

2019/2020

UNDERGRADUATE COURSE CATALOG

CARLOW
UNIVERSITY
CARLOW.EDU

EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITY POLICY

One of the core values of Carlow University is Sacredness of Creation. We revere each person and all creation, and the diversity they embody. The university, as an educational institution, and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. We are called to respect our diversity in both the university's mission and core values. Our commitment to inclusivity, respect, and acceptance informs every aspect of the university community.

Accordingly, the university prohibits and will not engage in discrimination or harassment on the bases of race, color, religion, sexual orientation, handicap or disability, sex, age, pregnancy, ancestry, national origin, place of birth, genetic information, gender identification, veteran's status, or any other category protected by federal, state, or local law. This policy applies to all programs and activities, with respect to both admissions and employment.

Questions and concerns about equal opportunity should be directed to the university's EEO coordinators:

Bridgette N. Cofield, JD, SPHR, Director of Human Resources

P: 412.578.8897

E: bncofield@carlow.edu

Timothy Phillips, PhD, Vice President for Student Affairs and Dean of Students

P: 412.578.6087

E: tpphillips@carlow.edu

Information about how to file a complaint using the Student Disability and Discrimination Policy may be found in the Carlow University Student Handbook on myPortal.

Americans with Disabilities Act

Carlow University makes reasonable accommodations to provide qualified students with disabilities the opportunity to take full advantage of programs, activities, services, and facilities. For more information, please see page 42.

Disaster Statement

If there is a natural disaster that interrupts a student's long-term participation in a course(s), Carlow University will apprise students of the options available to complete their academic course work.

About the Carlow University Undergraduate Course Catalog

The Carlow University Undergraduate Course Catalog is the official record of Carlow University for Fall 2019 through Summer 2020. It contains information correct at the time of publication. Carlow University reserves the right to alter any or all statements contained herein. Changes to the catalog will be posted to the university website or Portal. Consequently, this document cannot be considered binding and is to be used solely as an informational guide. Students are responsible for keeping themselves informed about official policies and for meeting all relevant requirements.

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GENERAL INFORMATION

INTRODUCTION TO CARLOW UNIVERSITY

Carlow University is a small, private, comprehensive, Catholic university offering graduate, professional and liberal arts programs. Founded in 1929 by the Sisters of Mercy, Carlow offers a liberal arts curriculum across all majors to prepare women and men for leadership in the 21st century. With an enrollment of more than 2,000 graduate and undergraduate students, Carlow is committed to providing its students with individual attention, a supportive academic environment, and career development. Located in a culturally diverse urban setting, Carlow's 15-acre campus neighbors the University of Pittsburgh and Carnegie Mellon University. A member of the Conference for Mercy Higher Education, Carlow is recognized for educating traditional students and adult learners for a lifetime of learning, leadership, and service.

- Founded in September 1929 as Mount Mercy College
- University status awarded in 2004
- Catholic/Liberal Arts
- 2,076 students
- 82 percent female/18 percent male
- Diverse student body
- 12:1 student–faculty ratio
- 28 undergraduate majors
- 18 graduate majors
- 2 doctoral programs

CARLOW UNIVERSITY VISION

Carlow University will be a preeminent, innovative, Catholic university, renowned for providing transformational learning experiences in which students realize their full potential and become career-ready ethical leaders committed to a just and merciful world.

CARLOW UNIVERSITY MISSION

Carlow University, rooted in its Catholic identity and embodying the heritage and values of the Sisters of Mercy, offers transformational educational opportunities for a diverse community of learners, empowering them to excel in their chosen work as compassionate, responsible leaders in the creation of a just and merciful world.

VALUES

MERCY

The identifying value of Carlow University is Mercy, encompassing all that we are and do as a university. Inspired by our God of Mercy, this value urges us to open our hearts to our students, our colleagues, and our world. In the tradition of action and contemplation, we seek practical ways of addressing need, as we engage in reflection to understand and integrate our experiences. Education offers us the tools to recognize and address unjust structures and dehumanizing situations. Each discipline provides a lens through which we can envision our place in our own personal transformation and that of the global community. The values of Service, Discovery, Hospitality, and the Sacredness of Creation further expand our understanding of the power of Mercy to change our world.

HOSPITALITY

In Hospitality, we welcome the wholeness of each person, creating a space in our campus community for all individuals with their varied beliefs, cultures, orientations, and abilities. Openness to the gifts and perspectives of all creates a community rich in diversity and committed to inclusion.

SERVICE

The value of Service calls us beyond ourselves to place the needs of others over our own self-interest. Our efforts to identify and respond to the needs we see around us lead us to interact with persons and institutions in ways that are transformational. Our spirit of compassion leads us to practical action on behalf of those in need.

DISCOVERY

Through Discovery we open ourselves to the totality of our human experience, to the educational enterprise, to our relationship with the Divine, and to the wonders of the world in which we find ourselves. Discovery energizes our intellectual curiosity and desire for learning. It leads us ever deeper in the engagement with our chosen discipline and engenders a spirit of awe at the complexity and variety of creation.

SACREDNESS OF CREATION

This value leads us to a respect for each person and for all of creation. In gratitude for the beauty and variety of our world and its inhabitants, we commit to a culture of sustainability and to the preservation of a world where all are revered and all may thrive.

PHILOSOPHY STATEMENT

The philosophy of Carlow University is guided by a commitment to the Catholic Intellectual Tradition, a belief in the transformative power of the liberal arts, and a dedication to undergraduate and graduate education that instills social responsibility and a desire to work for the good of all humankind. These ideals are touchstones of a Carlow education, informing the institution's mission and values so that students can realize their full potential and become ethical leaders in their personal and professional lives, committed to a just and merciful world.

Rooted in the Catholic Intellectual Tradition, Carlow University recognizes the dignity of all human persons and the value of all creation, and understands that genuine wisdom and knowledge yield imperatives for justice. As a result, the institution seeks to graduate individuals who become engaged citizens of the world, capable of establishing transformative relationships of compassion and empathy. The love of learning and the desire for God are understood to manifest themselves in the relationship between reason and faith. Catholic Intellectual Tradition posits that truth is not divided, that truth in science is not at odds with truth in religion; thus, at Carlow, truth is explored through a "both/and" (analogical) rather than an "either/or" (dialectical) approach. Understanding that no single academic discipline contains all truth, Carlow University promotes an interdisciplinary and multidisciplinary approach to research and scholarship, believing that creative, imaginative attentiveness to the world requires applying complex methods of interpreting that world.

This attentiveness to the world is also evident in the university's belief in the transformative power of the liberal arts. Derived from the Latin word *liber* for "free," the liberal arts have been the foundation of higher education for centuries because they free individuals to think clearly and creatively about themselves and the world in which they live. Carlow is committed to the liberal arts as part of its undertaking to educate the whole person: body, mind, and spirit. Fundamentally, the liberal arts focus on what it means to be human, in all humanity's complexity. Rather than approaching human experience from a finite perspective or insisting on rigid viewpoints that inhibit knowledge or limit thinking, the liberal arts encourage intellectual exploration and often pose problems that have no easy solutions. When students engage with the essential issues explored in the liberal arts, their lives are transformed, and they leave the institution ready to help transform society through their ability to comprehend and address the complex challenges of the world.

A commitment to transforming the world flows from the values of the founders of Carlow University. When the Sisters of Mercy launched Mount Mercy College in 1929, they were pioneers for women's higher education by combining scholarship in the liberal arts with career development in the professions, thus providing young women in the Pittsburgh area equal educational opportunities with men.

The Sisters of Mercy were inspired by their founder Catherine McAuley, whose social reform efforts recognized the inherent dignity of women, and helped those women become self-directing and self-sustaining. As Carlow began to admit male veterans after World War II, it was clear that an educational approach that values women is beneficial to both male and female students. Such an approach champions the inherent worth of all voices, creating a pedagogical and scholarly environment that includes those who have been historically excluded. The Mercy approach to teaching and scholarship, which emphasizes inclusion, flexibility, and collaboration, creates a campus culture where men and women experience empathy and mutual respect. In practice, the university's philosophy leads to undergraduate and graduate pedagogy and curricula rooted in social justice, requiring Carlow students and graduates to challenge or affirm prevailing values in the workplace and the world. Through course work, research, internships, and residencies, Carlow students embody the integrative Mercy approach to rigorous scholarship, creative thinking, and problem solving. Through the innovative liberal arts core experience, undergraduate students develop creative and critical reasoning skills essential to any professional, vocational, or personal situation. The original vision of the founders uniquely positions Carlow University today to offer an educational experience in which its graduates seek integrity in their lives and have the skills and conviction to create a more just and merciful world.

DEGREES AND PROGRAMS

Undergraduate Degrees

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Science in Nursing
- Bachelor of Social Work

Graduate Degrees

- Doctor of Nursing Practice (DNP)
- Doctor of Psychology (PsyD)
- Master of Arts (MA)
- Master of Business Administration (MBA)
- Master of Education (MEd)
- Master of Fine Arts (MFA)
- Master of Science (MS)
- Master of Science in Nursing (MSN)
- Master of Social Work (MSW)

ACCREDITATION

Carlow University is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104 (267.284.5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. Carlow's Nursing programs are also accredited by the Commission on Collegiate Nursing Education and the Bachelor of Science in Nursing and Master of Science in Nursing (NP) are approved by the Pennsylvania State Board of Nursing. Program approval is granted by the Pennsylvania Department of Education for Carlow University's teacher and school counselor preparation programs. The Bachelor of Social Work program is accredited by the Council on Social Work Education. Carlow University's Doctor of Psychology in Counseling Psychology program is accredited by the American Psychological Association. The Carlow University Respiratory Care program offers a Bachelor of Science Degree in Respiratory Care at its Pittsburgh, PA, campus and holds provisional accreditation from the Commission on Accreditation for Respiratory Care.

MEMBERSHIPS

The Association of Catholic Colleges and Universities, the Association of Governing Boards, the Conference for Mercy Higher Education, the Association of Independent Colleges and Universities in Pennsylvania, the College and University Personnel Association, the National Association of Independent Colleges and Universities, the Council of Independent Colleges, the National Association of College and University Business Officers, the American Association of Collegiate Registrars and Admissions Officers, the Society of College and University Planning, the Women's College Coalition, the Commission on Collegiate Nursing Education, the American Association of Colleges of Nursing, the American Association of Colleges and Universities, the Allegheny Conference on Community Development, the African-American Chamber of Commerce, the Greater Pittsburgh Chamber of Commerce, the Public Leadership Education Network, and the Pittsburgh Council on Higher Education. Carlow University is classified as a Masters Larger institution in the 2015 Carnegie Classification.

PROGRAMS OF STUDY

Carlow University is chartered by the Commonwealth of Pennsylvania and is authorized by the Pennsylvania Department of Education to award the following undergraduate degrees:

UNDERGRADUATE MAJORS

- Accounting
- Art
 - Specializations:*
 - Art History, Ceramics, Graphic Design, Media Arts & Animation, Painting & Drawing, Art Education and certification (Grades K-12)
- Art Therapy Preparation
- Behavioral Neuroscience
 - Specializations:*
 - Neuropsychology, Intraoperative Neurophysiological Monitoring
- Biology
 - Specializations:*
 - Human Biology, Cytotechnology
- Business Management
- Chemistry
- Communication and Media
- Corporate Communication
- Creative Writing
- Criminology
- Data Analytics
- Early Childhood Education with Certification (PreK-4)
- Early Development and Learning
- English
- Forensic Accounting
- General Studies
- Healthcare Data Analytics
- Health Management
- History
- Human Resource Management
- Liberal Studies
- Mathematics
- Nursing
- Political Science
- Psychology
 - Specializations:*
 - Child Development, Counseling, Crisis and Trauma
- Respiratory Care
- Social Work
 - Specialization:*
 - Crisis and Trauma
- Special Education Certification
 - must be combined with certification in Early Childhood

PARTNERSHIPS AND PROGRAMS

Duquesne University

- 3/3 JD Law Program
- Biology/Environmental Science and Management
- Biology/BS to MS in Biotechnology
- Biology/BS to PharmD

Lake Erie College of Osteopathic Medicine (LECOM)

- Biology/BS—Early acceptance in Dental, Pharmacy, or Osteopathic Medicine
- Chemistry/BS—Early acceptance in Dental, Pharmacy, or Osteopathic Medicine
- Neuroscience/BS—Early acceptance in Dental, Pharmacy, or Osteopathic Medicine

University of Pittsburgh/UPMC

- 3/3 JD Law program
- Early assurance admission to Graduate School of Public and International Affairs
- UPMC Nursing Program
- UPMC Shadyside Perfusion Program

Community College of Allegheny County

- Joint Admission RN-BSN Program
- Business Management Program to Program

Community College of Beaver County

- Joint Admission RN-BSN Program

Westmoreland County Community College

- Joint Admission Early Childhood Education
- Joint Admission RN-BSN Program

PARTICIPATING MEMBERSHIP INSTITUTIONS

- Pennsylvania Transfer and Articulation Center (PaTrac)
- CAEL—Learning Counts
- Department of Defense—Memorandum of Understanding

CARLOW EDUCATIONAL OPPORTUNITIES

Accelerated Programs

- BA to MA in Art
- BS in Biology to MS in Cardiovascular Perfusion
- BA/BS to MBA Business Administration
- BA/BS to MS in Fraud and Forensics
- BA/BS to MS in Professional Counseling
- BA/BS to MA in Psychology
- BA/BS to MA in Student Affairs
- BA to MEd with Certification in Special Education
- RN-BSN to MS in Nursing

Carlow-Issued Certificates

- Autism Spectrum Disorders Endorsement

Pre-Professional Interests

- Dentistry
- Law
- Medicine
- Molecular/Cell Biology
- Occupational Therapy
- Optometry
- Organismal/Ecological
- Osteopathy

- Pharmacy
- Physical Therapy
- Physician Assistant
- Podiatry

ADMISSIONS

OFFICE OF ADMISSIONS

Carlow University
 3333 Fifth Avenue
 Pittsburgh, PA 15213
 P: 1.800.333.2275 or 412.578.6059
<http://www.carlow.edu/admissions>

CRANBERRY EDUCATION CENTER

Regional Learning Alliance
 850 Cranberry Woods Drive
 Cranberry Township, PA 16066
 P: 724.741.1028
 F: 724.741.1012

GREENSBURG EDUCATION CENTER

J.A.S. Professional Center
 4534 Route 136
 Greensburg, PA 15601
 P: 724.838.7399 or 1.877.451.3001
 F: 724.838.7599

ADMISSION TO CARLOW UNIVERSITY

The Carlow University community nurtures creativity, diversity, talent, and skill. Carlow welcomes any student who combines academic achievement, ability, motivation, and maturity. Carlow welcomes students of all religious beliefs. At Carlow, students of various ages, academic backgrounds, and interests contribute to the overall educational experience. Any applicant who shows leadership potential and initiative, combined with a sincere determination to contribute to the campus community and to achieve academically, is considered for admission.

A conscious effort is made to enroll a student body that represents capable students with diverse interests and backgrounds.

Carlow operates on a rolling admissions policy for most programs. As soon as a complete admissions application is submitted to the university, it is reviewed and evaluated, and applicants are notified of the decision of the admissions committee. Prospective students seeking admission (or re-admission) can contact the Office of Admissions directly at 1.800.333.2275.

Formal admission to some academic programs and/or concentrations requires satisfactory progress within those programs and/or completion of a secondary admissions process.

All academic programs have essential standards that must be met by students to successfully complete program requirements. Additional information and program guides are available from the academic departments and/or faculty advisors.

ADULT ADMISSIONS

Prospective students who have earned a high school equivalency credential (through successful passage of GED, HiSET, or TASC), or who have been out of high school for five or more years, can apply as an Adult Undergraduate Student for programs available at the main Oakland campus, our regional education centers, or online. Those who would like to pursue

a second bachelor's degree or are interested in non-degree seeking or certificate programs are also encouraged to apply through the Office of Admission (contact information listed above).

TRADITIONAL FIRST-YEAR STUDENT ADMISSIONS REQUIREMENTS

The admissions committee makes decisions based upon a careful review of each application. To be considered for admission to Carlow as a traditional undergraduate student, applicants must present satisfactory evidence of the ability to achieve at the college level.

In general, students should:

- Follow a college preparatory curriculum in high school (18 units of academic preparation).
- Have a B average (preferred).
- Have satisfactory scores on the SAT/ACT/CLT. Old and new SAT scores (if applicable) will be concorded based on College Board recommendations.

High school and/or home school coursework is one of the most important factors in admissions, particularly to more selective programs. It is strongly recommended that all students follow a college preparatory curriculum throughout high school. Those applying to science or nursing programs should complete both algebra II and chemistry, with trigonometry and advanced sciences also strongly recommended.

The Carlow University Admissions Committee recognizes that school curricula greatly varies, and will consider favorably the application of an academically able student whose preparation and experience differs from the traditional college preparatory program.

Carlow will superscore SAT, ACT, or CLT exams for admission and scholarship review. In other words, the Admissions Committee will use the applicant's highest subcomponent scores to create a new composite score. Students scoring below 990 on the SAT, 19 on the ACT, or 64 on the CLT are strongly encouraged to re-test, especially if they are interested in qualifying for selective academic programs and/or for significant merit scholarships. Some programs have established an SAT/ACT/CLT threshold. Old and new SAT scores (if applicable) will be concorded based on College Board recommendations.

Prospective nursing candidates must possess a minimum 3.00 cumulative high school GPA, scored 1060 or higher on the SAT (taken after March 2016) or 21 or higher on the ACT or 68 or higher on the CLT, and have completed strong science and math courses (preferably with a grade of B or better in each). 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 lab science, including chemistry.

ADMISSIONS AND SCHOLARSHIP DEADLINES

Carlow operates on a rolling admissions basis, accepting applications from incoming first-year students through August. Due to space limitations in some programs, such as nursing, 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.

ADVANCED PLACEMENT AND PLACEMENT TESTS

Incoming first-year students who have taken Advanced Placement (AP) examinations, College Level Examination Program (CLEP) examinations, International Baccalaureate (IB) examinations, or any college-level courses prior to enrolling at Carlow University, must submit their official exam scores and/or official college transcripts to the Office of Admission in a timely manner to assure proper credit evaluation and course registration.

TRANSFER REQUIREMENTS

Admission to Carlow University is determined on an individual basis. SAT/ACT/CLT scores are not required for transfer students, but may be one of the factors considered for students with minimal college credits.

Carlow accepts transfer credits from institutions recognized as an institution of higher education or accredited by a regional accrediting association recognized by the Council of Higher Education Accreditation. We will make every attempt to utilize the academic credits students earned with those of Carlow's curriculum and standards. A transfer course evaluation will be

completed to approximate if and how courses will transfer. Grades must be a C or above in 100-level or higher courses to be transferred. Developmental courses at the 100-level do not transfer. See page 49 for more on Transfer of Credits.

REQUIRED GPA

Students transferring to Carlow for programs in:

- Biology with Master of Science in Cardiovascular Perfusion accelerated option must have a minimum 3.5 GPA and cumulative 3.5 GPA in the sciences.
- Behavioral Neuroscience with Intraoperative Neurophysiological Monitoring (IONM) must have a minimum 3.0 GPA and a cumulative 3.0 GPA in the sciences.
- Education must have a minimum 3.0 GPA. If the student is transferring 48 or more credits, he/she must also have successfully passed PAPA I or CORE ETS.
- Nursing must have a minimum 3.25 GPA with appropriate coursework.
- Pre-Nursing must have a minimum 3.0 GPA.
- Respiratory Care must have a minimum 2.5 GPA.
- All other programs require a minimum 2.0 GPA.

WHEN TO TRANSFER

- BSN program—Spaces are limited and highly competitive; early application is recommended.
- RN-to-BSN—Students may apply anytime for spring or fall admission.
- All other programs—We operate on a rolling admissions basis for transfers, typically through August each year for the fall semester, and through December for the spring, or as long as space allows. However, students are encouraged to apply as early as possible.

GUEST STUDENTS

Guest students are those who wish to register for coursework but who are not admitted to a program of study. Guest students are not eligible for financial aid or academic recognition; they are subject to the rules and regulations of the university. Guest students are limited to a maximum of 12 credits and may not exceed more than two classes per semester. Those interested in being a guest student should contact the Office of the Registrar.

PROVISIONAL ADMISSION

Occasionally, an applicant is admitted to an undergraduate program as a provisionally admitted student. Provisional admission is granted to an applicant who does not fully meet all of the admissions criteria, but for whom we believe there is a strong possibility for academic success. As a condition of provisional admission, students are limited to 12-14 credits for their first semester, and must attend mandatory meetings with their academic advisor and the Center for Academic Achievement (CAA). Students will have the opportunity to work with their advisors to schedule future semesters.

CONDITIONAL ADMISSION

Occasionally, an applicant is conditionally admitted to an undergraduate program. This occurs when final official documentation is still needed in order to be fully admitted to the university. Conditional admission is based on the student's ability to provide us with one or more final official transcripts or official standardized test scores, or any other required documentation as requested by the Office of Admissions. Once received, the student will be fully admitted to Carlow. As a conditionally admitted student, registration for the following semester and financial aid are held until a student is fully admitted to the university.

RE-ADMISSION TO THE UNIVERSITY

Re-admission procedures have been established for the following categories of students:

- Any student who attended Carlow as a matriculated student and withdrew before completing a degree
- Any student who has not attended Carlow for a period of four semesters, including the summer terms
- Any student academically dismissed, please see the section: *RE-ADMISSION AFTER A DISMISSAL*.

These students should contact the Office of Admissions and:

1. Complete and submit an application, selecting "Re-admit" on the application form.
2. Submit official transcripts* if post-secondary institutions were attended after leaving Carlow.

Due to changing admission and curriculum requirements, the University reserves the right to re-evaluate all academic courses, whether completed at Carlow or elsewhere, to determine what will be credited toward the student's degree. The University also reserves the right to request placement tests, where appropriate.

Students are re-admitted on the academic standing status they held when they last attended Carlow University. Students follow the catalog in effect at the time of re-admission. Some exceptions may apply. Students who seek Academic Forgiveness should refer to the Academic Forgiveness section for more information.

*The transcript is considered official if it contains the seal of the institution and is issued directly to Carlow University. Transcripts delivered to the Office of Admissions by students are considered official only when sealed in an envelope with the institution's seal over the flap. Faxed transcripts are not considered official. International students may send or deliver transcripts directly to the Office of Admissions. Carlow University will accept electronic transcripts for admissions purposes if the following criteria are met:

1. The transcript is certified as official from the high school, college and/or proprietary school using a third-party agency for the certification process. Approved agencies include AVOW Systems, Docufide, National Student Clearinghouse, and Scrip-Safe.
2. The transcript must be a PDF certified document that has no indication of tampering.
3. A college official must receive the transcript from an approved e-transcript service.

Carlow University has the right to refuse electronic transcripts or request additional information if there is question about the authenticity of the document.

RE-ADMISSION FOLLOWING MILITARY DEPLOYMENT

Carlow University has established re-admission policies to assist students who have been called to serve on active duty during the academic year. Students who will be out for a standard leave of absence time frame will follow the university policies associated with a traditional leave of absence time frame. Exceptions to this are cited in the university military and refund deployment policy. Students who return from military service within the leave of absence time frame (one to three semesters, including summer) will re-enter the university under the catalog for which they started their program of study. Students may enter under their original catalog unless the program requirements have changed significantly and the department overseeing the program recommends that the student move to the newest catalog with updated program requirements.

ADMISSIONS PROCEDURES

TRADITIONAL FIRST-YEAR STUDENT ADMISSIONS

Students applying for regular admission should:

- Submit a completed application form by applying online at www.carlow.edu.
- Ask a school counselor to forward a complete, official high school transcript* to the Office of Admissions indicating the student's cumulative GPA, courses previously taken and grades received, courses in which the student is currently enrolled or registered, class rank (if available), and results of achievement and assessment tests.
- Submit scores from the Scholastic Assessment Test of the College Board (SAT), the American College Test (ACT), or the Classic Learning Test (CLT), unless they are already recorded on the high school transcript.
- Submit an essay and/or letter of recommendation as requested.
- Arrange for a personal interview and a campus visit. Although optional, both are strongly recommended.

*The transcript is considered official if it contains the seal of the institution and is issued directly to Carlow University. Transcripts delivered to the Office of Admissions by students are considered official only when sealed in an envelope, with the institution's seal over the flap. A final official high school transcript, certifying that a student has earned a high school diploma, is required to be officially enrolled. Faxed transcripts are not considered official. Official GED, HiSET, or TASC test scores may be accepted in lieu of high school transcripts. Carlow University will accept electronic transcripts for admissions purposes,

in PDF format, if:

1. The transcript is certified as official from the high school, college, and/or proprietary school using a third-party agency for the certification process, such as AVOW Systems, Docufide, National Student Clearinghouse, or Scrip-Safe.
2. The transcript is emailed to Carlow University as an attached PDF (no screenshots) by a counselor, registrar, or other school official using a school-issued email address.
3. Carlow University has the right to refuse electronic transcripts or request additional information if there is question about the authenticity of the document.

Admissions counselors are available to assist students and families during the admissions and financial aid processes. In many geographic regions, admissions counselors will visit prospective students and their families at their high schools.

HOME-EDUCATED STUDENTS

Carlow University recognizes the unique experiences and benefits provided to home-educated students, and welcomes their applications. A home-educated student applying for admission should follow all admissions procedures for regular admissions as stated previously. Additional documentation and/or evaluations of progress may be requested.

Verification of high school graduation must be submitted prior to enrollment at Carlow University, and can be presented through any of the following forms:

- A diploma from a home-school agency governed by a State Board of Education;
- A letter from a local school district verifying graduation; or
- A copy of the General Educational Development (GED), High School Equivalency Test (HiSET), or Test Assessing Secondary Completion (TASC) transcript/score report.

TRANSFER STUDENTS

Prospective transfer students applying for admission should:

- Contact the Office of Admissions at 412.578.6059 or 1.800.333.2275 or via the website inquiry form.
- Submit a completed application form by applying online at www.carlow.edu
- Submit an official transcript* from each college and/or proprietary school previously attended—whether or not credit was earned—to the Office of Admissions; in some instances, an official high school transcript may also be required.
- Arrange for a personal interview and a campus visit. Although optional, both are strongly recommended.

*The transcript is considered official if it contains the seal of the institution and is issued directly to Carlow University. Transcripts delivered to the Office of Admissions by students are considered official only when sealed in an envelope with the institution's seal over the flap. Faxed transcripts are not considered official. Carlow University will accept electronic transcripts for admissions purposes, in PDF format, if:

1. The transcript is certified as official from the high school, college, and/or proprietary school using a third-party agency for the certification process, such as AVOW Systems, Docufide, National Student Clearinghouse, or Scrip-Safe.
2. The transcript is emailed to Carlow University as an attached PDF (no screenshots) by a counselor, registrar, or other school official using a school-issued email address.
3. Carlow University has the right to refuse electronic transcripts or request additional information if there is question about the authenticity of the document.

See page 49 for more on Transfer of Credits.

A catalog or a copy of the course descriptions for all courses taken at an accredited institution outside of Allegheny County may be requested in order to assess transfer credits to be awarded. Admissions counselors will inform candidates when additional information is necessary.

Admissions counselors are available to assist students and family through the admissions and financial aid processes.

ADULT STUDENTS

Students who have been out of high school for five or more years, should apply online at www.carlow.edu as an Adult Undergraduate Student. A prospective adult student applying for admission should submit the same application materials as a transfer student, indicated above. Adult students are able to attend programs at the Oakland campus, the Cranberry and Greensburg sites or online. For more information regarding adult admissions, please call 1.800.333.2275 or 412.578.6059.

RN-BSN PROGRAM ADMISSIONS REQUIREMENTS

To be admitted to the RN-BSN program, potential students must:

- Be a graduate of an ACEN-, NLNAC-, or CCNE-accredited program and have a cumulative GPA of 2.0 or above.
- Complete an online application for admission.
- Have an active, current, valid, unrestricted license as a Registered Nurse. Clinical coursework must be completed in the Commonwealth or state of current licensure.
- Meet both university and clinical agency health requirements.

Once a matriculated at Carlow, students can apply to RN-BSN to MSN Accelerated Option program. Students interested in this option must:

- Have a cumulative GPA of 3.0 or above as a RN-BSN student.
- Complete a minimum of one semester at Carlow as a RN-BSN student.
- Successfully complete all nursing support and Carlow Compass Program requirements prior to application to RN-BSN to MSN Accelerated Option Program
- Have an active, current, valid, unrestricted license as a Registered Nurse. Clinical coursework must be completed in the Commonwealth or state of current licensure.
- Meet both university and clinical agency health requirements.

RESPIRATORY CARE DEGREE COMPLETION ADMISSION REQUIREMENTS

- For enrollment consideration, potential candidates must obtain an active CRT or RRT credential, have graduated with an A.S. in Respiratory Care from a CoARC-approved Respiratory Care program, and possess a minimum GPA of 2.0.

PROFESSIONAL LIABILITY INSURANCE

All students in the nursing, cardiovascular perfusion, respiratory care, and social work programs will be covered by the university's professional liability coverage. The annual cost is approximately \$11 per year, but is subject to change, and is included as a fee attached to select courses. Students are not required to obtain coverage outside the university to meet this requirement.

INTERNATIONAL STUDENTS

INTERNATIONAL ADMISSIONS REQUIREMENTS AND PROCEDURES

All prospective international graduate and undergraduate students must apply for and receive a visa that permits study in the United States and submit the documents below to the Office of Admissions. **NOTE: Carlow does not admit international students into Education certification programs.**

1. **Completed Online Application**
2. **Proof of English Language Proficiency**
English proficiency is required of all students. To show proficiency, you may submit one or more of the following:
 - **SAT** Official Scholastic Assessment Test score. You can get more information about SAT at <http://www.sat.org>. (Carlow School code is 2421.) Scores Required: 500 (Math) and 500 (Critical Reading).
 - **TOEFL** Official Test of English as a Foreign Language (Internet Based Test) score. Additional information

can be found at <http://www.toefl.org>. (Carlow School code is 2421.) Score Required: 90 with no less than 20 in any subject area.

- **IELTS** Official Test of International English Language Testing System score. Additional information can be found at <https://www.ielts.org/>. (Carlow School code is 2421.) Score Required: 6.5.
- Official academic transcripts showing that you have studied in the U.S. for a minimum of two years (excluding ESL courses).

However, there are **EXCEPTIONS** to the English Proficiency Requirement:

- 24 or more credits from Canada, United Kingdom, South Africa, Australia, and Ireland.
- Born and raised in Canada, United Kingdom, South Africa, Australia, or Ireland.

3. **Official Academic Transcripts (secondary and/or post-secondary)**

Admission decisions cannot be made without official transcripts. These documents must come directly from your school(s) in sealed envelopes. Student copies, scanned copies, or photocopies are not acceptable. For some countries, other official test scores may be requested.

4. **Official Transcript Evaluation**

It is the applicant's responsibility to have their transcript(s) officially evaluated by a current member organization of the National Association of Credential Evaluation Services (NACES). The list of current members can be found at naces.org. The evaluation company must send the official evaluation report directly to Carlow University, as photocopies will not be accepted.

5. **Copy of Passport**

A scanned copy of this document can be accepted by email.

6. **Notarized Affidavit of Support Form (PDF)****

This is required of all students who will have a United States visa (except holders of H-4, J-2, and R-1 visas). You may have several sponsors to cover the cost of your first academic year. If so, each sponsor must submit an affidavit for the amount pledged. Each affidavit must be accompanied by official bank or employer's statement and must show evidence that the amount pledged is available. Bank statements should be no older than six months. Affidavits and bank statements must be submitted as the original; photocopies will not be accepted.

***The Affidavit of Support and bank statements are not required until after an admissions decision has been determined. These are required in order to issue an I-20.*

CONTACT US

Office of Admissions
Carlow University
3333 Fifth Avenue
Pittsburgh, PA 15213
P: 412.578.6059
E: admissions@carlow.edu

FINANCIAL AID

At Carlow University, our goal is to make financial aid available to students who would otherwise be unable to attend college. The Financial Aid Office administers federal, state, and institutional aid programs, and offers assistance to students and parents with questions about the financial aid process. All students are encouraged to utilize www.carlow.edu and myPortal for current financial aid information and to access all forms necessary to apply for financial aid.

HOW FINANCIAL AID IS AWARDED

All financial aid programs, excluding scholarships and some loan programs, base eligibility on financial need. Financial need is defined as the difference between the Cost of Attendance and the Expected Family Contribution. The Cost of Attendance is comprised of actual tuition and fees, plus room and board, and an allowance for books and supplies, transportation, and living expenses. Expected Family Contribution is determined by a standard need analysis formula called Federal Methodology. Factors such as taxable and non-taxable income, assets, and household information are all considered in this formula. Financial aid is awarded annually for one academic year. Continuation of an award requires an annual review of the applicant's financial need, based on that year's need analysis formula and academic progress, which is reviewed each semester.

SPECIAL CIRCUMSTANCES

Individual circumstances that could affect the Expected Family Contribution include unemployment, change in job status,

or unusual medical expenses. When these situations occur, they should be communicated to the Financial Aid Office via a Special Conditions Form, which is available at http://www.carlow.edu/Financial_Aid_Forms.aspx.

APPLICATION PROCESS

A high school graduate or college transfer student who has completed an application for admission to Carlow University and who will be matriculated (degree seeking) for at least six credits a semester (half-time status) may apply for financial aid by completing the Free Application for Federal Student at www.fafsa.gov. The FAFSA is for students who are U.S. citizens or permanent residents. First-time applicants who are Pennsylvania residents will be contacted by PHEAA, the Pennsylvania Higher Education Assistance Agency, to complete a State Grant Status Notice for state grant consideration. All new students who wish to be considered for financial assistance should file the FAFSA by March 15, which is Carlow's priority deadline. Applications received after this date will be processed as funds are available. Non-Pennsylvania residents must complete the FAFSA and any additional application their home state may require for state grant consideration. The FAFSA filing deadline for the PA State Grant is May 1.

VERIFICATION

About one-third of all FAFSA filers are selected for verification, a process in which the Financial Aid Office must verify the information reported on the FAFSA. Students selected for verification must submit requested documentation according to the verification flag associated with the FAFSA results. The most common type of verification requires that the student (and parent, if dependent) submit the Verification Worksheet and signed copies of IRS Tax Returns or Tax Return Transcripts. When possible, use the IRS Data Retrieval Tool on the FAFSA. Tax Returns will not be requested from students and parents who successfully transferred income information from the IRS to the FAFSA using the IRS Data Retrieval Tool. The Financial Aid Office notifies students via Carlow email if documents are needed to complete verification. Students may also access information about missing documents from Web Advisor.

OUTSIDE SCHOLARSHIPS

Students are encouraged to investigate private sources of financial aid. It is the responsibility of the student to notify the Financial Aid Office of any scholarship or grant received through outside sources.

FEDERAL FINANCIAL AID

Pell Grant:

Pell Grant is a federal need-based grant awarded to undergraduates seeking their first bachelor's degree. The lifetime limit on Pell is the equivalent of twelve full-time semesters. Pell received for enrollment at other institutions before enrolling at Carlow University is taken into account when determining remaining eligibility.

Federal Supplemental Education Opportunity (FSEOG):

A federal need-based grant for undergraduates seeking their first bachelor's degree. Priority is given to students with Pell Grant eligibility who submit the FAFSA by the priority filing date.

Federal Direct Loan Program:

The Federal Direct Loan program consists of the Federal Direct Student Loan and Federal Direct Parent PLUS Loan.

The Federal Direct Student Loan program is available to degree-seeking students who are enrolled at least half time, which is a minimum of six credits per semester for undergraduates. The Subsidized Loan is available to students who demonstrate financial need. During in-school and deferment periods, the interest is paid by the U.S. Department of Education. First-time borrowers must complete Entrance Counseling and the Master Promissory Note at www.studentloans.gov.

The Unsubsidized Loan is available to students without demonstrated financial need. The borrower is responsible for the interest that accrues during in-half time-time.

