring	Credits
CH-222/4	Organic Chemistry II + Lab	4
CH-216/8	Quantitative Analysis + Lab	4
PH-112/4	General Physics II + Lab	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Junior Fall	Credits
CH-231/3	Physical Chemistry I + Lab	4
CH-241	Inorganic Chemistry	3
CH-283	Advanced Chemical Methods Lab	2
XX-XXX	Elective	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Spring	Credits
CH-228	Introduction to Biochemistry	3
CH-232	Physical Chemistry II	3
CH-242	Instrumental Analysis	3
CH-282	Advanced Physical Methods	2
CH-300	Research Seminar I	1
CH-321	Special Topics	3

Course Number	Senior Fall	Credits
CH-301	Research Lab	2
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 -SLO5	3
XX-XXX	Open Elective	3

Course Number	Senior Spring	Credits
CH-302	Research Seminar II	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO6	Tier 2 -SLO6	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3

Total Credits:	124

Recommended Electives
* Math course: Take one of the following: MA-211, BL-260, MA-241 or MA-311 ** Inorganic Chemistry is taught fall of odd-numbered years. *** Special Topics is taught spring of even-numbered years.

Bachelor of Science in Chemistry Education

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry + Lab	4
MA-111	Calculus I	4
CORE-1400	Listening Seminar	3
CORE-1500	Core Writing	3
ED-100	Foundations of Education (T1 SLO3)	3
ED-103/207	Field Experience 1: 7-12	1

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
MA-112	Calculus II	4
T1 SLO1	Tier 1 - Theological Foundations	3
ED-115	Educational Psychology	3
CL-129	Young Adult Literature (T2 SLO2)	3

Course Number	Sophomore Fall	Credits
CH-221/3	Organic Chemistry I + Lab	4
PH-111/3	General Physics I + Lab	4
MX-XX	Math Course	4
T1 SLO2	Tier 1 – History, Culture, Politics	3
T1 SLO6	Tier 1 – Ethics and Service	3

Course Number	Sophomore Spring	Credits
CH-222/4	Organic Chemistry II + Lab	4
CH-216/218	Quantitative Analysis + Lab	4
PH-112/4	General Physics II + Lab	4
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategy	1
T2, SLO 1, 5, or 6	Select 1	3

Course Number	Junior Fall	Credits
CH-231/3	Physical Chemistry I + Lab	4
CH-241	Inorganic Chemistry	3
ED-322	Field Experience III: Secondary	1
T2, SLO 1, 5 or 6	Select 1	3
ED-390	Promote Youth Cultural Competence and Diversity	3
ED-290	Psychology Exceptional Student (T2 SLO3)	3

Course Number	Junior Spring	Credits
ED-304	Teaching of Science 7-12	3
CH-232	Physical Chemistry II	3
CH-242	Instrumental Analysis	3
CH-282	Advanced Physical Methods	2
CH-300	Research Seminar I	1
ED-208	Classroom Partnership	3
PY-214	Adolescent Development	3

Course Number	Senior Fall	Credits
CH-301	Research Lab	2
CH-285	Teaching of Chemistry	2
ED-401	Pre-Student Teaching Seminar	3
ED-220	Reading, Writing, and Differentiation	3
ED-400	Field Experience IV:	2
CORE-3401	Capstone Seminar	3

Course Number	Senior Spring	Credits
CH-302	Research Seminar II	1
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	135

Recommended Electives
* Math course: Take one of the following: MA-211, BL-260, MA-241 or MA-311 ** Inorganic Chemistry is taught fall of odd-numbered years

Bachelor of Arts in Criminology, Law, and Society

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CLS-101	Introduction to Criminology (T1 SLO3)	3
CORE-1500	CORE Writing (T1 SLO5)	3
CLS-155	American Judicial System	3
T1 SLO2	Tier 1 - History	3

Course Number	Freshman Spring	Credits
CLS-160	Research, Writing, Advocacy	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1- Literature	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Sophomore Fall	Credits
XX-XXX	CLS Elective*	3
CLS-215	Juvenile Justice	3
CLS-227	Criminal Law and Process	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Spring	Credits
CLS-245	Corrections, Probation and Parole	3
CLS-230	Constitutional Criminal Procedure	3
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
CLS-315	Criminological Statistics	3
CLS-356	Quantitative Research Methods	3
XX-XXX	CLS Elective*	3
T2 SLO1	Tier 2 - SLO21	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
XX-XXX	Elective	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3
XX-XXX	Elective	3
XX-XXX	CLS Elective*	3

Course Number	Senior Fall	Credits
CLS-390	Pre-Capstone	1
CLS-510	Criminological Theories	3
CLS-590	CLS Capstone	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	CLS Elective*	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
CLS-504	Ethical Decisions and Dilemmas in Criminal Justice	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
*Take 15 CLS Elective Courses from the following: CLS-155 CLS-205 CLS-210 CLS-220 CLS-225 CLS-235 CLS-250 CLS-266 CLS-269 CLS-270 CLS-275 CLS-280 CLS-290 CLS-305 CLS-310 CLS-316 CLS-320 CLS-325 CLS-340 CLS-344 CLS-350 CLS-355 CLS-360 CLS-361 CLS-367 CLS-375 CLS-376 CLS-377 CLS-380 CLS-385 CLS-399 CLS-400 CLS-415 CLS-420 CLS-425 CLS-430 CLS-440 CLS-485 CLS-550 PS-341 SO-200 SO-204 SO-235.

Bachelor of Arts in Communication and Media Studies

Course Number	Freshman Fall	Credits
CA-100	Introduction to Communication & Media Studies (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CA-120	Public Presentation (T2 SLO5)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO2	Tier 1- History	3

Course Number	Freshman Spring	Credits
CA-110	Introduction to Organizational Communication	3
CA-140	Introduction to Interpersonal Communication	3
T1 SLO1	Tier 1 - Theology	3
CA-XXX	Communication Elective*	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
CA-230	Writing for Media	3
CA-218	Intercultural Communication	3
PS-100	Intro to American Gov. (T1 SLO2)	3
CA-XXX	Communication Elective*	3
T1 SLO2	Tier 1 - Language & Culture	3
XX-XXX	Open Elective	3

Course Number	Sophomore Spring	Credits
CA-303	Communication Ethics	3
CA-201	Research Methods	3
T1 SLO3	Tier 1 - Natural Science	4
T1 SLO3	Tier 1 - Mathematics	3
XX-XXX	Open Elective	3

Course Number	Junior Fall	Credits
CA-XXX	Communication Elective*	3
CA-XXX	Communication Elective*	3
T1 SLO2	Tier 1 - Literature	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Junior Spring	Credits
CA-307	Media Literacy	3
CA-XXX	Communication Elective*	3
CA-XXX	Communication Elective*	3
T2 SLO3	Tier 2 – SLO3	3
XX-XXX	Open Elective	3

Course Number	Senior Fall	Credits
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3
T2 SLO6	Tier 2 - SLO6	3
CA-XXX	Communication Elective*	3
XX-XXX	Open Elective	3

Course Number	Senior Spring	Credits
CA-451	Senior Capstone	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XXX-XXX	Open Elective	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3

Total Credits:	124

Recommended Electives
Communication Electives: CA 221 CA 222 CA 236 CA 240 CA 271 CA 281 CA 291 CA 302 CA 304 CA 311 CA 321 CA 340 CA 344 CA 351 CA 355 CA 385 CA 401 CA 440 CA 550

Bachelor of Arts in Communication – Public Relations

Course Number	Freshman Fall	Credits
CA-100	Introduction to Communication & Media Studies (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CA-120	Public Presentation (T2 SLO5)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO2	Tier 1- History	3

Course Number	Freshman Spring	Credits
CA-110	Introduction to Organizational Communication	3
CA-140	Introduction to Interpersonal Communication	3
T1 SLO1	Tier 1 - Theology	3
XX-XXX	Public Relations Elective *	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
CA-230	Writing for Media	3
CA-218	Intercultural Communication	3
PS-100	Intro to American Gov. (T1 SLO2)	3
CA-240	Public Relations Strategies	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
XX-XXX	Open Elective	3
CA-201	Research Methods	3
T1 SLO3	Tier 1 - Natural Science	4
T1 SLO3	Tier 1 - Mathematics	3
CA-291	Facts, Persuasion, and Arguments	3

Course Number	Junior Fall	Credits
CA-303	Communication Ethics	3
CA-304	Social Media Strategies	3
T1 SLO2	Tier 1 - Literature	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Junior Spring	Credits
CA-307	Media Literacy	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3
CA-355	Advanced Public Relations	3
XX-XXX	Public Relations Elective *	3
T2 SLO3	Tier 2 – SLO3	3

Course Number	Senior Fall	Credits
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Public Relations Elective *	3
XX-XXX	Open Elective	3

Course Number	Senior Spring	Credits
CA-451	Senior Capstone	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3

Total Credits:	124

Recommended Electives
Communication Electives for PR Concentration: CA 221 CA 222 CA 236 CA 271 CA 281 CA 302 CA 311 CA 321 CA 325 CA 340 CA 344 CA 351 CA 385 CA 401 CA 415 CA 440 CA 550 BA 211 DA 120 DA 150 DA 190 DA 350

Bachelor of Arts in Communication – Sports Communication

Course Number	Freshman Fall	Credits
CA-100	Introduction to Communication & Media Studies (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CA-120	Public Presentation (T2 SLO5)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO2	Tier 1- History	3

Course Number	Freshman Spring	Credits
CA-110	Introduction to Organizational Communication	3
CA-140	Introduction to Interpersonal Communication	3
T1 SLO1	Tier 1 - Theology	3
XX-XXX	Sports Communication Elective *	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
CA-230	Writing for Media	3
CA-218	Intercultural Communication	3
PS-100	Intro to American Gov. (T1 SLO2)	3
CA-221	Communication, Sport, & Society	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
XX-XXX	Open Elective	3
CA-201	Research Methods	3
T1 SLO3	Tier 1 - Natural Science	4
T1 SLO3	Tier 1 - Mathematics	3
CA-236	Sports Writing	3

Course Number	Junior Fall	Credits
CA-303	Communication Ethics	3
CA-304	Social Media Strategies	3
T1 SLO2	Tier 1 - Literature	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Junior Spring	Credits
CA-307	Media Literacy	3
XX-XXX	Sports Communication Elective*	3
XX-XXX	Open Elective	3
CA-321	Sports Media Culture	3
XX-XXX	Open Elective	3
T2 SLO3	Tier 2 SLO3	3

Course Number	Senior Fall	Credits
XX-XXX	Open Elective	3
XX-XXX	Sports Communication Elective*	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3

Course Number	Senior Spring	Credits
CA-451	Senior Capstone	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Communication Elective	3
XX-XXX	Open Elective	3
XX-XXX	Open Elective	3

Total Credits:	124

Recommended Electives
Communication Electives for Sports Communication Concentration: CA 222 CA 240 CA 271 CA 281 CA 291 CA 302 CA 311CA 325 CA 340 CA 344 CA 351 CA 355 CA 385 CA 401 CA 415 CA 440 CA 550 BA 209 BA 211 DA 120 DA 150 DA 190 DA 350

Bachelor of Science in Computer Science

Course Number	Freshman Fall	Credits
CS-102	Fundamentals	3
CS-110	Programming I	3
MA-111	Analytical Calculus I (or MA-109) (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
CS-111	Programming II	3
MA-112	Analytical Calculus II (or MA-110)	4
T1 SLO1	Tier 1 - Theology	3
T1 SLO 2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
CS-170	Discrete Structures	3
CS-221	Data Structures	3
MA-311	Probability/Stats (or MA-241)	3
Science	See List *** (T1 SLO3)	3
Lab	Corresponding Lab *** (T1 SLO3)	1
T1 SLO 2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
CS-171	Computability	3
CS-355	Software Engineering	3
Science	See List ***	3
Lab	Corresponding Lab ***	1
PS-100	Intro to American Gov. (T1 SLO2)	3
T1- SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
CS-225	Cybersecurity	3
CS-350	Database	3
CS-312	Algorithms	3
CS-335	Computer Organization	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Spring	Credits
CS-XXX	CS Elective	3
MA-251	Linear Algebra	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO5	Tier 2 -SLO5	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
CS-292	Engineering& Computing Ethics (T2 SLO6)	2
CS-321	Data Communications, Networks	3
CS-357	Senior Project I	1
CS-XXX	CS Elective	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3

Course Number	Senior Spring	Credits
CS-310	Programming Languages	3
CS-330	Operating Systems	3
CS-358	Senior Project II	2
CS-XXX	CS Elective	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives
Students must take 8 credits of science for the major from the following: CH-101 CH-103 CH-102 CH-104 PH-111 PH-113 PH-112 PH-114 BL-150 BL-151 BL-152 BL-153. ***Students who take CH-101/103 or PH-111/113 can satisfy both the major requirement and CORE T1 SLO3 Natural Science requirement.

Bachelor of Science in Cybersecurity

Course Number	Freshman Fall	Credits
CS-102	Fundamentals	3
CS-110	Programming I	3
MA-111	Analytical Calculus I (or MA-109) (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
CS-111	Programming II	3
Science	Any science course ***	3
Lab	Corresponding Lab ***	1
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
CS-170	Discrete Structures	3
CS-221	Data Structures	3
CS-265	Info Systems Management	3
MA-241	Probability/Stats (or MA-311)	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
CS-355 OR CS-351	Software Engineering or Systems Analysis *	3
CS-XXX	CS Elective	3
Science	Any science course *** (T1 SLO3)	3
Lab	Corresponding Lab *** (T1 SLO3)	1
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Fall	Credits
CS-225	Cybersecurity	3
CS-335	Computer Organization	3
CS-350	Database	3
T1 SLO6	Tier 1 - Philosophy	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
CS-330	Operating Systems	3
CS-325	Advanced Cybersecurity	3
CS-xxx	CS Elective **	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
CS-292	Engineering & Computing Ethics (T2 SLO6)	2
CS-321	Data Communications, Networks	3
CS-357	Senior Project I	1
CS-375	Cryptography	3
T2 SLO3	Tier 2 - SLO 3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Spring	Credits
CS-310	Programming Languages	3
CS-322	Advanced Networking	3
CS-358	Senior Project II	2
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Total Credits:	124

Recommended Electives
* Note: Software Engineering (CS-355) is offered in spring of even years and Systems Analysis and Design (CS-351) is offered in spring of odd years ** List of acceptable CS electives: CS 205, CS 214, CS 226 CS 250, CS 255, CS 267, CS 270, CS 305, CS 315, CS 365, CS 366, CS 367 ***Students may take from subjects BL, CH, PH, NSCI for the science requirement for the major. ****Students who take CH-101/103 or PH-111/113 can satisfy both the major requirement and CORE Natural Science Requirement. .