Annual maximum combined eligibility for the Federal Direct Student Loan for dependent students is \$5,500 for freshmen, \$6,500 for sophomores, and \$7,500 for juniors and seniors.

Annual maximum combined eligibility for the Federal Direct Student Loan for independent students and dependent students

whose parents were denied PLUS loan is \$9,500 for freshmen, \$10,500 for sophomores, and \$12,500 for juniors and seniors.

The aggregate limit for a dependent undergraduate is \$31,000, with not more than \$23,000 in Subsidized Loan. The aggregate limit for an independent student and dependent student whose parent is denied PLUS loan is \$57,500, with not more than \$23,000 in Subsidized Loan.

Federal Direct Parent PLUS Loans:

Federal Direct Parent PLUS Loans are for parents with favorable credit histories who want to borrow money to help pay for the education expenses of their dependent children. The maximum a parent may borrow in an academic year is the difference between the student's Cost of Attendance and financial aid. Generally, repayment begins 60 days after the final loan disbursement in an academic year. Interest begins to accumulate at the time the first disbursement is made. Dependent students whose parents are denied the PLUS Loan due to adverse credit are eligible to receive additional Unsubsidized Loans. Freshmen and sophomores are eligible for \$4,000 and juniors and seniors \$5,000.

To apply for the PLUS Loan, the parent borrower must complete a PLUS application at www.studentloan.gov. If approved based on credit, the parent must then complete the promissory note, also at www.studentloan.gov.

Federal Work Study (FWS):

This need-based financial aid program provides job opportunities for students to help pay their educational expenses. Students with FWS eligibility must apply for available positions on campus to utilize their work study award. Students are paid monthly, at least at the current federal minimum wage, and are encouraged to put their earnings toward their account balance.

Nursing Loan:

Funded by the U.S. Department of Health and Human Services, this program is intended to help students achieve careers in nursing. Currently at 5 percent interest, this loan is awarded to nursing students enrolled at least half time who demonstrate financial need. The loan is repaid starting nine months after the student graduates, leaves school, drops below half time, or changes from nursing to another major.

STATE FINANCIAL AID PROGRAMS

Pennsylvania State Grant:

The Pennsylvania Higher Education Assistance Agency (PHEAA) offers need-based grants to undergraduates seeking their first bachelor's degree who are Pennsylvania residents and enrolled at least half time. Eligibility is limited to eight full-time semesters. Students whose enrollment is limited to one eight-week CAP session in a semester are not eligible for Pennsylvania state grant in that semester. For more information about the Pennsylvania State Grant program and other grant and scholarship programs administered by PHEAA, please visit www.pheaa.org or call 1.800.692.7392. The FAFSA deadline for PA State Grant is May 1.

Other State Grant Programs:

Students who are not Pennsylvania residents should contact the agency in their home state to see if they are eligible for assistance while attending a school in Pennsylvania.

AWARD LETTERS

Students who apply for financial aid will receive an official award letter that shows financial aid for the entire academic year, fall and spring. New students will receive paper award letters through regular mail. Returning students will be notified via Carlow email when their award letter is available on WebAdvisor. All students must officially accept their financial aid by completing a Reply Form either on paper or online.

INSTITUTIONAL FINANCIAL AID

Carlow offers merit and athletic scholarships, which are not based on financial need and are awarded to eligible traditional undergraduate students as defined by the Office of Admission (unless otherwise noted) enrolled in degree-seeking

programs. Carlow also offers institutional need-based grants.

PRIVATE ALTERNATIVE LOANS

There are many private loans that may be used for educational expenses. A list of loans used most frequently by Carlow students can be found at www.elmstreet.com, but students are free to use any lender they choose. Interest rates and terms of the loans vary by lender and the borrower's credit history.

RETURN OF TITLE IV FUNDS

The U.S. Department of Education requires institutions to apply the Return of Title IV Funds policy for students withdrawing from the university who received Title IV financial aid and who did not complete at least 60% of the semester. The Title IV programs include Federal Pell Grant, Federal SEOG, Federal Direct Student Loans, and Federal Direct PLUS Loans. The federal refund policy is separate from Carlow University's tuition refund policy. The Return of Title IV Funds policy is applicable when a student completely withdraws or does not complete all modules (courses which do not span the entire semester) for which he/she has registered at the time those modules began. The Financial Aid Office recalculates federal* financial aid eligibility for students who withdraw, drop out, are dismissed or take a leave of absence prior to completing at least 60% of a semester. Recalculation is based on the percent of earned aid using the following formula:

The Financial Aid Office recalculates federal* financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing at least 60 percent of a semester. Federal financial aid is returned to the federal government based on the percent of unearned aid using the following formula:

Step One:

Percent earned = Number of days completed up to the withdrawal date** / total days in the semester

Step Two:

Aid to be returned = (100 percent – percent earned in Step 1) x the amount of federal aid disbursed or to be disbursed toward institutional charges

*Federal financial aid includes the Federal Pell Grant, SEOG Grant, Perkins Loan, Federal Stafford Loan, and PLUS Loan.

**Withdrawal date is defined as the actual date the student contacted the registrar to begin the institution's withdrawal process, the student's last date of recorded attendance, or the midpoint of the semester for a student who leaves without notifying the institution.

The school must return unearned aid by repaying funds to the following sources in the following order:

- Unsubsidized Federal Direct Loan
- Subsidized Federal Direct Loan
- Perkins Loan
- Federal Direct Parent Plus Loan
- Pell Grant
- FSEOG
- Other Title IV programs

When aid is returned, the student may owe a balance to the university. If so, the student should contact the Office of Student Accounts to make arrangements to pay the balance due.

The Federal Refund Calculations only apply if the student is withdrawing from all classes. However, if a student makes changes in registration that result in changes to tuition and fee amounts, the Financial Aid Office will recalculate the Cost of Attendance and may need to change the original amount of aid awarded.

IMPORTANT: BEFORE WITHDRAWING FROM ALL OR SOME CLASSES, STUDENTS SHOULD CONTACT FINANCIAL AID/STUDENT ACCOUNTS TO FIND OUT THE FINANCIAL RAMIFICATIONS. STUDENTS COVERED BY FINANCIAL AID MAY FIND THEMSELVES WITH AN OUTSTANDING BALANCE BECAUSE FUNDS HAD TO BE RETURNED TO THE FEDERAL GOVERNMENT.

SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID

The United States Department of Education requires that institutions of higher education set standards to measure satisfactory academic progress for students who are receiving Title IV (Federal) financial aid. Carlow uses the same standards to measure academic progress for institutional, need-based grants. The Pennsylvania Higher Education Assistance Agency (PHEAA) has its own academic progress policy for Pennsylvania state grant recipients.

Satisfactory Progress:

Satisfactory progress is defined as a cumulative GPA of at least 2.0 and enough cumulative credits earned to equal at least 67 percent of cumulative credits attempted.

Students must be able to complete their program of study within 150 percent of the credits required, so for a 120-credit bachelor's degree program, a first-time student must be able to earn the degree within 180 credits attempted in order to remain eligible for Title IV aid.

PROCEDURE

The Financial Aid Office reviews academic progress after each semester. Transcripts from the Office of the Registrar are reviewed. The review includes an examination of the student's cumulative GPA, the ratio of credits earned versus credits attempted, and the amount of time taken to complete the program of study.

Warning:

If a student's cumulative GPA has fallen below 2.0, or the student has earned less than 67 percent of his or her cumulative credits attempted, or both, the student will be placed on financial aid warning for the following semester. Students are notified in writing from the Financial Aid Office of their warning status. During this warning period, students must work to raise their cumulative GPA to at least a 2.0 and their cumulative credits earned to at least 67 percent of cumulative credits attempted. Students are strongly encouraged to utilize the tutoring opportunities in the university's Center for Academic Achievement, particularly during warning periods. Students may continue to receive financial aid during warning periods as long as all other eligibility criteria are met.

Suspension:

At the end of the warning period, the Financial Aid Office will review the student's academic transcript. If the student has not met the minimum criteria for GPA and credits earned, eligibility for federal and institutional financial aid will be suspended. Students are notified in writing from the Financial Aid Office of their suspension status. The letter will include information about how to appeal due to extenuating circumstances. A student's financial aid will not be suspended without a period of warning. Students whose financial aid eligibility is suspended may regain eligibility once they meet the requirements for satisfactory academic progress.

Appeal Process:

If the student's financial aid eligibility is suspended, the student may appeal for one additional semester of eligibility, as long as there are extenuating circumstances and an academic plan has been established with the student's advisor. Extenuating circumstances may be directly related to the student's academic experience or to circumstances of a more personal nature, such as injury, illness, or trauma. All appeals are reviewed by the Academic Progress Committee. When an appeal is approved, the student will be placed on financial aid probation for the next period of enrollment and will be eligible for financial aid, as long as all other eligibility criteria are met.

The Academic Progress Appeal Form for Financial Aid is located on myPortal under Student HUB and Financial Aid. Upon completion, the form should be faxed, mailed, or emailed to the Financial Aid Office to the attention of the Director of Financial Aid. All decisions rendered by the committee are final.

Scholarship renewal is contingent on GPA. Appeals are not considered for students who lose scholarship eligibility because their GPA is below required minimum.

Transfer Students:

Credit hours accepted at Carlow are counted as both attempted and completed hours.

Withdrawals:

A WD is assigned if a student officially withdraws from a particular course prior to the final date to withdraw in a given semester, according to the academic calendar published in the Carlow Course Schedule and online at www.carlow.edu/registrar/registrar.html. A WD on a transcript influences the ratio of cumulative credits earned versus credits attempted. Withdrawals also impact the amount of time taken to complete the program of study.

Repeated Courses:

Students may attempt to improve their grade point average by repeating courses. A student wishing to repeat a course can do so only by taking the same course at Carlow University. When a course has been repeated, both grades remain on the transcript. The grade earned by repeating a course is used in lieu of the grade originally earned and will be used in the calculation of the cumulative GPA. A student who repeats a course one time may still be considered for financial aid for that course. No course may be taken more than three times. No course may be repeated at any other institution in order to have that grade accepted as a replacement for the original grade earned at Carlow University. A student who repeats a course for which credits were earned will not earn additional credits for the repeated course.

Academic Forgiveness:

When a student is granted Academic Forgiveness by the provost, the actual earned credits and earned grade are the units taken into account for the purpose of measuring academic progress for financial aid.

Pennsylvania State Grants:

For each academic year during which a Pennsylvania state grant is received, a student must successfully complete the minimum number of credits appropriate to the student's enrollment status during the semester(s) for which state grant aid was received. In an academic year, students receiving two full-time semesters of state grant aid must earn at least 24 credits, and students receiving two part-time semesters of state grant aid must earn at least 12 credits. A student who has not maintained satisfactory academic progress for state grant aid may enroll in summer courses (without state grant aid) to make up the necessary credits.

Academic Levels:

The following guidelines are used to determine the academic level for undergraduate students:

- First-year—a student who has completed 0 to 23 credits
- Sophomore—a student who has completed 24 to 53 credits
- Junior—a student who has completed 54 to 87 credits
- Senior—a student who has completed at least 88 credits
- Full-time—a student enrolled in 12 or more credits
- Part-time—a student enrolled in fewer than 12 credits
- Less than Half-time - < 6 credits

VETERANS AFFAIRS (VA) BENEFITS

The US Department of Veterans Affairs provides benefits to those eligible that can be used to defray the cost of tuition for approved programs of study. Carlow University accepts VA benefits for this purpose for those students that qualify. If you are interested in utilizing these benefits, you should begin by visiting the VA's website (va.gov) to check the status of your benefits and apply to use them at Carlow.

In addition, Carlow University 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, Vocational Rehabilitation 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 on which 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-Benefits, or a 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.

Carlow University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

ACADEMIC INFORMATION

ACADEMIC ADVISING

All students are assigned an academic advisor when they are registered for classes in a program. Students are expected to meet with their advisor prior to and throughout their program of study. Some undergraduate programs require students to follow a prescribed sequence of courses.

The academic advisor is responsible for helping the student make informed choices about course selection, but it is the student's responsibility to ensure that courses are appropriately selected to meet all requirements of the program and university in order to satisfy graduation requirements.

Students are matched to academic advisors by the department chair/program director. If a change is necessary, the program director/chair will assign a different academic advisor in consultation with the student and faculty.

ORIENTATION

The orientation program is the first step to a successful Carlow experience. Students will learn valuable information about their academic programs and support services, IDs, parking, and technology at Carlow; they will also have the opportunity to meet and socialize with one another and with the members of the faculty, staff, and administration. For more information about orientation, students should visit the Carlow website.

TRANSCRIPT REQUESTS

All requests for official transcripts should be submitted via a Transcript Request Form to the Office of the Registrar. A student's signature is required to release any transcript. A fee is charged for each transcript. A transcript will not be issued unless all financial obligations owed to the university have been fulfilled. Unofficial transcripts are available only to current students through WebAdvisor/Self-Service. The Office of the Registrar does not release unofficial transcripts.

ACADEMIC OPPORTUNITIES

HONOR AND SERVICE SOCIETIES

Outstanding achievement in the general academic program entitles students to apply for membership in national honor societies. Benefits vary by the society but, in general, membership in a national honor society can also provide access to educational enrichment activities, career planning, and career advancement opportunities.

Chapters of honor and service societies on the Carlow University campus are:

Alpha Nu Theta:

Alpha Nu Theta is Carlow University's Chapter of Sigma Tau Delta, an International English Honor Society. The Society strives to confer distinction for high achievement in English language and literature in undergraduate, graduate, and professional studies; provide, through its local chapters, cultural stimulation on college campuses, and promote interest in literature and the English language in surrounding communities; foster all aspects of the discipline of English, including literature, language, and writing; promote exemplary character and good fellowship among its members; exhibit high standards of academic excellence; and serve society by fostering literacy.

Alpha Sigma Lambda:

A scholastic and fraternal organization, Alpha Sigma Lambda is a national honor society for nontraditional adult students. Its goal is to recognize the special achievements of adults who accomplish academic excellence while facing competing interests of home and work. Alpha Sigma Lambda is dedicated to the advancement of scholarship and recognizes scholastic achievement in an adult student's career. Inductees must have a GPA of 3.5 in order to be invited for membership. Through programming and camaraderie, the society encourages its members to continue toward and to earn their degrees.

Beta Beta Beta:

This national professional society for students of the biological sciences offers experiences that enrich and extend the primary requirements for the biology major.

Kappa Delta Epsilon, Kappa Beta Chapter:

This honorary professional education society renders service to the campus and community and promotes the professional growth of its members. Qualifications for membership are demonstrated scholastic achievement, and desire to provide service to the campus community and the community at large.

Psi Chi:

An international psychology honors society that encourages scholastic excellence and to promotes the science of psychology. Membership provides networking, funding, and educational opportunities, and is open to psychology majors, minors, and graduate students who meet the minimum academic requirements established by the Carlow University chapter of Psi Chi.

Sigma Theta Tau, Eta Epsilon Chapter:

This international nursing honor society recognizes superior achievement and the development of leadership qualities. It also fosters high professional standards, encourages creative work, and strengthens commitment to the ideals and purposes of the profession. Qualifications for membership include demonstrated superior scholastic achievement, evidence of professional leadership potential, and marked achievement in the field of nursing.

Student Affiliates of the American Chemical Society:

This professional organization for science students stimulates interest in scientific research and promotes intellectual life.

Academic and Professional Clubs may be found on the Carlow website.

HONORS AND AWARDS FOR GRADUATING SENIORS

Eligibility for graduation with honors is computed cumulatively. Students are eligible for graduation with honors under the following conditions:

Cumulative Grade Point Average (GPA) of:

- to 4.0—summa cum laude
- to 3.89—magna cum laude
- 3.50 to 3.69—cum laude

Latin Honors are calculated based upon grades at the conclusion of CAP III for May commencement. Students who have received academic forgiveness may be eligible to graduate with honors limited to the cum laude designation only.

Joseph G. Smith Memorial Award:

In honor of the late Joseph G. Smith, former chairman of the Board of Trustees, this highest Carlow award is given to a senior in recognition of academic distinction and service to the university and to the community.

The Honors Program invites accomplished and motivated students to participate in a series of academic experiences that will challenge their abilities and help them to prepare for professions or graduate study. Through this program, students experience expanded leadership opportunities, and increased opportunities to interact with faculty and to shape their own education experience. See Honors Program on page 57.

STUDY ABROAD

We encourage Carlow students to enhance their on-campus and online coursework with a study abroad experience. Study abroad allows students to travel outside the United States to earn credits toward their Carlow degree requirements (major, minor, and Compass) through coursework, academic internships, and service-learning. Opportunities of varying lengths are available year-round for students of all majors and foreign language proficiency levels (including English-only programs), and funding is available to help make the experience affordable for students from a range of financial backgrounds.

There are three types of study abroad opportunities:

1. Carlow-created programs: Designed for Carlow students and often taught by Carlow faculty, these programs typically offer focused coursework and experiential learning opportunities outside the classroom. Fees vary by program, and students may be able to use their regular financial aid, including Carlow scholarships, to help fund the experience. Current programs include spring break in Nicaragua, full-semester options in Italy and Ireland, and short-term summer options in Ireland.
2. ISEP exchange program: Students may spend one or two semesters at any one of 250 universities around the world as part of the ISEP program. As an exchange program, students pay their regular Carlow tuition, room, and board to Carlow and pay nothing to their host university abroad. In addition, students may be able to use their regular financial aid, including Carlow scholarships, to help fund the experience. Extensive English-language coursework in a wide variety of disciplines is available across the ISEP network.
3. Third-party programs: Students may also select credit-bearing programs offered by other universities and study abroad companies. Although students cannot use Carlow scholarships on these programs, they may still be able to use federal financial aid. Programs of varying lengths, disciplines, and prices are available around the world.

Students who are interested in studying abroad should begin the planning process as early as possible with the Center for Global Learning, which provides support with program selection, financial planning, credit transfer, health and safety orientation, and more.

Center for Global Learning
University Commons, Third Floor
www.carlow.edu/studyabroad
412.578.6378
dlgallaher@carlow.edu

INTERNSHIPS AND FIELD PLACEMENTS

Off-campus fieldwork is a regular part of the curriculum. Students in nursing, education, perfusion, communication, accounting, forensic accounting, business management, human resource management, health management, psychology, criminology, political science, and social work are required to do discipline-specific professional work experiences as an integral part of their program. Other departments and interdisciplinary programs also offer internship experience.

RESERVE OFFICER TRAINING CORPS (ROTC)

Air Force and Army Reserve Officer Training Corps (ROTC) programs are offered through cross-registration at the University of Pittsburgh. Students in the Army and Air Force programs have the option of completing a two- or a four-year program. Completion of the Air Force program leads to a commission as a second lieutenant in the U.S. Air Force. Completion of the Army ROTC program leads to a commission as a second lieutenant in the U.S. Army, the U.S. Army National Guard, or the U.S. Army Reserve.

Interested students can enroll through Carlow's Office of the Registrar or find out more information at the following websites:

- Army: www.rotc.pitt.edu
- Air Force: www.afrotc.pitt.edu

ACADEMIC RESOURCES

CENTER FOR ACADEMIC ACHIEVEMENT

The Carlow University Center for Academic Achievement (CAA) provides tutoring and academic support to Carlow students. Professionals and peer tutors in math, science, writing, and learning skills work in collaboration with students in both individual and group settings. Faculty-approved and CRLA-trained and certified peer tutors, who are expert students, provide assistance and support classroom learning for a wide range of courses. Students may sign up for one-time or ongoing tutoring sessions; informal, as-needed review sessions; and study groups. In these settings, students review course material, practice problem solving, prepare for examinations, and develop general academic skills necessary for success and self-directed, lifelong learning.

The CAA also provides Academic Coaching services. Academic coaches work with students through purposeful mentoring in academic and organization skills to promote self-efficacy and resiliency. Coaches provide guidance regarding time management, learning and study strategies, and test-taking skills in order to help students create and be accountable for achieving academic goals.

ONLINE RESOURCES

Please visit the CelticOnline group site, "CAA Resources," for links to resources and tip sheets. Instructional PowerPoint presentations include topics like "Becoming a Skilled Researcher," "Formatting Your Paper APA Style," "APA Essentials," and "College Survival Skills."

DISABILITIES SERVICES OFFICE

This is a summary of Disabilities Services Guidelines and Policies. To access the full list of both, please see the Carlow University student handbook on the University website at https://www.carlow.edu/Student_Handbooks.aspx, or at the Disabilities web page at https://www.carlow.edu/Disabilities_Services.aspx

Carlow University makes reasonable accommodations to provide qualified students with disabilities the opportunity to take full advantage of programs, activities, services, and facilities. The university's Disabilities Services Office (DSO) arranges specific reasonable accommodations for students and prospective students with disabilities. Current documentation regarding a student's disability is required and will be treated as confidentially as possible; it is not released without the student's consent, unless required by law. The DSO, faculty, and student work together to identify appropriate academic adjustments, auxiliary aids and services, and/or other reasonable accommodations that may be warranted under particular circumstances. Individuals with disabilities are encouraged to contact the University's Disabilities Services Director in advance of the semester when accommodations/adjustments may be needed, but may request accommodations at any time in the semester. It is important to note that accommodations cannot be granted retroactively.

Carlow University has the right to establish qualifications and other essential standards and requirements for its courses, programs, activities, and services. All students are expected to meet these essential qualifications, standards, and requirements, with or without reasonable accommodations.

Students with disabilities who are requesting accommodations should contact the Disabilities Services Director at 412.578.6257 to arrange a meeting and discuss specific guidelines. Copies of these guidelines for receiving accommodations are available from the Disability Services Office.

OFFICE OF CAREER DEVELOPMENT

This Office provides undergraduate students with the training and coaching they need to obtain their job (or graduate school placement of choice) at graduation. Services include one-on-one appointments, workshops, career programs, skills training, classroom presentations, on-campus employer interviews, job fairs, and online resources. All these services are available to current students and alumni within two years after graduation.

The Office of Career Development utilizes a web-based system for job and internship postings, and notifications of career and networking events both on and off campus. Five highly trained Peer Career Advisors join the Career Development staff to provide personalized coaching for job or internship searches, resume and cover letter writing, mock interviews, assistance with e-portfolios, training in salary negotiations, and advising on careers and academic majors.

CENTER FOR EXPERIMENTAL LEARNING

The Center for Experiential Learning provides students with opportunities and encounters that complement their classroom learning with hands-on, real-world experiences that develop them into career-ready, responsible leaders. Experiential learning is a high-impact practice (HiP) that does more than add practical experience to classroom learning. It is an integral component of a complete education that develops graduates who are holistic, self-directed, and life-long learners. Carlow identifies 5 types of experiential learning via curricular and co-curricular opportunities: Research, Internships, Service-Learning, Leadership, and Study Abroad/Away. Students can visit the center to learn more about any of these opportunities and how they can participate.

GRACE LIBRARY

Grace Library supports collections and services to foster academic excellence and promote the process of self-directed, lifelong learning. The library offers more than 50,000 printed volumes and more than 140,000 e-books, with particular strengths in early childhood education, theology, literature, and women's studies. Special collections include those in peace studies, African-American studies, and career resources. More than 16,000 electronic and print journals are available in the online database collections and in the library.

The library collection also contains more than 1,200 DVDs, streaming videos, and videotapes. Students are issued a library barcode on the back of their ID cards that enables them to borrow up to 15 items at a time. Grace Library offers a wide array of services to make the research process easier, including:

Reference Help:

Librarians are available during most library hours to give students one-on-one help. Also, students can ask questions online via the "Ask a Librarian" service available on the library's website at www.carlow.edu/library or call 412.578.6139 to speak to a librarian.

Research Materials:

Students can access a tremendous amount of research material such as full text journal articles, encyclopedia articles, and statistics from the library website. Also, available on the website is the library's online catalog through which students can search for books and DVDs owned by Grace Library, renew and place holds on books, and see a listing of materials placed on reserve. Research guides, library hours, and policies are also found at www.carlow.edu/library.

In-house Resources:

Grace Library owns a rich collection of print materials available for student research, including over 7,000 reference volumes such as subject specific encyclopedias and dictionaries. For more advanced research, librarians will assist researchers with extensive online literature searches.

Borrowing from Other Libraries:

Grace Library has made arrangements for Carlow students to borrow and use materials from other academic libraries through Interlibrary Loan. Students have access to books and articles from thousands of libraries from around the world. Through Interlibrary Loan, we provide a global library collection.

The Carlow Archives and the International Poetry Forum Archives:

Carlow's Archives and the International Poetry Forum Archives are presently in storage and inaccessible to members of the Carlow University community.

Comfortable, Relaxing Study Areas:

The library offers comfortable chairs for reading and relaxing; small, quiet study rooms; and numerous areas for group meetings.

DR. TOM HOPKINS COMMUNICATION LABORATORY

Carlow is fortunate to have a state-of-the-art communication lab open to all members of the university community. The Hopkins Communication Lab is located on the 4th floor of the Learning Commons. There are 2 large presentation rooms, three interview rooms and a digital conference room. All rooms in the lab are set up for digital video display. Additionally, there is a large workroom where classes can incorporate a true lab experience.

Well-trained peer tutors and a communication faculty member are available seven days a week and three evenings (open hours and by appointment) to assist students in all phases of the presentation process. The communication lab team members can help students with creating an individual communication plan, brainstorming a topic for any presentation, researching a speech, outlining a speech, building persuasive arguments through evidence, creating visual aids, coping with speech anxiety, taping a speech, or practicing a speech. All appointments are kept confidential and students receive individual attention.

STUDENT EVALUATION

The methods that faculty use to evaluate student achievement vary according to the types of learning experiences. Written examinations are a common means of evaluation, but research papers, essays, interviews, classroom interaction, media presentations, observation, and clinical and field experience are also used.

ACADEMIC POLICIES

In addition to the following academic policies, students are advised to consult with their program directors/chairs and advisors regarding major-specific policies and procedures. Some departments have program-specific handbooks.

ACADEMIC CALENDAR

The academic calendar is published annually. Carlow follows the semester system, although some programs are divided into shorter sessions within the semester. (See Accelerated Course Calendar in the section below.) Most academic-related actions are carried out on a semester basis, such as academic standing decisions, the Dean's List, and determination for graduation.

ACCELERATED COURSE CALENDAR

Carlow Accelerated Program (CAP) classes generally meet for eight weeks. These courses typically meet in the evening or online and can occur in CAP I through VI sections. In addition to CAP sections, some courses meet over the weekend.

When an accelerated course is scheduled to meet at a time the university is closed, faculty will schedule a make-up class, provide an out-of-class assignment or hold an online session. Classes will not be conducted on days when the institution is officially closed. As alternatives to a make-up day, faculty may decide to give the class a substantive assignment or hold an online class session instead of using the make-up day. Faculty who teach an accelerated-format class that should meet on an official holiday will publish in their syllabus which of these plans will be in place for that course.

ACADEMIC FORGIVENESS

Any student who matriculated at Carlow University and withdrew at least five years prior to seeking re-admission* has the option of requesting academic forgiveness through the Office of the Provost and Vice President for Academic Affairs. A student seeking academic forgiveness shall request consideration at the time of re-admission. Academic forgiveness means all previous courses the student has passed will remain on the permanent record, but none will be computed into the new cumulative GPA. Credit earned prior to academic forgiveness for courses graded A, B, C, or D will be counted toward degree requirements. Previous courses graded F will not be counted toward degree requirements. Please refer to individual departments for specific repeat policies in major and support courses.

When a student is granted academic forgiveness by the Provost, the actual earned credits and earned grades are the units taken into account for the purpose of measuring academic progress for financial aid. To complete the degree, the student must earn a minimum of 32 credits after academic forgiveness. To earn graduation honors, the student must earn a minimum 3.5 GPA. Honors are limited to the cum laude designation, no matter how high the GPA.

*For additional information regarding re-admission please refer to section: *Re-Admission Procedure to the University*.

ACADEMIC INTEGRITY POLICY

Carlow University's values and vision are founded in the Sisters of Mercy's mission of cultivating lifelong learners through a learner-centric approach. It is in this tradition that Carlow University aims to educate and challenge students to reach their highest potential; to that end, we guide students along a path of honesty and integrity throughout their intellectual pursuits. Carlow University expects its constituencies to understand the various forms of academic dishonesty and to uphold the highest standards of academic integrity.

FORMS OF ACADEMIC MISCONDUCT

Cheating

Any coursework, such as (but not limited to) quizzes, tests, exams (in-class, online, or take-home), homework or other assignments, lab work, presentations, and both creative and scholarly forms of expression such as projects and papers, computer programs, artistic, musical, or any audiovisual or multimedia work, is presumed to represent a student's individual, original work (or the original work of all members of a group, in the case of group assignments). Cheating thus involves completing coursework by providing or receiving inappropriate assistance from a person or reference, or using unauthorized material such as (but not limited to) notes of any form, texts, test banks, wireless devices such as cell phones, tablets, or smart watches, calculators, formulas, or computers, unless otherwise directed or permitted by the course instructor.

Plagiarism

Plagiarism refers to the unauthorized use of copyrighted material or misrepresentation of someone else's work as one's own in any coursework, such as (but not limited to) quizzes, tests, exams (in-class, online, or take-home), homework or other assignments, lab work, presentations, and both creative and scholarly forms of expression such as projects and papers, computer programs, artistic, musical, or any audiovisual or multimedia work. Plagiarism can occur in many ways, including:

1. Submitting another's work as one's own.
2. Not properly citing sources, using exact wording without quotations or proper attribution, paraphrasing without proper citation, or improper paraphrasing.
3. Attributing citations to inaccurate or misleading sources.

Self-Plagiarism

Unless otherwise permitted by the course instructor or the nature of the assignment, each submitted work is presumed to be original. Self-plagiarism thus involves the unauthorized use of one's own work or part of a work, either from the same course or from another course, in more than one assignment.

Academic Deceit

Academic deceit involves the intentional use of false or altered information or the withholding of information critical to the processes of the University such as grade changes, course withdrawals, or other academic procedures. Academic deceit also entails providing false information or documentation with the intent to obtain an exemption, extension or exception to assignments, exams, presentations, and other coursework. In addition, academic deceit involves signing other students into classes or on group reports.

Fabrication of Data

Fabrication of data involves the use of distorted data through either falsification or fabrication, or any sort of forgery or unsanctioned use of documents for research or other coursework.

Interference with Other Students' Learning or Achievement

The interference with the classroom learning or scholarly products of other students is a violation of academic integrity. Examples include, but are not limited to: sabotaging (including failing to contribute to) group projects or laboratory work, disrupting in-class work including tests and quizzes, altering computer files or online posts, or making educational materials such as equipment or texts unavailable to others.

Unauthorized Acquisition or Exchange of Coursework

Unauthorized acquisition or exchange of coursework involves not only purchasing, borrowing, stealing, or otherwise obtaining material (such as, but not limited to, exams, test bank questions, papers, projects, assignments, and presentations) with the intent to use or represent part or all of the material as one's own coursework, but also selling, lending, or otherwise offering one's own coursework to others with the intent of allowing the recipient to use or represent part or all of the purchased or borrowed work as one's own. In addition, unauthorized acquisition or exchange of coursework entails obtaining a copy of one's own completed tests and exams (either a physical copy, an electronic image, or a screenshot) without explicit permission from the course instructor.

Copyright Violations

According to the copyright law, the creator of an original work has the exclusive right to use or distribute said work. Unauthorized redistribution of copyrighted material, including any educational or training material provided by the instructor or the University or obtained from the textbook, constitutes a violation of the copyright law.

Other Forms of Academic Misconduct

Carlow University reserves the right to act upon other actions that a reasonable person would consider academic dishonesty that may not be listed specifically above.

VIOLATIONS OF ACADEMIC INTEGRITY

When academic misconduct is suspected, the faculty should contact the Office of Academic Affairs to inquire about previous academic integrity violations by the student. If a staff member or a student witnesses or suspects academic misconduct, he/she is encouraged to report the violation to the faculty teaching the course.

If the alleged misconduct is the student's first offense of a similar nature, and the faculty believes the misconduct is minor or the result of an honest mistake, the faculty should contact the student within five business days of discovering the violation to arrange a meeting (the meeting may be in person or online or via electronic communication) and attempt to resolve the matter with the student directly. The faculty member may impose a sanction at his/her discretion. Also, in the spirit of helping guide the student's learning process, the faculty should refer the student to such resources as the Center for Academic Achievement, as appropriate. Once a resolution is achieved, the faculty and the student must sign an agreement detailing the misconduct and the sanction imposed to be kept on record at the Office of Academic Affairs. This agreement only kept as a means of tracking and is not meant to become part of a student's permanent academic record. The student may not contest the sanction or appeal to a higher level.

If the faculty and the student are unable to reach a resolution, or if the student denies responsibility for the alleged academic integrity violation, the matter is forwarded to the Academic Integrity Committee for a hearing, as described below.

If the alleged misconduct is not the student's first offense of a similar nature, or if the faculty believes the misconduct is serious, blatant, or warrants consideration by a higher authority, the matter is forwarded to the Academic Integrity Committee for a hearing, as described below. The Committee may collaborate with the faculty to impose further sanctions following the hearing.

Academic Integrity Hearing Procedure

The faculty will contact the Chair of the Academic Integrity Committee at least 72 hours prior to the next regular meeting of the Committee in the fall or spring semesters to begin the academic integrity hearing process. The Chair will then notify Dean of the College that houses the accused student's major(s), the Office of the Registrar, and the Office of Academic Affairs of the pending case.

The Academic Integrity Committee shall convene an Academic Integrity Hearing Panel for the case at its next regularly scheduled meeting. The faculty and the student are both expected to appear at the hearing and present their evidence in front of all parties in attendance. If the faculty and/or the student is unable to attend the hearing in person, they may present their case in a written statement to be provided to the Chair of the Academic Integrity Hearing Panel prior to the hearing. Barring any extenuating circumstance, the faculty is expected to attend the meeting or provide a written statement of evidence; otherwise, the case is dismissed. The faculty should also provide the Panel with written documentation of the alleged misconduct, if possible, in digital form prior to the hearing. If the student does not attend the meeting and fails to

provide a written statement of his/her case, the hearing will continue with the evidence available.

Only members of the Academic Integrity Hearing Panel, the faculty alleging the misconduct, the accused student, witnesses (if applicable), and a representative from the Disability Services Office (if applicable) may attend the hearing; no other personnel shall be permitted. If a witness cannot attend the hearing, he/she may be asked to submit a written statement as evidence. The faculty, student, and witnesses may be excused from the room during the Panel's deliberation.

During the academic integrity hearing process, the student may not withdraw from the course. If the matter is not resolved by the final grade due date, an incomplete grade is assigned until the Academic Integrity Hearing Panel rules on the matter. The student will not be conferred a degree or certificate if there are outstanding academic misconduct charges.

If the Academic Integrity Hearing Panel finds the student guilty of violating the academic integrity policy, the Panel will have three business days to consult with the faculty alleging misconduct for a decision on appropriate sanctions. In collaboration with the faculty, the following grade sanctions may be applied:

- Zero credit on the assignment
- Failure of the course

For serious cases of academic misconduct, the Panel may consult with the program(s)/department(s) that houses the student's major area(s) of study and recommend that the Provost apply the following sanctions:

- Suspension from the University
- Dismissal from the University

In the case of suspension from the University, if the ruling occurs past the course withdrawal date, the suspension will begin at the end of the current semester so that the student will not incur financial aid penalties. If a student is dismissed from the University due to violation of the academic integrity policy, he/she cannot be readmitted to the University in the future.

The Panel's ruling may be appealed, following the procedure described below.

The Chair of the Academic Integrity Committee will notify the student, the faculty alleging the misconduct, the Dean of the College that houses the student's major(s), and the Office of the Registrar regarding the outcome of the Panel's ruling.

All records of academic integrity violations will be kept permanently in the Office of Academic Affairs.

Cases of academic integrity violation that take place after the last spring hearing of the academic year or over the summer months shall be directed to the Office of Academic Affairs, which will convene an ad hoc panel consisting of three faculty who are available to serve within ten business days from the time the academic integrity violation is reported. The Office of Academic Affairs will also notify the Dean of the College that houses the student's major(s) and the Office of the Registrar regarding pending cases and the outcome of the ad hoc panel's ruling.