Bachelor of Science in Data Science

Course Number	Freshman Fall	Credits
DS-100	Intro to Data Science and Analytics	3
MA-111	Analytical Calculus I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO2	Tier 1 - History	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II	4
CS-110	C++ Program I	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Fall	Credits
MA-241	Statistics I	3
CS-111	C++ Programming II	3
CS-170	Discrete Structures I	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO3	Tier 1 - Natural Science	3
CS-190	Program Lab: Python	1

Course Number	Sophomore Spring	Credits
MA-242	Statistics II	3
CS-221	Data Structures	3
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO3	Tier 1 - Social Science	3
DS-300	Methods in Data Science and Analytics	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
CS-350	Database Concepts	3
DS-350	Data Mining	3
XX-XXX	Application Elective*	3
T2 SLO2	Tier 2 - SLO2	3
DS-370	Advanced Methods in Data Science	3

Course Number	Junior Spring	Credits
CS-355	Software Engineering	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO3	Tier 2 -SLO3	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
XX-XXX	Application Elective*	3
T2 SLO5	Tier 2 - SLO5	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
DS-400	Data Science and Analytics Capstone	3
XX-XXX	Application Elective *	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives
*Application Electives. Select from the following: BA-106, BA-355, CA-344, ES-220, HSCI-230, CA-225, MA-251, SO-248

Bachelor of Arts in Digital Art and Media

Course Number	Freshman Fall	Credits
DA140	Introduction to Digital Photography	3
DA150	Digital Video Production	3
CORE-1500	Core Writing (T1 SLO5)	3
CORE-1400	Listening Seminar (T1 SLO 4)	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Freshman Spring	Credits
DA120	Digital Layout and Design	3
XXX	Non-Major Elective	3
T1 SLO 1	Tier 1- Theology	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO2	Tier 1 - Language and Culture	3

Course Number	Sophomore Fall	Credits
DA220	Drawing and Illustration for Media	3
XXX	Open Elective	3
XXX	Non-Major Elective	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Spring	Credits
DA280	Animation and Digital Compositing	3
DA190	Introduction to Interactive Media	3
T1 SLO6	Tier 1- Philosophy	3
T1 SLO3	Tier 1 - Mathematics	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Junior Fall	Credits
XXX	Major Elective *	3
XXX	Major Elective*	3
XXX	Non-Major Elective**	3
XXX	Open Elective	3
T2 SLO2	Tier 2 - SLO2	3
XXX	Open Elective	3

Course Number	Junior Spring	Credits
XXX	Major Elective*	3
XXX	Major Elective*	3
XXX	Non-Major Elective**	3
XXX	Open Elective	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Fall	Credits
XXX	Tier 2 - SLO5	3
DA550	Internship	4
XXX	Open Elective	3
T2 SLO6	Tier 2 - SLO6	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Course Number	Senior Spring	Credits
DA410	Digital Media Portfolio	3
XXX	Major Elective*	3
XXX	Open Elective	3
XXX	Open Elective	3
XXX	Open Elective	3

Total Credits:	124

Recommended Electives

Suggested CORE courses: Peace and Justice in Historical Perspective, The Sixties in History and Culture, Television Criticism, Public Speaking, Christian Faith and Technology, Leadership: Jedi/Wizard/Hero, American Regime, Introduction to Sociology, Ancient Greece, Film Studies, American Literature or Acting I.

* Major Electives: DA-240 DA-250 DA-320 DA-350 DA-380 DA-385 DA-550.

** Non-major electives: AR-130 AR-131 AR-135 AR-225 CA-230 CA-304 CA-307 CS-102 EL-230.

Bachelor of Science in Early Childhood Education – Prek-4

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CL-130	Children's Literature (T2 SLO2)	3
ED-100	Foundations of Education (T1 SLO3)	3
ED-122	Curriculum, Projects and Play	3
NSCI-125	Intro Environmental Science Lecture & Lab (T1 SLO3) + Lab	4

Course Number	Freshman Spring	Credits
ED-200	Comprehension & Vocabulary Essentials	3
ED-115	Educational Psychology	3
ED-155	Geometric Measurement	3
CORE-1500 or ED-205/206*	Core Writing or Strategies and Techniques of Instruct. and Field II	3
ED-101	Field Experience I	1
HI-107	US History After 1865 (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
T1 SLO6	Tier 1 - Philosophy & Ethics	3
ED-205 or CORE-1500 *	Strategies and Techniques of Instruct. or CORE Writing	3
ED-206*	Field Experience II: Strategies	1
PY-212	Child Development	3
ED-142	Math for Teachers (T1 SLO3)	3
ED-290	Psychology of the Exceptional Student (T2 SLO3)	3

Course Number	Sophomore Spring	Credits
T1 SLO1	Tier 1 – Theology	3
ED-208	Classroom Partnership and Inclusion	3
ED-230	Social Studies for Early & Special	3
ED-242	Numerical and Manipulative Math for Early Learners	3
T2 SLOX	Tier 1-SLO 1, SLO 5, or SLO 6	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
ED-244	Science and the Environment for Early Learners	3
ED-250	Reading Writing for Early Learners	3
ED-381	Educational Testing	3
T2 SLOX	Tier 2: SLO 1 or SLO5, or SLO6	3
ED-325	Physical Health and Wellness	3
XX-XXX	Elective	1

Course Number	Junior Spring	Credits
ED-308	Perform and Visual Arts of Early Learners	3
ED-317	Program Develop for Infant and Toddlers	3
ED-318	Field Experience III	1
ED-320	Comp and Language Arts for Upper Elementary	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
ED-330	Early Child Leadership and Advocacy	3
ED-400	Field Experience IV: Pre Student	2
ED-401	Pre-Student Teaching Seminar	3
XX-XXX	Optional Elective	3
ED-390	Promoting Youth and Cultural Competence	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives
Courses for the following minors: disability studies; children's literature; PK-12 integrated STEM; or children's studies. *CORE-1500 and ED-205/206 can be interchanged between freshman spring and sophomore Fall.

Bachelor of Science in Economics

Course Number	Freshman Fall	Credits
EC-101	Principles of Microeconomics (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109*/111	Calc I (T1 SLO3)	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Freshman Spring	Credits
EC-102	Principle of Macroeconomics	3
EC-200	Environmental Economics	3
MA-110/112	Calc II	4
PS-100	Intro to American Government (T1 SLO2)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-350/A	Statistics and Analytics I & Excel I Lab	4
EC-201	Microeconomic Theory	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO3	Tier 1 -Natural Science	4

Course Number	Sophomore Spring	Credits
BA-351/A	Statistics and Analytics II & Excel II Lab	4
EC-202	Macroeconomic Theory	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2- SLO2	3

Course Number	Junior Fall	Credits
EC-353	International Finance	3
EC-380	Game Theory	3
T2 SLO5	Tier 2- SLO5	3
T2 SLO6	Tier 2 - SLO6	3
T2 SLO3	Tier 2 – SLO3	3

Course Number	Junior Spring	Credits
EC-310	Labor Economics	3
EC-360/361	Econometrics + R Lab	4
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
EC-390	Experimental Economics	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
EC-331	Public Finance	3
EC-480	Senior Thesis	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	126

Recommended Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Economics and Mathematics

Course Number	Freshman Fall	Credits
EC-101	Principles of Microeconomics (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-111	Analytical Calc I (T1 SLO3)	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Freshman Spring	Credits
EC-102	Principle of Macroeconomics	3
EC-200	Environmental Economics	3
MA-112	Analytical Calc II (T2 SLO3)	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-350/A	Statistics and Analytics I & Excel I Lab	4
EC-201	Microeconomics Theory	3
MA-211	Analytical Calc III	4
T1 SLO2	Tier 1 - History	3
MA-251	Linear Algebra	3

Course Number	Sophomore Spring	Credits
BA-351/A	Statistics and Analytics II & Excel II Lab	4
EC-202	Macroeconomics	3
MA-212	Differential Equations	4
MA-231	Methods of Proof	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Fall	Credits
EC-353 or EC-400	International Finance or Advanced Topics in Economics	3
EC-380	Game Theory	3
MA-421	Real Analysis I	4
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
EC-310	Labor Economics	3
EC-360/361	Econometrics + R Lab	4
MA-422	Real Analysis II	4
T2 SLO2	Tier 2 - SLO2	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
EC-390	Experimental Economics	3
MA-321	Complex Variables	3
T1 SLO3	Natural Science	4
T2 SLO6	Tier 2 - SLO6	3

Course Number	Senior Spring	Credits
EC-331	Public Finance	3
EC-480	Senior Thesis	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Science in Engineering – Chemical Concentration

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
MA-111	Analytical Calculus I (T1 SLO3)	4
ENGR-100	Introduction to Engineering	3
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II (T2SLO3)	4
PH-111/3	General Physics I + Lab	4
ENGR-105	Engineering Graphics & Design	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO6	Tier 1- Philosophy	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calculus III	4
PH-112/4	General Physics II + Lab	4
ENGR-223	Statics	3
ENGR-226/8	Materials Engineering + Lab	4

Course Number	Sophomore Spring	Credits
MA-212	Differential Equations	4
ENGR-115	Introduction to Engineering Computation	3
ENGR-230	Chemical Engineering Fundamentals	3
ENGR-240	Introduction to Engineering Design & Lab	4
T1 SLO2	Tier 1- Literature	3

Course Number	Junior Fall	Credits
ENGR-215	Introduction to Circuits & Measurement	3
ENGR-310	Thermodynamics	3
ENGR-330	Fluid Mechanics	3
MA-241	Statistics I	3
Add PS-100	American National Gon. (T1 SLO2)	3
T1 SLO2	Tier 1 -Language & Culture	3

Course Number	Junior Spring	Credits
ENGR-315	Junior Lab	1
ENGR-340	Heat and Mass Transport	3
ENGR-360	Separation Processes	3
ENGR-450	Junior Capstone Seminar	1
T1 SLO3	Tier 1- Social Science	3
T1 SLO2	Tier 1 – History	3

Course Number	Senior Fall	Credits
ENGR-220	Engineering & Computing Ethics (T2 SLO6)	3
ENGR-366	Automated Control Systems	3
ENGR-420	Chemical Reaction Kinetics	3
ENGR-451	Capstone Design Project I	2
T2 SLO2	Tier 2 SLO2 Core Course	3

Course Number	Senior Spring	Credits
ENGR-452	Capstone Design Project II	2
XXX	Technical Elective	3
T2 SLO5	Tier 2 SLO5 Core Course	3
T2 SLO1	Tier 2 SLO1 Core Course	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Total Credits:	126

Recommended Electives

Technical Elective: Any 100-level or 200-level Biology course
CH 102 (General Chemistry II)
Any 200-level Chemistry course
Any 100-level, 200-level, or 300-level Computer Science course, excluding CS 102, CS 357 and CS 358
Any Data Science course
Any Engineering course not required in the Engineering Core or in the student's selected concentration
Any 100-level or 200-level Environmental Science course
Any 200-level Health Science course
Any 200-level, 300-level, or 400-level Mathematics course, excluding those required in the Engineering core
Any 200-level or 300-level Physics course, excluding PH 214, PH 215, PH 223, PH 224, PH 225, and PH 381

Bachelor of Science in Engineering – Environmental Concentration

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
MA-111	Analytical Calculus I (T1 SLO3)	4
ENGR-100	Introduction to Engineering	3
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1- Theology	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II (T2 SLO3)	4
PH-111/3	General Physics I + Lab	4
ENGR-105	Engineering Graphics & Design	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calculus III	4
PH-112/4	General Physics II + Lab	4
ENGR-226/8	Materials Engineering + Lab	4
T1 SLO2	Tier 1- History	3

Course Number	Sophomore Spring	Credits
MA-212	Differential Equations	4
ENGR-115	Introduction to Engineering Computation	3
ENGR-235	Introduction to Environmental Engineering	3
ENGR-240	Introduction to Engineering Design and Lab	4
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Fall	Credits
ENGR-215	Introduction to Circuits & Measurement	3
ENGR-220	Engineering & Computing Ethics (T2 SLO6)	3
ENGR-223	Statics	3
ENGR-310	Thermodynamics	3
MA-241	Statistics I	3
ES-220	Introduction to Geographic Information Systems	3

Course Number	Junior Spring	Credits
ENGR-315	Junior Lab	1
ENGR-340	Heat and Mass Transport	3
ENGR-350	Alternative Energy Systems	3
ENGR-450	Junior Capstone Seminar	1
PS-100	American National Gov (T1 SLO2)	3
T1 SLO2	Tier 1- Language & Culture	3

Course Number	Senior Fall	Credits
ENGR-330	Fluid Mechanics	3
ENGR-366	Automated Control Systems	3
ENGR-451	Capstone Design Project I	2
T1 SLO3	Tier 1- Social Science	3
T2 SLO1	Tier 2 SLO1 Core Course	3

Course Number	Senior Spring	Credits
ENGR-XXX	Engineering Elective	3
ENGR-452	Capstone Design Project II	2
T2 SLO2	Tier 2 SLO2 Core Course	3
CORE-3401	Capstone Seminar (Tier 3 SLO4)	3
T2 SLO5	Tier 2 SLO5 Core Course	3

Total Credits:	126

Recommended Electives
Engineering elective: Any Engineering course not required in the Engineering Core or in the student's selected concentration

Bachelor of Science in Engineering – Materials Concentration

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
MA-111	Analytical Calculus I (T1 SLO3)	4
ENGR-100	Introduction to Engineering	3
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1 -History	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II (T2 SLO3)	4
PH-111/3	General Physics I + Lab	4
ENGR-105	Engineering Graphics & Design	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calculus III	4
PH-112/4	General Physics II + Lab	4
ENGR-223	Statics	3
ENGR-226/8	Materials Engineering + Lab	4

Course Number	Sophomore Spring	Credits
MA-212	Differential Equations	4
ENGR-115	Introduction to Engineering Computation	3
ENGR-320	Mechanics of Materials	3
ENGR-240	Introduction to Engineering Design and Lab	4
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Fall	Credits
ENGR-215	Introduction to Circuits & Measurement	3
ENGR-220	Engineering & Computing Ethics (T2 SLO6)	3
ENGR-310	Thermodynamics	3
ENGR-327	Soft Materials	3
MA-241	Statistics I	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Junior Spring	Credits
ENGR-315	Junior Lab	1
ENGR-328	Rapid Fabrication	3
ENGR-340	Heat and Mass Transport	3
PS-100	American National Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - History	3
ENGR-450	Junior Capstone Seminar	1

Course Number	Senior Fall	Credits
ENGR-366	Automated Control Systems	3
ENGR-451	Capstone Design Project I	2
T2 SLO2	Tier 2 SLO2 Core Course	3
T2 SLO1	Tier 2 SLO1 Core Course	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Senior Spring	Credits
ENGR-XXX	Engineering Elective	3
ENGR-452	Capstone Design Project II	2
XXX	Technical Elective	3
T2 SLO5	Tier 2 SLO5 Core Course	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Total Credits:	126

Recommended Electives

Engineering Elective: Any Engineering course not required in the Engineering Core or in the student's selected concentration.
Technical Elective: Any 100-level or 200-level Biology course
CH 102 (General Chemistry II)
Any 200-level Chemistry course
Any 100-level, 200-level, or 300-level Computer Science course, excluding CS 102, CS 357 and CS 358
Any Data Science course
Any Engineering course not required in the Engineering Core or in the student's selected concentration
Any 100-level or 200-level Environmental Science course
Any 200-level Health Science course
Any 200-level, 300-level, or 400-level Mathematics course, excluding those required in the Engineering core
Any 200-level or 300-level Physics course, excluding PH 214, PH 215, PH 223, PH 224, PH 225, and PH 381

Bachelor of Science in Engineering – Mechanical Concentration

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
MA-111	Analytical Calculus I (T1 SLO3)	4
ENGR-100	Introduction to Engineering	3
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II (T2 SLO3)	4
PH-111/3	General Physics I + Lab	4
ENGR-105	Engineering Graphics & Design	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calculus III	4
PH-112/4	General Physics II + Lab	4
ENGR-223	Statics	3
ENGR-226/8	Materials Engineering + Lab	4

Course Number	Sophomore Spring	Credits
MA-212	Differential Equations	4
ENGR-115	Introduction to Engineering Computation	3
ENGR-224	Dynamics	3
ENGR-240	Introduction to Engineering Design and Lab	4
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Fall	Credits
ENGR-215	Introduction to Circuits & Measurement	3
ENGR-220	Engineering & Computing Ethics (T2 SLO6)	3
ENGR-310	Thermodynamics	3
MA-241	Statistics I	3
T1 SLO3	Tier 1 - Social Science	3
T1 SLO2	Tier 1 -Language & Culture	3

Course Number	Junior Spring	Credits
ENGR-315	Junior Lab	1
ENGR-340	Heat and Mass Transport	3
ENGR-320	Mechanics of Materials	3
PS-100	American National Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - History	3
ENGR-450	Junior Capstone Seminar	1

Course Number	Senior Fall	Credits
ENGR-330	Fluid Mechanics	3
ENGR-366	Automated Control Systems	3
ENGR-451	Capstone Design Project I	2
T2 SLO2	Tier 2 SLO2 Core Course	3
T2 SLO1	Tier 2 SLO1 Core Course	3

Course Number	Senior Spring	Credits
ENGR-XXX	Engineering Elective	3
ENGR-452	Capstone Design Project II	2
XXX	Technical Elective	3
T2 SLO5	Tier 2 SLO5 Core Course	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Total Credits:	126

Recommended Electives

Engineering Elective: Any Engineering course not required in the Engineering Core or in the student's selected concentration
Technical Elective: Any 100-level or 200-level Biology course
CH 102 (General Chemistry II)
Any 200-level Chemistry course
Any 100-level, 200-level, or 300-level Computer Science course, excluding CS 102, CS 357 and CS 358
Any Data Science course
Any Engineering course not required in the Engineering Core or in the student's selected concentration
Any 100-level or 200-level Environmental Science course
Any 200-level Health Science course
Any 200-level, 300-level, or 400-level Mathematics course, excluding those required in the Engineering core
Any 200-level or 300-level Physics course, excluding PH 214, PH 215, PH 223, PH 224, PH 225, and PH 381

Bachelor of Arts in English – Creative Writing

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1SLO2	Tier 1- History	3
CORE-1500	Core Writing (T1 SLO5)	3
EL-114 or 118 or 133	British, Global, or American Literature (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Freshman Spring	Credits
EL-110	Creative Writing & Reading (T2 SLO5)	3
T1 SLO3	Tier 1- Social Science	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Language & Culture	3
EL-114 or 118 or 133	British, Global, or American Literature	3

Course Number	Sophomore Fall	Credits
T1 SLO3	Tier 1 - Natural Science	3
PS-100	Intro to American Gov. (T1 SLO2)	3
XX-XXX	Open Elective	3
T1 SLO3	Tier 1 - Mathematics	3
EL-200	Literary Theory	3
EL-2XX	Concertation course: EL-203, 204, or 244	3

Course Number	Sophomore Spring	Credits
T2 SLO3	Tier 2 - SLO	3
EL-2XX	Concertation course: EL-203, 204, or 244	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3
EL-522	Careers in English	1

Course Number	Junior Fall	Credits
EL-2xx	Advanced Literature	3
EL-xxx	English Course (100 or 200 level)	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3
XX-XXX	Elective	3
EL-550	English Internship	1

Course Number	Junior Spring	Credits
XX-XXX	Elective	3
EL-2xx	English Course	3
EL-2xx	English Course (100 or 200 level)	3
EL-551	English Travel	0
T2 SLO6	Tier 2 - SLO6	3
EL-2XX	Advanced Literature	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
EL-400 or 401	English Capstone	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Course Number	Senior Spring	Credits
EL-2xx	English Course	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Arts in English – Literary Translation

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1SLO2	Tier 1- History	3
CORE-1500	Core Writing (T1 SLO5)	3
EL-114 or 118 or 133	British, Global, or American Literature (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Freshman Spring	Credits
EL-110	Creative Writing & Reading (T2 SLO5)	3
XX-XXX	Open Elective	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Language & Culture	3
EL-114 or 118 or 133	British, Global, or American Literature	3

Course Number	Sophomore Fall	Credits
T1 SLO3	Tier 1 - Natural Science	3
PS-100	Intro to American Gov. (T1 SLO2)	3
XX-XXX	Elective	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1- Social Science	3
EL-552	Careers in English	1

Course Number	Sophomore Spring	Credits
T2 SLO3	Tier 2 - SLO3	3
EL-200	Literary Theory	3
EL-252	Intro to Literary Translation	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
EL-2xx	Advanced Literature	3
EL-236/250	Literature in Translation Course	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Course Number	Junior Spring	Credits
XX-XXX	Elective	3
EL-2xx	English Course	3
EL-2xx	English Course	3
EL-551	English Travel	0
EL-550	English Internship	1
EL-2XX	Advanced Literature	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
EL-401	Capstone	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
EL-2xx	English Course	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Arts in English – Literature

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1SLO2	Tier 1- History	3
CORE-1500	Core Writing (T1 SLO5)	3
EL-114 or 118 or 133	British, Global, or American Literature (T1 SLO2 Literature)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Freshman Spring	Credits
XX-XXX	Elective	3
EL-114 or 118 or 133	British, Global, or American Literature	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Language & Culture	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
T1 SLO3	Tier 1 - Natural Science	3
EL-200	Literary Theory	3
EL-1xx	English Literature	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1- Social Science	3
XX-XXX	Elective	2

Course Number	Sophomore Spring	Credits
T2 SLO3	Tier 2 - SLO3	3
EL- XXX	English Elective	3
EL – 2XX	Advanced Literature Course*	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
EL-2xx	English Course	3
EL – 2XX	Advanced Literature Course*	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3
XX-XXX	Elective	3
EL-550	English Internship	1

Course Number	Junior Spring	Credits
T2 SLO5	Tier 2 - SLO5	3
EL-2xx	English Course	3
EL-2xx	English Course	3
EL-551	English Travel	0
T2 SLO6	Tier 2 - SLO6	3
EL 552	Careers in English	1

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
EL-400	Capstone	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
Total Credits:		**124**

Course Number	Senior Spring	Credits
EL-1xx	English Course	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Recommended Electives

*See catalog for approved advanced lit courses.

Bachelor of Arts in English – Publishing

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1SLO2	Tier 1- History	3
CORE-1500	Core Writing (T1 SLO5)	3
EL-114 or 118 or 133	British, Global, or American Literature (T1 SLO2)	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Freshman Spring	Credits
EL-XXX	Elective	3
EL-114 or 118 or 133	British, Global, or American Literature	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Language & Culture	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
T1 SLO3	Tier 1 - Natural Science	3
EL-200	Literary Theory	3
EL-XXX	Elective	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1- Social Science	3
EL-522	Careers in English	1

Course Number	Sophomore Spring	Credits
T2 SLO3	Tier 2 - SLO	3
EL-1XX	English Elective	3
EL-185	History of the Book	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO5	Tier 2 – SLO5	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
EL-2xx	Advanced Literature	3
EL-230	Small Press Publishing	3
T2 SLO1	Tier 2 - SLO1	3
EL-550	English Internship	1
XX-XXX	Elective	2

Course Number	Junior Spring	Credits
XX-XXX	Elective	3
EL-2xx	English Course	3
EL-142	Poetry in Public	3
EL-551	English Travel	0
T2 SLO6	Tier 2 - SLO6	3
EL-2xx	Advanced Literature	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
EL-401	Capstone	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
EL-xxx	English Course ((100 or 200 level)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Arts in English – Teacher Certification

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
EL-XXX	English Elective	3
CORE-1500	Core Writing (T1 SLO5)	3
EL-1xx	British Literature (EL-114 or EL-118) (T1 SLO2)	3
ED-100	Foundations of Education (T1 SLO3)	3
ED-103/207	Field Experience 7-12/ K-12	1

Course Number	Freshman Spring	Credits
EL-133	American Literature	3
T1 SLO1	Tier 1 - Theology	3
ED-115	Educational Psychology	3
EL-205	EL205 Advanced Writing (T2 SLO5)	3
ED-142	ED 142 Math for Teachers (T1 SLO3)	3
XXX	English Elective	3

Course Number	Sophomore Fall	Credits
T1 SLO 6	Ethics and Philosophy	3
ED-155	Geometric Measurement Theory	3
EL-200	Literary Theory	3
ED-206	Field Experience II: Strategies	1
ED-205	Strategies and Techniques of Instruct	3
EL-552	Careers in English	1

Course Number	Sophomore Spring	Credits
CL-129	Young Adult Literature	3
PY-214	Adolescent Development (T2 SLO2)	3
EL-XXX	Shakespeare Course (EL-127or EL-165 or EL-213 or EL-214)	3
EL-119	History of the English Language	3
NSCI-XXX	NSCI Elective (T1 SLO3)	4

Course Number	Junior Fall	Credits
EL-2xx	Advanced Literature	3
ED-290	Psychology of the Exceptional (T2 SLO3)	3
ED-220	Read, Write & Dif. in Con. Area	3
ED-390	Promote Youth Cultural Competence and Diversity	3
EL-550	Internship	1
XXX	Elective	3

Course Number	Junior Spring	Credits
ED-322	Field Experience III: K-12	3
ED-208	Classroom Partnership and Inclusion	3
EL-2XX	Advanced Literature	3
EI-551	English Travel	0
T2	Tier 2 - Take one course from SLO 1 or SLO 6	3
ED-381	Educational Testing	3

Course Number	Senior Fall	Credits
CORE - 3401	Capstone Seminar (T3 SLO 4)	3
EL-400	Literature Capstone	3
ED-401	Pre-student Teaching Seminar	3
ED-400	Field Experience IV: Pre Student	2
ED-301	Teaching of English, 7-12	3
EL-200	English Elective	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives

Bachelor of Science in Environmental Chemistry

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3	4
MA-111	Calculus (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	CORE Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
MA-112	Calculus II	4
ES-150/2	Earth System Science + Lab	4
SO-161	Foundations of Sustainability *(T2 SLO2)*	3
T1 SLO2	Tier 1 - Literature	

Course Number	Sophomore Fall	Credits
CH-221/3	Organic Chemistry I + Lab	4
PH-111/3	General Physics I + Lab	4
XX-XXX	Math Course *	4
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
CH-222/4	Organic Chemistry II + Lab	4
CH-216/8	Quantitative Analysis + Lab	4
PH-112/4	General Physics II + Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Fall	Credits
CH-231/3	Physical Chemistry I + Lab	4
CH-276	Advanced Environmental Chemistry	3
CH-277	Methods of Environmental Analysis	2
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
CH-232	Physical Chemistry II	3
CH-242	Instrumental Analysis	3
CH-282	Advanced Physical Methods	2
CH-300	Research Seminar I	1
T2 SLO5	Tier 2 - SLO5	3

Course Number	Senior Fall	Credits
CH-301	Research Lab	2
T2 SLO2	*Tier 2 - SLO2 *If SO-161 is taken this can be an open elective*	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Electives	4

Course Number	Senior Spring	Credits
CH-228	Introduction to Biochemistry	3
CH-302	Research Seminar II	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Electives	7

Total Credits:	124

Recommended Electives
* Math Course: Take 3 credits from the following: MA-211, BL-260, MA-311, MA-241

Bachelor of Science in Environmental Science

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
ES-100	Nature & Sustainable Resources	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	CORE Writing (T1 SLO5)	3
T1 SLO6	Tier 1- Philosophy	3

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
ES-150/2	Earth System Science + Lab	4
SO-161	Foundation of Sustainability (T2 SLO2)	3
T1 SLO2	Tier 1 - History	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BL-150/1	General Biology I + Lab	4
MA-109**	Calculus I with Application (T1 SLO3)	4
T1 SLO3	Tier 1- Language & Culture	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Spring	Credits
BL-152/3	General Biology II + Lab	4
MA-110	Calculus II with Application (T2 SLO3)	4
T1 SLO3	Tier 1 - Social Science	3
EL-111	Environmental Literature (T1 SLO2) * Also fulfills 3 credits of Humanities for Major	3

Course Number	Junior Fall	Credits
BL-232/3	Ecology + Lab	4
ES-220	Intro to GIS	3
XX-XXX	Elective	3
PS-390	Environmental Law and Policy	3
XX-XXX	Elective	2

Course Number	Junior Spring	Credits
CH-216/8	Quantitative Analysis + Lab	4
ES-300	Research Seminar I	2
XX-XXX	Elective	3
XX-XXX	Elective	3
T2 SLO6	Humanities Elective (HI-226 or TH-274 or PL-219) T2 SLO 6	3

Course Number	Senior Fall	Credits
PH-109/13	College Physics I + Lab	4
XX-XXX	Advanced Env Elective + Lab	4
ES-301	Research Laboratory	2
ES-550	Internship	3
T2 SLO1	Tier 2 - SLO 1	3
XX-XXX	Elective	3
Total Credits:		**124**

Course Number	Senior Spring	Credits
XX-XXX	Phys Env Elective + Lab	4
ES-302	Research Seminar II	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO5	Tier 2 SLO5	3
XX-XXX	Elective	3