Composition of the Academic Integrity Committee

The Academic Integrity Committee is a standing committee that is available to meet once per month during the fall and spring semesters. This committee shall consist of two faculty members from each college (six total), serving staggering two-year terms. The Academic Integrity Committee shall work with the Office of Student Affairs to identify eligible graduate and undergraduate students to serve on Academic Integrity Hearing Panels.

Academic Integrity Hearing Panels shall be convened as needed to take place during the Committee's scheduled meeting time.

Each Panel shall consist of four members, as follows:

- Three faculty members from the Committee (one from each College).
- One student. An undergraduate student will serve if the accused is an undergraduate student, while a graduate student will serve if the accused is a graduate student. Student members must not have previous violations of the Academic Integrity Policy.

In addition, one staff member may serve as a consultant if such expertise is deemed necessary.

If a Panel member fails to attend the hearing, the hearing will proceed with the remaining members of the Panel, providing that there are at least three Panel members present.

Members serving on an Academic Integrity Hearing Panel must not have taught the accused student in the past or have personal ties to the student. If no Committee member from a particular College is eligible to serve under this condition, the Chair of the Academic Integrity Committee will work with the College representative to identify a substitute from that College.

Appeals

Following the Academic Integrity Hearing Panel's ruling, both the faculty alleging misconduct and the accused student may appeal the decision in writing detailing the grounds of the appeal. Appeals must be submitted to the Provost within ten business days of the Panel's ruling. The decision of the Provost is final and a written record of the decision shall be kept on file. Should the Provost reverse the ruling of the Panel, he/she shall explain the rationale for the reversal, in writing, to the Panel.

STUDENT CODE OF CONDUCT

Students of Carlow University are expected to conduct themselves as responsible individuals who respect the rights and dignity of others. University rules and regulations are intended to protect the rights of each member of the university community. Students are expected to act reasonably, responsibly, and with civility while on campus and at university-sponsored events off campus. See the *Carlow University Student Handbook* for more information.

ACADEMIC GRIEVANCE PROCEDURE

Formal grievance procedures have been established to provide students with a means to express concerns regarding the application of academic policies, procedures, practices, rules, or regulations of the university, and a method by which concerns can be resolved. For appeal of a grade, students should consult the Grade Changes and Grade Appeals section. The student is encouraged initially to discuss the concern informally with the faculty member and/or department/program chair. Students must utilize internal mechanisms for grievances before involving external counsel. General counsel is not part of the internal grievance procedure.

Steps to address a concern:

1. If a student has an academic concern she/he should present the situation to the faculty member in writing/email. The email must make explicit that the student is starting the grievance procedure. The faculty member will arrange an appointment as soon as possible. The faculty member will respond to the concern presented during this initial appointment within seven days of the appointment. Parties should retain a written record of this discussion. Most matters can be settled by frank discussion of the facts.
2. Should the concern remain unresolved, the student will discuss the matter with the department chair or program director and determine if a resolution can be mutually agreed or if a grievance process is required. This will be completed within five days of response from Step 1. In order for all facts to be carefully re-examined and evaluated, the department chair will follow these procedures:
 - a. Discuss the situation with the faculty member(s)
 - b. Arrange to meet with the student and involved faculty together to arrive at resolutions to the situation
 - c. Retain written notes from each intervention
3. Should the concern remain unresolved with the department chair or program director, or if the specific concern involves the department chair, the student will take the concern to the appropriate dean. The student filing the grievance must have completed Step 1 and have documentation of the discussion. The appropriate dean will then follow Steps 2a and b. There should be a written record of each meeting and its outcome.
4. If the grievance remains unresolved at this level and the student wishes to pursue it further, the dean will begin the process of setting up the grievance committee as described in this step. The committee will consist of five members: two students and three faculty members. One faculty member will be elected as chair of the committee and will vote only to break a tie. Student members will be drawn from the pool of graduate students when a grievance is filed by a graduate student. Faculty members will be drawn from other graduate departments. The student and faculty members may each request the removal of any one member of the pool of eligible members.
5. Both parties will be informed of the status or resolution of the grievance at each step of the process. If either party remains unsatisfied with the decision of the committee, the dean will notify the provost that there is dissatisfaction with the decision. The provost shall make a final determination.

ACADEMIC STANDING

Carlow University requires that students maintain satisfactory academic progress while attending the institution. In order to maintain satisfactory academic progress, a student must have a cumulative GPA of at least 2.0 and earn at least 67% of cumulative credits attempted.

PROCEDURE

All undergraduate students' academic records are reviewed at the end of each semester. The review includes an examination of the student's cumulative GPA and the percentage of credits earned versus credits attempted.

Warning:

If a student's cumulative GPA has fallen below 2.0, or the student has earned less than 67 percent of his or her cumulative credits attempted, or both, the student will be placed on academic warning for the following semester. Students are notified in writing of their warning status. During this warning period, students must work to raise their cumulative GPA to at least a 2.0 and their cumulative credits earned to at least 67 percent of cumulative credits attempted.

Dismissal:

At the end of the warning period, the student's academic transcript is reviewed. If the student has not met the minimum criteria for GPA and credits earned, the student is dismissed from Carlow University for one year. For first-time, first-year students, those earning a GPA below 1.0 in their first semester may be moved directly to dismissal. Students are notified in writing of their dismissal status. A student may appeal his or her dismissal.

ACADEMIC STANDING APPEAL PROCESS

If a student has been dismissed from the university, the student may appeal to return for one additional semester. If the minimum criteria for GPA and credits earned is not mathematically possible to achieve in one semester, the student may be given permission to continue to take classes so long as an academic plan for improvement is in place and the student meets all guidelines. All appeals are reviewed by the Dean. If the appeal is approved, the student will be placed on academic probation and will be permitted to take classes. If the appeal is denied, the student's dismissal stands, and s/he is dismissed from the university for one year.

RE-ADMISSION AFTER A DISMISSAL

If a student is dismissed from the university, the student may apply for re-admission after one year, including the summer terms. For example, a student who is dismissed in the fall semester must sit out the spring, summer, and following fall semesters and can return, if accepted, for the following spring semester. The student must reapply to Carlow University through the Admissions Office and select "Re-admit" on the admissions application. Admissions must notify the appropriate dean of their intent to re-apply. It should be noted that a student who has been dismissed from the BSN program is not eligible for re-admission to the BSN program. In addition to the application, the procedure for consideration for re-admission will include, but will not be limited to, a personal statement from the student that addresses the issues that lead to the original dismissal and how the obstacles to the student's academic progression have been remedied, and an updated resume. The required statement and resume should be submitted with the re-application. Dismissed students who are re-admitted to the university will re-enter on academic probation.

Due to changing admission and curriculum requirements, the university reserves the right to re-evaluate all academic courses, whether completed at Carlow or elsewhere, to determine what will be credited toward the student's degree. Graduation requirements are governed by the catalog in effect at time of readmission. See the Office of the Registrar for more information about catalog requirements. A student who is dismissed twice is not eligible for reinstatement or appeal. The student should also contact the Office of Financial Aid and Office of Student Accounts to address any other pertinent financial aid issues.

LEARNING ASSESSMENT AT CARLOW

A Carlow degree represents a commitment to our students—a commitment that they will be given the opportunity to learn and be able to demonstrate the skills, knowledge and competencies that are necessary to enter into a career, a community of practice, or higher levels of graduate study. One of the ways we honor this commitment is through the practice of

learning assessment. By engaging in learning assessment processes, we take steps to ensure our students achieve the learning goals represented by their degree.

Through our learning assessment efforts, we seek to provide truthful and accurate answers to the following questions:

- What goals do we have for students with respect to the knowledge, competencies, and skills they should develop or master to be able to enter into a career, a community of practice, or higher levels of graduate study?
- What intentional steps do we take to achieve these goals?
- How successful are our students in achieving these goals? That is, what are the actual outcomes?
- How do we improve student learning when the information obtained through our efforts indicates that students' progress in achieving these goals is not sufficient?

In *Standards for Accreditation and Requirements of Affiliation (2016)*, the Middle States Commission on Higher Education observes that assessment has the student as its primary focus, functions to help students improve their learning, enhances quality, and leads to continuous improvements in academic programs.

As a member of the Middle States Association, Carlow University embraces these principles as integral to its own framework for assessment. In fact, the improvement of teaching and learning is the framework's primary goal.

Carlow's Learning Assessment Framework

Based on best practices in the field of learning assessment, we have established a common set of expectations for the development and assessment of student learning outcomes. Each program of study is responsible for maintaining a sustainable assessment process. Specifically, a sustainable assessment plan in Carlow's learning assessment framework includes the following elements:

1. **Clearly Articulated Student Learning Outcomes**
To ensure learning, a program must first define goals in order to intentionally work toward those goals. With this in mind, each program of study defines five to seven program-level student learning outcomes. These outcomes are statements about what a learner should be able to do after he/she has completed the program of study. At the end of each academic year, departments and programs of study review their outcome results and use the information to determine action steps that will improve, bolster and better assure student learning.
2. **Defined Measures and Criteria for Success**
Learning outcome statements specify student learning behaviors that are observable, measurable and able to be demonstrated. Based on all of this, each program of study identifies opportunities where students apply and demonstrate their learning outcomes. These can include exams, papers, presentations, projects, and other assignments. After identifying these demonstration opportunities, programs of study establish standards of quality, i.e., "criteria for success", that they will use to evaluate the learning outcomes, ensuring that they meet our expectations and prepare students for future success. Wherever necessary, rubrics are developed to clearly explain the criteria used to evaluate outcomes.
3. **Collection and Analysis of Data**
Upon conducting assessments of each learning outcome, programs of study and Compass curriculum areas collect and analyze the resulting data. This analysis includes evaluation of the achievement of each outcome and thus leads to identification of best practices or areas in which student learning can be improved.
4. **Action Plans for the Improvement of Student Learning**
Where data collected indicate unsatisfactory progress in the achievement of learning outcomes, faculty will identify tangible actions that will be taken to improve student learning. The efficacy of these actions is then evaluated through future assessments.

It should be noted that while this framework provides clear guidelines for how each program of study carries out assessment, it leaves great flexibility to faculty, departments, and programs in determining and implementing the best practices for evaluating their students' achievement. There are several programs at Carlow University that are externally accredited, including programs in the School of Nursing (CCNE), the Counseling Psychology Doctoral Program (APA), the Respiratory Care Program (provisional accreditation through the Council on Accreditation for Respiratory Care-COARC), and the Social Work program (CSWE). For these programs, external agencies often have their own requirements regarding assessment and these programs may adapt the Carlow framework to conduct assessment of student learning in ways that align with those requirements.

Assessment Reports and Activities

Each program produces an assessment report each year that includes the following:

- Assessment results data from the most recent academic year.
- Plans for the improvement of student learning that result from analysis of the data collected.

Additionally, general education and institutional learning outcomes (a.k.a. “Compass learning outcomes”) are reviewed by the Carlow Compass Curriculum Steering Committee. In these reviews, which are designed to carefully examine the quality of education achieved by our Carlow Compass Curriculum, information and data on assessment of student learning are carefully evaluated by representative faculty from across the university.

CLASSIFICATION OF STUDENTS

- First-year: Students who have completed 0 to 23 credits
- Sophomores: Students who have completed at least 24 credits
- Juniors: Students who have completed at least 54 credits
- Seniors: Students who have completed at least 88 credits
- Full-time Students: Undergraduate students enrolled in 12 or more credits
- Part-time Students: Undergraduate students enrolled in fewer than 12 credits
- Less than Half-time: < 6 credits

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act, as amended (FERPA) does three things:

1. FERPA allows students to have the right to inspect their own records.
2. FERPA creates rules regarding the confidentiality and disclosure of education records.
3. FERPA allows students to ask to have their records amended.

CARLOW UNIVERSITY PROCEDURE FOR STUDENTS TO INSPECT EDUCATION RECORDS

Students who wish to inspect and review their own education records may submit to the registrar a written request that identifies the records the student wishes to inspect. A university official will make arrangements for access and notify the student of the time and place where the records may be inspected, within 45 days after the request was received. A university official may be present during the inspection and review.

Certain documents are excluded from the student’s inspection of his or her education records. These exclusions are: 1) information submitted by the student’s parents; 2) confidential letters of recommendation related to admission, employment, job placement or honors, placed in the file before January 1, 1975, or thereafter when the student has waived the right to inspect and review such letters of recommendation, (c) information about other students, and (d) documents that are not considered “education records. For example, documents that are in the sole possession of the maker of the document and are not shared with anyone else (except a substitute) are not considered education records maintained by the institution.

In general, students cannot inspect education records of other students unless the other student provides his/her written, signed and dated consent.

CARLOW UNIVERSITY PROCEDURES REGARDING DISCLOSURES OF STUDENT RECORDS

Carlow University students are encouraged to allow their parents and guardians to have access to their education records. To authorize disclosure to parents and guardians (and anyone else not listed in the exceptions below), students must provide written, signed and dated, specific authorization specifying the records they wish to share. To do so, students may submit an Authorization to Release Records form with the registrar. The student may email the completed form to the registrar only from the student’s own Carlow University email account. Otherwise, the student’s signature must be hand delivered or mailed to the Office of the Registrar. To revoke this authorization, students may alert the registrar in writing, including by email.

Disclosure with the student’s written consent is by no means mandatory or automatic. If a parent or guardian, or other designated third party wishes to review a specific record, Carlow will respond to that request by reviewing whether Carlow

has the student's written, signed, and dated authorization to disclose on file and weighing other interests. In many cases, the university may choose to share information directly with the student to allow the student to determine how and when to share with others.

Written consent generally required:

The general rule is that Carlow will not disclose personally identifiable information from the records of a student without the student's prior written consent. The list of exceptions (instances where Carlow may disclose education information without student consent) are set forth below.

Disclosures without student consent:

Carlow may disclose information from education records, including personally identifiable information, *without* the prior written consent of the student in the following circumstances (some are mandatory disclosures and Carlow has no choice; some are discretionary):

1. To Carlow University officials who have been determined by the university to have legitimate educational interests in the records. A school official is:
 - a. a person employed by Carlow in an administrative, supervisory, academic or research, or support staff position. Any Carlow employee who needs information about a student in the course of performing instructional, supervisory, advisory, or administrative duties for Carlow University has a legitimate educational interest. For example, human resources and accounting staff may have legitimate educational interests for purposes of tuition reimbursement.
 - b. a person employed by or under contract to Carlow to perform specific tasks, such as an auditor, consultant, or attorney, a person on the Board of Trustees, or a student serving on an official committee or assisting another school official. Vendors (for example, technology vendors) who receive education records must sign contracts agreeing to use the information only for the purposes designated in their contracts, must agree not to disclose information further and must otherwise agree to the protections and protocols in the Carlow University Non-Disclosure Agreement.
2. To certain officials of the United States Department of Education, the Comptroller General of the United States, the Attorney General of the United States, and state and local educational authorities in connection with state or federally supported educational programs.
3. In connection with the student's request for, or receipt of, financial aid necessary to determine the eligibility, amounts or conditions of financial aid, or to enforce the terms and conditions of the aid.
4. To organizations conducting certain studies for or on behalf of Carlow University, provided such organizations agree to protocols regarding the safeguarding of the information.
5. To accrediting commissions or state licensing or regulatory bodies to carry out their functions.
6. To parents of a dependent student, as defined in Section 152 of the Internal Revenue Code. Although Carlow is permitted to disclose under the law, it is Carlow's policy to disclose only with the student's consent.
7. To comply with a judicial order or lawfully issued subpoena.
8. To appropriate parties in health or safety emergencies.
9. To officials of another school in which a student seeks or intends to enroll.
10. To an alleged victim of a crime of violence or sexual offense, the final results of the university disciplinary proceedings against the alleged perpetrator of that crime or offense with respect to that crime or offense.
11. To persons in addition to the victim of a crime of violence or sexual offense, the final results of the Carlow University disciplinary proceedings described in paragraph 10 above but only if the school has determined that a student is the perpetrator of a crime of violence or sexual offense, and with respect to the allegation made against him or her, the student has committed a violation of Carlow University's rules or policies. Carlow University, in such instances, does not disclose the name of any other student, including a victim or witness without the prior written consent of the other student(s).
12. To a parent regarding the student's violation of any federal, state, or local law or of any Carlow University rules governing the use or possession of alcohol or a controlled substance if Carlow determines that the student has committed a disciplinary violation with respect to that use or possession, and the student is under 21 at the time of the disclosure to the parent.
13. Directory information. Directory information is personally identifiable information that may be disclosed without the student's consent. Carlow University designates the following information as directory information:
 - a. Student's name
 - b. Address: home, local, personal email and Carlow email
 - c. Telephone numbers
 - d. Date and place of birth

- e. Program of study
- f. Participation in officially recognized activities and sports
- g. Dates of attendance
- h. Degrees and certificates awarded
- i. Most recent previously attended school
- j. Photograph of the student, if available
- k. Enrollment status (i.e., enrolled, continuing, future enrolled student, reentry, leave of absence, etc.)
- l. Student honors and awards received.
- m. The height and weight of athletic team members.

Opting out of the directory:

A student may request that his or her information not be included in the directory. To do so, please complete the Request to Restrict Directory Information (Opt-Out) Form or otherwise submit written notice to the registrar. Failure to request nondisclosure of directory information may result in routine disclosure of one or more of the above-designated categories of personally identifiable directory information. Carlow University does not provide directory information to marketing companies, including credit card companies, ring vendors or the like.

Student Recruiting Information. Carlow University is required to comply with certain requests made by the U.S. Military. Student recruiting information includes ONLY: name, address, Carlow email address, telephone listing, age or date of birth, class level, academic major, place of birth, degrees received and most recent educational institution attended. It does not include and Carlow University will not provide: Social Security numbers, race, ethnicity, nationality, GPA, grades, low performing student lists, religious affiliation, students with loans in default, veteran's status, and information about students no longer enrolled. Students who opt out of the directory also opt out of student recruiting information.

Records of Requests for Disclosure:

The registrar maintains a record indicating the parties who have requested or obtained personally identifiable information from a student's education records and the legitimate interests those parties had in requesting or obtaining the information. This record may be inspected by the student. The registrar need not include in the record, disclosures made to the student himself/herself, disclosures made with the student's written authorization, disclosures to university officials and employees, and disclosures of directory information.

PROCEDURE TO AMEND EDUCATIONAL RECORDS

Students have the right to request that a school amend records that they believe to be inaccurate, misleading, or in violation of their right to privacy. To do so, the student files a written request to amend the record with the Registrar's Office, Carlow University, 3333 Fifth Avenue, Pittsburgh, PA 15213. The request should identify the part of the record that the student wants to have amended and specify why the student believes it to be inaccurate or misleading.

Carlow will either amend the record or decide not to amend the record and will so alert the student. If Carlow decides not to amend the record, the student then has the right to request a hearing. Carlow will arrange for the hearing and notify the student reasonably in advance of the date, place and time of the hearing. The hearing will be conducted by an individual who does not have a direct interest in the outcome. That individual may be an official of Carlow University. The student shall be afforded a forum for the opportunity to tell his or her side of the story, and present documentation and other information relevant to the issues raised in the original request to amend. The student may be assisted by another person, including an attorney.

After the hearing, Carlow University will prepare a written decision based upon the evidence presented at the hearing. If Carlow determines that the record was inaccurate or misleading, it will amend the record and inform the student in writing. If, after the hearing, Carlow still decides not to amend the record, the student has the right to place a statement with the record setting forth his or her view about the contested information.

MORE INFORMATION ABOUT FERPA

Students are afforded the right to file a complaint with the U.S. Department of Education concerning alleged failures by the university to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education

400 Maryland Avenue, SW
Washington, DC 20202-5901

For additional information please visit <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

Copying of Education Records

Online students or other students who are not able to inspect their academic records in person may request a copy of their education records. Students must follow the procedure to inspect education records as stated above. Transcripts from other institutions submitted as part of the admissions process may not be copied and distributed. Students must contact the other institutions directly to receive official transcripts.

COURSE INFORMATION

REGISTRATION

A student is officially registered for a course when named on the official class roster. Grades and credits will not be recorded for any course for which a student is not officially registered. Upon registration, a student agrees to pay all charges on the student account for that enrollment period according to the standard payment terms available on the Portal. Default of payment will result in a hold on future registration and release of transcripts. Tuition refund policies, deadlines, and more details for each semester are available on the Portal and in the Student Hub. Only officially registered students may attend class.

CHANGE OF REGISTRATION

Students may change registration without academic penalty during the official add/drop period. Dropping below full-time status may affect financial aid. Students should contact the Office of Financial Aid for details. Students must have written permission from the instructor and advisor to add a course after the first week of classes.

In Carlow accelerated courses, change of registration must be completed one day prior to the beginning of the second class. Students who miss the equivalent of more than two sessions cannot receive a passing grade for the course. A WD is assigned if a student officially withdraws from a particular course prior to the final date to withdraw in a given semester. Grades of students who do not complete a course and who have not withdrawn officially will be listed as F. Add/Drop/Withdrawal dates are posted on the Portal.

ATTENDANCE POLICY

Students have a responsibility to attend classes for which they have registered and fully participate in them. Specific attendance requirements for each course are established by the instructor. Students should be aware of individual course attendance policies, as they are held accountable for meeting those standards. Students are obligated to be in attendance on days with examinations, major or minor, are scheduled. Students who absent themselves from examinations may be refused permission to take the examination at a later date; may receive a failing grade for the examination missed; and may receive a failing grade for the course. Further, absence from class on a day when an assignment is due does not excuse the student from the obligation to have the assignment turned in on time. Faculty may refuse to accept any work which is turned in late and may assign a failing grade for that work.

ACCELERATED COURSES

Accelerated courses, regardless of delivery mode, have a very specific attendance policy, and faculty teaching these courses have a responsibility to adhere to it. Students who miss more than the equivalent of two class meetings of an eight-week/accelerated course will receive an F (failing grade). This policy includes partial absences that add up to more than two class meetings.

ONLINE/DISTANCE EDUCATION COURSES

In an online/distance education context, documenting that a student has logged into an online class is not sufficient, by itself, to demonstrate academic attendance by the student. A university must demonstrate that a student participated in class or was otherwise engaged in an academically related activity, such as by contributing to an online discussion or initiating contact with a faculty member to ask a course-related question, in order to constitute attendance.

NON-ATTENDANCE POLICY

To be eligible for a Federal Title IV grant and loan funds, a student must begin attendance in the period of enrollment for which the loan was intended. Accordingly, institutions must have a process in place to determine that the student actually began attendance. Faculty reporting activities are necessary for the university to comply with Federal Department of Education regulation 34CFR 668.21, which requires that if a student does not begin attendance in a payment period, the institution must return all Title IV, HEA program funds that were credited or disbursed to the student's account no later than 30 days after the date that the institution becomes aware that the student will not or has not begun attendance. If the student fails to begin attendance in any classes after disbursement of federal loan funds has been made directly to the student, the institution must immediately notify the applicable Federal loan servicer that the student has not begun attendance and did not establish eligibility for federal aid. The loan servicer will then issue a final demand letter to the student borrower for repayment.

STUDENT PARTICIPATION AND ABSENCE FOR MANDATORY UNIVERSITY SPONSORED EVENTS

A university-sponsored event is defined as an event directly related to a student's education or the university community that takes place outside the classroom. Examples include participation in varsity athletics, professional conferences, on-campus theatre productions, and student orientation activities.

A student whose participation in a university-sponsored event is required (such as athletics) or would promote her/his education (such as presenting research at a professional conference) must notify the appropriate faculty member(s) of her/his participation in these particular events, as well as the anticipated absence from class. It is recommended that the student should notify the appropriate faculty member(s) at least one week prior to the actual absence, and, if it is available, present the faculty member with a schedule of her/his events.

The student is responsible for all material and assignments covered during the absence. In the event that a student will be absent from an examination or absent on the due date for an assignment, the student will be expected to make up the examination or submit the assignment at a time and place designated by the faculty member. All students participating in university-sponsored events must be given the opportunity to make up classwork, including labs, assignments, and exams that they miss during attendance at such sponsored events. Every effort should be made to accommodate the student, and there will be no consequences due to missing class for the events (such as point deductions for an assignment, loss of attendance points, unfavorable grade adjustments, or new assignments beyond those listed in the course syllabus).

The student should also discuss the event schedule with her/his academic advisor when registering for courses. To the extent that event schedules are known in advance, and to the extent that multiple sections are offered for particular courses, the student, where it is possible and where it does not adversely affect the integrity of her/his Carlow education, should schedule courses in such a way as to minimize schedule conflicts. Accelerated courses are not recommended for students who are aware that they have extensive travel commitments, evening obligations, or other university-sponsored activities that would cause them to miss such classes. The guidelines established by the university regarding CAP classes will apply. Realizing that circumstances which may cause an absence may vary greatly, any exceptions will be at the discretion of the faculty member on a case-by-case basis.

INDEPENDENT STUDIES AND TUTORIALS

Independent Studies:

Department resources permitting, students may explore areas not covered in the Carlow curriculum through independent study. Upper-level students may work independently or design a course to be pursued independently under the guidance of a sponsoring faculty member and with chair/program director approval. Students must have a minimum cumulative Grade Point Average (GPA) of 2.75 and demonstrate proficiency in dealing with pertinent materials. Students are expected to demonstrate learning outcomes consistent with comparable course work.

Tutorials:

Courses taught infrequently but listed in the catalog may be taken as tutorials with advisor, faculty tutor, and chair/director approval, and department resources permitting. Prior to registration, the student must make arrangements with the professor who usually teaches the course. A tutorial may not be taken during a semester in which the same course is being offered as a class session. Exceptions to this policy must be approved by the department responsible for the tutorial.

Experiential Learning:

EXP 250 provides experiential learning credit for participation in seminars, workshops, conferences, internships, or special events. Such experiences might include leadership conferences, the Mercy-sponsored trip to the United Nations, etc. EXP 250 can be taken for 1 or 2 credits during the summer terms only. A maximum of three (total) credits may be issued for any given summer term. EXP 250 has a special summer pricing structure. Contact Student Accounts for the fixed rate per credit.

REPEATED COURSES

Students may attempt to improve their grade point average by repeating courses. A student wishing to repeat a course can do so only by taking the same course at Carlow University. When a course has been repeated, both grades remain on the transcript. The grade earned by repeating a course is used in lieu of the grade originally earned and will be used in the calculation of the cumulative GPA. A student who repeats a course one time may still be considered for financial aid for that course. No course may be taken more than three times. A student who repeats a course for which credits were earned will not earn additional credits for the repeated course. In some situations, it may be necessary for a student to repeat a course off campus. This situation will be handled on a case-by-case basis with oversight by the appropriate dean. No course may be repeated at any other institution in order to have that grade accepted as a replacement for the original grade earned at Carlow University. In the event that a student has failed a course that is no longer offered or for which the student is ineligible to take by determination of the academic department, the department offering the course will decide what course or courses a student may substitute. The grade for the substituted course does not replace the grade for the original course in the calculation of the cumulative GPA. Students should consult with the Office of Financial Aid for more information on how repeated courses might impact student aid.

WITHDRAWAL FROM A COURSE

Withdrawal from a course must be made officially in the Office of the Registrar. A WD is assigned if a student officially withdraws from a course after the drop deadline and prior to the final date to withdraw in a given semester, according to the deadlines posted on the Portal. Withdrawing from a course or courses does not withdraw a student from the university. Withdrawal from the University requires submission of an Official Notification of Withdrawal/Leave of Absence form to the Office of the Registrar. Grades of students who do not complete a course and who have not withdrawn officially will be listed as F.

CROSS-REGISTRATION (PCHE)

Full-time undergraduate students (12 credits or above) in good academic standing are eligible to participate in a cross-registration program through the Pittsburgh Council on Higher Education (PCHE), provided the course is open for cross-registration and the student has met the prerequisites. Students may cross-register for one course per semester in the fall and spring terms only. The registrant must have the approval of the appropriate dean, advisor, and the University Registrar. Grades earned through cross-registration are posted on the Carlow transcript and counted in the GPA. Students may not repeat courses for which they received a D- or above at Carlow for credit or to replace a grade. There is no additional tuition charge to cross-register, although students may be assessed course fees (e.g. for courses with a laboratory component) by the host institution. Students are responsible for special course or lab fees at the host institution. Academic rules and regulations of the host institution prevail. Cross-registration forms are available on the Portal.

There are nine schools where Carlow students can cross-register:

- Carnegie Mellon University
- Chatham University
- Community College of Allegheny County
- Duquesne University
- LaRoche College
- Pittsburgh Theological Seminary
- Point Park University
- Robert Morris University
- University of Pittsburgh

CREDIT FOR PRIOR LEARNING

Carlow offers six primary methods for gaining credit for college-level learning that has taken place outside the classroom. Students may obtain credits by means of the following: Advanced Placement Program of the College Board, College Level Examination Program (CLEP) examinations, College in High School courses, Course Challenge or Credit by Examination,

Credit for Prior Learning, and the International Baccalaureate program. A student may earn a maximum of 30 credits at Carlow, or elsewhere, through these options, either singly or combined. Any credits earned are not included in the number of credits necessary to satisfy college residence requirements. Carlow is part of the ACE Credit College and University Network that considers ACE recommendations for military training and experience. Carlow will also review additional types of credit for prior learning on a case-by-case basis.

Advanced Placement Program of the College Board:

A student who has taken college-level courses in one or more subjects in high school and has submitted the results of the College Board Advanced Placement (AP) Tests will be considered for advanced placement. Test scores of 3, 4, or 5 may entitle the student to academic credit in course areas corresponding to the advanced study. Scores are submitted to the Office of Admissions, usually at the time of application for admission. The university registrar will consult with the appropriate academic department to assign course equivalencies.

College Level Examination Program (CLEP) Eligibility:

Carlow accepts CLEP credit for scores at or above the recommended score of 50 or higher. Credit cannot be awarded if the student has already taken an equivalent course or a course at a more advanced level in the same discipline. CLEP scores are only applied to Core requirements. CLEP credit does not affect grade point average and does not count for residency requirements.

College in High School (CHS):

A student who has taken College in High School (CHS) courses in one or more subjects during high school and has submitted official transcripts from the awarding institution will be considered for college credit. A grade of C or better will be accepted for college credit. Course equivalency is determined by the Office of the Registrar in consultation with the appropriate academic department. Official transcripts are submitted to the Office of Admissions, usually at the time of application for admission.

Course Challenge or Credit by Examination:

Some courses may be challenged for either credit or exemption by passing an examination and/or by satisfying another means of evaluation. Students may qualify for challenge if they have not already attempted to pass or challenge the course or have not been enrolled in the course for more than four weeks. (For CAP and Weekend courses, consult the department office for appropriate time frame.)

To challenge the course, students must submit to the appropriate academic department a declaration of intention as well as reasonable evidence of preparation. After a student has successfully challenged a course for credit, the course is entered onto the transcript and the notation "Credit by Challenge" is posted in lieu of a grade. Credits earned by challenge are charged at a special fee. If a student chooses exemption, the exemption is noted by the Office of the Registrar, and there is no fee. Students are permitted one attempt to successfully challenge or exempt themselves from a given course.

Prior Learning Portfolio/Learning Counts:

Available to matriculated students with five years of professional experience that aligns with Carlow University courses. Upon successful completion of a three-credit portfolio development course CAEL 100, students will be able to: identify areas of their own learning from numerous settings such as training, work, community volunteering, and self-study; describe learning from experience, reflect on the learning, and synthesize ideas and the ideas of others; build a deep understanding of lifelong learning; discuss and apply experiential learning theory, models, and concepts; apply critical reflection to consider the nature and value of learning from experience; demonstrate an appropriate balance of practical and theoretical understanding; prepare learning narratives that demonstrate learning comparable to college level courses; identify research, gather, organize, and write documentation that supports learning in order to build a learning portfolio. Portfolio credits may be earned in all Carlow University courses with the exception of the following: major courses (SW prefix) within the Bachelor of Social Work; major courses (NU prefix) within the Bachelor of Science in Nursing except for NU 413 and NU 420; major courses (RC prefix) in the Bachelor of Science in Respiratory Care.

International Baccalaureate Program:

Students who have completed the International Baccalaureate Program and score 5 or above on the examinations may qualify for Carlow University credit. In most cases, credits awarded will be for elective credit only.

DEGREE/CERTIFICATE REQUIREMENTS

General requirements for a degree for all students include the following:

Proficiency in the English Language:

Each student is expected to demonstrate in all course work the ability to speak and write with precision and clarity, showing evidence of competent command of the English language.

Residence:

Students must earn a minimum of 32 credits in courses taken at Carlow University in order to fulfill the residence requirements of the university. In addition, each major also has a specified residence requirement. Please check the specific major section of the catalog; however, students are required to take a minimum of 18 credits in a major at Carlow. The total number of credits that any transfer student will need to take at Carlow will be a combination of university residence requirements, major residence requirements, and general education requirements as specified on the transfer evaluation issued upon admission to the university.

Credits earned through Advanced Placement, CLEP, College in High School, Course Challenge, Prior Learning Portfolio/Learning Counts, or International Baccalaureate cannot be considered as part of the residence requirements.

Specific Program Requirements:

Candidates for Pennsylvania Teacher Certification must maintain a 3.0 GPA to remain in good standing. Students in the nursing program must attain a 3.0 GPA to enter the specialized nursing sequences in the sophomore year and maintain a 3.0 each semester thereafter. Students majoring in biology who expect to be accepted in perfusion technology must present a 3.0 GPA.

Grade Point Average:

To qualify for a degree/certificate, a student must attain a cumulative academic average of 2.0 GPA by the completion of the degree/certificate. Students in degree programs must officially apply to graduate and must have a minimum of 120 credits (consult the specific academic program). Certificate students must alert the Office of the Registrar when they are about to complete the certificate requirements.

Capstone Experience:

Graduating seniors are usually assessed in their major through examinations, comprehensive seminars, research presentations, practica, and/or internships.

General Education Requirements:

The Carlow Compass and Core Curriculum requirements are listed in this catalog.

Academic Major Requirements:

Specific requirements for majors are listed within each department section of this catalog. Students are required to take a minimum of 18 credits in a major at Carlow.

Students who change their program of study (major) will be governed by the catalog in effect when the change is made.

Minor Requirements:

To earn a minor in an academic discipline, students must complete a minimum number of credits defined by the academic discipline. At least half of the credits for the minor must be completed with Carlow courses.

Student Responsibility:

Students are personally responsible for meeting all degree requirements governed by the catalog in effect at their time of

enrollment. Advisors will assist them in academic planning.

GRADUATION POLICY

All students must submit an application for graduation in order to be reviewed by their advisors and the University Registrar. The purpose of this review is to ensure students have met requirements for their degree or certificate. Students must meet all degree or certificate requirements, including all minimum grade, credit hour, and GPA requirements per departmental and University policy. Due to the University's obligation to report graduates within federally-mandated deadlines, students must submit their graduation applications by the date required for that graduation period and no more than 30 days beyond the end of the term. Students who submit their graduation applications beyond the deadline and more than 30 days after the term end date will be reviewed for the next graduation term. In addition, students who do not complete their final courses by the aforementioned deadlines due to incomplete or in-progress grades, late submission of official transcripts for off-campus credit, or any other reason will be reviewed in the next graduation term.

GRADES

GRADING AND GRADE POINT AVERAGE (GPA)

Instructors publish their grading policies so students know exactly how course grades will be determined. The following letter grades and their grade point equivalents are used at the university:

Grade	Points	Grade	Points
A+	4.00	C	2.00
A	4.00	C-	1.75
A-	3.75	D+	1.25
B+	3.25	D	1.00
B	3.00	D-	0.75
B-	2.75	F	0.00
C+	2.25		

NOTE: MINIMUM PASSING GRADE REQUIRED MAY VARY BY MAJOR

The cumulative Grade Point Average (GPA) is obtained by dividing the total points earned by the total number of semester hours attempted. These quality point values of grades are used for each credit attempted.

GRADING—NO POINTS ASSIGNED

AB	Absent from examination
AU	Audit—no points assigned
CC	Credit by Challenge
CR	Credit for course opted Credit/No Credit by student; CR = D- or above
EE	Exempt by Examination
I	Incomplete
IP	Course in progress for seminar, research, or internship extending beyond one semester
M	Military Leave of Absence
NA	Never attended (Eliminated effective Fall 1983)
NC	No credit; overcutting or failure to complete course
NG	No grade or problem with grade reported by instructor
NP	No credit for preparatory level courses (Effective Fall 1988)
NR	No credit for course opted Credit/No Credit by student
PA	Pass for preparatory level courses; P = C or better (Effective Fall 1988)
PD	Pass with distinction (MFA only)
PR	Pass with reservation (MFA only)
P/F	Course offered by Pass/Fail only
Q	Courses in progress (Eliminated effective Fall 1983)
S	Satisfactory (A, B, or C in course opted Pass/Fail by student)
U	Unsatisfactory (D or F in course opted Pass/Fail by student)
WD	Withdrawn

AUDITING A COURSE

Students may audit a course with the instructor's permission and must register through the Office of the Registrar. Students should consult with Student Accounts regarding fees for auditing a course. A grade of AU is given for an audited course with no credit.

PASS/FAIL OPTION

The Pass/Fail option permits students to explore disciplines without jeopardizing Grade Point Average (GPA). The option must be exercised on the student's original registration or by the end of the add/drop period. Only electives can be completed with this option. The maximum number of credits earned under the Pass/Fail option is 15.

INCOMPLETE GRADE POLICY

An incomplete grade (I grade) at the end of a course is reserved for those students who have completed at least 75 percent of the course work, have a passing grade in the course, and for good reason (mitigating or extenuating circumstances) have assignments or examinations to complete. Incompletes are given at the discretion of the instructor for the course; the instructor makes the final decision to award an incomplete.

The I grade is automatically changed to 'F' by the Office of the Registrar if not removed within the required time frame (six calendar weeks from the end of the semester in which the I grade was assigned, including summer terms). Official deadlines for each semester will be supplied by the University Registrar and posted on the Portal.

Once the student has completed the work, the instructor must submit a Change of Grade form to the Office of the Registrar. Instructors reserve the right to require that work be submitted prior to the sixth-week deadline in any given term. If an extension for an incomplete grade is needed, instructors must submit an Incomplete Extension form with Dean's approval to the Office of the Registrar prior to the six-week deadline. Credits assigned the grade of incomplete are not considered earned credits until completion.

IN PROGRESS (IP) GRADES

The IP grade is reserved for certain courses where it is anticipated that a student's work will extend into the next semester (e.g. thesis, project, internship, clinical, a third student teaching experience, etc.). At the end of the semester in which the student completes the work, an earned grade will be assigned which replaces the IP grade. Individual programs may place a time limit on completion of the thesis, creative project, internship, or clinical course. Students should check with their individual program directors. Students who are carrying an IP grade and do not register for classes for two or more semesters will have the IP grade converted to an NG (no grade). If those students are readmitted to the university, they will register and pay for the original course again with its associated credits.

GRADE CHANGES AND GRADE APPEALS

Once a grade has been submitted to the Office of the Registrar, the grade cannot be changed unless there has been an error or grade reconsideration on the part of the instructor. To change a grade, the faculty member must complete the Change of Grade form and obtain the appropriate department chair's or program director's signature. Completed forms are to be submitted to the Office of the Registrar by the instructor.

Students who have questions regarding a final course grade are to first consult with the instructor who originally awarded the grade. Any request for a grade reconsideration must be made to the faculty member in writing/email within 30 calendar days of the beginning of the semester following the one for which the first grade was first issued. If the instructor does not believe the evidence warrants a change of grade, the student may appeal within 30 calendar days of the instructor's written/emailed decision by following the appeal process outlined below.

If an acceptable solution cannot be reached by discussion with the instructor, the student may appeal by sending a written statement to the instructor and department chair/program director, along with any supporting evidence. The department chair/program director will then work with the instructor to review and assess the student's claims. The decision will be communicated to the student in email by the department chair/program director, and will be final. This process is not intended to replace informal conferences between a student and instructor concerning the issuance of a grade. In the event the instructor is the department chair/program director, the student should consult with the dean of the college.

HONORS AND ACADEMIC RECOGNITION

DEAN'S LIST

Eligibility for the Dean's List is determined each semester, not cumulatively. Students are eligible for the Dean's List under the following conditions:

- Completion of 12 credits at Carlow, including the semester under consideration;
- Enrollment in at least 12 credits for the semester in question (students who register for less than 12 credits in a semester should refer to Academic Recognition of Part-time Students below); and
- A GPA of 3.5 or above for the semester in question.

ACADEMIC RECOGNITION OF PART-TIME STUDENTS

Eligibility for academic recognition of part-time students is determined each semester, not cumulatively. Students are eligible for academic recognition under the following conditions:

- Completion of six credits at Carlow, including the semester in question;
- Enrollment in six credits (eight in the upper-level BSN completion program) for the semester in question; and
- A GPA of 3.5 or above for the semester in question.

VALEDICTORIAN and SALUTATORIAN

One valedictorian and one salutatorian are selected each Commencement ceremony from all eligible students in the graduating baccalaureate class. The distinction of valedictorian is given to the candidate who has achieved the highest level of academic performance in his/her Commencement class and the salutatorian distinction is the candidate who ranks second in scholarship. Criteria are based primarily on cumulative grade point average and number of credits completed in residence at Carlow University. In the event that more than one student may qualify for the valedictorian distinction, no salutatorian is selected.

Eligibility criteria:

1. Candidates must have completed all graduation requirements or designated official has verified that candidate anticipates completing all graduation requirements for the Commencement ceremony.
2. Candidates must have completed at least fifty credits for which letter grades were earned in residence at Carlow University.
3. The cumulative grade point average that is used in the determination of candidacy is calculated using the cumulative GPA determined at the end of CAP III for the May Commencement ceremony.

INSTITUTIONAL REVIEW BOARD

Federal law protects the individual's right to privacy and protects citizens from harm from others. Research involving human subjects is reviewed to safeguard those rights. Carlow University has convened an Institutional Review Board (IRB) to ensure that all human subject research and/or projects that include data collection from human subjects is reviewed in advance by responsible, knowledgeable peers to protect these rights. Carlow University is committed to these laws based on moral, ethical, and legal grounds. All research that comes under the aegis of the university must meet the procedures established to ensure the privacy and protection of human subjects. These procedures are followed by faculty in their own research, and by students in any research they conduct, regardless of where it is actually conducted. Additional guidelines can be found on the Portal.

PLACEMENT TESTING

New First--Year Traditional Students:

Prior to starting mathematics coursework at Carlow University, incoming first-year students will test in mathematics to evaluate essential foundational skills that are important for success in college. The test results serve to identify the appropriate starting point in mathematics, particularly in certain majors, and/or become part of baseline information. Specific programs may require additional placement tests.

Carlow University's Compass requires all new traditional students to take a two-course writing sequence: SKW101 Foundations of Writing and SKW102 Foundations of Writing II. Each course is designed to prepare students for the rigors of college writing and research. If a student wishes to skip the first course in the sequence (SKW101), that student may try to place into the second course in the sequence by taking a writing placement test. Placement tests are NOT required. Students who wish to take the two-course writing course sequence will register for SKW101 during registration. If students opt to take the test, this will occur at the time of registration.

New Traditional and Adult Transfer Students:

Math placement tests evaluate basic competencies for students who do not have transfer equivalency credit for Compass requirements. The results are used to identify the appropriate starting level course.

Students who take placement tests may be required to take an additional course based upon their final score on this evaluation. This course in addition to the standard curriculum may lengthen the duration of the program and increase the overall cost. Additional earned credits will be applied to the total number of credits required for graduation.

Students may submit to the Registrar's office prior writing courses for transfer equivalency. All prior courses will be evaluated for equivalency by the director of skills writing at the time of registration. If students have not taken writing courses at prior institutions or if their courses do not transfer, they have the option to take the placement test in an effort to place out of the first writing course in the sequence. All placement testing occurs at the time of registration.

ADD/DROP AND LEAVE OF ABSENCE/COMPLETE WITHDRAWAL NOTIFICATION

Non-attendance in classes does not constitute an official withdrawal and may result in full financial obligation. Students seeking to drop all classes and withdraw or take a leave of absence from the University must complete a Withdrawal/Leave of Absence form and submit it to the Office of the Registrar. The withdrawal form is available in the Student Hub the Portal. Students can take a leave of absence for one to three semesters, including summer terms. Students should contact the Office of the Registrar upon returning for registration instructions. Students taking a leave of absence or withdrawing due to military activation must contact the Office of the Registrar.

- Students who are considering withdrawal should investigate the financial and student aid implications prior to any action by contacting the Financial Aid and/or Student Accounts Office.
- Financial aid recipients are urged to contact the Financial Aid Office to determine how financial aid amounts will be affected by any withdrawal. Also, please review the Federal Title IV Aid Return of Funds Policy to determine how loans and grants will be recalculated.
- For complete withdrawal from all classes in a semester, final determination of tuition and fee refund amounts will be made by the Office of Student Accounts and will be based on the date that the student initiated the withdrawal process by contacting the Office of the Registrar or by submitting the withdrawal form.
- Students who do not return from a leave of absence or who are not registered for four consecutive semesters will be unofficially withdrawn from the university. Students who are unofficially withdrawn are still responsible for outstanding tuition balances.
- See below for the schedule of refunds of tuition, fees, room and board.

ADD/DROP

Students adding or dropping a class(es), but who are still enrolled at the University must submit the Change of Registration form available in the Student Hub or on the Portal. See below for the schedule of refunds of charges. *Graduate students and undergraduate students at the sophomore level and above can also make changes in registration prior to add/drop deadlines via WebAdvisor. For dropped courses, any refund of charges will be based on the date that the Change of Registration Form is received by the Office of the Registrar or the drop is completed by the student in Webadvisor.

- Financial aid recipients are urged to contact the Financial Aid Office to determine how financial aid amounts will be affected by a change in creditload.
- Full-time status for undergraduate students is at least 12 credits. Full-time status for graduate students is at least 6 credits. Dropping below full-time status will have financial aid implications.

Students wishing to withdraw from the residence hall must contact the Residence Life office at 412-578-8776. Refunds of room and board charges are governed by the Housing and Food Service Agreement signed by the student for the academic year. Refunds of residence hall deposits are processed upon request if the Housing Agreement has not been broken and if the student owes no outstanding balance or fine to the University.

REFUND OF TUITION AND FEE CHARGES

Accelerated Courses (CAP or WEC formats with Section #s CA to CZ, WA to WZ, GA to GZ) excluding MFF courses

- Students can add or drop a course(s), or completely withdraw from all courses, through midnight on the day before the second class meeting time.
- Students dropping a course(s) prior to the second class meeting time will receive 100% refund of all charges.
- Students dropping a course(s) OR completely withdrawing from all courses after the second class meeting time will have no refund of charges.
- New students dropping all courses prior to the second class meeting time will be considered a "cancel" and will receive 100% refund of all charges. No academic record will be created for cancelled students.
- For accelerated courses with no scheduled meeting dates including online courses with WEB location, students can add or drop a course(s) through midnight of the 10th day of the accelerated session.

Accelerated Courses in the MFF program with Section #01 to 32

- Students can add or drop a course(s) through midnight on Day 5 and receive 100% refund of charges. Drops or withdrawals after that date will result in no refund of charges.

Semester Courses (Undergrad and Grad Day formats with Section #s DA to DZ or G1, G2...)

- Students can add or drop a course(s) through midnight on Day 14 of the Day course calendar.
- Students dropping a course(s) or completely withdrawing prior to midnight on Day 14 will receive 100% refund of all charges.
- Students dropping a course(s) after Day 14, and who are still enrolled in the semester for other courses, will have no refund of charges.
- New students dropping all courses prior to midnight on Day 14 of the day course calendar will be considered a "cancel" and will receive 100% refund of all charges. No academic record will be created for cancelled students.
- Students who completely withdraw and drop all courses in a semester from Day 15 to Day 21 will receive a 75% refund of tuition and fees.
- Students who completely withdraw and drop all courses in a semester from Day 22 to Day 28 will receive a 50% refund of tuition and fees.
- Students who completely withdraw and drop all courses in a semester from Day 29 to Day 35 will receive a 25% refund of tuition and fees.
- Students who completely withdraw and drop all courses in a semester from Day 36 to the end of the semester will receive no refund of charges.

For specific semester dates, please refer to the Add/Drop/WD Deadline Grid on the Portal.

REFUND OF ROOM AND BOARD CHARGES

Students who withdraw from the University within the first 14 days of the semester are charged \$50 per day for number of days residing in the residence hall. Beginning Day 15, the room and board charges are refunded following the tuition and fee refund schedule.

MILITARY DEPLOYMENT AND REFUND POLICY

The university will assist a student who is currently enrolled in an academic semester and who is called to active military duty with transition out of the university as quickly as possible. The student must file written documentation of the activation order with the registrar. The student may then choose one of three options by contacting the Office of the Registrar.

1. A student can take the grade s/he has earned to date in the class provided that the student has completed at least 75 percent of the course work, has a passing grade in the course, and if both the student and faculty agree with this option. A student selecting this option will not be refunded any tuition or fees and will have his/her grade processed in the normal manner at the end of the semester with appropriate credits and grade awarded.
2. A student can choose to have an Incomplete (I) grade recorded at the end of the semester provided that the student has completed at least 75 percent of the course work, has a passing grade in the course, and if both the student and faculty agree with this option. The student and faculty will need to discuss the completion requirements for the course. A student who has selected the incomplete grade option will have one year after return from active duty to contact the university to arrange for completion of the credits. If the incomplete is not satisfied in this time period, the grade will be converted to an "F." The student choosing this option will not

receive a refund of tuition and fees.

3. A student can choose to process a withdrawal from one or all courses with an "M" grade at any time during the semester in which active military deployment occurs by informing the Office of the Registrar. Tuition and fees will be refunded or credited in full with no credit awarded for the term. The student should be aware that this option may result in the need to return funds to the university. The Financial Aid and Student Accounts Offices will inform the student of the impact of this option on the student account.

A student who resides on campus and who leaves for active duty assignment will be released from his/her housing contract for room and board. Fees will be refunded for the unused portion of the contract on a pro rata basis.

APPEALS

Changes to registration status resulting from injury to student or immediate family member, death in immediate family, sudden severe illness, accident, or exceptional trauma that is affecting the student's emotional and physical health may be cause for an appeal of change of registration deadlines and/or charges. Students must complete an appeal form, attach appropriate documentation, and submit to appeals@carlow.edu to the Appeals and Grievance committee consisting of a representative from Academic Affairs, Admissions, Financial Aid, Registrar, Student Accounts, Student Affairs, and the faculty. The student will receive a written response within 30 days of the appeal submission.

TRANSFER OF CREDITS

Students transferring to Carlow from other institutions may have up to 88 credits accepted. A grade of C or higher must have been earned. Courses taken for pass/fail or satisfactory/unsatisfactory grades may only be transferred if it can be verified that a pass or satisfactory grade is equivalent to a C or higher. Only the credit is transferred, not the grade. A transfer evaluation will be done after a student is accepted and after all catalog or course descriptions have been received. It is the responsibility of the student to obtain the course descriptions or catalogs from all colleges or universities outside of Allegheny County.

Once a student matriculates at Carlow University, the student must have permission from the faculty advisor and the university registrar/transfer coordinator prior to beginning a class at another institution. Students may be permitted to transfer a maximum of four classes or sixteen (16) credits from other universities, exclusive of cross-registration. The student is also responsible for requesting that the registrar at the host institution forward an official transcript to the Office of the Registrar at Carlow University. Credit will not be accepted for a course if a student has not obtained formal permission from the advisor and university registrar/transfer coordinator to take the course. Appropriate forms are available in the Student Hub and on the Portal.

Students may be awarded credits for vocational/technical programs of study. In the event a student qualifies for a technical block award, the credits can be used as elective credit only and may not be used as equivalent coursework in any of Carlow's academic programs or in fulfillment of any academic requirement. Coursework taken in vocational and technical programs of study is subject to the same transfer policies as other college level coursework.

Carlow University makes no promises about the transferability of its credits to another institution of higher education. Transferability of credits is determined exclusively by each receiving institutions. Typical considerations involve accreditation guidelines, whether the course substitutes for a course in the curriculum at the other institution, whether the student received a certain grade or better, how long ago the course was taken, how many credits the student seeks to transfer, and other factors. Students who plan to transfer credits from Carlow can check with the registrar to see if there is an affiliation agreement in place and check with the other institution to learn about their policies regarding transfer of credits before taking the courses.

DUAL MAJORS

A student can pursue dual undergraduate majors at Carlow resulting in a single or double degree. Both majors must be completed before any degree is awarded. The student must complete the requirements for both majors, earning a minimum of 120 credits, although the student may need to complete more than 120 credits to fulfill both majors' requirements. All requirements of each major must be satisfied before the degree(s) is conferred.

SECOND DEGREE FOR STUDENTS

Whether a student has completed a previous Carlow undergraduate degree or a degree at another institution, the student

must complete a minimum of 32 credits at Carlow for the additional degree. While previous courses can fulfill requirements if appropriate, 32 more Carlow credits must be completed to be awarded a second degree. It is possible students may need to take more than the 32-credit minimum to complete the degree. Compass curriculum requirements are waived for the second-degree students.

Students who previously earned a Carlow University bachelor's degree and are returning to complete the requirements for Bachelor of Science in Nursing or the Second Degree in Nursing program should refer to Office of Admissions for specific residency requirements. Residence Requirement: Refer to Degree/Certificate Requirements section.

PENNSYLVANIA TRANSFER AND ARTICULATION CENTER

Carlow University participates in the Pennsylvania Transfer and Articulation Center. Course equivalences between Carlow and other participating institutions are defined on the PaTrac website: <http://www.patrac.org/>

A student who completes an associate degree as defined in the Program to Program articulations will enter Carlow in the junior year. Students will not be required to complete Carlow Compass requirements. Major courses requirements are determined by the major department.

TUITION AND FEES

A complete listing of charges and fees is available on the Carlow website at www.carlow.edu/tuition_and_fees and on the Portal. The University reserves the right to modify these charges if circumstances require. Payment options and student account policies are also listed on the Portal under the Student Hub/Student Accounts tab.

STUDENT ACCOUNTS PAYMENT POLICIES

Each semester, payment is due by the due date published on myPortal. A student must pay the balance due or begin an official payment plan to cover any balance that will not be cleared by pending financial aid in order to begin attending classes and to move into the residence halls.

Ten business days prior to the start of the semester, registration may be voided for any returning student who owes an outstanding balance of \$4,000.00 or more for any previous and/or upcoming semesters combined after any finalized financial aid would be applied to the student account and who has not made payment arrangements with the Student Accounts Office. A notification letter will be sent to any student whose registration has been voided. Registration can be reinstated within the first week of the semester after the student pays the balance due or makes satisfactory payment arrangements. Reinstatement of registration will be subject to course availability.

Student accounts are audited during the semester and bursar holds are added to delinquent accounts. A bursar hold prevents receipt of transcripts. A registration hold is also placed on an account that has a delinquent balance of \$1000 or higher.

Upon graduation, a student must pay all outstanding obligations to the university prior to receiving a diploma and transcripts.

A student who is no longer enrolled at the university and has an outstanding balance must make satisfactory payment arrangements or the account may be placed with a collection agency, incur additional collection agency/legal fees of up to 33 1/3% of the balance due, and be reported to credit reporting agencies.

CARLOW UNIVERSITY CREDIT HOUR POLICY

Carlow University complies with federal (U.S. Department of Education) and Middle States Commission of Higher Education (MSCHE) and Pennsylvania Department of Education (PDE) regulations pertaining to degree requirements and credit hours. Carlow University undergraduate degrees require the successful completion of 120 semester credit hours. All graduate degrees require a minimum of 30 semester credit hours.

Carlow University's academic year is separated into fall, spring and summer semesters. Fall and spring are traditionally 15 weeks in length with an additional week for finals. Accelerated semesters (CAP/WEC) are typically five or eight weeks in length. Summer classes generally run for eight weeks. All formats, including traditional semester-length classes and the accelerated and summer formats, must comply with the university credit hour policy.

All new courses will have a credit hours calculation worksheet completed as part of new course development. For accelerated and weekend courses, faculty must also document, through their extended syllabi how CAP/WEC courses will meet the minimum semester credit hour requirement. In addition, existing courses are reviewed periodically by the college dean and Office of the Registrar to ensure that the workload is consistent with the potential credits to be earned.

BACKGROUND

The U.S. Department of Education, at 34 CFR Section 600.2, defines “credit hour” as:

“...an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or,

(2) at least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.”

The Pennsylvania regulation states, in part, “A semester credit hour represents a unit of curricular material that normally can be taught in a minimum of 14 hours of classroom instruction, plus appropriate outside preparation or the equivalent as determined by the faculty. A quarter credit hour represents a unit of curricular material that normally can be taught in a minimum of 10 hours or classroom instruction, plus appropriate outside preparation or the equivalent as determined by the faculty.” 22 Pa. Code Section 31.21(b).u

The Middle States Commission on Higher Education, in its Credit Hour Policy, effective August 23, 2013, requires institutions to verify compliance with Credit Hour regulations.

CARLOW UNIVERSITY CREDIT HOUR POLICY

Carlow University has adopted the credit hour as the unit measure of instruction for awarding credit.

At Carlow University, a credit hour is equivalent to one hour of classroom instruction (50 minutes) with a normal expectation of two hours of outside study for each class session. Typically, a three-semester credit hour course meeting for 45 total hours over 15 weeks requires 90 total hours of out of class academic engagement. Carlow adheres to the Federal standard of a total expectation of 45 total learning hours (15 hours for every 1 credit earned) in a semester regardless of time frame of delivery.

CARLOW UNIVERSITY COURSE METHODS

Delivery method:

1. Onsite—All classes meet at a site (can be a combination of campus and another site, ex. Clinical Rotation or Student Teaching).
2. Hybrid—Online meetings reduce the number of face-to-face meetings. Hybrid courses will have meeting dates onsite.
3. Online—All content is delivered online. There are no required face-to-face meetings.

Levels of synchronicity:

1. Completely Synchronous—Regardless of whether the faculty member and students are in the same location or are online, they have at least 45 hours together at the same time (in real time) for a 3-credit lecture or seminar course.
2. At least 50% synchronous—Regardless of whether the faculty member and students are in the same location or are online, they have at least 22.5 hours but less than 45 hours together at the same time (in real time) for a 3-credit lecture or seminar course. CAP/WEC college format courses generally follow this formula.
3. Less than 50% synchronous—Regardless of whether the faculty member and students are in the same location or are online, they have more than 0 but less than 22.5 hours together at the same time (in real time) for a 3-credit lecture

- or seminar course. 0 but less than 21 hours for CAP/WEC college format.
4. Completely Asynchronous—The faculty member and students do not meet in real time together. This would be a pure online section with no real-time meetings.

Instructional format:

Clinical	Practicum
Externship	Seminar
Field Placement	Student Teaching
Independent Study	Studio
Internship	Thesis
Lab	Tutorial
Lecture	

CARLOW UNIVERSITY CREDIT HOUR REQUIREMENTS

Method of attributing credits per course:

Undergraduate credits are assigned per semester as follows:

- **Lecture/Seminar**
3 credits. 1 hour of classroom instruction and 2 hours of outside study per credit. 45 total hours per credit with 90 total hours of out of class academic engagement equaling 135 total hours for three credits over 15-week format.
- **Accelerated CAP/ Weekend courses**
3 hours per week over 8-week format, plus additional hours of equivalent instructional activities. 135 total hours for three credits.
- **Lab**
1 credit. 2-4 hours per week depending on the program, with 2 or more hours of student prep time per week over 15-week format.
- **Clinical**
1 credit per 60 hours of clinical contact.
- **Student Teaching**
12 credits per semester. 640 hours of total student teaching. 16 weeks, 8 hours per day/5 days per week.
- **Internship/Externship**
1-6 credits. 45 hours in field per credit.
- **Psychology Internship**
1 credit. 45 hours in field per credit.
- **Art Therapy Practicum**
1 credit. 45 hours in field per credit.
- **Field Placement**
3-5 credits. 135 to 225 hours in the field per credit depending on the program.
- **Online**
Refer to calculating credit hours for synchronous and asynchronous environments.
- **Studio**
3 credits. 50-minute clock hours. 60 total hours over 15-week format.
- **Independent Study/Tutorial**
Credits vary; contact hours will vary based upon program and or program requirements and will meet minimum credit hour requirements.

Specialized Graduate credits are assigned as follows:

- **Nursing Clinical**
1 credit per 75 hours of clinical contact.
- **Doctor of Nursing Practicum**
1 credit = 200 hours
- **Thesis**
3-6 credits. Hours variable per program.
- **Internship/Practicum**
1-4 credits. 45-100 field experience hours per credit.

- **Professional Counseling Practicum**
3 credits. 100 hours of field experience, plus additional hours of class/preparation time. 135 total hours for three credits.
- **Doctor of Psychology Practicum**
3 credits. 300 hours of field experience.
- **Doctor of Psychology Internship**
9 credits. 2000 hours of internship experience.
- **Student Teaching**
6 credits per semester. 640 hours of total student teaching. 16 weeks, 8 hours per day/5 days per week.

Credit Hours for Online, Hybrid, and Accelerated/Weekend Courses

Credit hours for online or hybrid learning courses, as well as accelerated and weekend courses at Carlow, must adhere to the Federal standard of a total expectation of 45 total learning hours for every 1 credit (15 hours of instruction with 30 hours of out of class academic engagement) earned in a semester regardless of time frame of delivery. All course developers are expected to complete the credit hours calculation worksheet as part of new course development. For accelerated and weekend courses, faculty must also document, through their extended syllabi how CAP/WEC courses will meet the minimum semester credit hour requirement.

Calculating Credit Hours for Synchronous or Asynchronous Environments

The following is a brief description of the types of activities that can be included in learning hour calculations. Many courses will present unique learning activities not directly covered in the exact or estimated equivalent examples provided below. Equivalent Instructional Activities contribute toward the total number of learning hours by using the following examples:

- Exact Equivalent (1:1, i.e. one learning or contact hour for every hour spent)
- Face-to-face or live synchronous sessions, such as classroom or web-based lectures or class sessions, real-time chat sessions, or conference calls
- Other live 'classroom' time (i.e. internships or practica, guided field experiences [museum or facility tours], studio work, virtual or at-home labs for chemistry/biology, service projects, etc.)
- Videos, audio recordings, recorded lectures or webinars, or timed animations/simulations/demonstrations
- Student presentations via web conferencing
- Proctored exams or quizzes

ESTIMATED EQUIVALENT

- LMS/module pages (estimated number of words at average adult reading rate)
- Learning assets such as assigned reading, digital mini-books, articles, simulations, self-paced modules, case studies, etc. (calculated average time needed to 'consume' the material assuming the student reads 10 to 15 pages per hour. Time may vary by department.)
- Instructor-facilitated or instructor-feedback-rich activities such as discussion boards, wikis, journals, group projects (instructor expectation of time to be spent)
- Student presentations via virtual poster session (instructor expectation of time spent reviewing and commenting on 'posters' or presentation)
- Instructor-guided research activities (instructor expectation of time to be spent)
- Low-stakes quizzes used as comprehension checkers (instructor estimation of time spent)
- Preparation for examinations (instructor estimation of time to be spent)
- Discussion question preparation (instructor estimation of time spent)
- Homework/Working Problems time (instructor estimation of time to be spent)

ACCEPTABLE RANGES OF STUDENT LEARNING HOURS

Given the diversity of course offerings and delivery and instructional formats, calculating student learning hours requires flexibility. Because of this, the following chart was devised to provide a foundation for calculating student learning hours. Equivalent Instructional Activities helps to supplement time when courses do not meet the traditional (45 total learning hours, 15 hours for every 1 credit earned).

- Credit Value of Course **4**
Target Number of Student Learning Hours **180**

- Credit Value of Course **3**
Target Number of Student Learning Hours ***135**
- Credit Value of Course **2**
Target Number of Student Learning Hours **90**

*Example represents a traditional course meeting for 45 contact hours with 90 hours of out of class academic engagement. This follows the federal guideline for every one hour in class the student will have two hours of work outside the classroom.

For courses with abbreviated contact hours, the out of class academic engagement will be supplemented via Equivalent Instructional Activities.

GENERAL EDUCATION REQUIREMENTS

CARLOW COMPASS CURRICULUM OVERVIEW

The Carlow Compass is a unique and innovative general education curriculum rooted in the liberal arts and the Catholic Intellectual Tradition, and is intended to serve as a navigational tool to help guide a student toward her/his academic and professional goals. The curriculum is integrated with a student's major course of study, and aligns with the university's mission, vision, and Mercy heritage. The Compass emphasizes career-readiness and ethical leadership, and courses introduce, develop, and reinforce specific learning outcomes. With the Carlow Compass, students can design, navigate, and explore their own educational pathways.

CARLOW COMPASS REQUIREMENTS: FIRST YEAR

CTC 101 Connecting to Carlow

This course introduces students to the Carlow University curriculum, vision, mission, and resources. It focuses on academic preparation for transitioning to college, and transitioning to Carlow specifically. It promotes intellectual engagement with the liberal arts and seeks to deepen a student's skills in reflective self-exploration. In this course, students will analyze their own academic and career goals and consider the connection between the liberal arts, their major, and career-readiness.

1 credit

148 Critical Exploration

All courses with a 148 number meet the critical exploration requirement. This course, which can be from any liberal arts discipline, focuses on specific topics related to the discipline. The course can be applied to a minor. It introduces and develops the learning outcomes of: critical reasoning, written communication, liberal arts integration, and information and digital literacy. This course can also be used in partial fulfillment of the Liberal Arts Breadth requirement (see below).

Usually taken in the fall semester. **3 credits**

149 Contemplation and Action

All courses with a 149 number meet the Contemplation and Action requirement. This course, which can be from any liberal arts discipline, focuses on the Mercy tradition of service through examination and analysis of societal issues, and development of reflective practice. This course can be applied toward a minor. It introduces and develops the learning outcomes of: ethical and social responsibility, critical reasoning, and written communication. This course can also be used in partial fulfillment of the Liberal Arts Breadth requirement (see below). Usually taken in the spring semester. **3 credits**

SKILLS COURSES

SKC 101 Communication: Personal to Professional

This course is designed to introduce students to the knowledge and skills needed to communicate effectively in both personal and professional situations, using traditional (face-to-face) and digital mediums. Students will study the essential concepts and models of communication; while designing and presenting formal presentations. Topics include: interviewing; ethics; nonverbal communication; team building; visual aids; demonstrating appropriate use of ethos, pathos and logos in the organization; and delivery of a presentation, demonstrating college-level research and critical thinking skills. All students will deliver individual and group presentations. It is recommended that this course be completed during the first year of

study. **3 credits**

SKQ 101 Quantitative Reasoning

This course is designed to study the fundamental skills required to understand quantitative information in personal, societal, and career contexts, and to use this information to effectively form conclusions, judgments, or inferences. These skills include the ability to consume quantitative information presented in many formats as well as the ability to articulate arguments using quantitative evidence to a variety of audiences. Topics include: critical thinking, number sense, statistical interpretation, basic probability, graphic representation, and analysis of data. Students will have the opportunity to consider the ethical issues surrounding the use of data as engaged citizens of the world. It is recommended that this course be completed during the first year of study. **3 credits**

SKW 101 Foundations of Writing I

This course is designed for students to learn rhetorical terminology and concepts to describe and practice writing for a variety of audiences, genres and technologies. Students will develop their own writing process for drafting, evaluating, revising and editing their work. This course emphasizes critical reading of college-level texts and the development of information literacy skills. These skills include reading, summarizing and evaluating sources for relevance and reliability (information literacy). Students will develop knowledge of and practice the fundamentals of grammar, punctuation, sentence and paragraph structures and will develop an understanding of the fundamentals of MLA and APA documentation style and formatting. Students who successfully complete this course will be prepared to take SKW102 Foundations of Writing II. **3 credits**

SKW 102 Foundations of Writing II

This course will build on strong critical reading and thinking skills and is designed for students to deepen their understanding of rhetorical terminology and concepts to describe and practice writing for a variety of audiences, genres, technologies and particularly in their disciplines. Students will strengthen their own writing process for drafting, evaluating, revising and editing their work. Students will determine strategies for reading a range of advanced college-level texts and identify the questions, problems and evidence that define disciplines, particularly their own. This course emphasizes advanced research skills including reading, summarizing and evaluating sources for relevance and reliability. Students will strengthen their knowledge of the fundamentals of grammar, punctuation, sentence and paragraph structures and will cultivate a strong and effective use of citation systems typical of their field or discipline. All of these skills culminate in a final portfolio. **3 credits**

PREREQUISITES: SKW101 FOUNDATIONS OF WRITING OR EQUIVALENT, AS DETERMINED BY THE DIRECTOR OF SKILLS WRITING.

CARLOW COMPASS REQUIREMENTS: SOPHOMORE, JUNIOR, SENIOR YEARS

LIBERAL ARTS BREADTH REQUIREMENT: (15-27 CREDITS TOTAL)

Students are required to complete two courses in different liberal arts disciplines in each of the following categories: Expression, Natural World, Social Justice, and Wisdom.

Expression

One 100- or 200-level course from two different liberal arts disciplines from the following: Art, English, Music, Theatre. Each course must be at least 1.5 credits and a minimum of 3 total credits must be taken to fulfill the requirement.

Total of 3-6 credits

Natural World

One 100- or 200-level course from two different liberal arts disciplines from the following: Biology, Chemistry, Mathematics, Physics, Psychology. Each course must be at least 1.5 credits and a minimum of 3 total credits must be taken to fulfill the requirement. **Total of 3-6 credits**

Social Justice

One 100- or 200-level course from two different liberal arts disciplines from the following: Communication, Economics, Political Science, Sociology, Women's and Gender Studies. Each course must be at least 1.5 credits and a minimum of 3 total credits must be taken to fulfill the requirement. **Total of 3-6 credits**

Wisdom

One 100- or 200-level course from two different liberal arts disciplines from the following: History, Philosophy, Theology or foreign language. Each course must be at least 1.5 credits and a minimum of 3 total credits must be taken to fulfill the requirement.

Total of 3-6 credits

Liberal Arts Depth Requirement

Students are required to take one 200- or 300-level, 3-credit course in a liberal arts discipline in which they've already completed a breadth experience. Students will be expected to engage in a deeper exploration of a topic within the course. This course must be a course outside the student's major. **3 credits**

Upper-Level Ethics and Social Responsibility Requirement

Students are required to complete one upper-level Ethics and Social Responsibility requirement. This course deepens understanding of the Mercy tradition of service and social responsibility and builds on the ethics and social responsibility learning outcome introduced in the Contemplation and Action course. Service learning courses fulfill the Ethics and Social Responsibility requirement. **3 credits**

Anchor Course

All students are required to complete an anchor course, which is usually completed in the junior year. This is a synthesis course where students engage in assignments that incorporate multiple liberal art perspectives. This course also guides students through a reflection on how the liberal arts connect to their majors. Students will also reflect on and engage with important aspects of career-readiness. This course serves as the signature course for transfer students starting in fall 2017. **3 credits**

CARLOW COMPASS REQUIREMENTS: SENIOR YEAR

Senior Capstone

All students are required to complete a senior capstone experience. In this culminating experience, students will draw from and integrate the foundational skills they built through their experiences in Compass Curriculum within the practice of their major discipline. Students should consult with their major advisor regarding this requirement. The specifications for the Senior Capstone experience are at the discretion of each major. **Minimum 1 credit**

PRE-FALL 2015 CORE CURRICULUM: OVERVIEW

Readmitted students who were in the previous Core Curriculum will follow the major and Compass Curriculum requirements of their new catalog year of entry. Students who change their major are bound by the major's catalog requirements for that particular catalog year, but will remain in the Compass requirements under which they started.

For information about the previous Core Curriculum requirements, please refer to previous years' course catalogs. Previous years' course catalogs can be accessed at via the Carlow University website or from the Office of the Registrar.