Recommended Electives
Advanced Env Elective + Lab: BL-228/9 or BL-230/1 or BL-240/1 or BL-252/3 Phys Env Elective + Lab : ES-230 or ES-240 or CH-276/7, or ES-250 or ES-245/6 **MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Finance – Behavioral Track

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109**/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3
PY-100	Introduction to Psychology	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
PY-243	Abnormal Psychology	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
PY-260	Social Psychology	3
T1 SLO2	Tier 1 - History	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO6	Tier 1 -Philosophy	3
PY-308	Cognitive Psychology	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 324	Advanced Personal Financial Planning	3
PY-309	Learning	3
PY-382*	Psychological Assessment	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Senior Fall	Credits
BA-367	Investments III: Alternatives	3
BA-353/EC-353	International Finance	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Spring	Credits
BA-488	Portfolio Theory	3
BA-495	Business Policy and Strategy	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO6	Tier 2 - SLO6	3
T2 SLO5	Tier 2 - SLO5	3

Total Credits:	131

Electives
* Offered every other year. **MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Finance – CFA Track

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109*/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO6	Tier 1 -Philosophy	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
T1 SLO3	Tier 1 - Natural Science	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 324	Advanced Personal Financial Planning	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA-367	Investments III: Alternatives	3
BA-353/EC-353	International Finance	3
BA-495	Business Policy and Strategy	3
T2 SLO6	Tier 2 - SLO6	3
XXX	Elective	3
XXX	Internship	1

Course Number	Senior Spring	Credits
BA-488	Portfolio Theory	3
BA-485	Financial Planning and Analysis	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XXX	Elective	3
XXX	Elective	1

Total Credits:	124

Electives
*MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in Finance – CFP Track

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109**/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO6	Tier 1 -Philosophy	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO3	Tier 1 - Natural Science	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
BA 324	Advanced Personal Financial Planning	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 484	Risk Management*	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA-367	Investments III: Alternatives	3
BA-353/EC-353	International Finance	3
BA-495	Business Policy and Strategy	3
T2 SLO6	Tier 2 - SLO6	3
BA 310	Taxes I	3

Course Number	Senior Spring	Credits
BA-488	Portfolio Theory	3
BA-485	Financial Planning and Analysis	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
BA 311	Taxes II	3
XXX	Internship	1

Total Credits:	126

Electives
* Offered every other year. **MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in Finance – Computational Track

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109**/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
MA-112	Calculus II	4
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
MA-211	Calculus III	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
MA-231	Methods of Proof	3
T1 SLO2	Tier 1 - Language & Culture	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
MA-421*	Real Analysis I	4
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO6	Tier 1 -Philosophy	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 324	Advanced Personal Financial Planning	3
MA-251	Linear Algebra	3
T1 SLO2	Tier 1 - History	3

Course Number	Senior Fall	Credits
BA-367	Investments III: Alternatives	3
BA-353/EC-353	International Finance	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Spring	Credits
BA-488	Portfolio Theory	3
BA-495	Business Policy and Strategy	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO6	Tier 2 - SLO6	3

Total Credits:	131

Electives
* Offered every other year **MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Finance – Corporate Track

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109*/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO6	Tier 1 -Philosophy	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
T1 SLO3	Tier 1 - Natural Science	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 324	Advanced Personal Financial Planning	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA 200	Intermediate Accounting I	3
BA 325	Analysis of Financial Statements	3
BA-353/EC-353	International Finance	3
T2 SLO6	Tier 2 - SLO6	3
XXX	Elective	3
XXX	Internship	1

Course Number	Senior Spring	Credits
BA-321	Advanced Corporate Finance	3
BA-495	Business Policy and Strategy	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XXX	Elective	3
XXX	Elective	1

Total Credits:	124

Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Finance and Mathematics

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109***/111	Calc I (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
BA-101	Financial Accounting II	3
BA-220	Principles of Marketing	3
EC-102	Principles of Macroeconomics	3
MA-112	Analytical Calculus II	4
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
BA-320	Corporate Finance	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
MA-211	Analytical Calculus III	4
CS/ENGR	Take 1 approved CS course **	3
PS-100	Intro to American Gov. (T1 SLO2)	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-265	Management Information Systems	3
BA-340	Business Law	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
MA-212	Ordinary and Partial Differential Equations	4
MA-231	Methods of Proof	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-362	Investments I: Securities	3
BA-385	Financial Institutions	3
MA-321*	Complex Variables	4
MA-421*	Real Analysis I	4
T1 SLO2	Tier 1 - History	3
MA-251	Linear Algebra	3

Course Number	Junior Spring	Credits
BA-363	Investments II: Derivatives	3
BA-305	Business Ethics	3
BA 324	Advanced Personal Financial Planning	3
T1 SLO2	Tier 1 - Literature	3
MA-422*	Real Analysis II	4
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Senior Fall	Credits
BA-367	Investments III: Alternatives	3
BA-353/EC-353	International Finance	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO6	Tier 1 -Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Spring	Credits
BA-488	Portfolio Theory	3
BA-495	Business Policy and Strategy	3
T2 SLO3	Tier 2 - SLO3	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO6	Tier 2 - SLO6	3
T2 SLO5	Tier 2 - SLO5	3

Total Credits:	146

Electives
* Offered every other year ** Take CS-110, CS-190, CS-270 or ENGR-115. ***MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Arts in History

Course Number	Freshman Fall	Credits
HI-100	Introduction to the History Major	1
HI-1xx	History Area Study 1.1 * (T1 SLO2)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Writing Seminar (T1 SLO5)	3
HI - 201	Introduction to Public History	3
XX-XXX	Elective	3

Course Number	Freshman Spring	Credits
T1 SLO1	Tier 1 - Theology	3
HI-1xx	History Area Study 1.2 *	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO3	Tier 1 - Natural Science	3
XX-XXX	Elective	3

Course Number	Sophomore Fall	Credits
HI-1xx	History Area Study 2.1 *	3
HI-2xx	History 200 Level	3
HI-101	Historical Writing	3
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
HI-1xx	History Area Study 2.2 *	3
HI-300	The Historian's Profession	3
HI-2xx	History 200 Level	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Junior Fall	Credits
HI-1xx	History Area Study 3.1*	3
HI-2xx	History 200 Level	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
HI-1xx	History Area Study 3.2*	3
HI-301	Junior Seminar of History Majors	3
XX-XXX	Elective	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO6	Tier 2 - SLO6	3

Course Number	Senior Fall	Credits
HI-302	Senior Seminar for History Majors	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives

*History Majors must complete 3 of the following History Area Study areas for a total of 18 credits:
- Western Civilization: HI-102 & HI-103
- Contemporary Europe: HI-104 & HI-105
- U.S. History: HI-106 & HI-107
- English History: HI-110 & HI-111
- Global History: HI-123 & HI-124

* Tier 2 SLO 2, Tier 2 SLO3, Tier 2 SLO6 may be satisfied by the History 200 level major requirement, depending on the courses taken. See approved CORE courses for each of these SLO's.

Bachelor of Arts in History – Secondary Education

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
*ED-100	Foundation of Education (T1 SLO3)	3
CORE-1500	Core Writing (T1 SLO5)	3
HI-107	Topics in US History Since 1865 (T1 SLO2)	3
HI-100	Introduction to the History Major	1
*ED-115	Educational Psychology	3

Course Number	Freshman Spring	Credits
HI-106	Topics in US History Before 1865	3
HI-104	Contemporary Europe II	3
T1 SLO1	Tier 1 - Theology	3
*ED-103/207	Field Experience I: 7-12	1
ED-142	Mathematics for Teachers (T1 SLO3)	3
T1SLO3	Tier 1 – Natural Science	4

Course Number	Sophomore Fall	Credits
T1 SLO 6	Tier 1 - Ethics & Philosophy	3
HI-105	Contemporary Europe I	3
PS-100 or PS-222	American Government or State and Local Government	3
HI-303	Historical Writing	3
SO-101	Introduction to Sociology	3

Course Number	Sophomore Spring	Credits
HI-123	Global History II	3
HI-300	The Historian's Profession	3
*ED-205	Strategies and Techniques	3
*ED-206	Field 2	1
HI-2xx	History Elective	3
*ED-290	Psychology of the Exceptional Child (T2 SLO3)	3

Course Number	Junior Fall	Credits
EC-101 or 102	Macro or Micro Economics	3
HI-124	Global History II	3
*ED-155	Geometric Measurement	3
ED-220	Reading Writing and Differentiation	3
HI-2xx	History Elective (T2 SLO2)	3
HI-226 or HI-290	Society & The Environment or Peace & Justice History Perspective (T2 SLO6)	3

Course Number	Junior Spring	Credits
PY-214	Adolescent Development	3
HI-301	Junior Research Seminar	3
*ED-208	Classroom Partnerships and Inclusion	3
ED-381	Educational Testing	3
*ED-322	Field 3	1
CL-129	Adolescent Literature (T2 SLO 2)	3

Course Number	Senior Fall	Credits
ED-303	Teaching of Social Studies 7-12	3
ED-390	Promoting Youth and Cultural Competence and Diversity	3
ED-400	Field Experience IV: Pre Student	2
HI-302	Senior Research Seminar	3
ED-401	Pre-Student Teaching Seminar	3
CORE-3401	Capstone Seminar	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	127

Recommended Electives
** These courses can be swapped from one semester to the next*

Bachelor of Science in Health and Physical Education

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1 - Theology	3
BL-150/151	General Biology I and Lab	4
CORE-1500	Core Writing (T1 SLO5)	3
ED-103/ HPE-103/ED-207	Field Experience I: K-12	1

Course Number	Freshman Spring	Credits
NSCI-235	Human Anatomy and Kinesiology + Lab (T1 SLO3)	4
BL -140	Intro to Exercise Science	3
T1 SLO2	Take one course from approved History or Literature or Classical & Modern Language or PS-100	3
ED-142	Mathematics for Teachers (T1 SLO3)	3
ED-100	Foundation of Education (T1 SLO3)	3

Course Number	Sophomore Fall	Credits
ED-115	Educational Psychology	3
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategies	1
XX-XXX	Approved Elective Course*	3
ED-155	Geometric & Measurement Theory	3
HPE-120	Emergency Care Prevent of Injury	3

Course Number	Sophomore Spring	Credits
PY-214	Adolescent Development	3
ED-290	Psychology of the Exceptional Study (T2 SLO3)	3
CL-129	Young Adult Literature (T2 SLO2)	3
T1 SLO6	Tier 1 - Philosophy & Ethics	3
HPE-250	Team Sports II	3
HPE-260	Comprehensive Move. & Fitness	3

Course Number	Junior Fall	Credits
BL-245	Exercise Physiology	3
ED-208	Classroom Partnership and Inclusion	3
HPE-325	Adaptive Physical Education	3
ED-220	Reading Writing and Differentiation	3
ED-307	Teaching of Health and Physical Ed	3
HPE-150	Team Sports 1	3

Course Number	Junior Spring	Credits
HPE-130	Swimming and Water Safety	1
T2	Take one Tier 2 Course from the following: SLO 1 or SLO5 or SLO6	3
ED/ HPE-322	Field Experience III: K-12	1
ED-390	Promote Youth Cultural Competence and Diversity	3
T2	Take one Tier 2 Course from the following: SLO 1 or SLO5 or SLO6	3
ED-381	Educational Testing	3

Course Number	Senior Fall	Credits
ED-400	Pre-Student Teaching	2
ED-401	Pre-student Teaching Seminar	3
HPE-270	Personal & Community Health	3
HPE-340	Customized Training and Assessment	4
CORE-3401	Capstone Seminar	3
XX-XXX	Elective Course	1

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives
Take an approved elective course from the following: BA-209, BA-374, HSCI-250, PY-322, PY-250, PY-275

Bachelor of Science in Health Science

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
HSCI-101	Intro to Health Science	1
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	CORE Writing (T1 SLO5)	3
HSCI-201	Medical Term	1
T1 SLO2	Tier 1 - History	3

Course Number	Freshman Spring	Credits
CH-102/4	General Chemistry II + Lab	4
XX-XXX	Elective	3
T1 SLO1	Tier 1 - Theology	3
T1SLO 2	Tier 1 - Language & Culture	3
PS-100	American National Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
BL-150/1	General Biology I + Lab	4
HSCI-210	Healthcare Systems	3
T1 SLO2	Tier 1- Literature	3
MA-109**	Calculus I with Application (T1 SLO3)	4

Course Number	Sophomore Spring	Credits
BL-152/3	General Biology II + Lab	4
T1 SLO6	Tier 1- Philosophy	3
XX-XXX	Elective	3
T1 SLO3	Tier 1 - Social Sciences	3

Course Number	Junior Fall	Credits
HSCI-222/3	Human Anatomy and Phys I + Lab	4
XX-XXX	Social and Natural Science Elective	3
XX-XXX	Social and Natural Science Elective	3
T2 SLO1	Tier 2 SLO1	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
HSCI-224/5	Human Anatomy and Phys II + Lab	4
XX-XXX	Social and Natural Science Elective	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
PH-109/13	College Physics I + Lab	4
XX-XXX	Social and Natural Science Elective	3
HSCI-550	Internship/Reflection	0
HSCI-300	Health Science Seminar	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
XX-XXX	Social and Natural Science Elective + Lab	4
BL-260	Biostatistics or PY-203 Statistics I	3
CORE-3401	Loving Seminar	3
XX-XXX	Electives (minor)	6
T2 SLO5	Tier 2 - SLO5	3

Total Credits:	125

Recommended Electives
Social and Natural Science electives are HSCI major electives; non-major recommended electives include a Bioethics course (TH, PL, or CORE) **MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in Information Systems

Course Number	Freshman Fall	Credits
CS-102	Fundamentals	3
CS-110	Programming I	3
MA-109*****	Calc I (or MA-111) (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
CS-111	Programming II	3
Science	Any Science with Lab (T1 SLO3*)	3
Lab	Corresponding Lab (T1 SLO3*)	1
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1- History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
CS-170	Discrete Structures	3
CS-221	Data Structures	3
CS-265	Info Systems Management	3
MA-241	Probability/Stats (or MA-311)	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Spring	Credits
CS-355 or CS-351	Software Engineering or Systems Analysis	3
Science	Any Science with Lab	3
Lab	Corresponding Lab	1
EC-101	Principles of Microeconomics (T1 SLO3)	3
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO6	Tier 1- Philosophy	3