MAJOR FIELD OF CONCENTRATION

All students must select a major field of concentration before the end of their sophomore year. In compliance with the Pennsylvania Department of Education Board of Governors, a major that confers a Bachelor of Arts degree may require 27 to 44 credits. Majors that confer a Bachelor of Science degree may comprise a greater amount of credits. Faculty may offer the opportunity for independent study and off-campus experience for each student in the field of concentration. Refer to the specific academic department in the following Academic Policies—Degree Requirements section of this catalog for specific information about the course of study for majors, minors, certificates, and certifications.

Minor Courses

Students may select a minor that consists of a minimum number of credits defined by the academic discipline. At least half of the credits for the minor must be completed with Carlow courses (taken in residence at Carlow University). Departments

provide information on minors and approve students' course selections.

Support Courses

Students in certain majors may be required to take courses outside the major that support the major sequence of courses. Departments provide further information on support courses.

Electives

Students are free to choose from elective courses according to their aptitudes and interests. The courses may also be those needed to achieve certification or to complete a minor or a second major.

THE HONORS PROGRAM

The Honors program invites exceptional students who want to excel in intellectual development and leadership skills to advance their personal and professional success and make significant contributions to society. Through the program, students have expanded opportunities to obtain individualized academic and career planning, develop close relationships with other students and faculty mentors, participate in experiential learning, attend field trips, explore interesting concepts, commit to social justice, and graduate from Carlow with distinction.

Honors Program requirements include:

1. One honors designated section of ***either SKC or SKW.***
2. An **honors designated section of Connecting to Carlow** unless they have completed their Connecting to Carlow course prior to admission to the honors program.
3. **IS-498, Honors Project** (.5 credits). Completion of the honors project will be done in conjunction with an existing three-credit course of the student's choosing. Students are required to work with a faculty member to design and execute a scholarly project comprised of agreed-upon assignments that will qualify the course for honors designation. Projects can be research-based, experiential, service-learning, creative expression and more.
4. **IS-499, Honors ESR Requirement** (.5 credits). Completion of honors work in conjunction with an existing Ethics and Social Responsibility (ESR) course.

In addition to the academic components of the program, students also have opportunities for enhanced extracurricular experiences, including attending local cultural events or speakers and program-sponsored trips. Honors students receive advising and mentorship from faculty and the Honors directors.

Sophomore and junior Honors students who are humanities majors are eligible for the William Patrick McShea Scholarship. Students in the Honors program maintain a cumulative grade point average of 3.6 or above. Honors coursework is noted on students' transcripts. Students who successfully complete the program are recognized as Carlow University Scholars upon graduation.

Invitation to the Honors Program is extended to incoming first-year students by the university's admissions staff and is determined on the basis of standardized admission tests and high school records. Students earning a cumulative GPA of 3.6 or higher after the second semester of their first year may be invited by the honors director to join the program.

PHYSICAL EDUCATION

Physical education courses are directed toward activities that foster physical fitness and creative expression. Courses are designed to afford students the opportunity to acquire skills and knowledge necessary to enhance their quality of life and to establish lifestyles that promote emotional and physical wellbeing.

COURSE DESCRIPTIONS

PE 104 Aerobics

Beginning level of aerobic activity and exercise, emphasizing cardiovascular endurance, flexibility, and coordination. Prior experience is not required. **1 credit**

PE 111 Triathlon

Introduction to the sport of triathlon, educating the student on training principles and methods for endurance sports. Instruction on the various athletic disciplines involved in a triathlon will include both classroom lectures as well as student participation in swimming, cycling, running, and weight training. The course culminates in an in-class triathlon. **1 credit**

PE 120 Fitness and Weight Control

Understanding of the important correlation between exercise and nutritious eating as it affects body weight. Emphasis will be placed on low-impact exercise, charting food intake, and the achievement of weight loss, gain, or maintenance of goals. **1 credit**

PE 121 Aquatic Fitness

Improving muscular strength, flexibility, and cardiovascular endurance while learning various water exercise techniques. Aqua aerobics, water walking, and use of aquatic exercise equipment are studied. **1 credit**

PE 123 Walking for Wellness

Improving health does not necessarily mean high-intensity exercise. Discover the health benefits of a walking program. Learn how to improve your fitness levels and total well-being. All levels of fitness are encouraged to participate. **1 credit**

PE 125 Healthy Lifestyles

Introduction to the concept of wellness, consisting of three major components: nutrition (assessing dietary habits, caloric needs, and goal-setting techniques for healthy eating), fitness (defining components of fitness and exploring options in fitness programming), and stress management (learning techniques for dealing positively with stress). The objective of the course is to teach students that they are responsible for their total well-being. **1 credit**

PE 137 Self-Defense for Women

Introduction to the basic fundamental kicking, blocking, and punching techniques of self-defense designed specifically for women. Volunteer simulation exercises conclude the course. **1 credit**

PE 140 Weight Training

Introduction to proper techniques for lifting weights to increase strength, flexibility, and endurance. Progress in the course will be self-paced. **1 credit**

PE 150 Introduction to Yoga

Introduction to the systematic approach and proper form of exercise known as yoga. Warming up, stretching, and the releasing of muscle tension will reduce stress, increase blood circulation, and improve both physical and mental health. **1 credit**

PE 200 Varsity Sports

This course gives college credit for student athletes participating in the varsity sports of basketball, soccer, cross-country, softball, tennis, golf, track and field, and volleyball. Students listed on the official team roster are permitted to register for this course. Questions about a student's eligibility to register for this credit should go to the director of athletics. Students who wish to participate in intercollegiate athletics and who have not been recruited to the team by the coaching staff must try out for the team and meet all requirements for team participation as determined by the head coach. Students can take PE 200 for up to 5 credits total (limit of 1 credit per semester, 2 credits per academic year). **1 credit**

PE 221 Advanced Aquatic Fitness

Advanced workout for those who have completed PE 121 Aquatic Fitness. The course will provide an opportunity to improve muscular strength and endurance, flexibility, and cardiovascular endurance through water aerobics utilizing aquatic equipment and choreography. **1 credit**

PE 240 Advanced Weight Training

Advanced skills and techniques in weight training and conditioning. Classes consist of weight training through the use of free weights and equipment. A portion of each class includes cardiovascular exercise. Progress in the course will be self-paced.

1 credit

COLLEGE OF LEARNING AND INNOVATION

ART DEPARTMENT

MAJORS

- Art
- Art with a Concentration in:
 - Art History
 - Ceramics
 - Graphic Design
 - Media Arts and Animation
 - Painting and Drawing
- Art Therapy Preparation
- Art with Art Education Certification (K-12)

MINORS

- Art
- Art History
- Art Therapy Preparation
- Ceramics
- Painting

ART MAJOR

The Art major provides a strong foundation in art history and in studio art: design, drawing, painting, printmaking, ceramics, computer art, and sculpture. Electives and directed study in a variety of media include ceramics, drawing, painting, and mixed media.

Senior Project, an individual project and study course, is required for all majors, while a senior exhibition required of art, painting and drawing, and ceramics concentrations is open to all seniors. Other specialized advanced and tutorial courses are also offered. Combining an art major with minors in business or communication offers viable career opportunities in advertising, communication, and arts administration.

Major Requirements: 52 credits

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or AR 221L, AR 227, AR 240, AR 315, AR 321, AR 331 or AR 331SL, AR 355, AR 370, AR 421, AR/WS 209, and four art focus concentrations.

ART HISTORY CONCENTRATION

The art history concentration is in many ways unique in that it is a studio-based program that gives the student experience in the role of creator. Ideal as an introduction to a career in art in both theory and practice, the major is worked out with the help of the student's advisor. Career options include graduate work (master's and doctoral levels) in art history, museum work, conservation and preservation, and arts administration.

Major Requirements: 48 credits

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or 221L, AR 227, AR 240, AR 315, AR 330, AR 331 or 331SL, AR 355 or AR 321, AR 421, AR/WS 209, plus three additional art history courses.

CERAMICS CONCENTRATION

The ceramics concentration gives the student who has a strong interest in the ceramic arts a solid foundation in two-dimensional art, sculpture, and ceramics. The student goes on to spend six semesters in Advanced Ceramics Studio exploring various ceramic materials, kilns, and techniques as determined through a dialogue between student and professor.

Major Requirements: 52 credits

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 115, AR 221 or 221L, AR 240, AR 315, AR 321, AR 331 or 331SL, AR 355, AR 370, AR 421, AR/WS 209, plus six semesters of Advanced Ceramics Studio.

GRAPHIC DESIGN CONCENTRATION

In today's ever-changing world, technical proficiency alone is rarely enough for success. Combine the strength of a diverse liberal arts framework and graphic design education with a strong foundation in art. Students in the Art/Graphic Design program go beyond mere graphic design proficiency to a well-rounded education. The Art Department offers a robust and flexible curriculum that provides students with strong foundational skills and allows for an in-depth exploration in Graphic Design. Courses are structured to promote and instill critical and creative thinking skills, personal vision, and literacy in the visual language.

Major Requirements:

AR-101 or AR-148, AR-102 or AR-149, AR/WS-209, AR-111, AR-114, AR-115, AR-221 or AR-221L, AR-227, AR-240, AR-313, AR-340, AR-341, AR-342, AR-343, AR-344, AR-345, AR-355, AR-370, AR-389, AR-390, AR-421, and IT-235

MEDIA ARTS AND ANIMATION CONCENTRATION

Media Arts and Animation encompasses artworks created with new media technologies, including digital art, computer graphics, computer animation, virtual art, internet art, interactive art, video games, and computer robotics. Exciting opportunities such as animation artist, special effects artist, broadcast graphics designer, and video postproduction artist are at the forefront of an industry that repackages information in creative new ways. Under the guidance of an industry-experienced faculty, students examine advanced 2-D animation and 3-D animation principles, as well as story development, background design, scenic layout and special effects. They will also have an opportunity to work with program specific software such as Adobe Photoshop, Adobe After Effects, and Autodesk 3Ds Max.

Major Requirements:

AR-101 or AR-148, AR-102 or AR-149, AR/WS-209, AR-111, AR-114, AR-115, AR-221 or AR-221L, AR-227, AR-240, AR-355, AR 370, AR-381, AR-382, AR-383, AR-384, AR-385, AR-386, AR-387, AR-388, AR-389, AR-390, and AR-421

PAINTING AND DRAWING CONCENTRATION

The painting and drawing concentration offers the student a solid foundation in two- and three-dimensional art. The student goes on to spend six semesters in a more in-depth study of painting. During this time, more advanced issues concerning two-dimensional art and concept development are explored.

Major Requirements: 52 credits

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or 221L, AR 227, AR 240, AR 315, AR 321, AR 355, AR 370, AR 421, AR/WS 209, plus five semesters of Painting Studio.

ART THERAPY PREPARATION MAJOR

Art Therapy Preparation is an interdisciplinary major sponsored by the Art and the Psychology & Counseling departments. This program prepares the student for further study in art therapy on a graduate level. The program integrates a strong fine

arts background with an in-depth study of psychology and art therapy. Because of Carlow's urban location in the heart of a major medical and therapeutic complex, students have convenient access to observation and practicum experiences.

Major Requirements:

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or 221L, AR 227, AR 240, AR 315, AR 321, AR 330, AR 331 or 331SL, AR 355, AR 421, AT 205, AT 339, AT 406 or PY 450, AE 326, PY 101, PY 122, PY 155, PY 203, PY 209 or 209SL, PY 255, PY 285, PY 355, AR/WS 209.

ART WITH ART EDUCATION CERTIFICATION

Art with art education certification is a professional program offered in conjunction with the Education Department. It requires a minimum of 42 credits in art and a series of required courses in education and art education. Upon successful completion of the program, the student may receive certification from the Pennsylvania Department of Education as a teacher of art, grades K through 12.

Art Requirements:

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or 221L, AR 227, AR 240, AR 315, AR 321, AR 330, AR 331 or 331SL, AR 355, AR 421, AR/WS 209

Education Requirements:

EC 200, ED 200, ED 282, ED 307, AE 326, AE 327, AE 409, AE 410, PY 101, PY 206, SPED 230, SPED 334, SPED 390, two math (quantitative reasoning and MAT 110 or higher) and two English courses (one composition course and one literature course).

ART MINOR

The art minor requires a minimum of 18 credits. At least nine credits must be taken at Carlow.

Required Courses:

AR 101 or AR 102, AR 111 or AR 115, plus four AR electives.

ART HISTORY MINOR

Minor Requirements:

AR 101, AR 102, AR/WS 209, plus three additional art history courses. At least nine credits must be taken at Carlow.

ART THERAPY PREPARATION MINOR

Minor Requirements:

AR 111 or AR 115, AR 331 or 331SL, PY 203, PY 285, AT 205, AT 339. At least nine credits must be taken at Carlow.

CERAMICS MINOR

Minor Requirements:

AR 115, AR 315, AR 331, plus three semesters of Advanced Ceramics Studio. At least nine credits must be taken at Carlow.

PAINTING MINOR

Minor Requirements:

AR 111, AR 114, AR 227, plus three semesters of Advanced Painting Studio.

ACCELERATED OPTION FOR CARLOW UNDERGRADUATES

Undergraduate students with a major concentration in Art, Painting, and Ceramics are invited to apply to Carlow's Master of Arts in Art program prior to graduation. Juniors and seniors admitted to this program may be permitted to take up to nine credits of AR730, Advanced Projects, while they are still undergraduate students.

To be given graduate credit, all graduate courses must be passed with a B- or above. These credits will also be counted toward the 120 credits needed for the undergraduate degree and be concurrently posted on the graduate transcript. Graduate courses will count for undergraduate credit even if the student earns a C-.

This opportunity can save students time and money if they are planning to apply for admission to Carlow's MA in Art program. It is also an opportunity for students to engage in higher-level work and interact with graduate students while completing their undergraduate coursework. To stay in the program, students will need to maintain a 3.0 average. Admission to the accelerated program may not be retroactive, it must be approved and in place before registration for the courses to be included.

In order to begin MA courses, you must:

- Major in Art, Painting, or Ceramics
- Hold junior or senior status
- Achieve a cumulative GPA of 3.0 while at Carlow
- Meet Carlow residency requirements (minimum 18 AR credits at Carlow and appropriate overall credits at Carlow)
- Achieve a minimum grade of B in the MPC courses to continue in the program
- Obtain undergraduate advisor's approval
- Submit application materials by contacting the MA director
- Obtain approval of MA director

Final and full admission to the MA in Art depends upon a portfolio and transcript review upon completion of the undergraduate degree from Carlow.

BIOLOGY DEPARTMENT

MAJORS

- Biology
 - with Concentration in Human Biology
 - with Cytotechnology specialization (3+1)
- Behavioral Neuroscience (interdisciplinary program)
 - Intraoperative Neurophysiological Monitoring (IONM) Track
 - Neuropsychology Track

MINORS

- Biology
- Behavioral Neuroscience

DUAL-DEGREE PROGRAMS

- Accelerated BS in Biology/MS in Cardiovascular Perfusion (with UPMC Shadyside School of Cardiovascular Perfusion)
- Biology/Biotechnology (4+1 Dual-Degree Program with Duquesne University)
- Biology/Environmental Science and Management (3+2 Dual-Degree Program with Duquesne University)

PRE-PROFESSIONAL PROGRAMS

- Pre-Pharmacy Program with Duquesne University's Mylan School of Pharmacy
- Pre-Med, Pre-Dental, and Pre-Pharmacy Early Acceptance Programs with Lake Erie College of Osteopathic Medicine (LECOM)

DEPARTMENT ACADEMIC POLICIES

The following policies apply to students in all programs offered through the Biology Department.

At all times, the student must maintain a cumulative grade point average (GPA) of 2.0 in the program's required and support courses (biology, chemistry, mathematics, and physics). If, at the end of any subsequent semester, the student's program GPA falls below 2.0, the student is placed on program probation. A student on program probation is prohibited from taking additional program courses until the student retakes the program course(s) in which the lowest grade(s) was received in order to re-establish the minimum program GPA of 2.0.

Biology students are prohibited from taking any program course if a grade of D+ or lower was received for the prerequisite course(s). Students must retake the prerequisite course and attain a grade of C- or better before taking the subsequent course.

BIOLOGY MAJOR

The Biology curriculum at Carlow University enables students to prepare for the variety of careers available in today's biological sciences. It gives students a solid foundation across the entire breadth of biology, while affording students ample opportunities to delve deeply into their chosen specialties in order to prepare for successful careers in one of biology's many fields.

Requirements:

The Foundations courses (BIO 110 and BIO 120), General Ecology (BIO 255), Genetics (BIO 250), Junior Seminar (BIO 300), Senior Experience (BIO 498 and BIO 499), and four advanced biology electives, four semesters of chemistry (CHM 111/113, CHM 112/114, CHM 211/213, and CHM 212-/214), two semesters of physics (PCS 201/203 and PCS 202/204) and mathematics through calculus I (MAT 160) are required. At least two of the electives plus Junior Seminar and Senior Experience must be taken in residence at Carlow University.

BIOLOGY MINOR

A minor in Biology prepares graduates in such fields as professional writing, business management, communications, psychology, and social work for positions within organizations in the medical, pharmaceutical, and biotechnology industries.

Requirements:

BIO 110 and BIO 120, or their transferred equivalents, plus three advanced biology electives are required for the biology minor. At least two of these courses must be taken in residence at Carlow University. A minimum of 18 total credits is required to complete the minor.

HUMAN BIOLOGY CONCENTRATION

Students concentrating in human biology are prepared to enter professional training in all areas of human health care: medicine, dentistry, optometry, osteopathy, physician's assistant, physical therapy, pharmacy, and podiatry. Elective courses in human biology are chosen in consultation with advisor.

CYTOTECHNOLOGY SPECIALIZATION (3+1)

Carlow University's collaborative program with UPMC's Anisa I. Kanbour School of Cytotechnology prepares students for an exciting and meaningful career assisting pathologists and changing patients' lives. The program is a 3+1 program, meaning 3 years are spent at Carlow University, and the 4th year students will enroll in the Cytotechnology program at Magee-Women's Hospital of UPMC.

During the 3 years spent at Carlow, students will take course work designed to provide a solid foundation in cellular and molecular biology, with relevant biomedical information and practice with biotechnology commonly used in medical and research laboratories. Once at UPMC's facility, students will be trained by cytopathologists and cytotechnologists. This course work includes instruction in preparing patient samples and interpretation of material, clinical rotations in UPMC hospitals, and training with state-of-the-art imaging systems used in the field.

Students completing the requirements of the program graduate with a B.S. in biology from Carlow University and are prepared to take the national certification examination of the American Society for Clinical Pathology's Board of Certification (ASCP-BOC) to be certified at a Cytotechnologist.

Requirements:

Along with UPMC Anisa I. Kanbour School of Cytotechnology admission requirements, students must meet Carlow University's prerequisites for approval and recommendation to enter the program: science course GPA of 2.0, overall GPA of 2.0, and science faculty/advisor recommendation based on demonstrated integrity and excellence in academic pursuits.

Note: Admission into the final year at Magee-Women's Hospital of UPMC is on a competitive basis.

BEHAVIORAL NEUROSCIENCE MAJOR

The Behavioral Neuroscience major is an interdisciplinary program in neuroscience, building upon the strengths of Carlow's biology, psychology, and chemistry programs. Students receive grounding in all three disciplines, in addition to coursework in neuroscience specifically. Students must choose one of the two possible tracks within the major.

The Neuroscience with Intraoperative Neurophysiological Monitoring (IONM) track prepares students for a career in IONM. Students are prepared in neuroanatomy, neurophysiology, and neuropharmacology, and finish the degree with instructors at UPMC's Procirca – Center for Clinical Neurophysiology, where they receive instruction and hands-on training in the operating room. This highly specialized training allows students to observe and assist in up to 150 surgical cases to accumulate the clinical hours necessary to take the ABRET's Certification in Neurophysiologic Intraoperative Monitoring (CNIM) Exam to be a certified Surgical Neurophysiologist.

The Neuropsychology track prepares students for graduate work in neuropsychology or psychology and, ultimately, a career in either area. Neuropsychologists also study the connection between the brain and behavior; this career option often focuses on assessment of neuropsychological functioning in patients. Students majoring in the Neuropsychology track receive a versatile degree that prepares them for graduate work in psychology and neuropsychology.

Required Courses in Behavioral Neuroscience for Both Tracks:

- BIO 110 Foundations of Organismal Biology (4 credits)
- CHM 111/113 General Chemistry I and Lab (4 credits)
- PY 101 Introduction to Psychology (3 credits)
- BIO 120 Foundations of Molecular and Cell Biology (4 credits)
- CHM 112/114 General Chemistry II and Lab (4 credits)
- PY 280 Cognitive Psychology (3 credits)
- NEU 220 Neuroanatomy (4 credits)

Additional Required Courses for Neuroscience with Intraoperative Neurophysiological Monitoring (IONM) Track:

- BIO 205 Anatomy & Physiology I (4 credits)
- BIO 206 Anatomy & Physiology II (4 credits)
- CHM 211/213 Organic Chemistry I and Lab (4 credits)
- MAT 115 Basic Applied Statistics (3 credits)
- NEU 221 Neurophysiology (4 credits)
- BIO 300 Junior Seminar (2 credits)
- Neuromonitoring Fundamentals (Taught at UPMC; 4 credits)
- Introduction to Neuromonitoring for Surgical Procedures (Taught at UPMC; 8 credits)
- Neuromonitoring for Advanced Surgical Procedures (Taught at UPMC; 9 credits)

Total credits for Neuroscience with Intraoperative Neurophysiological Monitoring Track: 72 credits

Additional Required Courses for Neuropsychology Track:

- NEU 300 Neuropsychology (3 credits)
- PY 230I Biological Bases of Behavior (3 credits)
- PY 290 Elementary Statistics & Lab (4 credits)
- SSC 321 Research Methods (3 credits)
- PY 325 Experimental Psychology (4 credits)
- PY 255 Designing Your Life II (1 credit)
- PY 355 Designing Your Life III (1 credit)

- PY 455 Knowledge of Psychology (1 credit)
- NEU 450 Neuroscience Internship (1-3 credits)

Total credits for Neuropsychology Track: 47-49 credits

BEHAVIORAL NEUROSCIENCE MINOR

The Minor in Behavioral Neuroscience is designed for students who are not majoring in Behavioral Neuroscience. It is of particular interest to Psychology and Biology majors who would like to focus on Behavioral Neuroscience without majoring in this area. However, other majors are welcome to take this minor, which gives students preparation in psychology and biology and some beginning groundwork in Neuroscience. A minimum of 21 credits are required as follows: PY/BIO 230I or BIO/PY 230, NEU 220, NEU 221, BIO 120, PY 101, PY 280. A minimum of ten credits in the minor must be taken at Carlow University.

BEHAVIORAL NEUROSCIENCE/EARLY ACCEPTANCE IN DENTAL, PHARMACY, OSTEOPATHIC MEDICINE (LECOM)

Carlow University students majoring in Behavioral Neuroscience (Intraoperative Neurophysiological Monitoring (IONM) track) may apply for the early acceptance program with Lake Erie College of Osteopathic Medicine (LECOM). This affiliation allows qualified students to earn a four-year bachelor's degree in Biology, Chemistry, or Behavioral Neuroscience from Carlow University and then a Doctor of Osteopathic Medicine (D.O.) degree, a Doctor of Dental Medicine (D.M.D.) degree, or a Doctor of Pharmacy (Pharm.D.) degree from LECOM. The early acceptance program grants academically strong students an opportunity to gain conditionally guaranteed acceptance to LECOM as early as their senior year of high school or during their first or second year at Carlow University. Participation in the program alleviates much of the cost of applying to medical schools, while providing a strong background in scientific and liberal arts courses at Carlow University. After completing their undergraduate education at Carlow University in four years, students matriculate for an additional four years at either the main campus in Erie, Pennsylvania, or a branch campus in Bradenton, Florida, based on the program to which they are accepted.

ACCELERATED BS IN BIOLOGY/MS IN CARDIOVASCULAR PERFUSION

In cooperation with the UPMC Presbyterian-Shadyside School of Cardiovascular Perfusion, Carlow offers a five-year program leading to a Bachelor of Science degree in biology and a Master of Science degree in Cardiovascular Perfusion. Perfusionists operate the cardiopulmonary bypass machine during open-heart surgery, coronary artery bypass, heart and lung transplantation, congenital defect repairs, and valve replacements.

The UPMC School of Perfusion accepts up to 20 students per year. There are two general populations of students who may apply for admission to the program: Carlow University undergraduate students who meet all program prerequisites at Carlow and students who already hold a bachelor degree and have met all program prerequisites.

For Carlow University undergraduate students, the program requires three academic years at Carlow as a biology major with a 3.0 minimum GPA (3.0 in the sciences) and 18 months of clinical training at UPMC Shadyside, part of which replaces the traditional senior year. The clinical portion of the perfusion program requires out of town clinical externships, room and board for externships are the responsibility of the student.

NOTE: CARLOW UNIVERSITY DOES NOT GUARANTEE ADMISSION TO THE MS IN CARDIOVASCULAR PERFUSION PROGRAM. ADMISSION IS ON A COMPETITIVE BASIS.

Requirements:

Candidates must satisfy all requirements for the Bachelor of Science degree in biology, with the following modifications: Anatomy and Physiology I and II, Microbiology and Pharmacology are required, and Biomedical Ethics is recommended. One biology course is waived, as is Senior Experience (BIO 498 and BIO 499).

BIOLOGY/BIOTECHNOLOGY DUAL-DEGREE PROGRAM (DUQUESNE UNIVERSITY)

Carlow University students majoring in biology may combine a Bachelor of Science degree with a Master of Science degree in collaboration with Duquesne University Bayer School of Natural and Environmental Sciences. Students complete required molecular/cellular biology courses at Carlow University, and qualified students apply for admission to the Master of Science program.

After the first four years of study, students will have earned a Bachelor of Science in biology from Carlow University. After

completion of the fifth year at Duquesne University, students will have earned a Master of Science in biotechnology. Examples of courses taken in the Master of Science degree program include Elements of Biotechnology, Biotechnology Leadership, Ethics in Biotechnology, and Bioanalytical Chemistry. Students completing this program will have the added expertise and training for careers in industry, government, and academia.

BIOLOGY/ENVIRONMENTAL SCIENCE AND MANAGEMENT DUAL-DEGREE PROGRAM (DUQUESNE UNIVERSITY)

In collaboration with Duquesne University's Bayer School of Natural and Environmental Sciences, Carlow students interested in applied ecology may complete a five-year Bachelor of Science/Master of Science program. Students complete required biology/organismal biology and ecological courses in residence at Carlow. During the third academic year, qualified students apply for admission to the Master of Science program. Those admitted complete their fourth and fifth years in residence at Duquesne University.

At the conclusion of the fourth year, students will have earned a Bachelor of Science in biology from Carlow. Upon completion of the fifth year, students will have earned a Master of Science degree in environmental science and management from Duquesne University. Examples of courses taken in the master's degree component include Environmental Microbiology, Environmental Toxicology, Air Quality, Business Ethics, Environmental Management, and Environmental Law. The students graduating in this collaborative program are broadly trained scientists. They have the same credentials as other biology students and can pursue those relevant careers. Additionally, with the master's degree training, students have the skills required for careers in industry, regulatory agencies, academia, and the public policy arena.

PRE-PHARMACY PROGRAM WITH DUQUESNE UNIVERSITY'S MYLAN SCHOOL OF PHARMACY

Prospective pharmacy students may attend Carlow University for two (or three) years and then receive preferential consideration for admission into the Doctor of Pharmacy program at the Duquesne University Mylan School of Pharmacy.

NOTE: Admission into the Professional Phase of the Duquesne Pharm.D program is on a competitive basis.

Professional Doctorate Pathway

Pharm. D. only, no bachelor's degree awarded. 6 years.

The Pre-Pharmacy Early-Entry Program at Carlow University allows academically qualified students to attend Carlow University for two years of pre-pharmacy coursework before transferring to the Duquesne University Mylan School of Pharmacy for the "professional phase" of their studies.

Bachelor's Degree Pathway

BS in Biology / Pharm.D. 7 years.

In this option students attend Carlow for three years before transferring to the Duquesne University Mylan School of Pharmacy. After completing their first year at Duquesne, students will be awarded a B.S. degree in Biology by Carlow University.

Requirements for Admission into the Carlow University Phase

Candidates for admission into the Carlow University Phase are required to:

- Have earned a high school Grade Point Average (GPA) of 3.00, or higher, on a 4.00 scale
- Demonstrate evidence of leadership potential, community service, and involvement in cocurricular activities
- Provide one letter of recommendation from either a high school teacher or guidance counselor
- An SAT total score of 1050 or higher (testing date prior to or in the month of February 2016)
- An SAT total score of 1130 or higher (testing date after or in the month of March 2016)
- A total score of 24, or higher, on the Math and Critical Reading sections of the ACT

Duquesne University Mylan School of Pharmacy Requirements

Candidates for admission to the Duquesne University Mylan School of Pharmacy are required to:

- Have completed the two-year undergraduate Pre-Pharmacy curriculum at Carlow University, including core curriculum requirements
- Have earned a minimum grade of “C” in all Carlow University undergraduate courses
- Have maintained a minimum overall GPA of 2.50 or better in all Carlow University undergraduate courses
- Participate in an interview process with faculty members of the Duquesne University Mylan School of Pharmacy
- Submit a letter of recommendation from the Carlow University Pre-Pharmacy Selection Committee
- Provide evidence of leadership potential and commitment to the pharmacy profession
- Achieve a composite PCAT (Pharmacy College Admission Test) score of 375 or better
- Achieve a GPA of 3.00 or higher for all science and math courses taken at Carlow University and/or achieve a cumulative Grade Point Average of 3.00 or higher in the Pre-Pharmacy Early-Entry Program.

Admission Process for Professional Phase at Duquesne University

Students should apply to Duquesne University by **January 15th of their sophomore year at Carlow University** for the doctorate only program, and by **January 15 their junior year** for the BS in Biology/Pharm.D. program. All applicants will be placed into a pool of Carlow University applicants from which students will be chosen. Once offered acceptance, students will have two weeks to send their enrollment deposit to Duquesne University in order to reserve their space in the program. If that deadline passes without a deposit being received by Duquesne University, the prospective student’s space will be given to another student, and they will be placed at the bottom of the applicant wait list.

BIOLOGY/EARLY ACCEPTANCE IN DENTAL, PHARMACY, OSTEOPATHIC MEDICINE (LECOM)

Carlow University students majoring in biology may apply for the early acceptance program with Lake Erie College of Osteopathic Medicine (LECOM). This affiliation allows qualified students to earn a four-year bachelor’s degree in biology, chemistry, or behavioral neuroscience from Carlow University and then a Doctor of Osteopathic Medicine (D.O.) degree, a Doctor of Dental Medicine (D.M.D.) degree, or a Doctor of Pharmacy (Pharm.D.) degree from LECOM. The early acceptance program grants academically strong students an opportunity to gain conditionally guaranteed acceptance to LECOM as early as their senior year of high school or during their first or second year at Carlow University. Participation in the program alleviates much of the cost of applying to medical schools, while providing a strong background in scientific and liberal arts courses at Carlow University. After completing their undergraduate education at Carlow University in three or four years (depending on the program chosen), students matriculate for an additional four years at either the main campus in Erie, Pennsylvania or a branch campus in Bradenton, Florida, based on the program to which they are accepted.

Requirements for LECOM Early Acceptance Programs

Phase 1: Along with meeting LECOM’s admission requirements, students are required to meet Carlow University’s prerequisites for approval and recommendation to enter the program: science course GPA of 3.35 or higher, overall GPA of 3.5 or higher, and have the recommendation of science faculty and/or advisor based on demonstrated integrity and excellence in academic pursuits.

Phase 2: For Carlow University to approve and recommend students for LECOM matriculation, students must meet the minimum requirements stated by LECOM, and be recommended by Carlow University’s science faculty and/or advisor based on demonstrated integrity and excellence in academic pursuits.

Statement for Enrollment in Pre-Health Professional Programs at Carlow University:

Students must declare a single Pre-Health Professional Program they wish to pursue at Carlow University by the start of their 3rd year of enrollment. Students cannot be in two Pre-Health Professional Programs simultaneously. Pre-Health Professional Programs include: LECOM EAPs, Duquesne Pre-Pharmacy, Perfusion, Cytotechnology, and IONM.

CHEMISTRY DEPARTMENT

MAJORS

- Chemistry

MINORS

- Chemistry

DEPARTMENT ACADEMIC POLICIES

The following policies apply to students in all programs offered through the Chemistry Department.

At all times after the completion of the student's fourth course required within the major (i.e. biology, chemistry, mathematics, and physics courses), the student must maintain a cumulative Grade Point Average (GPA) of 2.0 in the program's required and support courses. If, at the end of any subsequent semester, the student's program GPA falls below 2.0, the student is placed on program probation. A student on program probation is prohibited from taking additional program courses until the student retakes the program course(s) in which the lowest grade(s) was received in order to reestablish the minimum program GPA of 2.0.

Students are prohibited from taking any chemistry program course if a grade of D+ or lower was received for the prerequisite course(s). Students must retake the prerequisite course and attain a grade of C- or better before taking the subsequent course.

CHEMISTRY MAJOR

The course of study in chemistry at Carlow University is designed to provide the theory and research skills needed by every chemist. Chemists find jobs in a wide variety of areas across industry, academia, and government. A Chemistry degree also prepares the student for graduate or professional school. The major program curriculum is designed to be consistent with the guidelines published by the American Chemical Society (ACS). The program provides instruction in each of the four major subdisciplines of chemistry: organic chemistry, analytical chemistry, physical chemistry, and inorganic chemistry. Laboratory skills are emphasized throughout. Students are also required to further develop their skills by completing a senior experience that may consist of an independent research project. Each student must also complete required support courses in mathematics, biology, and physics. Students who are seeking employment in some of the nontraditional areas can choose a program with an emphasis in biology, marketing and management, technical communications, or math and computer science. Students interested in teaching chemistry at the high school level may wish to enroll in the 4+1 MED program. Students earn a chemistry degree followed by a one-year Master's Degree in Secondary Education.

Requirements:

General Chemistry (CHM 111/113 and CHM 112/114), Organic Chemistry (CHM 211/213 and CHM 212/214), Quantitative Analysis (CHM 312), Inorganic Chemistry (CHM 311), Physical Chemistry (CHM 411 and CHM 412), Advanced Experimental Techniques (CHM 423), Mathematics through Calculus III (MAT 160, MAT 260, MAT 360), Physics with Calculus (PCS 221/223 and PCS 222/224), Foundations of Molecular and Cell Biology (BIO 120), Computer Applications for Science and Mathematics (CHM 151), Junior Seminar (CHM 398 and CHM 399), Senior Experience (CHM 498 and 499), as well as two electives, depending on program emphasis. (At least three of the required chemistry core courses plus Junior Seminar and Senior Experience must be taken in residence at Carlow University.)

CHEMISTRY MINOR

Requirements:

General Chemistry (CHM 111/113 and CHM 112/114) and Organic Chemistry (CHM 211/213 and CHM 212/214), plus an additional five credits of upper-level Chemistry (CHM) courses (at the 200 level or higher)

CHEMISTRY/EARLY ACCEPTANCE IN DENTAL, PHARMACY, OSTEOPATHIC MEDICINE (LECOM)

Carlow University students majoring in chemistry may apply for the early acceptance program with Lake Erie College of Osteopathic Medicine (LECOM). This affiliation allows qualified students to earn a four-year bachelor's degree in biology, chemistry, or behavioral neuroscience from Carlow University, and then a Doctor of Osteopathic Medicine (D.O.) degree, a Doctor of Dental Medicine (D.M.D.) degree, or a Doctor of Pharmacy (Pharm.D.) degree from LECOM. The early acceptance program grants academically strong students an opportunity to gain conditionally guaranteed acceptance to LECOM as early as their senior year of high school or during their first or second year at Carlow University. Participation in the program alleviates much of the cost of applying to medical schools, while providing a strong background in scientific and liberal arts courses at Carlow University. After completing their undergraduate education at Carlow University in four years, students matriculate for an additional four years at either the main campus in Erie, Pennsylvania or a branch campus in Bradenton, Florida, based on the program to which they are accepted.