Course Number	Junior Fall	Credits
CS-225	Cybersecurity	3
CS-292	Engineering & Computing Ethics (T2 SLO6)	3
CS-350	Database	3
T2 SLO1	Tier 2- SLO1	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
CS-xxx	CS Elective	3
XX-XXX	Business or Economics	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO2	Tier 2 - SLO 2	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
CS-321	Data Communications, Network	3
CS-357	Senior Project I	1
CS-xxx	CS Elective **	3
T2 SLO5	Tier 2- SLO5	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Course Number	Senior Spring	Credits
CS-322	Advanced Networking	3
CS-358	Senior Project II	2
CS-xxx	CS Elective	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Total Credits:	124

Recommended Electives
* Note: Software Engineering (CS-355) is offered in spring of even years and Systems Analysis and Design (CS-351) is offered in spring of odd years ** CS electives: Take 9 credits of CS electives at 200+ level or above ***Students may take from subjects BL, CH, PH, NSCI for the science requirement for the major. ****Students who take CH-101/103 or PH-111/113 can satisfy both the major requirement and CORE Natural Science Requirement. *****MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in International Business

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Theory	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109**/111	Calc I (T1 SLO3)	4

Course Number	Freshman Spring	Credits
BA-150	Managerial Accounting	3
BA-220	Principles of Marketing	3
T1 SLO2	Tier 1 - History	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Ter 1 - Literature	3

Course Number	Sophomore Fall	Credits
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
	Language Requirement (1) *	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-320	Corporate Finance I	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - Language & Culture *	3
EC-102	Principles of Macroeconomics	3
	Language Requirement (1)	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-251	International Business	3
T1 SLO3	Tier 1 - Natural Science	3
T2 SLO1	Tier 2 - SLO1	3
BA-353/EC-353	International Finance	3
BA/EC/PS	Major Elective *	3

Course Number	Junior Spring	Credits
BA-340	Business Law	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO2	Tier 2 - SLO2	3
BA-250	Global Business Management	3
	Required Minor (3)	3

Course Number	Senior Fall	Credits
BA-305	Business Ethics	3
T2 SLO5	Tier 2 - SLO5	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
BA-395	Global Marketing	3
	Required Minor (3)	3
	Required Minor (3)	3

Course Number	Senior Spring	Credits
BA-495	Business Policy and Strategy	3
T2 SLO3	Tier 2 -SLO3	3
T2 SLO6	Tier 2 - SLO6	3
	Required Minor (3)	3
	Required Minor (3)	3

Total Credits:	128

Recommended Electives

*Tier 1 SLO2 - Language and Culture and the Language Major Requirement can both be fulfilled by an intermediate level language course depending upon the course taken. Please see the approved listing of CORE courses.
*Major Electives: Take 1 of the following courses: BA-470, BA-525, PS-242, or PS-244.
**MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Arts in Liberal Arts

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
TH-XXX	Tier 1 - Theology (T1 SLO1)	3
HI-XXX	Tier 1 - History (T1 SLO2)	3
T1 SLO3	Tier 1 - Natural Science	3

Course Number	Freshman Spring	Credits
XX-XXX	I-Track Course 1	3
XX-XXX	I-Track Course 2	3
EL-XXX	Tier 1 - Literature (T1 SLO2)	3
T1 SLO2	Tier 1 - Language and Culture	3
T1 SLO3	Tier 1 - Mathematics	3

Course Number	Sophomore Fall	Credits
XX-XXX	I-Track Course 3	3
XX-XXX	I-Track Course 4	3
PS-100	Intro to American Gov. (T1 SLO2)	3
PL-214	Love, Dignity & Justice (T1 SLO6)	3
TI SLO3	Tier 1 – Social Science	3

Course Number	Sophomore Spring	Credits
XX-XXX	I-Track Course 5	3
XX-XXX	I-Track Course 6	3
XX-XXX	I-Track Course 7	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Junior Fall	Credits
LA-225	Truth & Interpretation	3
XX-XXX	I-Track Course 8	3
XX-XXX	I-Track Course 9	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3

Course Number	Junior Spring	Credits
XX-XXX	I-Track Course 10	3
XX-XXX	I-Track Course 11	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Course Number	Senior Spring	Credits
LA-325	Senior Seminar	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	2

Total Credits:	124

Recommended Electives

Bachelor of Science in Mathematics/Actuarial Science

Course Number	Freshman Fall	Credits
MA-111	Analytical Calc I (T1 SLO3)	4
BA-100	Financial Accounting I	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
XX-XXX	Tier 1 -Natural Science or Elective ***	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calc II	4
BA-101	Financial Accounting II	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
MA-311	Probability and Statistics I	3
BA-350 or MA-241	Statistics I	3
PS-100	Intro to American Gov. (T1 SLO2)	3
EC-101	Microeconomics (T1 SLO3 encouraged)	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
MA-312	Probability and Statistics II	3
BA-320	Corporate Finance	3
MA-212	Ord and Partial Diff Eq	4
T1 SLO6	Tier 1 - Philosophy	3
EC-102	Macroeconomics (encouraged elective)	3

Course Number	Junior Fall	Credits
MA-211	Analytical Calc III	4
MA-251	Linear Algebra	3
BA 362	Investments I: Securities	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	General Science (CH or BL or PH) + Lab ** (See options below)	4

Course Number	Junior Spring	Credits
MA-231	Methods of Proof	4
BA-363	Investments II: Derivatives (encouraged elective)	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
MA-421/451	Real Analysis I or Abstract Algebra I	4
BA-367	Investments III: Alternative Assets	3
T2 SLO5	Tier 2 -SLO5	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
MA-422/452	Real Analysis II or Abstract Algebra II	4
CORE-3401	Capstone Seminar (T3 SLO4)	3
CS-XXX	CS Elective (see options below) *	3
EC-102	Macroeconomics (elective)	3
MA-501	Capstone I	1

Total Credits:	126

Recommended Electives
*CS Elective - Complete one of the following: CS-110, CS-190, CS-270, or ENGR-115 . ***Tier 1 SLO3 may be fulfilled by the General Science Major requirement, depending upon the course taken. See the approved list of CORE courses.

Bachelor of Arts in Mathematics

Course Number	Freshman Fall	Credits
MA-111	Analytical Calc I (T1 SLO3)	4
	General Science (CH or BL) + Lab *** (See options below)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calc II	4
T1 SLO2	Tier 1 - Literature	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
XX-XXX	Elective	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calc III	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3
T1 SLO2	Tier 1 - Language & Culture	3
MA-251	Linear Algebra	3

Course Number	Sophomore Spring	Credits
MA-212	Ord and Partial Diff Eq	4
CS-XXX	CS Elective (see options below) *	3
XX-XXX	Elective	3
MA-231	Methods of Proof	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
MA-421/451	Real Analysis I or Abstract Algebra I	4
MA-2xx/3xx	200 or 300 Level math course	3
XX-XXX	Tier 1 -Natural Science or Elective ***	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
MA-422/452	Real Analysis II or Abstract Algebra II	4
MA-2xx/3xx	200 or 300 Level math course	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
MA-2xx/3xx	200 or 300 Level math course	3
T2 SLO5	Tier 2 -SLO5	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
MA-501	Capstone	2
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives
*CS Elective - Complete one of the following: CS-110, CS-190, CS-270, or ENGR-115 ***Tier 1 SLO3 may be fulfilled by the General Science Major requirement, depending upon the course taken. See the approved list of CORE courses. If the science course fulfills both the CORE and major, students can take an open elective course.

Bachelor of Science in Mathematics

Course Number	Freshman Fall	Credits
MA-111	Analytical Calc I (T1 SLO3)	4
	General Science (CH or BL) + Lab ** (See options below)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
XX-XXX	Tier 1 -Natural Science or Elective ***	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calc II	4
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calc III	4
PH-111/3	General Physics I + Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1 - Social Science	3
MA-251	Linear Algebra	3

Course Number	Sophomore Spring	Credits
MA-212	Ord and Partial Diff Eq	4
CS-XXX	CS Elective (see options below) *	3
MA-231	Methods of Proof	3
MA-2xx/3xx	200 or 300 Level math course	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Junior Fall	Credits
MA-421/451	Real Analysis I or Abstract Algebra I	4
MA-2xx/3xx	200 or 300 Level math course	3
T2 SLO1	Tier 2 - SLO1	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
MA-422/452	Real Analysis II or Abstract Algebra II	4
MA-2xx/3xx	200 or 300 Level math course	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2 - SLO3	3
XX-XXX	Elective	3
MA-501	Capstone I	1

Course Number	Senior Fall	Credits
MA-421/451	Real Analysis I or Abstract Algebra I	4
MA-2xx/3xx	200 or 300 Level math course	3
T2 SLO5	Tier 2 -SLO5	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
MA-422/452	Real Analysis II or Abstract Algebra II	4
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	2
MA-502	Capstone II	1

Total Credits:	125

Recommended Electives
*CS Elective - Complete one of the following: CS-110, CS-190, CS-270, or ENGR-115. ***Tier 1 SLO3 may be fulfilled by the General Science Major requirement, depending upon the course taken. See the approved list of CORE courses. If the science course fulfills both the CORE and major, students can take an open elective course.

Bachelor of Science in Mathematics – Secondary Certification

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SO4)	3
CH-101/3	General Chemistry + Lab (T1 SLO3)	4
MA-111	Analytical Calc I (T1, SLO 3)	4
CORE-1500	Core Writing (T1 SLO5)	3
ED-115	Educational Psychology	3
ED-103/207	Field Experience 1: 7-12 Strat and Tech	1

Course Number	Freshman Spring	Credits
ED-100	Foundations of Education (T1 SLO 3)	3
MA-112	Analytical Calc II	4
T1, SLO 2	History, Culture, Politics	3
T1, SLO 6	Ethics and Service	3
T1, SLO 1	Theological Foundation	3

Course Number	Sophomore Fall	Credits
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Classroom Partnerships	1
MA-211	Analytical Calc III	4
T2, SLO 1	Theology	3
MA-251	Linear Algebra	3

Course Number	Sophomore Spring	Credits
MA-212	Ordinary and Partial Diff Equations	4
PY-214	Adolescent Development	3
CL-129	Young Adult Literature (T2 SLO 2)	3
MA-231	Methods of Proof	3
ED-290	Psychology Exceptional Student (T2 SLO 3)	3

Course Number	Junior Fall	Credits
ED-390	Promote Youth Cultural Competence and Diversity	3
ED-208	Classroom Partnerships and Inclusion	3
MA-311/ MA-241	Probability and Stats or Statistics I	3
MA-421/451	Real Analysis or Abstract Algebra I	4
ED-220	Reading, Writing and Differentiation	3
ED-322	Field Experience III: Secondary	1

Course Number	Junior Spring	Credits
MA-501	Capstone	2
T2, SLO 6	Ethics and Service	3
PH-111/3	General Physics I + Lab	4
MA-301	History of Mathematics	3
CS-XXX	CS Elective	3
ED-381	Educational Testing	3

Course Number	Senior Fall	Credits
ED-400	Field Experience IV: Pre Student Teaching	2
MA-421/451	Real Analysis or Abstract Algebra I	4
ED-401	Pre-Student Teaching Seminar	3
ED-303	Teaching of Mathematics 7-12	3
CORE-3401	Capstone Seminar	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives
CS Elective - Take 1 of the following: CS-110, CS-190, CS-270, or ENGR-115

Bachelor of Science in Mathematics and Engineering

Course Number	Freshman Fall	Credits
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
MA-111	Analytical Calculus I (T1 SLO3)	4
ENGR-100	Introduction to Engineering	3
CORE-1400	Listening Seminar (T1 SLO4)	3
T1 SLO1	Tier 1- Theology	3

Course Number	Freshman Spring	Credits
MA-112	Analytical Calculus II	4
CH-102/4	General Chem II + Lab	4
PH-111/3	General Physics I + Lab	4
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO6	Tier 1 - Philosophy & Ethics	3

Course Number	Sophomore Fall	Credits
MA-211	Analytical Calc III	4
PH-112/4	General Physics II + Lab	4
XX-XXX	Technical Elective	3
ENGR-223	Statics	3
T1 SLO2	Tier 1 - SLO2 (History/ American Gov/ Literature/ Language & Culture)	3

Course Number	Sophomore Spring	Credits
MA-212	Differential Equations	4
ENGR-115	Introduction to Engineering Computation	3
ENGR-240	Intro to Engineering Design and Lab	4
T1 SLO2	Tier 1 - SLO2 (History/ American Gov/ Literature/ Language & Culture)	3
T2	Tier 2 (1 course from SLO1 or SLO2 or SLO3 or SLO5 or SLO6)	3

Course Number	Junior Fall	Credits
ENGR-XXX	Engineering Elective	3
XX-XXX	Technical Elective	3
XX-XXX	Technical Elective	3
MA-241	Statistics I	3
T2	Tier 2 (1 course from SLO1 or SLO2 or SLO3 or SLO5 or SLO6)	3

Course Number	Junior Spring	Credits
ENGR-XXX	Engineering Elective	3
XX-XXX	Technical Elective	3
T2	Tier 2 (1 course from SLO1 or SLO2 or SLO3 or SLO5 or SLO6)	3
T2	Tier 2 (1 course from SLO1 or SLO2 or SLO3 or SLO5 or SLO6)	3
CORE-3401	Capstone Seminar (Tier 3 SLO4)	3

Course Number	Senior Fall	Credits
Total Credits:		**99**

Course Number	Senior Spring	Credits

Recommended Electives

***Engineering Elective**: Any Engineering course not required in the Engineering Core or in the student's selected concentration*
***Technical Elective**: Any 100-level or 200-level Biology course*
CH 102 (General Chemistry II)
Any 200-level Chemistry course
Any 100-level, 200-level, or 300-level Computer Science course, excluding CS 102, CS 357 and CS 358
Any Data Science course
Any Engineering course not required in the Engineering Core or in the student's selected concentration
Any 100-level or 200-level Environmental Science course
Any 200-level Health Science course
Any 200-level, 300-level, or 400-level Mathematics course, excluding those required in the Engineering core
Any 200-level or 300-level Physics course, excluding PH 214, PH 215, PH 223, PH 224, PH 225, and PH 381

Bachelor of Science in Management

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Behavior	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109*/111	Calc I (T1 SLO3)	4

Course Number	Freshman Spring	Credits
BA-150	Managerial Accounting	3
BA-220	Principles of Marketing	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO1	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
BA-232	Human Resource Management	3
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I	4
PS-100	Intro to American Gov (T1 SlO2)	3
EC-101	Principle of Microeconomics (T1 SLO3)	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-250/251	Global Business Management/ International Business	3
BA-320	Corporate Finance	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
T1 SLO2	Tier 1 - Language & Culture	3
EC-102	Principle of Macroeconomics	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-340	Business Law	3
BA-398	Project Management	3
T2 SLO5	Tier 2 - SLO5	3
T1 SLO3	Tier 1 - Natural Science	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
BA-280	Leadership	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
BA-305	Business Ethics	3
BA-444	Operations Management	3
BA-344	Introduction to Operational Excellence	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Internship or Elective	1
XX-XXX	Elective	1

Course Number	Senior Spring	Credits
BA-495	Business Policy and Strategy	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Science in Marketing

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Theory	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109**/111	Calc 1 (T1 SLO3)	4

Course Number	Freshman Spring	Credits
BA-150	Managerial Accounting	3
BA-220	Principles of Marketing	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - History	3
T1 SLO 2	Tier 1 - Literature	3

Course Number	Sophomore Fall	Credits
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
BA-395	Global Marketing	3
PS-100	Intro to American Gov. (T1 SLO2)	3
EC-101	Principle of Microeconomics (T1 SLO3)	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-320	Corporate Finance	3
BA-351/A	Statistics and Analytics II & Excel II Lab	4
BA-380	Consumer Behavior	3
T1 SLO2	Tier 1 - Language & Culture	3
EC-102	Principle of Macroeconomics	3
BA-299	Professionalism II	1

Course Number	Junior Fall	Credits
BA-340	Business Law	3
BA-397	Marketing Research	3
BA-XXX	Marketing Electives*	3
T1 SLO3	Tier 1 - Natural Science	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
BA-425	Marketing Strategy	3
BA -XXX	Marketing Electives*	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA-305	Business Ethics	3
XX-XXX	Elective	3
T2 SLO5	Tier 2 - SLO5	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Internship or Elective	1
XX-XXX	Elective	1

Course Number	Senior Spring	Credits
BA-495	Business Policy and Strategy	3
BA-XXX	Marketing Electives *	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
Complete 3 marketing electives (9 credits) from the following: BA-106, BA-330, BA-334, BA-335, BA-336, BA-337, BA-338. **MA-102 and MA-103 can be taken in place of MA-109.

Bachelor of Science in Middle Grade Education (4-8)

Course Number	Freshman Fall	Credits
T1 SLO 4	Listening Seminar	3
ED-100	Foundations of Education (T1 SLO3)	3
ED-155	Geometric and Measurement Theory	3
ED-115	Educational Psychology	3
T1 SLO 5	Core Writing	3

Course Number	Freshman Spring	Credits
ED-142	Mathematics for Teachers (T1 SLO3)	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO6**	Tier 1 - Philosophy & Ethics	3
CL-129	Young Adult Literature (T2 SLO2)	3
PS-100	Intro to American Government	3
ED-102 or 103	Field Experience 1: 4-8	1

Course Number	Sophomore Fall	Credits
NSCI-125 (or any 4 credit NSCI course)	Intro Enviro Science + Lab (T1 SLO 3)	4
ED-205**	Strategies and Techniques of Instruct	3
ED-206**	Field Experience II: Strategies	1
LA/SS/SC/MA	Middle Grade Concent Area Course	3
ED-290	Psych of the Except Stud (T2 SLO 3)	3
XX-XXX	Open Elective	3

Course Number	Sophomore Spring	Credits
T2	Take a Tier 2 course from SLO1 or SLO2 or SLO6*	3
ED-208	Classroom Partnership and Inclusion	3
LA/SS/SC/MA	Middle Grade Concent Area Course	3
PY-214	Adolescent Development	3
HI 258	Pennsylvania History	3

Course Number	Junior Fall	Credits
ED-237	Teaching of Humanities for Mid Learners	3
LA/SS/SC/MA	Middle Grade Concent Area Course	3
ED-390	Promote Youth Cultural Competence and Diversity	3
ED-311 or 322	Field Experience III: Middle Grade	1
LA/SS/SC/MA	Middle Grade Concent Area Course	3
HI-107 (or 106)	Topics in US History (T1 SLO 2)	3

Course Number	Junior Spring	Credits
T2	Take a different Tier 2 course from SLO1 or SLO2 or SLO6*	3
ED-234	Teaching of Science for Middle	3
ED-320	Comp and Language Arts for Up El	3
ED-235	Teaching of Math for Middle	3
ED-381	Educational Testing	3
XX-XXX	Open Elective	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar	3
LA/SS/SC/MA	Middle Grade Concent Area Course	3
ED-400	Field Experience IV: Pre Student Teach	2
ED 401	Pre-Student Teaching Seminar	3
LA/SS/SC/MA	Middle Grade Concent Area Course	3
XX-XXX	Open Elective	1

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives
*The two choice courses for Tier 2 from SLOs 1, 2, or 6 cannot both be from the same SLO. **ED-205/206 in sophomore fall can be interchanged with T1SLO6 in freshman spring.

Bachelor of Arts in Music Performance

Course Number	Freshman Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-108	Music History I	3
MU-525	Applied Lessons	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MU-115	Fundamentals of Music (if recommended)	3

Course Number	Freshman Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-208	Harmony I	3
MU-525	Applied Lessons	4
T1 SLO1	Tier 1 - Theology	3
MU-109	Music History II	3
MU-205	Aural Skills I	3
MU-317	Diction 1 (Voice Students ONLY)	1

Course Number	Sophomore Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
MU-106	World Music	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
MU-209	Harmony II	3
MU-206	Aural Skills II	3
PS-100	Intro to American Gov (T1 SLO2)	3
T1 SLO3	T1 - Natural Science	3
MU-318	Diction II (Voice Students ONLY)	1

Course Number	Junior Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
T1 SLO3	Tier 1 - Social Science	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
MU-220	Form & Analysis	3
MU-330	Junior Recital	1
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OER MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO6	Tier 2 - SLO6	3
MU-XXX	Music Elective	1

Course Number	Senior Spring	Credits
MU-170-180	Ensemble (MU-175, MU-172, MU-180, MU-182, MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	4
MU-00X	Piano Proficiency	0
MU-430	Senior Recital	2
CORE-3401	Capstone Seminar (T3 SLO4)	3
T2 SLO2	Tier 2 - SLO2	3

Total Credits:	124

Recommended Electives
If taken, MU-115 satisfies Tier 2 SLO5.

Bachelor of Arts in Music Studies

Course Number	Freshman Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-108	Music History I	3
MU-525	Applied Lessons	2
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MU-115	Fundamentals of Music (T2 SLO5) OR MU-220	3
XX-XXX	Music or General Elective	3

Course Number	Freshman Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-208	Harmony I	3
MU-525	Applied Lessons	2
T1 SLO1	Tier 1 - Theology	3
MU-109	Music History II	3
MU-205	Aural Skills I	3
MU-317	Diction I (Voice Students ONLY)	1

Course Number	Sophomore Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
MU-106	World Music	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Sophomore Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
MU-209	Harmony II	3
MU-206	Aural Skills II	3
PS-100	Intro to American Gov (T1 SLO2)	3
T1 SLO3	T1 - Natural Science	3
MU-318	Diction II (Voice Students ONLY)	1

Course Number	Junior Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
T1 SLO3	Tier 1 - Social Science	3
T1 SLO3	Tier 1 - Mathematics	3
XX-XXX	Music or General Elective	1
XX-XXX	Music or General Elective	3

Course Number	Junior Spring	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO2	Tier 2 - SLO2	3
MU-243	Music Technology	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Senior Fall	Credits
MU-170-180	Ensemble (MU-175 OR MU-172 OR MU-180 OR MU-182 OR MU-170)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
T2 SLO3	Tier 2 - SLO3	3
MU-00X	Music Elective	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Music or General Elective	3
XX-XXX	Music or General Elective	2

Course Number	Senior Spring	Credits
MU-170-180	Ensemble (MU-175, MU-172, MU-180, MU-182, MU-181)	1
MU-090	Recital Attendance	0
MU-525	Applied Lessons	2
MU-00X	Piano Proficiency	0
MU-410	Senior Capstone	2
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Music or General Elective	3
XX-XXX	Music or General Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Science in Nursing

Course Number	Freshman Fall	Credits
CORE 1401	Listening Seminar: Health, Wellness, & Self-Care (T1 SLO4)	3
CORE 1500	Core Writing (T1 SLO5)	3
PY 218	Life Span Development	3
MA 107	Quantitative Reasoning (T1 SLO3)	3
T1 SLO1	Tier 1 - Theology	3
NUR 100	Nursing Seminar: Exploring the Nursing Profession	0
Micro-credential: Introduction to System Thinking Science		

Course Number	Freshman Spring	Credits
CA 120	Public Speaking (T2 SLO5)	3
NUR 101	Principles of Applied Nutrition	3
CH 125/127	Introduction to General, Organic, & Biological Chemistry + Lab (T1 SLO3)	4
SO 101	Introduction to Sociology (T1 SLO3)	3
MA 121	Basic Applied Statistics	3

Course Number	Sophomore Fall	Credits
HSCI 222/3	Human Anatomy & Physiology I + Lab	4
BL 295/6	Fundamentals of Microbiology + Lab	4
NUR 211	Introduction to Clinical Reasoning in Nursing Practice I: Health Assessment (T2 SLO3)	2
NUR 221	Introduction to Clinical Reasoning in Nursing Practice I: Health Assessment Practicum (T2 SLO3)	1
NUR 212	Perspectives on Nursing	2
AN 285	Foundations of Public Health (T1 SLO6)	3
Micro-credential: Medication Mathematics		

Course Number	Sophomore Spring	Credits
HSCI 224/5	Human Anatomy & Physiology II + Lab	4
BL 299	Pharmacology	3
NUR 213	Introduction to Clinical Reasoning in Nursing Practice II: Fundamentals of Assessment, Nursing Care & Clinical Practice	2
NUR 223	Introduction to Clinical Reasoning in Nursing Practice II: Fundamentals of Assessment, Nursing Care & Clinical Practice Practicum	1
NUR 214	Introduction to Evidence Based Practice and Nursing Science	2
PL218/TH280	Bioethics or Catholic Bioethics (T2 SLO6)	3
Micro-credential: Medical Terminology		

Course Number	Junior Fall	Credits
NUR 311	Nursing Care of Adults with Acute & Chronic Disorders	3
NUR 321	Nursing Care of Adults with Acute & Chronic Disorders Practicum	3
NUR 312	Nursing Care of Women, Newborns and Families	2
NUR 322	Nursing Care of Women, Newborns and Families Practicum	2
BL 297	Pathophysiology Across the Lifespan I	2
NUR 313	Genetics and Precision Health	2
T1 SLO2	Tier 1 - History, Literature, Language & Culture or Intro to American Gov	3
Micro-credential: Building Just and Inclusive Environments		

Course Number	Junior Spring	Credits
NUR 314	Nursing Care of Vulnerable Populations + Practicum	2
NUR 324	Nursing Care of Vulnerable Populations	2
NUR 315	Nursing Care of Children, Adolescents, & their Families	2
NUR 325	Nursing Care of Children, Adolescents, & their Families Practicum	2
BL 298	Pathophysiology Across the Lifespan II	2
NUR 316	Applied Epidemiology in Nursing	1
T2 SLO1	Tier 2 - SLO1	3
Micro-credential: Team STEPPS (Patient Safety) Micro-credential: Palliative & End-of-Life Care		

Course Number	Senior Fall	Credits
NUR 411	Nursing Care of Individuals with Psychiatric, Behavioral & Mental Health Conditions	2
NUR 421	Nursing Care of Individuals with Psychiatric, Behavioral & Mental Health Conditions Practicum	2
NUR 412	Nursing Care of Populations	2
NUR 422	Nursing Care of Populations Practicum	2
NUR 413	Leadership in Systems of Care	2
NUR 201	Health Policy & Social Justice (T2 SLO2)	3
NSCI 161	Science Writing	3
Micro-credential: Emergency Preparedness & Disaster Nursing		

Course Number	Senior Spring	Credits
NUR 414	Nursing Care of Adults & Populations with Multiple & Complex Health Disorders	2
NU 423	Professional Nursing Immersion- Leadership in Systems of Care	8
NUR 415	Application of Data Analytics, Informatics & Healthcare Technology	1
NUR 416	Senior Capstone	1
CORE 3401	Capstone Seminar (T3 SLO4)	3
Micro-credential: Organizational Excellence in Quality & Safety		

Total Credits:	**124**
Clinical Credits:	**23/1035 hours**

Recommended Electives

Bachelor of Arts in Philosophy

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
PL-121	Logic and Theory of Knowledge	3
T1 SLO1	Tier 1- Theology	3
PL 400	Socratic Seminar	1
T1 SLO2	Tier 1- History	3

Course Number	Freshman Spring	Credits
T1 SLO3	Tier 1 - Mathematics	3
PL-214/215	Ethics (T1 SLO6)	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1 Language & Culture	3
PS-100	Intro to American Gov. (T1 SLO2)	3
PL 400	Socratic Seminar	2

Course Number	Sophomore Fall	Credits
PL 201	Ancient Philosophy	3
T1 SLO3	Tier 1- Natural Science	3
T1 SLO3	Social Science	3
XX-XXX	Elective	3
PL-400	Socratic Seminar	1
PL-XXX	PL-220 OR PL-230 OR PL-240 OR PL-281	3

Course Number	Sophomore Spring	Credits
PL 202	Medieval Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3
PL 400	Socratic Seminar	1
XX-XXX	Elective	3
PL-XXX	PL-220 OR PL-230 OR PL-240 OR PL-281	3

Course Number	Junior Fall	Credits
T2 SLO3	Tier II - SLO3	3
PL203	Modern Philosophy	3
PL-280	Tier 2 SLO6	3
PL-400	Socratic Seminar	1
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
PL xxx	Philosophy Elective	3
PL 400	Socratic Seminar	2
PL 206	19th/20th Century Philosophy	3
T2 SLO5	Tier 2 - SLO5	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
PL 440 or 450	Senior Thesis or Exam	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
PL-400	Socratic Seminar	1

Course Number	Senior Spring	Credits
PL 400	Socratic Seminar	2
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	125

Recommended Electives
Elective Credits - these can be filled by any courses of a student's choosing in consultation with his or her advisor, and can count toward a second major, minor, etc. For example, a philosophy

Bachelor of Science in Physics

Course Number	Freshman Fall	Credits
PH-100	Physics Seminar	1
MA-111	Analytical Calculus I (T1 SLO3)	4
CH-101/3	General Chemistry I + Lab (T1 SLO3)	4
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3

Course Number	Freshman Spring	Credits
PH-111/3	General Physics I + Lab	4
MA-112	Analytical Calc II	4
CH-102/4	General Chem II + Lab	4
T1 SLO1	Tier 1 - Theology	3

Course Number	Sophomore Fall	Credits
PH-112/4	General Physics II + Lab	4
MA-221	Analytical Calc III	4
T1 SLO2	Tier 1 - History	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO2	Tier 1- Language & Culture	3

Course Number	Sophomore Spring	Credits
PH-211/3	Modern Physics I + Lab	4
MA-212	Ordinary and Partial Differential Equations	4
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO3	Tier 1 - Social Science	3
T1 SLO2	Tier 1 - Literature	3