EDUCATION DEPARTMENT

MAJORS

- Early Childhood Education with Certification (PreK-Grade 4)
- Early Development and Learning

CARLOW-ISSUED CERTIFICATE

- Autism Spectrum Disorders Endorsement

CERTIFICATION PROGRAMS

- Art Education Certification (Grades K-12)
- Special Education (Grades K-12) - Must Be Combined with Early Childhood

SCHOLAR-PRACTITIONER

Education of scholar-practitioners is the vision guiding all professional programs at Carlow University. At Carlow, scholar-practitioner is more than a professional role and goes beyond the acquisition of specific skill sets or application of best practices. Scholar-practitioner is a way of being in and relating to the world. Those who embody the stance of scholar practitioner understand that teaching is a daunting task and a challenging endeavor. It is a vocation that when taken seriously demands moral vision and intellectual rigor. At Carlow we believe that scholar-practitioners in the professional field of education embody six intertwining qualities: metacognitive reflection, theoretical understanding, pedagogical wisdom, contextual literacy, ethical stewardship, and aesthetic imagination.

Graduates of all undergraduate and graduate programs of study in the Education Department will embody the qualities of a Carlow scholar-practitioner as manifested by their capacity for metacognitive reflection, theoretical understanding, pedagogical wisdom, contextual literacy, ethical stewardship, and aesthetic imagination.

Graduates of all undergraduate and graduate programs of study in the Education Department will demonstrate the ability to be reflective in action, capable of creating and serving in high performance learning environments, and will support and respect the dignity and diversity of all learners.

ADMISSION TO EDUCATION PROGRAMS

To be fully admitted to the Education Department, students must have the following:

- 48 credits
- 3.0 or higher GPA
- Two college math courses
- Two college English courses (one literature and one composition)
- Passing score on a basic skills exam (PAPA or Core)
- Satisfactory rating on all dispositions instruments

FIELD EXPERIENCE REQUIREMENTS

- Appropriate and current health clearances, criminal history background checks, child abuse history clearance, federal criminal history records (CHRI)

STUDENT TEACHING REQUIREMENTS

To be accepted for student teaching, students must have:

- 3.0 or higher GPA
- Appropriate and current health clearances, criminal history background checks, child abuse history clearance, federal criminal history records (CHRI)
- A completed student teaching application
- Completed Stage III Field Experience
- Satisfactory rating on all dispositions instruments

CERTIFICATION REQUIREMENTS

All candidates for certification must maintain a minimum cumulative GPA of 3.0. A teacher candidate who has not met this minimum academic level will not be placed in student teaching. Students must earn a C or higher in all major courses. If students earn C– or below in a major course, they will have to retake the course.

The Pennsylvania Department of Education has approved the instructional programs in each area of certification. Students completing these approved programs must pass the required Pennsylvania Educator Certification Tests (PECT) or PRAXIS II examinations for their certification areas. These examinations are required for every person applying for Pennsylvania certification, no matter where that person has completed a teacher preparation program. Students who plan to teach in states other than Pennsylvania should ascertain testing and other special requirements in those states no later than their junior year at Carlow.

All students are responsible for applying for Pennsylvania Level I instructional certification upon completion of the Carlow University program and passing the required examinations. The student must pay all fees for certification. Any questions regarding testing and certification should be directed to the Education Department Certification Office.

ART EDUCATION CERTIFICATION

Art teachers are prepared to teach children from kindergarten through grade 12. Students major in art and complete a professional sequence in art education.

The art teacher candidate will:

- Demonstrate their knowledge of the fundamental concepts of the arts and competence in teaching K-12 grade students two-and three-dimensional art, art history, criticism and aesthetics.
- Establish an environment that is purposeful and equitable with high expectations of students both in work and conduct by maintaining a supportive relationship with all students by instilling a belief that they can succeed in art education.
- Utilize knowledge of content and pedagogical theory to engage K-12 grade students in learning art content through a variety of strategies ranging from simple reproductions, and graphic demonstrations to “essay-style” homework, class exhibitions, projects, and utilizing traditional tools as well as modern technologies.
- Use a variety of means, providing feedback to K-12 grade students to assist learning and adjust instructional strategies.
- Demonstrate qualities of a scholar-practitioner within and beyond the classroom, with students and colleagues as well as members of the community.

Art Requirements:

AR 101 or AR 148, AR 102 or AR 149, AR 111, AR 114, AR 115, AR 221 or 221L, AR 227, AR 240, AR 315, AR 321, AR 330, AR 331 or 331SL, AR 355, AR 421, AR/WS 209

Education Requirements:

EC 200, ED 200, ED 282, ED 307, AE 326, AE 327, AE 409, AE 410, PY 101, PY 206, SPED 230, SPED 334, SPED 390, two math (quantitative reasoning and MAT 110 or higher) and two English courses (one composition course and one literature course).

EARLY CHILDHOOD EDUCATION MAJOR/CERTIFICATION

The Early Childhood Education program at Carlow University focuses on educating children from birth to grade four in any context—school, family, or community. As a signature mark of the program, students learn how to honor diversity and form strong, inclusive relationships between child and caregiver/teacher. They learn that a child’s environment needs to be rooted in trust and in feeling physically and psychologically safe. They learn that the caregiver/teacher relationship needs to be collaborative and characterized by advocacy for the child. Principles of child development and constructivist approaches to learning ground the program, along with the belief that strong relationships among the child, family, and community form a healthful child who has the necessary foundation to succeed.

The program uses the National Association for the Education of Young Children (NAEYC) guidelines for ethical behavior to demonstrate professionalism. Competencies for early childhood education are based on current research and child development theory, NAEYC standards and guidelines, and the pedagogy of relationship.

Early childhood teaching candidates will:

- Develop pedagogical wisdom and contextual literacy as they apply their understanding of young children’s

development, motivation, characteristics, and influences on children's development and learning to create environments that are healthy, respectful, supporting, and challenging for the young child.

- Develop into ethical stewards who know and understand diverse family and community characteristics, and support, engage, and involve families and communities through respectful relationships to support children's development and learning.
- Be able to effectively and appropriately use a variety of assessment tools (including observation, informal, summative, formative, diagnostic, and benchmark) to plan appropriate curriculum for young learners based on a deep level of theoretical understanding.
- Develop a theoretical understanding of early learning standards, common core, and child development to design, implement, and evaluate meaningful and challenging curricula for each child.
- Demonstrate qualities of reflective scholar practitioners who engage in a variety of communities of practice to become informed and ethical advocates and leaders in the field of education.
- Create high performance learning environments for diverse student populations (which include children with disabilities, English language learners, children in poverty, etc.) through aesthetic expression and imagination.

Major Requirements:

EC 200 or 205, EC 201, EC 206/PY 216, EC 207, EC 303, EC 304, EC 307, EC 311, EC 313, EC 315, EC 318, EC 325, EC 401SL, EC 403, EC 406 and EC 407 or EC 410, ED 200, ED 305, ED 307, ED 312, ED 370, PY 101, SPED 230 or 230SL, SPED 332, SPED 450, and two math (quantitative reasoning and MAT 110 or higher) and two English courses (one composition course and one literature course)

EARLY DEVELOPMENT AND LEARNING MAJOR (WITHOUT TEACHING CERTIFICATION)

Early development and learning majors complete practicum and internship placements in various child care center and/or information learning environments. Students in this major are not eligible for teaching certification.

The Early Childhood Education program at Carlow University focuses on educating children from birth to grade four in any context—school, family, or community. As a signature mark of the program, students learn how to honor diversity and form strong inclusive relationships between child and caregiver/teacher. They learn that a child's environment needs to be rooted in trust and in feeling physically and psychologically safe. They learn that the caregiver/teacher relationship needs to be collaborative and characterized by advocacy for the child. Principles of child development and constructivist approaches to learning ground the program, along with the belief that strong relationships among the child, family, and community form a healthful child who has the necessary foundation to succeed.

The program uses the NAEYC guidelines for ethical behavior to demonstrate professionalism. Competencies for early childhood education are based on current research and child development theory, NAEYC standards and guidelines, and the pedagogy of relationship.

Major Requirements:

EC 200 or 205, EC 201, EC 206/PY 216, EC 207, EC 303, EC 304, EC 307, EC 311, EC 313, EC 315, EC 318, EC 401SL, EC 415, ED 200, ED 305, ED 307, ED 312, ED-370; six credits of early childhood, education, psychology or special education electives; PY 101, SPED 230 or 230SL, SPED 450

SPECIAL EDUCATION CERTIFICATION

Carlow University's Special Education program prepares teachers to meet the needs of children with a wide variety of mental, physical, social, emotional, and behavioral disabilities in multiple settings. The Special Education program includes 30 credit hours of course work focusing on the practical application of research-based special education theoretical constructs and methodology. Equally essential are the carefully correlated field experiences totaling 210 hours in a variety of classrooms and educational settings.

Graduates of the program obtain Pennsylvania Special Education certification in Grades K-12. This must be combined with Early Childhood Education.

Teacher candidates completing the special education program K-12 will:

- Demonstrate the ability to design and/or employ a variety of assessment tools and strategies, formative and summative, formal and informal, to analyze the results of the assessments and to use those results in the design and

- implementation of instruction for students with disabilities.
- Consistently demonstrate knowledge of the characteristics of individuals with disabilities as well as the understanding of the impact of the disabling condition on ability to learn, interact socially and live as fulfilled, contributing members of society. They demonstrate the ability to use this knowledge in planning and implementing instruction for students with disabilities.
- Consistently choose and implement a variety of research-based, systematic instructional strategies designed to allow students with a range of disabilities opportunity to learn identified objectives, content and skills.
- Demonstrate the ability to consistently incorporate a variety of research-based strategies to create positive educational environments that support individual and collaborative learning, value diversity, encourage independence, self-motivation, self-direction, personal empowerment and self-advocacy for students with disabilities.
- Demonstrate the ability to use knowledge about student diversity in general, and individual student characteristics, strengths and needs in particular, to create lessons that meet those diverse needs and that ensure opportunity to learn and access the general curriculum for students with a range of disabilities.
- Demonstrate professionalism and ethical behavior in all interactions with others in the teaching environment by using evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapt practices to meet the needs of each learner.

Requirements:

SPED 230, SPED 332, SPED 334 or SPED 360, SPED 450, SPED 451, SPED 460, SPED 470, SPED 472

AUTISM SPECTRUM DISORDERS ENDORSEMENT CERTIFICATE PROGRAM

The Autism Spectrum Disorders Endorsement certificate program offers educators, counselors, and other professionals a 12-credit sequence (four courses) designed to meet the competencies set forth by the Pennsylvania Department of Education (PDE). If you are interested in working with children and youth with autism spectrum disorders, including autism, pervasive developmental disorder (PDD and PDD-NOS), Asperger syndrome, Rett's syndrome, and childhood disintegrative disorder (CDD), this program will prepare you to design effective programs for your students.

Through a four-course sequence, students become familiar with the theories and methods proven to be successful in working with the ASD population. The first course in the sequence, SPED 472: Positive Behavior Supports PK-8 or SPED 474: Positive Behavior Supports 7-12, provides a foundation of Applied Behavioral Analysis, including conducting Functional Behavior Assessments (FBAs) and designing Behavior Interventions (BIPs). The second course, SPED 460: Communication and Assistive Technologies, focuses on typical challenges for students with ASD in developing effective communication and provides an in-depth exploration of the various assistive technologies, including augmentative communication systems that improve opportunities for students to access the general education curriculum or to develop functional communication skills. The third course, SPED 478: Autism, explores the evidence-based practices for teaching children who are on the spectrum including Applied Behavior Analysis (ABA), TEACCH, Early Start Denver Model, Discrete Trial Training (DTT), Verbal Behavioral Intervention (VBI), Picture Exchange Communication System (PECS), and Pivotal Response Training (PRT). The final course in the sequence, SPED 788: Applied Issues in ASD, addresses professional ethics, co-morbidity and medications, and parental collaboration. Central to the final course is the opportunity to apply the methods previously explored in a classroom or therapeutic setting.

The four courses are offered in either the traditional classroom on our Oakland campus or through our digital learning environment (DLE), available online. The fourth (last) class is an exclusively online course.

DEPARTMENT OF ENGLISH AND THEATRE

MAJORS

- Creative Writing
- English

MINORS

- Creative Writing
- English
- Theatre
- Women's and Gender Studies

CREATIVE WRITING MAJOR

The creative writing curriculum explores the work of many great writers, past and present, and encourages students to respond thoughtfully and critically to those works. By exploring all genres of literature and workshoping creative pieces with peers and professional authors, students expand their abilities to consider important concepts including context, image, voice, and audience. Students may concentrate on poetry, fiction, or creative nonfiction.

Students may develop additional experience in editing, writing, graphic design, and planning literary events through internships with The Critical Point (the university's journal of visual and literary arts), Dionne's Story (an anthology of original writing connected to Dionne's Project), the Hungry Sphinx Reading Series (an interactive series between the community and the university), and Voices from the Attic (the annual anthology of the Madwomen in the Attic).

Major Requirements: 38 credits

- EN 200, one special topics course (choose from EN 216, EN 217, or EN 218); EN 405; EN 445 (11 credits)
- Three English electives (9 credits)
- World Literature/Language cluster: (foreign language, EN 219, EN/WS 233I, EN 340, EN 400 on an international writer, or study abroad for academic or service-learning credit) (6 credits)
- 12 credits in one of the following areas of concentration:
 - Poetry Concentration: EN 208, EN 239, EN 241, EN 343, EN 358, EN 435
 - Fiction Concentration: EN 205, EN 242, EN 334, EN 344, EN 406, EN 420
 - Creative Nonfiction: EN 203, EN 223, EN 229, EN 370, EN 410, EN 412

CREATIVE WRITING MINOR

Students who minor in Creative Writing must take a minimum of 18 credits in Creative Writing. The student and faculty advisor will design the program that best suits the student's needs.

ENGLISH MAJOR

The English major provides a strong foundation in British and American literature, world literature, major writers, and linguistics. Students who major in English have the flexibility to focus on additional areas of interest by taking a variety of electives, combining their degree with a secondary education certification, or pursuing a double major or minor in creative writing or professional writing. Many major courses highlight women writers' contributions to the history of literature.

English majors develop the ability to read critically, to communicate clearly and confidently, and to conduct research with an open and analytical mind. The major prepares students for many professions that require strong analytical thinking and exceptional communication skills, including fields such as teaching, publishing, public relations, and law.

English majors may develop additional skills and professional experience through membership in Sigma Tau Delta (the English Honors Society) and editorial internships for The Critical Point and Dionne's Story anthologies.

Major Requirements: 41 credits

- EN 207, EN 220, EN 301, and EN 444 (11 credits)

- Two American literature courses (EN 225, EN 305, EN 306, EN 321, EN 322, or EN 323) (6 credits)
- Two British literature courses (EN 270, EN 271, EN 318, EN 319, or EN 320) (6 credits)
- Three world literature/language courses (EN 219, EN/WS 233I, EN 265, EN 310, EN 340, foreign language or study abroad for academic credit) (9 credits)
- Three English electives (9 credits), which may include internship experience.

The requirements are the same for English majors seeking certification in secondary education or preparing for graduate study in English, but students intending to pursue a graduate degree in English should take at least two semesters of foreign language to meet the world literature/language requirement. Students who have an undergraduate degree and are applying for secondary certification must have Chaucer (EN 207), Linguistics (EN 220), Shakespeare (EN 301), American literature, and world literature. In general, such students must take a minimum of two upper division English courses at Carlow. Students who combine an English major with a major in another discipline must fulfill a minimum of 26 to 27 credits in English.

ENGLISH MINOR

Students who minor in English must take a minimum of 18 credits in English. The student and faculty advisor will design the program that best suits the student's needs. English minors have opportunities to explore literature that intrigues them, through topics as diverse as crime fiction, Irish literature, and environmental justice literature.

THEATRE MINOR

The Theatre minor requires a minimum of 18 credits including TR 103 and TR 205. The student and advisor will plan the program in accordance with the student's interests.

WOMEN'S AND GENDER STUDIES MINOR

Women's and Gender Studies courses look at contemporary and historical research about and creative productions by women; raise new questions which are relevant to women in global cultures; question sex role relationships and basic social assumptions regarding women's roles; and encourage students and faculty to do research and creative productions about gender issues. Women's and Gender Studies incorporate interdisciplinary concepts and methods and question masculine biases across the disciplines. Courses explore the historical condition of women, the interpretation of women in the various disciplines, and the present and future position of women in society. The program fosters new scholarship in order to understand the cultural history of gendered experiences as well as to debate gendered situations today.

Requirements:

The Women's and Gender Studies program offers an introductory course, a course in feminist theory, and a course in global perspectives. Students who would like to minor in Women's and Gender Studies should first enroll in level-one courses, in the order in which they appear below, before moving on to level-two courses, which are cross-listed in various departments and programs. The Women's and Gender Studies program requests that the two cross-listed courses not be from the same discipline/department and that the student also complete one Women's and Gender Studies elective. Under this structure, the total credits needed for the minor in Women's and Gender Studies is 18.

Required Core Women's and Gender Studies Courses:

- WS 101: Introduction to Women's and Gender Studies 3 credits
- WS/EN 233I: Visions of Social Change: Global Women's Writing 3 credits
- WS 320: Feminist Theories 3 credits

Required Cross-listed Women's and Gender Studies Courses:

- Two cross-listed courses from different disciplines/fields total 6 credits

Required Women's and Gender Studies Elective:

- One women's studies elective; this course can be a cross-listed course 3 credits

HUMANITIES DEPARTMENT

MAJORS

- General Studies
- History
- Liberal Studies

MINORS

- History
- Modern Languages
- Philosophy
- Theology

GENERAL STUDIES MAJOR

The Bachelor of Arts in General Studies is designed for the student who wishes to pursue a university degree grounded in the liberal arts in the most expedient, yet enriching, way possible. The student fulfills the specified Compass required of all Carlow University students but enjoys a maximum degree of flexibility in choosing the remaining courses. It is a viable option for the student with varied interests who wishes, for example, to study the plays of Shakespeare in one course, pursue the theories of economics in another, and focus on biblical interpretation in yet another. A required concentration in one area of study assures that the student will reach a level of progressive depth in a single discipline of his/her choice. This is also an excellent program for a student who is currently employed but can advance further in the workplace with a university degree. With the help of an advisor, the student can creatively shape the direction of studies in light of personal and professional goals. This program will be particularly beneficial to students who have decided to exit their original major but who still desire to graduate in a timely manner.

PROGRAM REQUIREMENTS

- Students must successfully achieve 120 credits in order to graduate. A minimum 2.0 grade point average is required.
- All students must fulfill the requirements of the Carlow Compass.
- In addition to the Carlow Compass, each student must choose one area of concentration, taking a minimum of 12 credits in one discipline. At least two of those courses must be at the 200 level or higher. Note: Students may not minor in the same subject in which they have a concentration.
- In the last semester, the student will produce a thesis or project that demonstrates integrative thinking and proficiency of the Program of Study outcomes. This will be chosen and completed under the direction of the program advisor.
- The remaining credits needed to reach 120 will be considered electives chosen at the discretion of the student in conjunction with the advisor.

HISTORY MAJOR

The study of history and the skills developed in writing history provide a sound basis for positioning students in the increasingly competitive job markets of today and tomorrow, for their formal and informal education later in their lives, as well as during their college years. A major in History is one of the best foundations for success in career and academic plans. Knowledge of history is essential for success in a rapidly changing world. Understanding humanity's recorded experience gives students the information and perspective they need in order to be able to think in an orderly way about the world: its economics, politics, cultures, legal systems, and religions. History also provides students with a context for better understanding and enjoying literature, music, and the arts, all of which are in part reflections of the times in which they were produced. Equally important are the skills in research and writing developed in the course of historical study. These skills are readily transferable to everyday life, future scholarship, and a career. The quality performance of History majors in law, business, education, government, journalism, television and radio, and the arts has long been recognized. A major in History is a good preparation for graduate study in History or other humanities.

The History major program can be combined with virtually any minor program at Carlow. History is also an ideal second major augmenting the advantages of almost any field of study.

Graduates from Carlow with a degree in History should:

- Exhibit in-depth knowledge in a specialty area coupled with a broad familiarity with other histories, Western and/or non-Western, and a solid foundation in methodology;
- Produce scholarship sensitized to the issues of class, race, gender, and sexual orientation, manifestly utilizing cross-cultural and transnational perspectives, leadership issues, and peace and justice considerations;
- Demonstrate familiarity with current concerns and debates within historiography, and the social and cultural significance of these debates;
- Show knowledge and versatility adequate for entrance to and successful completion of an MA and/or PhD program in history or another superior degree in other related graduate programs, or to pursue a career in journalism, the media, or the arts upon graduation.

Requirements:

- HS 110, HS 151, HS 170, HS 171, one Special Studies in History course (from HS 353/354, HS 355/356, HS 392/393, HS 395/396, HS 411/412, and HS 413/414), and HS 456 Senior Thesis (History majors are required to write a 25-30-page senior thesis on a topic approved at the end of the second semester of their junior year.

Additional History Courses (15 credits)

- 15 credits in History in consultation with your advisor.

HISTORY MINOR

Students who minor in History must take a minimum of 15 credits in History. The student and faculty member will design the program that best suits the student's needs.

LIBERAL STUDIES MAJOR

A Bachelor of Arts in Liberal Studies provides an ideal major for the creative, independent student who is interested in an interdisciplinary focus. This major takes on the characteristics of a "guided studies" or "directed studies" program whereby the student, working closely with the program advisor, has the opportunity to "create a major" according to personal education and career goals. This major further allows the student to gain significant depth in three areas of study and, at the same time, to acquire the breadth that is characteristic of a liberal arts education.

While a degree in Liberal Studies is a very practical degree in itself, this major is also an ideal preparation for students who are planning to pursue studies beyond the bachelor degree level. It is especially practical for students who have particular career goals that require in-depth study in more than one academic area. It is an individually designed program of study whereby students choose three minors. At least two minors must be from any of the liberal arts programs such as those found in the humanities, art, the sciences, English, Women's Studies, and the social sciences. Students may choose one minor in an area outside of the liberal arts programs—Accounting, Business Management, Human Resources, Information Technology, or Health Coach minor.

Program Requirements:

- **Total Program Required Credits**
Minimum 54 credits. The required number of credits for each minor and the particular sequence of courses are determined by the academic program offering the minor.
- **Three Minors in Separate Programs of Study**
The three minors constitute the minimum 54-credit requirement. Two of the chosen minors **must** be in Liberal Arts programs; one minor may be in a Professional Studies program (i.e. Accounting, Business Management, Human Resources, Information Technology or Nursing), or all three may be in a Liberal Arts program.
- **Liberal Studies Thesis (IS 400, 1-4 credits)**
During the senior year, the student will produce a senior project that reflects the learning outcomes of the program. While this project will be created in conjunction with the program advisor, the student will be free to choose a project faculty director from any of the chosen minor fields.
- **Carlow Compass**
Any of the Carlow Compass courses can be counted toward the minors where applicable, as well as to the Liberal Studies major as a whole.

MODERN LANGUAGES MINOR

Students may earn a minor in Modern Languages by achieving six semesters of foreign language study. At least three of those semesters must be obtained at Carlow by studying language in a Carlow University-approved study abroad program language course, a PCHE language course, or by completion of EN 220 Linguistics. The balance may be achieved by transferring credits. Eligible credits include:

- Credits earned on study abroad prior to transfer to Carlow OR during enrollment at Carlow
- Credits earned through study at a PCHE institution (These are cross-registered, not transferred credits.)
- Credits transferred from another college or university at the time of transfer admission

PHILOSOPHY MINOR

As a minor, Philosophy provides a strong humanities background for students whose primary major—perhaps Biology or Business Management—may not provide this opportunity. Additionally, Philosophy is a superb complement to majors such as Psychology or Education. With its emphasis on language skills, critical thinking, and abstract reasoning, Philosophy is a minor with numerous practical applications. A Philosophy minor can be obtained by completing at least 15 credits (five courses) in the field of philosophy. Philosophy minors should meet with the members of the Philosophy Department about which courses would be most appropriate for their degree.

THEOLOGY MINOR

Theology is a scholarly study of the mystery of human existence and the interdependence of women and men as they relate to God. Theology examines the human experiences that have given rise to questions of religion such as the meaning of life and death, the existence of a personal God, the search for human values, issues of peace and justice, contemporary spirituality, and ministry of the laity. These questions have no answers. Rather, they invite inquiry into reality in a unique way by engaging one in reflection that yearns for Sabbath, i.e. sacred time set aside to ponder the depth of the richness and wisdom of God in human beings, in human history, and in all of creation. Following upon this, it seems that the theology student comes to this discipline already with a prerequisite: the desire to rest in the depths of holy mystery. The theology minor provides the discipline necessary for this unique way of inquiry through a sequence of courses in scriptural, historical, systematic, and moral theology, and pastoral ministry.

The Theology minor is a perfect augment to many majors. Students majoring in the Social Sciences, Education or Nursing have found that theological studies can provide a greater depth as to how and why we care about the many issues in society, education and health care. Students in the empirical sciences can be enriched by Theology's encompassing approach to the natural world as a window that reveals the presence of divine activity in the cosmos. Finally, students who choose Liberal Studies as a major will find the Theology minor to be an exciting complement to their other minors.

Students who minor in Theology must take 18 credits in the department including TH 101. The student and advisor plan the program in accordance with the student's interests.

DEPARTMENT OF MATHEMATICS AND DATA ANALYTICS

MAJORS

- Data Analytics
- Mathematics

MINORS

- Data Analytics
- Mathematics

DATA ANALYTICS MAJOR

Data Analytics is an interdisciplinary program that involves drawing conclusions from complex data. Analytics has been identified by sources like Google and LinkedIn as one of the top skills employers will be looking for in the coming years, and

companies from start-ups to major corporations around Pittsburgh are looking for graduates with these skills for entry-level positions. The Data Analytics major will prepare students for these types of jobs by introducing them to highly desirable analytics skills and competencies, including linear algebra, introductory computer programming courses, statistics, data visualization, database management, communications, and data science. Students who complete this curriculum will understand how to access, process, store, clean, and analyze data sets, and they will use this knowledge to complete both internal and external internships. They will know how to use that data ethically and responsibly, and how to communicate the conclusions from the data with experts and non-experts in their fields.

Requirements:

- DTAN 101, Introduction to Scripting, Data Visualization, Introduction to R, Database Management I, Database Management II, Introduction to Python, Scripting, MAT 115, MAT 140, MAT 151 or CHM 151, MAT 302, MAT 398/399, Advanced Statistics, Ethics in Big Data, Scientific Communications, Senior Experience

DATA ANALYTICS MINOR

The Data Analytics minor is a 16-credit minor that includes 13 credits of required coursework and 3 credits of electives.

Requirements:

- DTAN 101, Data Visualization, MAT 115, MAT 140 or MAT 160, Choose one of the following electives: Introduction to R, Introduction to Python, MAT 151 or CHM 151

MATHEMATICS MAJOR

The curriculum in Mathematics provides the knowledge and experience needed to be a professional mathematician or pursue advanced study in a related area. The courses provide a balance between applied and theoretical problem solving, while the Junior Seminar and Senior Experience allow an in-depth exploration of an area beyond the formal course work. The design of the major provides ample opportunity to pursue a minor in another academic discipline, to expand potential career opportunities, or to prepare for law school. Students completing the major in Mathematics will have satisfied content area requirements for Pennsylvania secondary certification in mathematics.

Requirements:

Mathematics majors are required to complete: MAT 160, MAT 260, and MAT 360 (Calculus I, II, and III: 12 credits), MAT 302 (Linear Algebra: 3 credits), plus at least four additional upper level mathematics courses (at least 12 credits) and CSC 110 (Introduction to Computer Programming: 2-4 credits), or MAT 151I (Computer Applications for Science and Mathematics: 3 credits). Each student must also complete a Junior Seminar (MAT 398/399: 2 credits) and Senior Experience (MAT 498/499: 4 credits) in mathematics.

Required Support Courses:

Each student must complete PCS 221/223 (Physics with Calculus I Lecture and Laboratory: 4 credits).

MATHEMATICS MINOR

Requirements:

Students must complete MAT 160 and MAT 260 (Calculus I and II: 8 credits), MAT 302 (Linear Algebra: 3 credits) plus at least two additional upper-level mathematics courses (at least 6 credits). (Note: MAT 398/399 and MAT 498/499 do not fulfill this requirement.) In addition, MAT 151I (Computer Applications for Science and Mathematics: 3 credits) or CSC 110 (Introduction to Computer Programming: 2-4 credits) must be completed.

COLLEGE OF LEARNING AND INNOVATION COURSE DESCRIPTIONS

ART EDUCATION

AE 326 Elementary Art Methods and Materials

Sequential and systematic exposure and training in age appropriate methods, materials, and techniques for elementary art programs. Students gain theoretical knowledge in art education theory, developmental stages of artistic growth, and in the structuring and maintenance of a comprehensive elementary art program. Field placement required. **3 credits**

AE 327 Secondary Art Methods and Materials

Core course designed for art certification majors to gain an understanding of the structuring and maintenance of a sequential art program at the middle/junior and senior high level. Emphasis placed on technical skills appropriate for fostering the special creative needs of the adolescent student. Field placement required. **3 credits**

AE 409/410 Elementary/Secondary Art Student Teaching

Eight weeks of full-time teaching in an elementary (K–6) art room and eight weeks in a secondary (7–12) art room under the direct supervision of the cooperating teacher and university supervisors. Verification of competence will be determined jointly by the cooperating teacher and the university supervisor. The seminar will include the development of topics particularly pertinent to this experience: school law, professional organizations, evaluation, school-based relationships, strategies for teaching, classroom management, development of assessment strategies, and preparation for employment.

6 credits for each course, equals a total of 12 credits

PREREQUISITE: COMPLETION OF ALL MAJOR COURSE REQUIREMENTS, PROFESSIONAL SEQUENCE REQUIREMENTS, AND MINIMUM CUMULATIVE GPA OF 3.0.

NOTE: NO OTHER COURSES MAY BE TAKEN WHILE A STUDENT IS REGISTERED FOR AE 409 AND AE 410 WITHOUT SPECIAL PERMISSION OF THE CHAIR OF ART EDUCATION.

ART

AR 101 Introduction to Art/Visual Culture I

An introduction to the history of art from the prehistoric period to the year 1300. This course provides a chronology of the major works in the Western tradition and provides the basic terminology and methodologies necessary to analyze these works in a social, historical, religious, and/or material context. **3 credits**

AR 103 Every Picture: Global Themes in Art

This course presents a thematic and global approach to the history of art. Students will explore a range of topics or themes from a global perspective. Some of the topics may include: war, love, the human body, family, portraits, god(s). Students will examine how artists from around the world explore these themes and how these artworks tell stories about these universal themes from varying perspectives. **1.5 credits**

AR 102 Introduction to Art/Visual Culture II

An introduction to art in the West from Renaissance to early 20th century. Students learn basic vocabulary and methodologies necessary to analyze key works and critically engage with issues raised. Special attention given to representation of social relations, gender, religion, and politics; the context of production, use, and display. **3 credits**

AR 111 Basic Art I/Drawing I

An introduction to two-dimensional drawing media, techniques, and concepts. The course will cover line, value, perspective, and other basic drawing issues. **3 credits**

AR 114 Basic Art/Drawing II

A second-level drawing course following AR 111 Basic Art I/Drawing I. Continued development of basic drawing techniques along with more in-depth exploration of various 2-D media and conceptual approaches. **3 credits**

PREREQUISITES: AR 111

AR 115 Basic Art and Design

An introduction to two-dimensional design concepts. Course will include composition elements, as well as a component on color theory. These issues will be explored through a variety of media. **3 credits**

AR 203 Modern and Contemporary Art

Every two years, Pittsburgh hosts one of the most important exhibitions of global contemporary art, The Carnegie International (CI). This course highlights the artists and artwork of the current CI and places these works in an historical context. The first half of the course will be devoted to issues in modern and avant-garde art in Europe and North America, setting the foundation for an in-depth exploration of the CI. The second half of this course will explore the ways in which the modernist tradition has been challenged and re-evaluated by contemporary postmodern and feminist artists from around the world, highlighting the work of artists represented in the CI. **3 credits**

AR 206 (PH 206) Aesthetics

Investigation of the history of aesthetics and its pertinence to art. The role of art as a vehicle of philosophic expression will be examined along with the aesthetic theories of such thinkers as Plato, Aristotle, Kant, Nietzsche, Schopenhauer, and Marx. Film and music will also be used in the class, as well as an examination of poetry and its philosophic and aesthetic significance. **3 credits**

AR 209 (WS 209) Women and Art

An investigation of the history of art through the lens of feminist critical theory. Explores the production and status of women artists and patrons as well as the representation of women in art from the Renaissance to the present. Students critically engage with course materials through class dialogue, written assignments, and collaborative projects. **3 credits**
PREREQUISITE: AR 102.

AR 214SL Public Art in the United States

Studies the history of public art in the United States from the late 19th century until the present. Emphasis on the critical issues raised by public art over time as they relate to race, class, gender, and key historical events in American history. Highlights how public art is used to create and shape identity and space. **3 credits**

AR 221 Life Drawing and Media

A second-year level experience in drawing of the human figure. Included in the course are concepts such as gesture, anatomy, proportion, and composition. Students will work with anatomical and live models. Various media will be explored. Fulfills linked requirement when offered as AR221L and taken with BIO 157L. **3 credits**
PREREQUISITES: AR 111 OR AR 114 OR PERMISSION FROM THE DEPARTMENT CHAIR.

AR 222 Concepts and Media

A course designed to familiarize students with contemporary conceptual art skills, thinking through the process of artistic idea generation, personal approaches to subject matter and content, and developing individual art practices. Themes can include: the self, processes and systems, time and space, etc. Course can be repeated for credit and has no prerequisites. **3 credits**

AR 224 Introduction to Fiber Arts

An introduction to creative expression using traditional and contemporary approaches to fiber and mixed media materials. Emphasis on combining content and form and application of craft techniques such as quilting, crocheting, basketry, sewing, etc., to production of expressive artworks. **3 credits**

AR 225 Art and Science

This course will explore how scientific discoveries, ideas, and concepts inspired and influenced artists and their works. Focusing on art created from the Renaissance through the present, this class will examine the links between art and science in various media. **3 credits**

AR 227 Painting I

An introduction to basic concepts and techniques in oil painting. There will be a concentration on color mixtures, creating form, space, and light. A variety of subjects will be explored. **3 credits**
PREREQUISITES: AR 111 OR AR 115.

AR 229 Drawing and Painting II

An exploration of advanced drawing and painting issues. Experimentation with media and technique. **3 credits**
PREREQUISITES: AR 111 OR AR 115, OR PERMISSION FROM THE DEPARTMENT CHAIR.

AR 240 Sophomore Review

An opportunity for the student to learn how to create and present a professional presentation of artwork and progress to date. The student and the studio arts faculty assess the work and its presentation, helping guide the student's course of study. **1 credit**
ART MAJORS ONLY.

AR 245 Heritage of American Art

An introduction to the major themes in the art and culture of the United States from the colonial period to the 20th century. Special attention is given to the issues of race, class, and gender as they relate to art production, art reception, and the articulation of "national identity" in the visual culture of the United States. **3 credits**

AR 249 20th Century Art in the United States

This course examines visual art (primarily painting and photography) in the United States in the 20th century. Following a chronological format, we begin with the 1893 World's Columbian Exposition and end with a discussion of 9/11 memorials. Students study modern art movements such as Regionalism, Abstract Expressionism, Pop Art and Minimalism, as well as postmodern art production that defies and questions the "isms" of modernist movements. Special emphasis on race, class, gender, and the socio-political context of art-making and art reception. In addition, we highlight the importance of art institutions, exhibitions, and art collecting in shaping culture in the U.S. in the 20th century. **3 credits**

AR 254 World Architecture

A survey of Western architecture from the prehistoric period to the present, which focuses on particular monuments, both public and private. Architectural types, stylistic influences, urban design, and cross-cultural currents are studied in order to provide students with a vocabulary of terms for discussing and analyzing how architecture both shapes the environment and communicates meaning. **3 credits**

AR 266 Special Topics in Modern Art

A special topics course in the area of the history of modern art. Students engage in an in-depth exploration of a particular topic, issue, theme, or artist of the modern period through advanced readings, class discussion, research, and written exercises. **3 credits**
PREREQUISITE: AR 102.

AR 268 Contemporary Art Issues

An introduction to the art theories and practices of artists working with social and political issues in the 20th century. Surveys major international modernist art movements such as Futurism, Constructivism, Expressionism, Dada, and Surrealism. Concentrates on the social engagement and art activism of artists from the 1960s to 1990s in the context of social and political movements. **3 credits**

AR 305I (TH 305I) Memory

In this exploration of the topic of memory through the two lenses of theology and art, the student will assimilate aspects of the material presented by each professor into an understanding that places the two viewpoints into a more holistic framework. **3 credits**
PREREQUISITE: CC 101 or SKC 101.

AR 307 (CM 307) Media Criticism

An introduction to the aesthetic and social analysis of mass media, film, and television through critical writing and discussion. **3 credits**

AR 311 Issues of Scale and Quantitative Project Development in the Studio Arts

The course is intended to develop the student's quantitative understanding of scale in artwork as well as in exploring

methods for quantitatively approaching studio project development. **3 credits**

PREREQUISITES: CC 101, CC 102, AR 111, AND AR 115

AR 315 Sculpture

A concentration on formal and technical problems of three-dimensional media (volume, space, structure) and investigation of the techniques of modeling, casting, carving, and construction using a variety of materials. **3 credits**

PREREQUISITES: AR 111, AR 115, OR PERMISSION FROM THE DEPARTMENT CHAIR.

AR 317 Painting II

A focus on more advanced painting issues. Discussions of painting styles, personal voice, and other issues of expression. Refinements in basic skills while reviewing and exploring contemporary visual directions. **3 credits**

PREREQUISITES: AR 111 OR AR 114 OR PERMISSION FROM THE DEPARTMENT CHAIR.

AR 321 Printmaking

An introduction to basic printmaking methods. Course will include lino block, monoprint, collagraph prints, and drypoint etching. Emphasizes understanding various techniques, development of concepts, and precision of print execution. **3 credits**

PREREQUISITES: AR 111 OR AR 115 OR PERMISSION FROM THE DEPARTMENT CHAIR.

AR 322 (HS 322, WS 322) Representations of Women: High Art/Popular Culture

A study and critique of concepts of gender and sexuality in representative texts (film, painting, music, and television). Critical and source materials are drawn from art history, cultural studies, feminist theory, and history. **3 credits**

AR 330 Advanced Projects

Advanced project work in any visual media for students beyond the sophomore level. Students work on projects of their own design. The emphasis of the course is on conceptualizing, researching, and executing substantive art projects, as well as advancing students' familiarity with techniques and media. **3 credits**

PREREQUISITE: PERMISSION FROM THE DEPARTMENT CHAIR.

AR 331SL Ceramics

An introduction to ceramic design and techniques, including the hand-built methods of pinch, coil, drape, and slab as well as wheel throwing with stoneware clay. Emphasis on creativity, concepts, terminology, and process. **3 credits**

AR 340 Typography

This course will introduce students to both traditional and advanced typography. Students will focus on the history and foundation of letterforms. The course will expose students to the relationship between appearance and readability of letterforms, placement of display and text typed in formatted space. As they work in a traditional context of hand rendering type, they will also be introduced to contemporary typesetting technology. As students understand the basics, they will be challenged to emphasize creativity and visual aesthetics with type. Typographical assignments will be geared to develop sensitivity to the integration of typography with a variety of visual imagery. **3 credits**

AR 341 History and Analysis of Design

This course will introduce the study of the art of movements that have structured the field of graphic design covering political, social, and economic influences as well as the analysis of contemporary design and design trends. **3 credits**

AR 342 Digital Illustration

This course will be focused on teaching vector based image creation techniques as they are related to advertising, design, and illustration fields. **3 credits**

AR 343 Advertising

This course is designed to introduce both advertising design and corporate identity. Students will explore preparation of original concepts while utilizing the principles of design, typography, color, and problem solving skills. They will stress

attention to detail, deadlines, professional presentation, and cultural diversity in artwork. This course will introduce students to the business ethics, contracts, and billing within the design and advertising fields. Students will also have an opportunity to learn about the role of design in corporate identity. An analysis of corporate objectives and practical applications will be the basis for developing a structured corporate image system including logo design and brand standards. **3 credits**

AR 344 Electronic Design/Layout

In this course, Students will explore various means of indicating, placing, and manipulating visual elements in page design. They will develop strong and creative layout solutions by means of conceptual design process. The course is designed to help students obtain the ability to effectively integrate photographs, illustrations, and type using InDesign. **3 credits**

AR 345 Business of Graphic Design

This course will investigate traditional and emerging business topics. It is designed to prepare students as they transition into a media and design profession. The course will cover concepts of professionalism, and expected business needs. The students will have an understanding of self-marketing, proposals and project management as well as intellectual property and contractual issues. **3 credits**

AR 355 Introduction to Computer Art

An introductory course in basic computer art skills including Adobe Photoshop, Adobe Illustrator, and basic Web page design. **3 credits**

AR 370 The Creative Freelancer

The Creative Freelancer is a course designed for juniors and seniors who intend to work for themselves in a creative field (art, music, writing, etc.). Students will learn about creative professional practice. Lessons will include marketing oneself, taxes for sole proprietorships, writing proposals, pricing one's services or artwork, grant writing, etc. As homework, students will write CVs, cover letters, proposals, and other documents that they will be able to use when applying for real opportunities outside of the classroom. The course is intended to benefit students by preparing them for practicalities in their futures, rather than to test their abilities within art, music, writing, etc. For that reason, it has been designed as an elective, one-credit pass/fail course that meets for one hour per week. **1 credit**

AR 380 History and Principles of Animation

This course will allow the students to explore animation throughout history. It will introduce animated film from its most simplistic form to current adaptations also in a variety of mediums. Students will have the opportunity to implement the principles of animation within projects that will concentrate on real world movements and how to manipulate them to create the illusion of life. **3 credits**

AR 381 Storytelling with Editing Techniques

This course will focus on the importance of storytelling in animation and media arts while introducing various elements of effective techniques to enhance the story. The course will expose students to industry-based storyboard techniques to convey a story. Students will utilize storyboard creation to demonstrate their story in digital film format. They will create an animatic using audio and editing techniques to enhance the story further. Using digital editing techniques, will help students possess an additional skill in digital film post production. **3 credits**

AR 382 Material, Lighting, and Texturing

This course will expose students to materials, textures, and lighting strategies to add detail and realism to objects while working with simple models. During assignments, students will study real world surfaces and recreate them along with textures. **3 credits**

AR 383 Compositing and Motion Graphics

This course will refine students' illustration techniques through the introduction of timeline based digital compositing process. This course will further emphasize the importance in design elements while working with 2D elements in a 3D environment to create various projects which will include examples in: rotoscoping, keying, tracking, multiple layers, 3D

camera and lighting, and kinetic typography. Students will also have the opportunity to incorporate live action film footage to projects as well as Cinema 4D. **3 credits**

AR 385 Animation Design and Layout

This course will focus first on designing and drawing characters or objects for animation using line to accurately create the form which will enhance apt proportion. The course will also focus on the fundamentals of background layout with emphasis on perspective, composition, design properties, staging, mood, lighting, and overall storytelling. This will create a 3 Dimensional composition in 2 Dimensional format utilizing foreground, mid-ground, and background elements. **3 credits**

AR 386 2D Animation

This course is an introduction to 2-dimensional hand drawn animation which focuses on the principles of animation and incorporates acting elements through the study of animation. Students will reproduce characters' personality, expression, body language, and posture through classroom exercises. As the students apply principles to create an animated sequence, they will demonstrate timing through the use of various image acquisition techniques, pencil tests, inking, and other 2D animation skills will be introduced. **3 credits**

AR 387 3D Modeling and Animation

This course will allow students to utilize basic design principle to conceptualize 3D design elements. Students will construct 3D models focusing on the geometric construction. The course will also introduce basic 3D animation techniques which will include: hierarchical linking, keyframing, function curves, animated modifiers, basic morphing, animated cameras, and an introduction to character animation. **3 credits**

AR 388 3D Character Modeling and Rigging

This course will introduce the fundamentals of character setup. Using industry standard techniques, students will use advanced anatomical modeling to create 3D characters. The characters will be tested by animation assignments. After animated studies, students will incorporate their character animation in a real life sequence. **3 credits**

AR 389 Portfolio Pre-Production

This course will help students prepare for the industry through personal branding and portfolio. Students will demonstrate the skill and knowledge they have obtained throughout the program in conceptual design and creative problem solving while compiling and refining portfolio artwork. Instructor will work individually with student to advise them on what should be chosen to showcase their unique style and skill. This course is designed to help students identify short and long term professional employment goals as well as industry related resources. **1 credit**

AR 390 Portfolio Production

This course is designed to continue students' portfolio pre-production professional development. The students will prepare for entry level employment within the industry through finalizing their professional portfolio along with its presentation. Students will demonstrate advanced skills in conceptual thinking, design, creative problem solving, and utilizing constructive criticism as portfolios are refined. Students will be exposed to additional industry resources such as industry database, employment guide, discussion in copyright, and film festivals. **2 credits**

AR 400 Independent Study

A student-designed course in an area of art not covered by current courses. Requires the approval and sponsorship of a faculty member prior to registration. **Credits vary**

AR 421 Senior Project

An opportunity for the student to create and present a professional presentation of art work and progress to date. The student and the studio arts faculty assess the work and its presentation. Can be expanded to include a project approved and advised by a faculty member. **2 to 8 credits**

REQUIRED OF ALL ART MAJORS. ART MAJORS ONLY.

AR 450 Internship

Opportunity for professional student experience in various organizations. **1 to 8 credits**

ART THERAPY

AT 205 Foundations of Art Therapy

An introduction to art therapy in which students learn how art is used therapeutically with various populations and in a variety of settings. Through class participation using art therapy techniques and case presentations, the students will gain knowledge of how art can be used to establish therapeutic goals and then be used to achieve those goals. The student will develop a basic understanding of the field of art therapy and how its roots developed from the field of psychology. **3 credits**
ART THERAPY MAJORS ONLY OR PERMISSION OF ART DEPARTMENT CHAIR

AT 339 Expressive Visual Techniques

An introduction to various media as they apply to art therapy and to specific expressive art therapy techniques. The students will achieve understanding and working knowledge through participation, individually and in groups, in expressive art/art therapy activities and through discussion concerning the values, purposes, and goals of the art experience. Understanding of the experiential will be achieved through discussion of the student's own artwork and through slides, films, photographs, and artwork of clients in treatment. **3 credits**
ART THERAPY MAJORS ONLY OR PERMISSION OF ART DEPARTMENT CHAIR

AT 406 Art Therapy Practicum

An in-depth sequence of therapeutic clinical art experiences under the supervision of a registered art therapist. Exposes the student to the practice of art therapy on a pre-professional level. The student will write a case study and present work. **1-3 credits**

PREREQUISITE: AT 205.

BEHAVIORAL NEUROSCIENCE

NEU 220 Neuroanatomy

This is a one-semester undergraduate-level hybrid course designed to provide students in Behavioral Neuroscience tracks with an in-depth study of the structures contained in the central and peripheral nervous systems at both the microscopic and gross anatomy levels. The course will also introduce basic research and diagnostic techniques used to investigate the nervous system. Attention will be given to clinical case studies that highlight anatomical importance. This is a 4-credit course with 3 hours of lecture instruction and 3 hours of lab instruction per week. **4 credits**
PREREQUISITES: BIO 120, BIO 230, and PY 101.

NEU 221 Neurophysiology

This is a one-semester undergraduate-level hybrid course designed to provide students in Behavioral Neuroscience tracks with an overview of neurophysiology and current topics in neuroscience. The course will also introduce basic research and diagnostic techniques used to investigate the nervous system. Attention will be given to developing analytical and communication skills necessary to investigate and report on topics in the field. This is a 4-credit course with 3 hours of lecture instruction and 3 hours of lab instruction per week. **4 credits**
PREREQUISITES: NEU 220

BIOLOGY

BIO 110 Foundations of Organismal Biology

A first course in the biology curriculum that introduces students to the unity of life in both animals and plants. Students will learn that although the life forms of our planet may vary in evolutionary history, they share the same basic principles of form and function. The course will cover the anatomical structures and physiological systems that maintain animal and plant life. Three hours of lecture and three hours of lab per week. **4 credits**
FOR BIOLOGY MAJORS.

BIO 120 Foundations of Molecular and Cell Biology

A second course in the biology curriculum, which introduces students to molecular and cellular theory, including the structure and function of cells at the microscopic and sub-cellular levels. Students will also examine the concepts of energy metabolism, biochemistry and biosynthesis of macromolecules, and the genetic level of organization. Three hours of lecture and three hours of lab per week. **4 credits**

FOR BIOLOGY AND CHEMISTRY MAJORS.

BIO 151I (CHM 151I, MAT 151I) Computer Applications for Science and Mathematics

An introduction to the practical application of computer hardware and software to problems in the sciences and mathematics. Topics include basics such as using a graphical user interface and common office applications. More advanced topics include computer interfacing to instruments, mathematical modeling, curve fitting, molecular modeling, and others. No computer background is assumed. Three hours lecture/workshop/ demonstration weekly. **3 credits**

PREREQUISITES: BIO 110 OR PCS 221; MAT 152 OR MAT 160; CC 100 OR SKW 101, CC 101 OR SKC 101, AND CC 102 OR SKQ 101 OR PERMISSION FROM THE DEPARTMENT CHAIR.

BIO 157 Contemporary Biology

An overview of the principles and applications of biological knowledge as they relate to health, medical, agricultural, and ecological issues in contemporary society. The process and methods of scientific inquiry, its resulting technologies, our understanding of the natural world, and the impact of our knowledge and the technologies on our society and environment are examined. An underlying theme is humankind, human form and function, and humankind's relationship to the natural world. Three hours of lecture and one two-hour lab per week. Open to all non-biology majors. **4 credits**

BIO 157L Contemporary Biology

Designed for the non-biology major who is interested in developing a strong foundation in human anatomy. The course begins with a focus on the investigative process by which knowledge in science is accumulated. Major emphasis is then placed on the two systems of the human body that provide structural support: the skeletal and muscular systems. Three hours of lecture and two hours of laboratory each week. Open to all non-biology majors. **4 credits**

BIO 203 Pathophysiology

A course examining the underlying processes and effects of disease at the level of cells, tissues, organs, and systems. Cellular mechanisms lay the foundation for examining pathophysiological changes in organs and systems. Three hours of lecture weekly. **3 credits**

PREREQUISITES: BIO 205 AND BIO 206.

BIO 205 Anatomy and Physiology I

BIO 206 Anatomy and Physiology II

A set of two courses designed for the biology major preparing for careers in perfusion technology, the health professions, or forensic science. These comprehensive courses cover the anatomical structure of all major systems of the body and the physiological and homeostatic mechanisms that are associated with their functions. Three hours of lecture and two hours of lab per week. **4 credits each**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 207 Anatomy and Physiology I

BIO 208 Anatomy and Physiology II

A sequence of two courses. The students examine the anatomy and physiology of the various systems of the body. The relationship between structure and function and the concept of homeostasis are emphasized. Attention is given to clinical correlation and application of basic anatomical and physiology facts. Three hours of lecture and two hours of lab weekly. Successful completion of BIO 207 (D or better) is a prerequisite for BIO 208. A grade of C or better is required for nursing majors. These two courses do not satisfy an elective requirement for biology majors. **4 credits each**

FOR NURSING MAJORS: COREQUISITE FOR BIO 207 IS NU 2161/2162, COREQUISITE FOR BIO 208 IS NU 2171/2172.

BIO 225 Comparative Anatomy

A course designed to provide the biology major with a comprehensive understanding of the anatomy of the members of the Phylum Chordata. Through lectures and laboratory dissection, students examine the diverse nature of chordate structure and appreciate the mechanisms of evolution that have produced these features. Three hours of lecture and two hours of lab

per week. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 227 Microbiology

A course designed to provide students with an introduction to the biology of microorganisms, particularly bacteria, fungi, protozoa, helminths, and viruses that are agents of human disease. Emphasis is on the biological bases for clinical activities in disinfecting and sanitation, infection control and prevention, and antimicrobial chemotherapies. Host defenses, the immune response, and immunotherapies are also examined. Includes practical experience in bacteriological and immunological lab techniques. Three hours of lecture and one two-hour lab per week. **4 credits**

PREREQUISITES: CHM 105 OR CHM 111-113, CHM 112-114.

BIO 230I (PY 230I) Biological Basis of Behavior

Biological Basis presents an in-depth focus on neuroanatomy, the nervous system, and other biological processes relevant to human thought and behavior. Students will learn the structure and function of the nervous and endocrine systems, with a specific focus on how biological systems influence psychological functions and vice versa. Students will become familiar with the terminology and research methods of both biology and psychology, and will be introduced to exciting interdisciplinary neuroscience fields. **3 credits**

PREREQUISITE: PY 101

BIO 231 Basic Human Anatomy and Neurobiology Laboratory

A hands-on laboratory course that covers all human body systems (i.e. skeletal, muscular, cardiovascular, respiratory, digestive, renal, and reproductive) with special emphasis placed on the structure and function of the nervous and endocrine systems. This laboratory course, along with the lecture topics covered in BIO 231I, provides a basic understanding of the structure and function of the human body. **1 credit**

BIO 250 Genetics

An investigation into the maintenance, inheritance, transfer, and expression of genetic information at the molecular, cellular, organismal, and population levels. Includes Mendelian genetics, bacterial genetics, the structure and function of chromosomes and genes, recombination and mutation, the control of gene expression, and population genetics. Provides a brief introduction to genetic engineering and biotechnology. Three hours of lecture and one three-hour lab per week.

4 credits

PREREQUISITES: BIO 110 AND BIO 120.

BIO 255 General Ecology

A broad survey of the study of interactions of organisms with each other and their physical environment. This course addresses the dynamics of energy flow and nutrient cycling through ecosystems, as well as ecological processes operating at the individual, population, and community levels of organization. Emphasis is placed on the methods ecologists use to conduct their research. Three hours of lecture and three hours of laboratory per week. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 261 Zoology

A course designed to provide the biology major with an understanding of the diversity, taxonomy, ecology, and behavior of many phyla of animals, especially emphasizing the invertebrates. Allows the student to survey the diversity of animal forms in the environment and the contributions, both positive and negative, that they make in our everyday lives. Three hours of lecture and two hours of laboratory per week. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 275 Introduction to Forensic Death Investigation

A course that is the first in a sequence of courses designed to prepare students for careers in forensic death investigation. The course introduces students to the history, legalities, equipment, and procedures associated with post-mortem examinations. Students will also be required to observe practical autopsy procedures. Four hours of classroom theory/ laboratory training per week, with observational times TBA. **4 credits**

PREREQUISITES: BIO 110, BIO 120 AND BIO 205. COREQUISITE: BIO 206.

BIO 280SL Current Topics in Cell Biology

A service-learning course for biology majors designed to integrate basic concepts of cell biology with current topics in the field. Topics can include, but are not limited to: cell cycle and cancer biology, signal transduction and pharmacology implications, stem cells and regenerative medicine, cell sequences and aging, and neuron functioning and addiction. The course will emphasize experimental techniques used in the study of cell biology, and how to critique primary literature in the field. Additionally, as a service-learning course, students will be exploring the social and ethical responsibilities of the field, as well as participating in a service-learning project with a community partner. These experiences will provide a basis for student reflection pertaining to the influence of science in society, and the role of the scientist to his or her community.

4 credits

PREREQUISITES: BIO 110 AND BIO 120.

BIO 300 Junior Seminar

An opportunity for junior biology majors to research current trends and topics in their discipline and present a seminar devoted to the topic of their choice. Junior presentations may be on any topic approved in advance by the seminar director.

2 credits

BIO 306I (CHM 306I) Biochemistry (Interdisciplinary)

The science of biochemistry covers the arena where molecular and cell biology and chemistry interrelate. This course is an interdisciplinary (same as CHM 306I) one-semester introduction to selected areas of biochemistry. The course will allow an in-depth examination of the structure and function of biological molecules such as carbohydrates, lipids, proteins and nucleic acids. Also covered are the metabolic processes of organisms and bioenergetics. Three lecture hours weekly.

3 credits

PREREQUISITES: BIO 110 AND 120 AND CHM 211 OR PERMISSION FROM DEPARTMENT CHAIR

BIO 307 Pathophysiology I

This course examines the underlying processes and effects of disease at the level of cells, tissues, organs, and systems. Cellular mechanisms lay the foundation for examining pathophysiological changes in organs and systems. BIO 307 is the first in a two-part series, with BIO 308 being offered in the spring term. **2 credits**

BIO 308 Pathophysiology II

This course examines the underlying processes and effects of disease at the level of cells, tissues, organs, and systems.

Cellular mechanisms lay the foundation for examining pathophysiological changes in organs and systems. **2 credits**

PRE-REQUISITE BIO-307. FOR NURSING MAJORS: COREQUISITE FOR BIO 307 IS NU 3181/3182; COREQUISITE FOR BIO 308 IS NU 3191/3192.

BIO 310 Cell Biology

A study of the basic cellular and molecular mechanisms by which cells function: membrane transport, metabolism and ATP production, DNA replication, protein synthesis, cell movement, and division. Laboratories introduce students to cell culture, microscopy, centrifugation, electrophoresis, spectrophotometry, and other techniques used to study cells. Three hours of lecture, one three-hour lab per week. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 335 Microbiology and Immunology

A comprehensive examination of the biology of microorganisms, including bacteria, fungi, protozoa, helminths, and viruses. Emphasis is placed on, but not limited to, the bases of microbial diseases, control, prevention, treatment, and host defenses including immune responses and immunotherapies. Includes practical experience and bacteriological lab techniques. Three hours of lecture, one three-hour lab per week. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 339 Pharmacology

A one-semester course designed to provide the biology major with an in-depth understanding of the pharmacologic principles regarding particular medical issues. Receptor mechanisms are applied as they relate to the therapeutic application of drugs, and the major side effects and adverse reactions of commonly used drugs. Descriptions of drugs classified as autonomic, central nervous system, cardiovascular, endocrine, and chemotherapeutic agents are studied. **3 credits**

PREREQUISITES: BIO 110, BIO 120, CHM 111-113, AND CHM 112-114. COREQUISITES: CHM 211-213 AND CHM 212-214. BIO 205 AND 206 HIGHLY RECOMMENDED.

BIO 357 Gross Anatomy

A course designed to provide the biology major with the unique opportunity to explore the details of human anatomy through cadaver dissection. This is a two-semester course, but the student can elect to take the credit for the course in either the fall or spring semesters. A minimum of two hours of dissection time per week is required. **4 credits**

PREREQUISITES: BIO 110, BIO 120, BIO 205 AND BIO 206.

BIO 380 Special Topics in Biology

This course offers in-depth exploration of a special topic, issue or trend in the biological sciences as determined by the Instructor. Reflects the special expertise of the faculty and/or the special needs of the students. **Variable, 1-4 credits**

PREREQUISITE: PERMISSION OF INSTRUCTOR.

BIO 390 Histology

An examination of cell and tissue structure primarily at the light microscopic level, although some electron microscopy of cell structure will be considered. The focus is on major tissue groups that make up the vertebrate body, and examines the contribution of each to the structure and function of the organism as a whole. Emphasis will be placed on the technology and histological methods used in preparing tissues for microscopic examination and study. **4 credits**

PREREQUISITES: BIO 110 AND BIO 120.

BIO 400 Independent Study

A student-designed course of study in an area of biology not covered by current courses, under the guidance of a faculty member. Requires the approval and sponsorship of a faculty member prior to registration. FOR BIOLOGY MAJORS ONLY.

Credits vary

BIO 406 Animal Physiology

A comparative approach to the adaptive nature of animal function. This course addresses the diversity of solutions that have evolved in animals in response to environmental conditions presented in their natural habitats. Three hours of lecture and three hours of laboratory per week. **4 credits**

PREREQUISITES: BIO 110, BIO 120, CHM 111-113, AND CHM 112-114.

BIO 420 Molecular Biology and Biotechnology

Provides the research-oriented student with an in-depth exposure to the tools and techniques of molecular biology and biotechnology. Includes molecular cloning, genetic engineering, DNA sequencing, protein expression and purification, immunological techniques, electrophoresis, and blotting. Three hours of lecture and three hours of lab per week. **4 credits**

PREREQUISITES: BIO 110, BIO 120, CHM 211-213, AND CHM 212-214.

BIO 498/499 Senior Experience

A general survey of the field of biology through student presentation and discussion of major principles, problems, discoveries, and theories. Students pursue this experience under the direction of a department member. One-hour seminar and additional time in laboratory research or professional experience weekly. **2 credits each**

REQUIRED OF ALL SENIOR BIOLOGY MAJORS.

CHEMISTRY

CHM 100 Chemistry and Society

An opportunity for the non-science major to learn chemical principles and methods in order to engage in decision-making activities related to real world societal issues that have important chemistry components. A few case studies, which may include global warming, ozone depletion, acid rain, energy conservation, and drug discoveries, are used to introduce the chemistry on a need-to-know basis. In every instance, the chemistry is set in its political, social, ethical, economic, and international context. Students are encouraged to use their analytical and critical thinking skills to evaluate information and assess the risks and benefits related to the issues studied. Three hours of lecture and three hours of lab per week. **4 credits**

CHM 103 Chemistry in Everyday Life

Chemistry in Everyday Life involves an examination of the basic definitions and theories of chemistry with emphasis on introductory aspects of inorganic, analytical, physical, organic, nuclear, and biochemistry. In addition to developing basic knowledge of chemical principles and introductory laboratory techniques, the course is designed to enhance the development of analytical thought. There is some emphasis on numerical problem solving and thought processes by which the problems can be solved. Three hours of lecture and one hour of lab weekly. **4 credits**

CHM 105 Principles of Chemistry

A one-semester introduction to general chemistry, organic chemistry, and biochemistry. Fundamental chemical theories within each of these areas are integrated to build an understanding of the chemistry of living systems at the molecular level and to provide a foundation for further study in the allied health professions. General chemistry emphasizes theories of inorganic, analytical, physical, and nuclear chemistry that support key concepts in organic and biochemistry. Major topics include: atomic structure, radioactive isotopes, ionic and covalent bonding, electronegativity and polarity, chemical equations and stoichiometry, intermolecular interactions, aqueous solutions and solubility, acid-base theory, kinetics, and thermodynamics. Organic chemistry is the study of the structures, properties, and reactivity of carbon-containing molecules, with emphasis on the functional groups and reactions of biomolecules. Biochemistry, the chemistry of life, expands general and organic chemical theories and applies them to the major classes of biomolecules: proteins, carbohydrates, lipids, and nucleic acids. The relationships between molecular structure, chemical and physical properties, and functions of biomolecules are explored. The course consists of three hours of lecture, one hour of recitation, and two hours of laboratory per week. There are no prerequisites for this course, but high school chemistry and algebra are highly recommended.

4 credits

CHM 111 General Chemistry I Lecture

CHM 112 General Chemistry II Lecture

An examination of the basic definitions and theories of chemistry. First semester topics include stoichiometry, atomic structure, thermochemistry, molecular bonding, states of matter, solutions, and kinetics. Second semester topics include equilibrium, thermodynamics, nuclear and electro-chemistry, coordination compounds, and a brief introduction to organic chemistry and biochemistry. Inorganic descriptive chemistry is included throughout both courses. Three hours of lecture.

3 credits each

CHM 113 IS A COREQUISITE FOR CHM 111 AND CHM 114 IS A COREQUISITE FOR CHM 112. CHM 111 IS A PREREQUISITE FOR CHM 112. THIS COURSE SEQUENCE IS OFFERED EACH ACADEMIC YEAR.

CHM 113 General Chemistry I Laboratory

CHM 114 General Chemistry II Laboratory

An introduction to the hands-on application of chemical principles and concepts as well as an introduction to basic laboratory instrumentation and equipment. First semester topics include practice in making good scientific measurements, density measurement, and several gravimetric and volumetric analyses of known chemical systems. Second semester topics include the study of chemical equilibrium, acid-base chemistry, redox chemistry, inorganic salt synthesis and characterization, and a basic organic synthesis and characterization. Three hours of laboratory weekly. **1 credit each**

CHM 111 IS A COREQUISITE FOR CHM 113 AND CHM 112 IS A COREQUISITE FOR CHM 114. CHM 113 IS A PREREQUISITE FOR CHM 114. THIS COURSE SEQUENCE IS OFFERED EACH ACADEMIC YEAR.

CHM 151I (BIO 151I, MAT 151I) Computer Applications for Science and Mathematics

An introduction to the practical application of computer hardware and software to problems in the sciences and mathematics. Topics include basics like using a graphical user interface and common office applications. More advanced topics include computer interfacing to instruments, mathematical modeling, curve fitting, molecular modeling, and others. No computer background is assumed. Three hours lecture/workshop/demonstration weekly. **3 credits**

PREREQUISITE: CHM 111, BIO 110, OR PCS 221; MAT 160; OR PERMISSION FROM THE DEPARTMENT CHAIR.

CHM 185 (SO 185) Introduction to Forensic Science

An introduction to the use of science and the scientific method in law and criminal justice. Designed primarily for criminal justice or science majors. Includes techniques from chemistry, biology, physics, and geology that are useful for evaluating crime-scene evidence. Topics include chemical analysis, microscopic analysis, fiber analysis, drug analysis, DNA analysis, blood analysis, and others. Three hours of integrated lecture and lab each week. Basic mathematics is used. **3 credits**

CHM 211 Organic Chemistry I Lecture
CHM 212 Organic Chemistry II Lecture

A two-semester sequence of courses that study the structure, properties, composition, reactions, and preparation (by synthesis or other means) of chemical compounds consisting primarily of carbon. Because of the unique properties of the element carbon, organic compounds exhibit an extremely wide variety, and the range of applications of organic compounds is enormous. They form the basis of, or are important constituents of, many products (paints, plastics, food additives, cosmetics, explosives, drugs, petrochemicals, pesticides, and many others) and, in addition, organic compounds form the basis of all life processes (biomolecules such as enzymes, proteins, amino acids). Specific attention is focused on the structure-reactivity relationships in different classes of organic molecules, and the mechanistic aspects of reactions. Methods of spectroscopic analysis fundamental to the study of organic molecules are also examined. Three hours of lecture weekly. This course sequence is offered each academic year. **3 credits each**

CHM 112 IS A PREREQUISITE FOR CHM 221. CHM 213 IS A COREQUISITE FOR CHM 211 AND CHM 214 IS A COREQUISITE FOR CHM 212. CHM 211 IS A PREREQUISITE FOR CHM 212.

CHM 213 Organic Chemistry I Laboratory
CHM 214 Organic Chemistry II Laboratory

An experimental laboratory course to accompany the corresponding Organic Chemistry lecture course (CHM 211 or CHM 212). Students will gain firsthand knowledge of the properties and general reactivity of organic compounds through hands-on experimentation. In the first half of CHM 213, standard "wet-chemical" bench organic chemistry laboratory skills, such as distillation, crystallization, extraction, and chromatographic methods of analysis (among others), are learned. In the second half, these skills are reinforced with experiments designed to illustrate and reinforce lecture theory, including some multistep synthesis reactions. Hands-on training in the acquisition and interpretation using those methods of instrumental analysis most pertinent to the study of organic chemistry, (such as Fourier transform infrared spectroscopy (FTIR) and gas chromatography (GC) is also provided. In addition, proper methods for documenting and reporting scientific experimentation are reinforced. In CHM 214 students will expand on and reinforce their knowledge of the properties and reactivity of organic compounds by performing a variety of experiments, including several multi-part synthesis reactions. Additional instrumental/ spectroscopic methods of analysis pertinent to the study of organic chemistry are also introduced, including nuclear magnetic resonance (NMR). Three hours of laboratory weekly. **1 credit each**

CHM 114 IS A PREREQUISITE FOR CHM 213. CHM 211 IS A COREQUISITE FOR CHM 213 AND CHM 212 IS A COREQUISITE FOR CHM 214. CHM 213 IS A PREREQUISITE FOR CHM 214.

CHM 255 Environmental Chemistry

An introduction to the chemistry and chemical composition of the Earth's atmosphere, soil, and waterways. This highly interdisciplinary course will focus on the chemical processes influencing the composition and chemical speciation of natural systems (air, water, and soils); the chemical fate and mobility of contaminants in the environment; chemical processes and reactions that affect the toxicity and bioavailability of contaminants and chemicals; and aspects of contaminant remediation and pollution prevention (green chemistry). Current methods of energy production will be studied in terms of their efficiency and cleanliness. Questions of corporate and social responsibility regarding environmental stewardship and public health will be presented to and debated by the class. Four hours of class weekly (includes lab time). **4 credits**

PREREQUISITE: CHM 212 OR PERMISSION FROM THE DEPARTMENT CHAIR.

CHM 285 Special Topics

This is a variable credit course that is designed to introduce students to selected specialized fields in the area of chemistry. Some examples of topics include separation techniques, advanced organic synthesis, photochemistry, and nuclear chemistry. The topics will vary each semester. **1-3 credits**

PREREQUISITE OR CO-REQUISITE: CHM 212 OR PERMISSION FROM THE DEPARTMENT CHAIR.

CHM 306I (BIO 306I) Biochemistry (Interdisciplinary)

The science of biochemistry covers the arena where molecular and cell biology and chemistry interrelate. This course is an interdisciplinary (same as CHM 306I) one-semester introduction to selected areas of biochemistry. The course will allow an in-depth examination of the structure and function of biological molecules such as carbohydrates, lipids, proteins and nucleic acids. Also covered are the metabolic processes of organisms and bioenergetics. Three lecture hours weekly.

3 credits

PREREQUISITES: BIO 110 AND BIO 120 AND CHM 211 OR PERMISSION FROM DEPARTMENT CHAIR.

CHM 311 Inorganic Chemistry

An examination of the chemistry of the elements other than carbon. The course covers the physical and electronic structures of the compounds of these elements. Emphasis is placed on the chemistry of the transition metals, particularly as it relates to their biological occurrence and function. Three hours of lecture weekly. **3 credits**

PREREQUISITE: CHM 212 OR PERMISSION FROM THE DEPARTMENT CHAIR.

CHM 312 Quantitative Analysis

An introduction to analytical chemistry. Deals with the basic theory of and experimentation in gravimetric and volumetric analysis, with emphasis on principles of chemical equilibrium. The course also includes selected topics in instrumental analysis and chromatography with an emphasis on quantitative applications. Two hours of lecture and four hours of laboratory weekly. **4 credits**

PREREQUISITE: CHM 212.

CHM 350 (TH 350) Miracles: Science and God

Studies in the fields of theoretical physics and quantum mechanics suggest exciting possibilities for a 21st-century theology of divine action. In particular, this course will investigate the relationship between what Thomas Aquinas referred to as primary cause (the origin of all things) and secondary causes (all the interactions we perceive in the empirical world). This is an anchor course in the Carlow Compass. **3 credits**

CHM 398/399 Junior Seminar

An opportunity for junior chemistry majors to research current trends and topics of interest in an area of chemistry and present a seminar and paper devoted to this topic. Students work in conjunction with a faculty mentor. The course covers such skills as working with the chemical literature, proper ways to critique a scientific report, and preparation and delivery of a technical scientific presentation. One-hour weekly seminar. **1 credit each**

CHM 400 Independent Study

A student-designed course of study in an area of chemistry not covered by current courses, under the guidance of a faculty member. Requires the approval of the departmental chairperson and sponsorship of a chemistry department faculty prior to registration. **Credits vary**

CHM 411 Physical Chemistry I

CHM 412 Physical Chemistry II

A study of the most fundamental aspects of chemistry. The first semester focuses on quantum mechanics and spectroscopy. Topics include the Schrödinger equation, atomic and molecular structure, chemical bonding, and magnetic resonance spectroscopy. The second semester focuses on thermodynamics and kinetics. Topics include the properties of gases, partition functions, the laws of thermodynamics, the Maxwell relations, equilibria, and molecular dynamics. Three hours of lecture and one hour of recitation weekly. **3 credits each**

PREREQUISITES: CHM 212, PCS 222, AND MAT 200 OR MAT 260. PRE- OR COREQUISITE: MAT 201 OR MAT 360. CHM 411 IS A PREREQUISITE FOR CHM 412.