Course Number	Junior Fall	Credits
PH-252	Electromagnetic Fields	3
PH-311	Modern Physics II	3
PH-261/3	Electronics + Lab	4
XX-XXX	Elective	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
PH-215	Thermodynamics	3
PH-244	Advanced Lab	1
XX-XXX	Elective	3
PH-341	Condensed Matter Physics	3
T2 SLO2	Tier 2 - SLO2	3
T2 SLO3	Tier 2- SLO3	3

Course Number	Senior Fall	Credits
PH-221	Classical Mechanics	3
PH-322	Quantum Mechanics	3
XX-XXX	Elective	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO6	Tier 2 - SLO6	3

Course Number	Senior Spring	Credits
PH-241/3	Optics + Lab	4
PH-370	Mathematical Physics	3
PH-381	Research (Capstone Project)	1
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	2

Total Credits:	124

Recommended Electives

Bachelor of Science in Physics Education – Secondary Certification

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4)	3
T1, SLO1	Theological Foundations	3
MA-111	Calc 1 (T1 SLO3)	4
CORE-1500	CORE Writing (T1 SLO5)	3
CH-101/3	General Chem I + Lab (T1 SLO3)	4
PH-100	Physics Seminar	1

Course Number	Freshman Spring	Credits
ED 100	Foundations of Education (T1 SLO3)	3
MA-112	Calc III	4
ED-115	Educational Psychology	3
ED-103 or 207	Field Experience I: 7:12	1
PH-111/3	General Physics I + Lab	4
CH-102/4	General Chem + Lab II	4

Course Number	Sophomore Fall	Credits
T2, SLO 1, 5, or 6	Select 1	3
T1, SLO 6	Ethics and Service	3
MA-211	Calc III	4
PH-112/4	General Physics II + Lab	4
T1, SLO 2	History Culture and Politics	3

Course Number	Sophomore Spring	Credits
PH-211/113	Modern Physics + Lab	4
MA-212	Ordinary Part and Differential Equations	4
PH-244	Advanced Lab	1
PH-215	Thermodynamics	3
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategies	1

Course Number	Junior Fall	Credits
PH-221/322	Classical Mechanics / Quantum Mechanics	6
T2, SLO 1, 5, or 6	Select 1	3
ED-390	Promote Youth Cultural Competence and Diversity	3
PH-261/3	Electrical Circuits and Electronics + Lab	4
ED-290	Psychology Exceptional Student (T2 SLO3)	3

Course Number	Junior Spring	Credits
CL-129	Young Adult Literature (T2 SLO2)	3
PH-241/4	Optics + Lab	4
NSCI 100/1	Astronomy + Lab	4
PY-214	Adolescent Development	3
ED-304	Teaching of Science 7-12	3
ED-322	Field Experience III: Secondary	1

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar	3
ED-400	Field Experience IV: Pre Student Teach	2
ED-220	Reading, Writing, and Differentiation	3
ED-208	Classroom Partnerships and Inclusion	3
ED-401	Pre-Student Teaching Seminar	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3
PH-381	Research (Capstone Project)	1

Total Credits:	134

Recommended Electives

Bachelor of Arts in Political Science

Course Number	Freshman Fall	Credits
PS-100	Intro to American Government (T1 SLO2)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO1	Tier 1 -Theology	3
T1 SLO2	Tier 1 - Language and Culture	3

Course Number	Freshman Spring	Credits
PS-295 or 298	American Political Thought I or II	3
T1 SLO2	Tier 1 - History	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1 - Social Science	3
T1 SLO6	Tier 1 - Philosophy	3

Couse Number	Sophomore Fall	
PS-205 or 210	Classical or Modern Political Thought	3
PS-242 or 244	International Politics or Comparative Politics	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO3	Tier 1 - Natural Science	4
XXX	General Elective	3

Course Number	Sophomore Spring	
PS-335 or 345	The US Presidency or Congress & Pub Policy	3
T2 SLO1	Tier 2 -SLO1	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO5	Tier 2 - SLO5	3
XXX	General Elective	3

Course Number	Junior Fall	Credits
PS-205 or 210	Classical or Modern Political Thought	3
PS XXX	Political Science Elective	3
T2 SLO6	Tier 2 - SLO6	3
T2 SLO2	Tier 2 - SLO2	3
XXX	General Elective	3
XXX	General Elective	3

Course Number	Junior Spring	Credits
PS-368 or 369	Con Law (National Powers or Civil Liberties)	3
PS 335 or 345	US Presidency or Congress & Pub Policy	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XXX	General Elective	3
XXX	General Elective	3

Course Number	Senior Fall	Credits
PS-395	What is Political Science?	3
PS XXX	Political Science Elective	3
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3

Course Number	Senior Spring	Credits
PS-XXX	Political Science Elective	3
PS-480	Senior Capstone in Political Science	0
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3

Total Credits:	124

Recommended Electives

Bachelor of Science in Psychology (General Track & Mental Health Concentration)

Course Number	Freshman Fall	Credits
PY-100	Intro to Psychological Science (T1 SLO3)	3
PY-243	Abnormal Psychology (T2 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
T1 SLO2	Tier 1- Language & Culture	3

Course Number	Freshman Spring	Credits
PY-212	Child Development	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO6	Tier 1 - Philosophy	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3

Course Number	Sophomore Fall	Credits
PY-203	Statistics I	3
T1 SLO2	Tier 1 Literature	3
PY-260	Social Psychology (T2 SLO2)	3
T1 SLO3	Tier 1 Natural Science	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3

Course Number	Sophomore Spring	Credits
PY-204	Statistics II	3
T1 SLO2	Tier 1 - History	3
PS-100	Intro to American Gov. (T1 SLO2)	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3

Course Number	Junior Fall	Credits
PY-308	Cognitive Psychology	3
PY-341	Research Methods in Psych. Science (T2 SLO3)	4
T2 SLO1	Tier 2- SLO1	3
T2 SLO5	Tier 2 - SLO5	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3

Course Number	Junior Spring	Credits
PY-309	Learning	3
XX-XXX	Elective/ Minor Course	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
PY-395	Professional Development in Psychological Science	3
PY-331	Biological Psychology	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective/ Minor/ Mental Health Con.	3
XX-XXX	Elective/ Minor Course	3

Course Number	Senior Spring	Credits
PY-401	Capstone: Research Review & Analysis	3
XX-XXX	Elective/ Minor Course	3
XX-XXX	Elective/ Minor Course	3
XX-XXX	Elective/ Minor Course	3
XX-XXX	Elective/ Minor Course	3

Total Credits:	124

Recommended Electives

· Mental Health Concentration will take the following electives: PY-219, PY-230, PY-251, PY-370, PY-343, PY-382, PY-322, PY-250.
· For those pursuing the Addiction Specialist Training Certificate those courses can be applied to fulfill open electives.
·To fulfill the 124 credit hour requirement students will need to take one additional 3 credit course, it can be a summer course, 3 credit internship, or a one - semester overload.
· For the Capstone requirement students can take PY-401 or they may take PY-405 which will also require them to take PY-406.

Bachelor of Arts in Psychology Education

Course Number	Freshman Fall	Credits
CORE-1400	Listening Seminar (T1 SLO4_	3
Tier 1 SLO 2	History, Language, Literature, or Politics	3
ED 100	Foundations of Education (T1 SLO3)	3
CORE-1500	Core Writing (T1 SLO5)	3
XXX	Elective	3
XXX	Elective	3

Course Number	Freshman Spring	Credits
ED 142	Math for Teachers (T1 SLO3)	3
T1 SLO1	Theological Foundations	3
ED 10X	Field I (ED 101 or 102 or 103 or 207)	1
ED-115	Educational Psychology	3
T1 SLO6	Intro to Philosophy and Ethics	3
XX-XXX	Elective	3

Course Number	Sophomore Fall	Credits
NSCI 125	Intro to Environmental Science (T1 SLO3)	4
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategies	1
PY-212	Child Development	3
ED/PSY	100-Level Course (ED 122 or ED 155 or PY 100)	3
XX-XXX	Elective	3

Course Number	Sophomore Spring	Credits
Tier 2 SLO 1/5/6	1st choice (choose one course from different SLOs 1/5/6)	3
CL-129 or CL-130	Children's or Young Adult Literature (T2 SLO2)	3
ED-290	Psychology of the Exceptional Student (T2 SLO3)	3
PY-214	Adolescent Development	3
XX-XXX	Elective	3
XX- XXX	Elective	3

Course Number	Junior Fall	Credits
ED 355	INST. INTER/HIGH INCID. DISAB (for dis studies minor) or other minor	3
PY-251	Family Systems	3
ED	Education Elective-Teaching of Reading Recommended for SPE CERT	3
ED-208	Classroom Partnerships and Inclusion	3
Tier 2	2nd choice (choose 1 course from different SLOs 1/5/6)	3

Course Number	Junior Spring	Credits
ED-360	STRAT/ASSESS. SIG/MULTI DISAB (for dis studies or other minor class)	3
ED	Education Elective-Teaching of Math Recommended for SPE CERT	3
PY-260	Social Psychology	3
ED 333 or PY 219	Intro to School Counseling	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
Tier 2	Choose 1-- Tier 2 SLO 5 or 6	3
ED-381	Educational Testing	3
ED Elective	Education Methods Course	3
ED 362	BEHAV. & AUTISM SPEC. DISORD. (or other minor course)	3
XXX	Elective	3

Course Number	Senior Spring	Credits
CORE-3401	Capstone Seminar	3
ED 412	SPEC. ED. CONSULT, TRAN, LAW (or other minor course)	3
ED Elective	Education Methods Course	3
ED-550 or ED 400	Internship or Pre-Student Teaching (must have 3.0 GPA)	2 or 3
XXX	Elective	3
* ED 400 must also take ED 401 for certification		

Total Credits:	126

Recommended Electives
If 3.0 GPA achieved, Student may return to student teach for a Special Education (K-12) certificate (will need both ED 410 & ED 411) If student is pursuing graduate level psychology or social work PY 203 Statistics I is recommended in a fall semester.

Bachelor of Arts in Public History

Course Number	Freshman Fall	Credits
HI-100	Introduction to the History Major	3
CORE-12xx	History Area Study 1.1 * (T1 SLO2)	3
HI-1xx	History Area Study 2.1*	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
XX-XXX	Elective	3

Course Number	Freshman Spring	Credits
HI-1xx	History Area Study 1.2 *	3
HI-1xx	History Area Study 2.2 *	3
T1 SLO1	Tier 1 - Theology	3
HI-201	Introduction to Public History (T2 SLO3)	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
HI-2xx	History 200 Level	3
HI-101	Historical Writing	3
XX-XXX	Public History Elective***	3
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Spring	Credits
HI-293	Intro to Museum Studies	3
HI-300	The Historian's Profession	3
HI-2xx	2nd History 200 Level	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO3	Tier 1 – Natural Science	3

Course Number	Junior Fall	Credits
BA-326	Nonprofit Management	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1 - Social Science	3
T2 SLO5	Tier 2 - SLO5	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Spring	Credits
HI-301	Junior Seminar for History Majors	3
HI-202	Practicum in Public History	3
T2 SLO2	Tier 2 - SLO2**	3
T2 SLO6	Tier 2 - SLO6**	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
HI-302	Senior Seminar for History Majors	3
HI-550	Internship	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	1
Total Credits:		**124**

Course Number	Senior Spring	Credits
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Recommended Electives

*History Majors must complete 3 of the following History Area Study areas for a total of 12 credits:
- Western Civilization: HI-102 & HI-103
- Contemporary Europe: HI-104 & HI-105
- U.S. History: HI-106 & HI-107
- English History: HI-110 & HI-111
- Global History: HI-123 & HI-124

** Tier 2 SLO 2 and Tier 2 SLO6 may be satisfied by the History 200 level major requirement, depending on the courses taken. See approved CORE courses for each of these SLO's. ***Public History Elective choose one from the following: AN-101 AN-222 AN-230 BA-337 BA-398 CA-100 CA-230 CA-304 DA-120 DA-140 DA-150 DA-190 EL-107 EL-133 EL-139 EL-138 EL-244 SO-200.

Bachelor of Science in Public Policy

Course Number	Freshman Fall	Credits
EC-101	Principles of Microeconomics (T1 SLO3)	3
MA-109*	Calc with Applications I (T1 SLO3)	4
BA-100	Financial Accounting	3
CORE-1400	Listening Seminar (T1 SLO4)	3
PS-100	Intro to American Government (T1 SLO2)	3

Course Number	Freshman Spring	Credits
EC-102	Principles of Macroeconomics	3
BA-150	Managerial Accounting	3
T1 SLO2	Tier 1 - History	3
CORE-1500	Core Writing (T1 SLO5)	3
EC-200	Environmental Economics	3

Couse Number	Sophomore Fall	
EC-201	Microeconomic Theory	3
T1 SLO1	Tier 1 -Theology	3
T1 SLO2	Tier 1 - Language and Culture	3
T1 SLO3	Tier 1 - Natural Science	4
PS-242 or 275	Internat'l Politics or Internat'l Law	3

Course Number	Sophomore Spring	
EC-202	Macroeconomic Theory	3
PS-335 or 345	U.S. Presidency or Congress & Public Policy	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3

Course Number	Junior Fall	Credits
BA-350	Statistics and Analytics I	3
BA-350A	Excel I Lab	1
T2 SLO2	Tier 2 - SLO2	3
T2 SLO5	Tier 2 - SLO5	3
XXX	General Elective	3
XXX	General Elective	3

Course Number	Junior Spring	Credits
BA-351	Statistics and Analytics II	3
BA-351A	Excel II Lab	1
T2 SLO6	Tier 2 - SLO6	3
PS-335 or 345	The U.S. Presidency or Congress & Pub Policy	3
T2 SLO3	Tier 2 -SLO3	3
XXX	General Elective	3

Course Number	Senior Fall	Credits
PS-395	What is Political Science?	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3

Course Number	Senior Spring	Credits
EC-331	Public Finance	3
PS-480	Senior Capstone in Political Science	0
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3
XXX	General Elective	3

Total Credits:	124

Recommended Electives
**MA-102 and MA-103 can be taken in place of MA-109*

Bachelor of Arts in Sociology

Course Number	Freshman Fall	Credits
SO-101	Introduction to Sociology (T1 SLO3)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Writing Seminar (T1- SLO5)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Freshman Spring	Credits
AN-222	Cultural Anthropology	3
XX-XXX	Sociology Elective	3
T1 SLO1	Tier 1 - Theology	3
PS-100	Intro to American Gov. (T1 SLO2)	3
T1 SLO3	Tier 1- Mathematics	3

Course Number	Sophomore Fall	Credits
SO-235	Inequality & Social Problems (T2 SLO3)	3
T1 SLO2	Tier 1- Literature	3
T1 SLO2	Tier 1 - Language and Culture	3
SO-200	Race and Ethnicity	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO6	Tier 1- Philosophy	3

Course Number	Sophomore Spring	Credits
XX-XXX	Sociology Elective	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3
T1 SLO2	Tier 1 - History	3
SO-204	Sociology of Crime	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
PY-203	Statistics I	3
AN-360/SO-356	Research Methods or Qualitative Research Methods	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
XX-XXX	Sociology Elective	3
T2 SLO5	Tier 2- SLO5	3
T2 SLO6	Tier 2- SLO6	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
SO-405	Senior Seminar I	3
XX-XXX	Sociology Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
XX-XXX	Elective	3
XX-XXX	Elective	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives

Bachelor of Arts in Spanish

Course Number	Freshman Fall	Credits
SP-203	Intermediate Spanish I (T1 SLO2)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
HI-104 or HI-105	Contemporary Europe or Contemporary Europe II (T1 SLO2)	3
XX-XXX	Elective	3

Course Number	Freshman Spring	Credits
SP-204	Intermediate Spanish II (T2 SLO2)	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier 1 - Literature *	3
El-118* or EL-138	Global Literature or Multiethnic Literature	3
XX-XXX	Elective	3

Course Number	Sophomore Fall	Credits
SP-315	Advanced Spanish Grammer	3
PS-100	Intro to American Gov. (T1 SLO2)	3
AR-100/2	Art and Music Western Culture	3
XX-XXX	Elective	3
T1 SLO3	Tier 1 - Mathematics	3
T1 SLO3	Tier 1 - Social Science	3

Course Number	Sophomore Spring	Credits
SP 444	Pen Cult. and Civilization	3
T1 SLO3	Tier 1 - Natural Science	3
XX-XXX	Elective	3
AN-222/328	Cultural Anthro or Anthro of Comm	3
SP-317	Intro to Spanish Literary Analysis	3
T1 SLO6	Tier 1 - Philosophy	3

Course Number	Junior Fall	Credits
EL-XX	English Elective	3
SP-XXX	Peninsular Elective	3
T2 SLO1	Tier 2 - SLO1	3
T2 SO6	Tier 2- SLO6	3
SP-XXX	300+ level Spanish American Literature Elective	3

Course Number	Junior Spring	Credits
T2 SLO3	Tier 2 - SlO3	3
T2 SLO5	Tier 2 - SLO5	3
SP-445	Spanish American Culture and Civ	3
SP-XXX	Advanced Spanish Elective	3
SP-XXX	300+ level Spanish American Literature Elective	3

Course Number	Senior Fall	Credits
SP-320	Developing Oral Proficiency	3
SP-XXX	Advanced Spanish Elective	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
SP-XXX	Advanced Spanish Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives
*If taken, EL-118 can satisfy both the CORE Tier 1 Literature requirement as well as and English requirement for the major.

Bachelor of Arts in Spanish Education

Course Number	Freshman Fall	Credits
T1 SLO 4	Listening Seminar	3
Core 1500	Core Writing	3
	Placement Recommendation	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO6	Tier 1 - Philosophy & Ethics	3
ED-103/207	Field Experience I	1

Course Number	Freshman Spring	Credits
SP-204/317	Int II or SP Literary Analysis	3
ED-100	Foundations of Education (T1 SLO3)	3
ED-115	Educational Psychology	3
ED-142	Mathematics for Teachers (T1 SLO3)	3
HI-104 or 105	Contemporary Europe I or II (T1 SLO 2)	3
T1 SLO3	Tier 1 - Natural Science	4

Course Number	Sophomore Fall	Credits
T2	Take course from SLO1, SLO5 or SLO6	3
ED-155	Geometric and Measurement Theory	3
ED-290	Psychology of the Exceptional Student (T2 SLO3)	3
SP-321/426	Panorama of Peninsular Lit	3
T2	Tier 2: Take course from SLO1, SLO5 or SLO6	3

Course Number	Sophomore Spring	Credits
AN-222/328	Cultural Anthro or Anthro of Comm	3
SP-444	Peninsular Culture and Civ	3
CL-129	Young Adult Literature (T2 SLO 2)	3
ED-205	Strategies and Techniques of Instruct	3
ED-206	Field Experience II: Strategies	1
PY-214	Adolescent Development	3

Course Number	Junior Fall	Credits
ED-390	Promote Cultural Competence and Diversity	3
SP-322/327/425	Panorama of Spanish Am Lit I	3
SP-300/400	300-400 level elective	3
ED-322	Field Experience III: Secondary	1
ED-220	Reading, Writing, and Differentiation	3
EL- 118/138	Global or Multiethnic Lit	3

Course Number	Junior Spring	Credits
SP-450	Study Abroad Exp 15 Credits as Follows:	3
SP-445	Spanish American Culture and Civ	3
SP-300/400	Spanish American Lit II	3
ED-208	Classroom Partnerships and Inclusion	3
SP-300/400	300-400 level elective	3
ED-381	Educational Testing	3

Course Number	Senior Fall	Credits
CORE-3401	Capstone Seminar	3
SP-320	Developing Oral Proficiency	3
ED-400	Field Experience IV: Pre Student	2
ED-401	Pre-Student Teaching Seminar	3
ED-300	Teaching of Foreign Language K-12	3

Course Number	Senior Spring	Credits
ED-410	Field Experience V: Student Teaching	9
ED-411	Professional Seminar	3

Total Credits:	124

Recommended Electives

Bachelor of Science in Sports Management

Course Number	Freshman Fall	Credits
BA-100	Financial Accounting I	3
BA-170	Organizational Theory	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
MA-109*/111	Calc I (T1 SLO3)	4

Course Number	Freshman Spring	Credits
BA-150	Managerial Accounting	3
BA-220	Principles of Marketing	3
T1 SLO1	Tier 1 - Theology	3
T1 SLO2	Tier1 - History	3
T1 SLO2	Tier 1 - Language & Culture	3

Course Number	Sophomore Fall	Credits
BA-232	Human Resource Management	3
BA-265	Management Information Systems	3
BA-350/A	Statistics and Analytics I & Excel I Lab	4
PS-100	Intro to American Gov. (T1 SLO2)	3
EC-101	Principles of Microeconomics (T1 SLO3)	3
BA-199	Professionalism I	1

Course Number	Sophomore Spring	Credits
BA-209	Sports Administration	3
BA-320	Corporate Finance	3
BA-299	Professionalism II	1
T1 SLO2	Tier 1 - Literature	3
EC-102	Principle of Macroeconomics	3

Course Number	Junior Fall	Credits
BA-307	Sports Venue and Event Management	3
BA-340	Business Law	3
BA-398	Project Management	3
T1 SLO3	Tier 1 - Natural Science	3
BA-501	Sports Apprenticeship	3

Course Number	Junior Spring	Credits
BA-211	Sports Media, Promotion, and Marketing	3
BA-280 or 212	Leadership or Leadership in Sports	3
T1 SLO6	Tier 1 - Philosophy	3
T2 SLO1	Tier 2 - SLO1	3
T2 SLO2	Tier 2 - SLO2	3

Course Number	Senior Fall	Credits
BA-305	Business Ethics	3
BA-374	Sports Law	3
BA-444	Operations Management	3
T2 SLO5	Tier 2 - SLO5	3
CORE-3401	Capstone Seminar (T3 SLO4)	3
XX-XXX	Internship or Elective	3

Course Number	Senior Spring	Credits
BA-250/251 or 395	Global Marketing/ International Business	3
BA-495	Business Policy and Strategy	3
T2 SLO3	Tier 2 - SLO3	3
T2 SLO6	Tier 2 - SLO6	3
XX-XXX	Elective	3

Total Credits:	124

Recommended Electives
*MA-102 and MA-103 can be taken in place of MA-109

Bachelor of Arts in Studio Art

Course Number	Freshman Fall	Credits
AR-101 or 102	Caves to Cathedrals or Art History II: Baroque to Present	3
AR-130	Drawing I	3
AR-131	Two-Dimensional Design	3
CORE-1500	Core Writing (T1 SLO5)	3
CORE-1400	Listening Seminar (T1 SLO4)	3

Course Number	Freshman Spring	Credits
AR 230	Drawing II	3
AR-135	Materials and Process	3
XX-XXX	Elective	3
T1 SLO1	Tier 1 - Theology	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
AR 225	Painting I	3
AR-238	Clay and Pottery	3
AR-xxx	Art History Topic	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3
T1 SLO2	Tier 1 - Social Science	3

Course Number	Sophomore Spring	Credits
AR 325	Painting II	3
DA -XXX	DA Elective **	3
DA-XXX	DA Elective**	3
T1 SLO 3	Tier 1 - Natural Science	3
T1 SLO2	Tier 1 - Language & Culture	3
XX-XXX	Elective	3

Course Number	Junior Fall	Credits
AR-234	Introduction to Stained Glass	3
XX-XXX	Elective	3
T2 SLO1	Tier 2 - SLO1	3
T1 SLO6	Tier 1 - Philosophy	3
T1 SLO3	Tier 1 - Mathematics	3

Course Number	Junior Spring	Credits
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
T2 SLO2	Tier II - SLO2	3
T2 SLO3	Tier II - SLO3	3

Course Number	Senior Fall	Credits
AR-404	Intensive Study in Techniques	3
AR-383/5/6	Advanced Studio	3
T2 SLO5	Tier 2- SLO5 *	3
T2 SLO6	Tier 2 - SLO6	3
CORE-3401	Capstone Seminar (T3 SLO4)	3

Course Number	Senior Spring	Credits
AR-405	Senior Exhibition	3
AR-384/5/6	Advanced Studio	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	1

Total Credits:	124

Recommended Electives
* See approved listing of approved AR Tier 2 SLO 5 courses. These courses can double count between CORE and Major requirements. ** DA Electives: DA-120 DA-140 DA-150 DA-190 DA-220 DA-280

Bachelor of Arts in Theology

Course Number	Freshman Fall	Credits
TH-340	Basic of Catholic Faith (T1 SLO1)	3
CORE-1400	Listening Seminar (T1 SLO4)	3
CORE-1500	Core Writing (T1 SLO5)	3
XX-XXX	Elective (intro to foreign lang rec)	3
XX-XXX	Elective	3

Course Number	Freshman Spring	Credits
TH-231	Biblical Foundations	3
T1 SLO2	Tier 1 - Philosophy	3
T1 SLO2	Tier 1 - Language Culture	3
XX-XXX	Elective (intro to foreign lang rec)	3
XX-XXX	Elective	3
PS-100	Intro to American Gov. (T1 SLO2)	3

Course Number	Sophomore Fall	Credits
TH-XXX	Theology Elective	3
TH-4XX	Theology Seminar	3
T1 SLO2	Tier 1 - History	3
T1 SLO2	Tier 1 - Literature	3
XX-XXX	Elective (intermediate foreign lang rec)	3
T1 SLO3	Tier 1 - Mathematics	3

Course Number	Sophomore Spring	Credits
TH-XXX	Theology Elective	3
TH-4XX	Theology Seminar	3
T1 SLO3	Tier 1 - Natural Science	3
T1 SLO3	Tier 1 - Social Science	3
XX-XXX	Elective (intermediate foreign lang rec)	3

Course Number	Junior Fall	Credits
T2 SLO1	TH-205 or TH-322 or TH-346	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Junior Spring	Credits
T2 SLO5	Tier 2-SLO5	3
TH-XXX	Theology Elective	3
T2 SLO2	Tier II- SLO2	3
T2SLO3	Tier II -SLO3	3
XX-XXX	Elective	3

Course Number	Senior Fall	Credits
TH-4XX	Theology Seminar	3
T2 SLO6	TH-251 or TH-258 or TH-274 or TH-290	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Course Number	Senior Spring	Credits
CORE-3401	Capstone Seminar(T3-SLO4)	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3
XX-XXX	Elective	3

Total Credits:	126

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Saint Vincent College
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PARKING
Areas identified by letters A-S
BEATTY COUNTY ROAD
MONASTERY DRIVE
Gristmill
James F. Will Engineering and Biomedical Sciences Hall
Frank and Elizabeth Resnik Swimming Pool
Sis & Herman Dupré Science Pavilion
Tenley Hall
Sauerkraut Tower
Elizabeth J. Roderick Center
Monastery
Saint Gregory Chapel
DiPadova Hall
Leander Hall
Latimer Family Library
Prep Hall
Headmasters Hall
Anselm Hall
Saint Vincent Basilica
Placid Hall
Wimmer Hall
Post Office ATM
Robert S. Carey Student Center
Gymnasium/ Bookstore/ATM
Melvin Platz
Mary, Mother of Wisdom Student Chapel
Welcome Center
Alfred Hall
Aurelius Hall
Community Center Dining Room
Boniface Wimmer Statue
Tennis Courts
Gerard Hall
St. Scholastica Hall
Bonaventure Hall
Baseball Field
Saint Vincent Fitness Trail
Field 3
Field 2
Chuck Noll Field
UPMC Field
Softball Field
Rooney Hall
Massaro Pavilion
IM 2
IM 1
Intramural Fields
Saint Benedict Hall
Fred M. Rogers Center
Entrance Booth
SAINT VINCENT DRIVE
FRASER PURCHASE ROAD
< TO ROUTE 30
< TO WIMMERTON
Outdoor Basketball Court
VB
Winnie Palmer Nature Reserve
P
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R

WHY CHOOSE SAINT VINCENT COLLEGE?

- **Challenging Academics** - Saint Vincent College offers challenging academics rooted in the liberal arts and sciences, in more than 50 undergraduate majors and 10 graduate programs.

- **Successful Graduates** - Graduates find success in their fields: 98 percent of the Class of 2016 graduates who responded to a survey reported working full-time in their fields or continuing their studies in graduate or professional school.

- **Quality and Value** - Saint Vincent College ranks highly among the most affordable, high-quality private liberal arts colleges in the nation, with Forbes magazine, *Washington Monthly* and *U.S. News & World Report* among those who praise our quality and value.

- **Community of Learners** – Students become part of a community of learners who value education and the development of skills that help them become leaders who serve their communities, and the world.

- **Inspiring Setting** – Members of the Saint Vincent community care for our beautiful campus through many green initiatives, enjoying easy access to both recreation and the arts, in a safe and friendly campus environment.

- **Growth in Character and Values** – Faculty, staff and students cherish the development of growth in character, with special emphasis on Catholic, Benedictine values such as community, love of neighbor, hospitality and stewardship, including the care of all creation.

SAINT VINCENT COLLEGE

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