CHM 422 Instrumental Methods in Chemistry

An introduction to instrumental methods of chemical analysis. Methods covered include electronic absorption spectroscopy, IR spectroscopy, magnetic resonance spectroscopy, fluorescence spectroscopy, gas and liquid chromatography, electrochemical techniques, calorimetry, and others. Students are expected to demonstrate proficiency in each technique. An additional emphasis is placed on formal laboratory report writing and communication of scientific results. One hour of lecture and three hours of laboratory weekly. Offered each spring semester. **2 credits**

PREREQUISITE: CHM 312 OR PERMISSION FROM THE DEPARTMENT CHAIR.

CHM 423 Advanced Experimental Techniques in Chemistry

A capstone course for chemistry majors, CHM 423 expands upon and enhances laboratory skills acquired in the program curriculum by introducing the students to novel applications of chemical instrumentation, methodologies and techniques. Topics covered in the course may include a variety of absorbance and emission spectroscopic techniques, separation techniques such as gas and liquid chromatography, electrochemical methods of analysis, as well as quantum mechanical calculations and computational modeling. An additional emphasis is placed on formal laboratory report writing and communication of scientific results. One hour of lecture and six hours of laboratory weekly. Offered each spring semester. **3 credits**

PREREQUISITE: CHM 312 OR PERMISSION FROM THE DEPARTMENT CHAIR. PRE- OR COREQUISITE: CHM 412. THIS COURSE SERVES AS THE CAPSTONE EXPERIENCE FOR CHEMISTRY MAJORS IN THE CARLOW COMPASS.

CHM 498/499 Senior Experience

An independent, professional experience within the field of chemistry (or another science) that may involve laboratory research, an internship, student teaching, or other independent project. The experience is designed in consultation with a faculty mentor. One-hour seminar weekly, plus additional time needed to complete the experience. This course sequence is offered each academic year. **2 credits each**

PREREQUISITE: CHM 399.

COMPUTER SCIENCE

CSC 110 Introduction to Computer Programming

The student is introduced to the fundamental concepts of computer programming in an object-oriented language. The object-oriented approach is introduced using the Alice programming environment. The student then transitions to the JAVA programming language. Three hours of lecture and one two-hour laboratory weekly. **4 credits**

DATA ANALYTICS

DTAN 101 Introduction to Data Analytics

In this introductory course, students will learn basic terminology and an introduction to several fundamental aspects of data analytics, including sampling, cleaning, managing, predicting, and exploring data. Students will perform basic statistical analyses on a variety of data sets and will use these statistics to draw conclusions and make data-driven predictions about future events. Students will gain experience expressing these conclusions in oral and written reports to their peers. An introduction to the ethical issues involved in data analysis, storage, and acquisition will also be covered. **3 credits**

EARLY CHILDHOOD EDUCATION

EC 200 Child Development (Birth to Age 5)

This course provides an in-depth learning experience in child development theory and best practices that apply to the care and education of children from birth to 5 years of age. Assessment and observation techniques are carefully aligned with curriculum and program planning so students may see the strong connection between assessment and curricular practices. Principles of physical, social-emotional, cognitive, moral, aesthetic, and language development will be covered within the context of family and community. Students will examine issues relating to the development of children, ages 3 to 5 years, from an historical, cultural, and family perspective, as well as through current theories and research. As a stage of development, early childhood will be studied and analyzed across the full range of normative, non-normative, inter-and intra-variability for all young children. Students will learn and practice the basic skills of observation. Students will be required to apply theory to daily practice. **3 credits**

EC 201 Orientation to Early Childhood Education

This course will be based on principles of child development, including understanding how children learn from birth to 9 years of age, and focusing on all the domains of the child's development. The relationship between each child and the teacher is the basis of all effective teaching. Students will examine the historical and psychological perspective of early childhood education in order to understand the context and particular challenges of early childhood professionalism today. The principles and stages of child development, birth to 9 years of age, will serve as the foundation for defining the essential components of a successful learning environment for young children. Family and community relationships will be emphasized as well. **3 credits**

PREREQUISITE FOR ALL OTHER EARLY CHILDHOOD COURSES EXCEPT FOR CHILD DEVELOPMENT COURSES.

EC 205 Advanced Child Development Studies

This course provides an in-depth learning experience in child development theory and best practices that apply to the care and education of children from birth to five years of age. This course is designed for transfer students who enter Carlow with child development courses. This course is meant to introduce students to Carlow's academic learning community and build upon the developmental foundation students have achieved at their previous education institution. Advanced assessment

and observation techniques are carefully aligned with curriculum and program planning so students may see the strong connection between assessment and curricular practices. Principles of physical, social-emotional, cognitive, moral, aesthetic, and language development will be covered in the context of family and community. Students will examine issues relating to the development of children, ages three to five years, from an historical, cultural, and family perspective as well as through current theories and research. As a stage of development, early childhood will be studied and analyzed across the full range of normative, non-normative, inter- and intra-variability for all young children. Students refine basic skills of observation. Students will be required to apply theory to daily practice. **3 credits**

EC 206/PY 216 Child Development: Ages 6 to 9

This course addresses the physical, cognitive, and psychosocial development of children in grades PreK through four. The student is introduced to major concepts and theories of child development and the scholarship and research that inform these concepts and theories. The course is designed to promote connections between one's understanding of child development and how that understanding informs those who work with this age group. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 207 Play as Learning

This course provides an overview of the role and value of play in child development and learning. Students will examine stages of children's play and learn how play reflects and enhances social, emotional, cognitive, and physical development. Topics include various perspectives on the meaning of play, current theories about play, research on children's play, and the role of play during various stages of development, from infancy through the school-age years. Students will design an appropriate play environment for early childhood classrooms. They will demonstrate ability to assess children's play skills and adapt activities to support and facilitate symbolic representation through play. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 303 Math for the Developing Child

This course provides the theoretical principles and methodologies in the teaching of mathematics for prospective teachers of children ages 3 to 9 years old—and about how the mathematical mind of the child works. The course of study is designed to promote mathematics teaching competence; review exemplary curriculum materials, and design the creation of standard-based, active learning environments that foster curiosity, confidence, and persistence; and encourage the successful acquisition of knowledge of important mathematical relationships, number sense, and the ability to solve problems in the early years. Participants will strive to gather examples of current teaching methodologies through a progression of field observations. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 304 Science for the Developing Child

This course provides the theoretical principles and methodologies in the teaching of science for prospective teachers of children ages 3 to 9 years old—and about how the scientific mind of the child works. The course of study is designed to promote science teaching competence, review exemplary curriculum materials, and design the creation of standards-based, active learning environments that foster curiosity, confidence, and persistence, and encourage the successful acquisition of knowledge and skills of scientific ideas necessary to understand and explain phenomena of the natural world. Participants will strive to gather examples of current teaching strategies through a progression of field observations. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 307 Curriculum and Methods for Early Childhood Education with Practicum

This course will be based on principles of child development, including understanding how children learn from birth to 9 years, and focusing on all the domains of the child's development. The course hinges on an understanding of how children grow and develop socially, emotionally, morally, cognitively, aesthetically, physically, in language, and as part of their families and communities. Five effective models for early childhood classrooms will be examined. The theoretical foundation for the course is rooted in child development theory, multiple intelligences, and contemporary neuroscience. Formal and informal assessment strategies will be a part of diversification of curriculum and instruction. The course requires a 40-hour practicum experience. **3 credits**

PREREQUISITES: EC 200, EC 201, EC 207 AND EC 318.

EC 311 Infant-Toddler Program and Practicum

This course provides an in-depth learning experience in best practices that applies to the care and education of children

from birth to 3 years of age. Principles of development and infant/toddler milestones form the basis for making decisions about effective caregiving practices. Emphasis will also be placed on the child within the context of the family as a major factor to consider when determining high-quality infant/toddler care outside the home. This course combines in-class learning with a 40-hour practicum experience where students will have the opportunity to interact with children and caregivers, and apply theory and in-class learning. Students will also study the sociological and political contexts that affect programs for infants and toddlers. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 313 Family and Community Partnerships

This course focuses on recognizing and implementing partnership relationships among the child, the family, and the community. Family is recognized as a primary unit of a diverse and unique nature. Family systems are examined to understand family structure and function. Likewise, family is viewed in its role in a child's development. The family and community will be examined using strategies for meeting cross-cultural needs. Knowledge of community resources and family methods to find and access these resources will be examined as well. **3 credits**

PREREQUISITES: EC 200, EC 201.

ED 315 Education STEM Lab and Maker Space

Students will choose a STEM project to research, develop, and implement into an appropriate setting (school, after-school program, museum). Students will utilize the design process and a variety of resources (educational technology, materials, tools, machines) in a Maker Space environment to safely and efficiently develop solutions to problems that require integration of concepts and skills from multiple disciplines. Seminar content includes cross-disciplinary content instruction and pedagogical strategies for working with a variety of learners. Learners will demonstrate competencies that include planning and organization; assessment of learning; reflection on teaching; interdisciplinary collaboration; and inquiry-based approaches to teaching and learning. Practicum required. **3 credits**

EC 318 Communication and Reading Development

This course provides an overview of language and communication development in young children and a study of the acquisition of early literacy skills. Current research on effective strategies for enhancing language and literacy skill development are presented and discussed. Participants design experiences in language development and early literacy for children from birth through kindergarten. **3 credits**

PREREQUISITES: EC 200, EC 201.

EC 325 Early Childhood Practicum

This course will enable students to do field experience in a K-4 classroom. Students will be placed in a classroom one day a week for most of the school day. Students will also participate in a weekly seminar that will facilitate the practicum experience. Students will present lessons and work with small and large groups of children. The expectations will increase as the students' competencies grow. **3 credits**

PREREQUISITES: EC 200, EC 201, EC 303, EC 304, EC 307, EC 311, EC 318. COREQUISITE: EC 403.

EC 401SL Professional Communities of Practice

This course has been designed to facilitate the students' identities as scholar/practitioner professionals in the field of early childhood education and so that students can engage in professional communities of practice. This is also a service-learning course. At Carlow, service-learning is discipline-based and contains a set of organized community-based learning activities through which students have direct, hands-on learning while responding to community needs. Service-learning courses provide structured opportunities for students to connect their service activities to course content through reflection. Reflection includes an examination of one's personal connection to service in light of the Mercy mission. Students will work with their county's community liaison from the Education for Children and Young Experiencing Homelessness (ECYEH) organization. The community liaison will identify homeless shelters in the Pittsburgh area that participate in Together Time—an interactive, activity-based learning program that strengthens relationships between parents and young children as they play and learn together, and provides essential skills for future academic and social success. 15 hours of service-learning is required. **3 credits**

PREREQUISITES: EC 200, EC 201, EC 207, AND EC 307.

EC 403 Understanding Early Childhood Curriculum for Peace and Justice

Based on principles of child development, this course is designed to engage teacher candidates in various experiences that

provide opportunities for understanding early childhood curriculum in its complex and multiple facets. The focus on peace and justice teaching emphasizes the importance of developing attitudes and behaviors that can contribute to building a democratic, ecologically responsible society. This includes encouraging early childhood educators to nurture dispositions in young children towards collaboration, curiosity, engaged inquiry, ecological consciousness, fairness, and empathy. Teacher candidates will have opportunities to explore the philosophical, theoretical, and practical dimensions of the PreK through grade four curricula. The critical areas of cultural diversity, racism, gender equity, and real world problem solving, as they relate to the PreK through grade four curricula, are highlighted. **3 credits**

PREREQUISITES: EC 200, EC 201, EC 303, EC 304, EC 307, EC 311, EC 318 COREQUISITE: EC 325.

EC 406/407 Pre-School and Primary Student Teaching and Seminar

This course will provide opportunities for experience, discussion, and reflection on issues related to positive classroom environment; behavior support; building relationships; managing time; planning and preparation; assessment for planning; integrating the curriculum; instructional delivery; teaching to diverse learners; collaborative teachers and collaborative children; and developmentally appropriate practices. The child will be recognized as the learner and the learning community will be the classroom, the school, the family, the community, and professionalism. Evaluation of student teaching in early childhood education, both preprimary and primary, will be conducted by examining attendance and class participation; lesson plans, unit plans and teachable moments; weekly reflective logs; student teaching portfolios; midpoint and final evaluations of each site mentor teacher; and weekly observations and interactive meetings between college supervisor/mentor and student. Midpoint and final evaluations will use the PDE 430 form. **12 credits (6 credits for each placement)**

PREREQUISITES: COMPLETION OF ALL EARLY CHILDHOOD EDUCATION CERTIFICATION REQUIREMENTS WITH A MINIMUM GPA OF 3.0. NOTE: NO OTHER COURSES MAY BE TAKEN WHILE A STUDENT IS REGISTERED FOR EC 406/EC 407 WITHOUT SPECIAL PERMISSION OF THE CHAIR OF EARLY CHILDHOOD EDUCATION PROGRAM.

EC 410 Student Teaching and Seminar

This course is designated in special circumstances for students who complete their student teaching on their jobs site. Special permission must be obtained and this is only granted in specific circumstances. **12 credits**

PREREQUISITES: EC 303, EC 304, EC 403, EC 325

EC 415 Senior Capstone

Students electing to complete the early learning and development degree will work with an early childhood faculty member to design a final senior capstone internship or project that will serve as the culminating capstone event of the program.

3-12 credits

PREREQUISITES: EC 303, EC 304, EC 403, EC 325

EDUCATION

ED 200 Pre-Teacher Assessment

The belief that teaching is an art has evolved from the experiences of professionals in the field. Research has taught us that success in the classroom reaches far beyond the use of textbooks, tests, and projects. The personal characteristics of the teacher have a powerful impact on their students and on their classroom performance. Six of these characteristics are the focus in this course. The assessment process is diagnostic and leads to information that the student can use as she/he establishes goals. **3 credits**

ED 282 Learning Theory

This course focuses on cognitive theories that stress learners' constructions of beliefs, skills, strategies, and knowledge. Beginning with historical perspectives and progressing to cognitive theories and processes of learning, this course will require students to examine their beliefs about learning, align these with existing theories, and determine how to apply learning principles to improve teaching and learning. Current information regarding the neuroscience of learning, content-area learning, and motivation will be blended with the aforementioned theories to present a unified perspective of learning in educational settings. **3 credits + 30-hour field placement**

ED 305 Integrating the Arts in Early Childhood

Development of one's own artistry along with facilitation of the arts with children. Integrating the arts (visual arts, creative writing, music, movement, and creative play) into all aspects of the curriculum. Recognition of the arts as a way of knowing.

3 credits

ED 307 Teaching English Language Learners, PreK–12

This course provides both an introduction to the principles of second language acquisition, with a focus on linguistics, developmental factors, and cross-cultural awareness, as well as an introduction to methods in teaching English language learners (ELLs) from PreK to grade 12. Techniques for developing the conversation and literacy skills of English language learners in the mainstream classroom will be presented. Students will learn the availability of school and community resources to assist ELLs in language acquisition and content learning, and ways to promote parental/family involvement.

3 credits + 15-hour field placement

ED 308 Assessment and Intervention

This course will provide the beginning middle-level teacher with a comprehensive menu of assessment techniques for evaluating how learners think, perform, and apply what they know. Students will learn how to assess the following: a learner's knowledge base, a student's declarative and procedural knowledge, cognitive and metacognitive strategies, transfer skills, and habits of mind. **3 credits**

ED 312 Reading and Language Arts Methods

This course includes an examination of the philosophical orientation, pertinent research, and understanding of the reading process. Learners will construct their own philosophy of teaching reading and writing. They will apply learned strategies by developing lessons for students in a classroom or after school program. This field experience will take place with students in grades one through four. Clearances are needed for the field experience. **3 credits + 15-hour field placement**

PREREQUISITES: EC 200, EC 201, AND EC 318.

ED 370 Teaching and Professional Growth

The primary emphasis of this course is portfolio development including the refinement of select artifacts, exploration of the teacher certification process and other professional support entities for educators, and critical review of contemporary issues in education. As a culminating activity, students will participate in a mock interview. **1 or 3 credits**

ED 409 Irish Educational and Cultural Institutions

Designed to prepare students intending to complete a student teaching experience in Northern Ireland and for students interested in discovering Ireland's rich history, including study of its political systems, educational systems, and cultural institutions. The course is taught by 'embedded faculty' living and working in Northern Ireland, and delivery will include video and online conferences with experts in a variety of subjects from Northern Ireland and the Republic of Ireland, as well as traditional classroom discussions. **3 credits**

MIDDLE LEVEL EDUCATION

EDML 321SL Reading and Social Studies Methods

This course is the foundational basis for teaching reading and literacy development in the middle level classroom, grades four-eight. Current theory, research, and techniques are integrated with valid traditional views of teaching reading to a diverse population of children and their needs. Views of the process of reading, emergent literacy, syntax and semantics, fluency, major approaches and materials for teaching reading, writing, speaking, assessment of students, classroom organization, communication with parents, and integrating computer technology are addressed. Specific skills in teaching phonemic awareness, phonics, reading fluency, and direct, explicit comprehension instruction are emphasized. In addition, learning theory relevant to assessment and intervention in student learning is included in class and implemented in the field experience. Pre-service teachers will develop a philosophy that encompasses all the major components of reading instruction to ensure literacy for all children. Students will also gain knowledge of social studies methodology at the middle level, grades four-eight. They will develop an understanding of Pennsylvania and national social studies standards and their relationship to instruction and assessment. Learners will create a framework for learning units and projects that are student-centered investigations into historical events, government, civic, geographic and economic features, and the current social environment in which they live. A multicultural perspective will help participants develop culturally relevant pedagogy in the teaching of social studies. A focus on current research and practice in urban education will prepare teachers to become leaders in urban education and school reform. **3 credits + 15-hour field placement**

PREREQUISITES: ED 200, ED 282.

EDML 323 Middle Level Math and Science Methods

This course is a comprehensive study of the theoretical principles requisite to teaching mathematics and science at the middle school level. The course is designed to offer pre-service teachers direction in the organization and implementation of meaningful mathematics-learning and science-learning experiences through the use of research-based curricula and problem-solving processes applicable to diverse populations of students and classroom environments. The course focuses on the development of instructional leaders in mathematics and science. It encourages meaningful habits of inquiry, collaborative effort, and reflective praxis into teaching and learning. Participants will strive to implement research-based approaches during a required 15-hour supervised field placement. **3 credits + 15-hour field placement**

PREREQUISITES: ED 200, ED 282.

EDML 400 Understanding Middle Level Curriculum

This course is designed to engage middle level teacher candidates in various experiences that provide opportunities for understanding curriculum in its complex and multiple facets. Teacher candidates will have opportunities to explore the organization and philosophy of middle school education, as well as theoretical and practical dimensions of the middle level school curriculum. Teacher candidates will probe the various aspects of curriculum and the ways that teachers facilitate learning in middle level classrooms through the environment, the materials, the learning experiences, the sequencing of events, the interpersonal interactions, and the adaptation of instruction to diverse students. Teacher candidates will create an integrated curriculum plan based on an understanding of meaningful learning experiences and motivation, appropriate content and subject matter in the fourth through eighth grades, sound instructional strategies, the use of formal and informal assessment strategies to plan and improve instruction, and current skills in the use of educational technology. Finally, teacher candidates will engage in reflection and evaluation related to teacher professionalism. This course is designed to be taken during the semester directly preceding EDML 424, 425, 426 or 427. **3 credits + 30-hour field placement in a middle level setting**

EDML 424 Middle Level English/Language Arts Student Teaching

EDML 425 Middle Level Math Student Teaching

EDML 426 Middle Level Science Student Teaching

EDML 427 Middle Level Social Studies Student Teaching

Student teacher/teacher candidates are placed in a middle level (grades four-eight) classroom for eight weeks for a dual concentration or 16 weeks for a single concentration. The mentor teachers at the school oversee the daily experiences of the student teachers. Student teachers will be observed daily by the mentor teacher and weekly by the university mentor/supervisor. The university mentor will meet with the mentor teacher to discuss the direction of the student teaching experience and the progress of the individual student teacher. The director of student teaching will hold bi-weekly seminars at the university. The seminar is designed as an ongoing dialogue focusing on various aspects of the student teaching experience, together in one group for the first hour, then meeting in small groups with their university mentors for the second hour. Seminar topics may include lessons and unit planning, classroom organization and management, teaching strategies, evaluation processes, communication skills, writing resumes, certification requirements, job interviews, preparation of a portfolio, and reflective teaching that supports the final presentation at the Celebration of Teaching held at the end of the semester. **6 credits or 12 credits**

PREREQUISITES: COMPLETION OF ALL MIDDLE LEVEL EDUCATION CERTIFICATION REQUIREMENTS WITH A MINIMUM GPA OF 3.0. NOTE: NO OTHER COURSES MAY BE TAKEN WHILE A STUDENT IS REGISTERED FOR STUDENT TEACHING WITHOUT SPECIAL PERMISSION OF THE CHAIR OF MIDDLE LEVEL EDUCATION.

ENGLISH

EN 101 Introduction to Literature

Students read and analyze cross-cultural prose, poetry, and drama. Writing that focuses on literary analysis is an integral part of the course. **3 credits**

EN 180 (CM 180) Journalism Practicum

Students practice newswriting, editing, and crafting other journalistic pieces for the student newspaper. This course provides hands-on experience in all aspects of production of a student newspaper, including design, layout, and editorial practices. **1 credit; may be repeated**

EN 200 Introduction to Creative Writing

Students read and practice writing a wide range of poetry, creative nonfiction, and fiction, and learn to critique work in a workshop setting. **3 credits**

EN 203 Creative Nonfiction: Description, Narration, and Dialogue

In this introductory creative nonfiction course, students examine and practice description, narration, and dialogue, as they explore how writers show and tell life stories, making scenes, situations, and events come alive on the page. Students will also critique established authors' work and respond to in-class writing prompts, as well as sharing their own writing and giving feedback to peers. **3 credits**

EN 205 Fiction I: Character, Setting, and Plot

In this introductory course in the reading and writing of fiction, students read a range of authors, from Nathaniel Hawthorne to Zadie Smith, and write critical papers, as well as their own creative works that they share through peer review. **3 credits**

EN 207 Chaucer

Students explore the art and language of Chaucer through a critical reading of his short poems, romances, and *The Canterbury Tales*. **3 credits**

EN 208 Poetry I: Finding Your Voice

In this introductory course in the reading and writing of poetry, students experiment with writing their own poetry as a way to begin to find their own voice. Students read individual collections of poetry, write critical papers, and critique each other's work in a workshop setting. **3 credits**

EN 216 Special Topics: Poetry

This course provides a focused examination of a particular topic, such as African-American women writers, the Modernists, or LGBT writers. Students engage in critical reading and writing, and may do original creative writing. **3 credits**

EN 217 Special Topics: Fiction

This class is an in-depth exploration of a particular topic related to fiction, such as fiction shorts or imagination and fiction. The course includes critical reading and writing, as well as students' original creative works based in reality. **3 credits**

EN 218 Special Topics: Creative Nonfiction

This course is a creative examination of a particular topic related to creative nonfiction, such as flash creative nonfiction or journeys. The class includes critical reading and writing as well as original creative writing of true-life experiences. **3 credits**

EN 219 Literature in Translation

This class explores poetry, fiction, drama, and/or essays in translation. Students research, present, and write about international authors whose writing has been translated into English. Students may write creatively in response. This course meets the major requirement for the International Language/International Study cluster. **3 credits**

EN 220 Introduction to Linguistics

This course provides an introduction to the study of language from structural, historical, social, and psychological perspectives. Language acquisition, its systematic nature (phonology, morphology, and syntax), and its social and geographic variations are elements of the course. **3 credits**

EN 221 Crime Fiction

This exploration of crime literature traces the genre from its roots in the works of Poe and Doyle to its present incarnations in novels like *The Girl with the Dragon Tattoo*. Students read, write, and present analysis of the established traditions of the mystery genre and contemporary transformations of those traditions in fiction, television, and film. **3 credits**

EN 222 Arthurian Legend

This course provides an introduction to works in the development of Arthurian tradition. **3 credits**

EN 223 Creative Nonfiction I

In this introductory course that explores the parameters of creative nonfiction, students read and critique a range of authors, from Faith Adiele to Joan Didion. Students write their own creative nonfiction pieces and respond to in-class writing prompts as well as share and give feedback to their peers. **3 credits**

EN 229 Creative Nonfiction II

This advanced creative nonfiction course delves deeper into the genre's parameters: telling true stories, creatively. Students will read and critique authors' work from an established list and write creative nonfiction personal essays and memoirs. **3 credits**

EN 233I (WS 233I) Visions of Social Change: Global Women's Writing

This interdisciplinary course draws on the pedagogy and disciplines of women's studies and English to explore global women's writing about social justice. The interdisciplinary approach of the literary materials and women's studies perspectives is integrated into students' readings, research, and collaborative in-class projects. This course meets the major requirement for the International Language/International Study cluster. **3 credits**

EN 238 Shakespeare's Sisters

This course explores the women writers of 16th, 17th, and 18th-century England. Students read drama, poetry, essays, and other texts related to these fascinating women who blazed a trail for later women writers. **3 credits**

EN 239 Poetry Studies: Workshop

This beginning course in the reading and writing of poetry focuses on the workshop format and encourages students to share their work and experiment with reading their work aloud. Students will read individual collections of poetry and anthologized works, write critical papers on craft, and critique each other's work in a workshop setting. **3 credits**

EN 241 Poetry II: Sound, Rhythm, and Line

This intermediate course in the reading and writing of poetry has a focus on the development of craft. Students experiment with sound, rhythm, and the line as they write their own poetry. Students read individual collections of poetry and anthologized works, write critical papers on craft, and critique each other's work in a workshop setting. **3 credits**

EN 242 Fiction II: Workshopping and World Building

An intermediate course in the reading and writing of reality-based fiction, this class focuses on the workshop format where students practice giving and receiving critique, with emphasis on integrating others' feedback. Students also will read a range of authors to identify what works and why. **3 credits**

EN 244 Organizational Writing

This class gives students practice in writing documents used for internal and external communication in organizations. Assignments offer experience writing for non-profit and for-profit settings, often with a social justice advocacy focus and a real-world audience or client. **3 credits**

EN 252 Literature and Film

This course examines the connections between a literary work and its film adaptation, with a focus on cinematic style and literary motif or theme. **3 credits**

EN 260 (CM 260) Writing for Media

An examination of the principles and practice of writing for media. Students gain experience in writing tightly organized, concise, "hard news" stories. Students will learn interviewing and basic investigative skills, and they will practice writing for print and online media sources. **3 credits**

EN 265 Classical Backgrounds to English Literature

An examination of Greek and Roman literature in translation, this class focuses on the influence of classical literature on contemporary fiction, drama, film, and poetry. Students analyze influence on works such as the Harry Potter series, the film *O Brother Where Art Thou*, and the poems of Louise Glück. **3 credits**

EN 270 Survey of English Literature I

This class provides an introduction to major works of English literature from *Beowulf* to the mid-18th century. Students analyze works in relation to their historical/cultural contexts and practice critical writing about the works. **3 credits**

EN 271 Survey of English Literature II

This class provides an introduction to major works of English literature from the late 18th century to the present. Students analyze works in relation to their historical/cultural contexts and practice critical writing about the works. **3 credits**

EN 286I (PY 286I) The Psychology of Literature

This course explores the connection between psychological concepts and literary texts. Students will examine myths, fairy tales, contemporary fiction, drama, and poetry from literary and psychological perspectives, analyzing parallels between psychoanalytic theory and authors' characters and, at times, authors' lives. This interdisciplinary approach encourages students to discover and articulate how psychology and literature reflect the core concepts that define humanity. **3 credits**

EN 300I (WS 300I) Environmental Justice

This interdisciplinary examination of environmental justice issues explores works by various authors and contemporary films. The interdisciplinary approach of the literary materials and women's studies perspectives is integrated into students' readings, research, and collaborative in-class projects. **3 credits**

EN 301 Shakespeare

This course focuses on William Shakespeare's comedies, tragedies, histories, and romances, read within cultural and generic contexts. Students analyze the plays' complex depictions of gender norms, race, politics, family dysfunction, and other controversial topics, as they were understood during the Renaissance and are relevant for today. The course includes viewing of film adaptations and (when possible) live performances. **3 credits**

EN 305 Survey of American Literature I

This course provides an introduction to major works of American literature from the 17th century through the Civil War. **3 credits**

EN 306 Survey of American Literature II

This course provides an introduction to major works of American literature from the Civil War until the present. **3 credits**

EN 310 Irish Literature

This study of drama, fiction, and poetry by Irish writers examines the cultural/historical contexts for the works. **3 credits**

EN 319 Victorian Writers

This course examines novels by 19th-century British writers and the cultural/historical contexts for the works. **3 credits**

EN 320 Modern British Writers

This course explores novels, poetry, and drama by 20th-century British writers and post-colonial writers, including Woolf, Eliot, Joyce, and Lawrence. **3 credits**

EN 330 (CM 330) Feature Writing

This course examines the principles and practices of feature writing. Students gain experience in interviews, personality profiles, narratives, sidebars, and other forms of "soft news" pieces for publication in print or online. **3 credits**

EN 334 Advanced Fiction: The Art of Storytelling

This intermediate course in the reading and writing of fiction provides opportunities for students to experiment with craft to create full-bodied stories that can enrich and enthrall an audience. Students respond to in-class writing prompts and participate in workshopping. **3 credits**

EN 340 World Literature

This class provides a solid foundation in global perspective through an introduction to some of the greatest non-American and non-British works of literature. **3 credits**

EN 343 Poetry Seminar: Image and Form

This advanced course in the reading and writing of poetry has a focus on the further development of craft. Students experiment with form, image, and movement as a way to find the heart and soul of the poem. The course includes intensive reading and critical response to the work of major poets, critique of each other's work in a workshop setting, and critiques and conferences with instructor. **3 credits**

EN 344 Advanced Fiction: Developing Your Craft

In this creative writing class, students weave together the elements of character, plot, and setting to create more nuanced and exciting fiction that is based in reality but takes the reader into unfamiliar territory. Students analyze authors' works and integrate identified techniques to enhance their own writing. The course includes in-class writing prompts and workshopping. **3 credits**

EN 346 Technical Writing

In this professional writing course, students develop skills in analysis of processes and in writing concise professional pieces, such as technical descriptions, specifications, requests for proposals (RFPs), product development plans, policies, processes, procedures, instructions, short reports, and related correspondence. **3 credits**

EN 347 Foundation Proposals

In this professional writing course, students develop substantial proposals and engage in grant writing processes appropriate for corporate or non-profit foundations. Proposals often have a social justice focus and a real-world audience or client. **3 credits**

EN 348 Strategic Plans

In this professional writing class, students practice and apply the processes of writing strategically, often developing a strategic plan for a real-world client. After analyzing information from a variety of sources, students use qualitative and quantitative reasoning to write a creative and imaginative, yet practical, strategic plan. **3 credits**

EN 349 Government Grants

In this professional writing class, students develop major proposals and engage in grant writing processes appropriate for state or federal grants. Assignments include lengthy proposals or proposal sections that seek funding for a specific program or project, often with a social justice emphasis, for real-world projects and clients whenever possible. **3 credits**

EN 351I (SW 351I) Literature and Public Policy

This interdisciplinary course examines the relationship between authors whose works inspired or reflected social justice activism and public policy changes in the 19th and 20th centuries. The interdisciplinary approach of the literary materials and social work perspectives is integrated into students' readings, research, and collaborative in-class projects. Students read and analyze fiction, such as *Maggie: Girl of the Streets*; drama, such as *A Raisin in the Sun*; and music, such as "Strange Fruit." **3 credits**

EN 358 Poetry: Writing a Manuscript

This advanced course in the reading and writing of poetry has a focus on the development of a manuscript of poems. As students put a manuscript together, they learn about order, shaping, and formatting a manuscript of poetry. Assignments include intensive reading and critical response to the work of major writers, plus critique of each other's work in a workshop

setting. Students also engage in critique and conferences with the instructor. **3 credits**
PREVIOUS CREATIVE WRITING EXPERIENCE RECOMMENDED OR PERMISSION FROM THE DEPARTMENT CHAIR.

EN 370 Creative Nonfiction: Place

This advanced course in the reading and writing of creative nonfiction focuses on place. Students read and critique a variety of authors who use place as a “character.” The course also explores travel as part of the writer’s journey. Students write creative essays and stories, critical papers, and respond to in-class writing prompts and workshopping. **3 credits**

EN 400 Independent Study

This class is a specialized study in which the student engages independently, with the guidance of a faculty member, on a literary topic of interest. **1-3 credits**
OPEN TO ALL STUDENTS WITH DEPARTMENT CHAIR PERMISSION.

EN 405 Internship

For internship credit, students engage in practical work experience through placement negotiated with a faculty member prior to registration. Open to sophomores, juniors, and seniors. **Pass/Fail. 1-3 credits**

EN 406 Fiction: Writing a Manuscript

This advanced course in the reading and writing of fiction has a focus on the development of a manuscript of short stories or a novel. With faculty, students develop a reading list of significant authors for critical analysis, engage in intensive reading and critical response to the works, and critique other students’ work in a workshop setting. Assignments also include critique and conferences with instructor. **3 credits**
PREVIOUS CREATIVE WRITING EXPERIENCE RECOMMENDED OR PERMISSION FROM THE DEPARTMENT CHAIR.

EN 410 Madwomen in the Attic: Creative Nonfiction

This writing-intensive study with women creative nonfiction writers explores varying themes. Students engage in critical reading and response to the work of major writers and critique each other’s work in a workshop setting. **Pass/Fail. 3 credits; may be repeated**
PREREQUISITE: PERMISSION OF THE DIRECTOR OF THE CREATIVE WRITING PROGRAM.

EN 412 Writing One’s Life: Creative Nonfiction

This advanced course in the reading and writing of creative nonfiction focuses on the form of autobiography that is a slice of life written by everyday people. Students read a variety of authors, write true-life stories, write a critical review of a book, respond to in-class writing prompts, and engage in workshopping. **3 credits**

EN 420 Madwomen in the Attic: Fiction

This writing-intensive study with women fiction writers explores varying themes. Students engage in critical reading and response to the work of major writers and critique each other’s work in a workshop setting. **Pass/Fail. 3 credits; may be repeated**
PREREQUISITE: PERMISSION OF THE DIRECTOR OF THE CREATIVE WRITING PROGRAM.

EN 435 Madwomen in the Attic: Poetry

This writing-intensive study with women poets explores varying themes. Students engage in critical reading and response to the work of major writers and critique each other’s work in a workshop setting. **Pass/Fail. 3 credits; may be repeated**
PREREQUISITE: PERMISSION OF THE DIRECTOR OF THE CREATIVE WRITING PROGRAM.

EN 444 Senior English Project

During this capstone experience for senior English majors, students work with a faculty mentor to complete a substantial literary analysis that may revise and develop an essay written for another literature class. Students meet regularly with their faculty mentor to select a topic, conduct research, draft, and write their thesis over two semesters, receiving an IP grade at the end of the first semester. Students present a section of their completed thesis to the English faculty and other students. If the project extends past the two-semester deadline, students will be required to register for IS 400. **Pass/Fail. 2 credits**

EN 445 Senior Creative Writing Portfolio

During this capstone experience for senior creative writing majors, students work with a faculty mentor to revise and complete a manuscript of original poetry, fiction, or creative nonfiction. Students meet regularly with their faculty mentor over one or two semesters, with students receiving an IP grade at the end of the first semester. Students present a selection from their completed manuscript to the English faculty and other students. If the project extends past the two-semester deadline, students will be required to register for IS 400. **Pass/Fail. 2 credits**

The following elective courses are offered periodically:

EN 210	Special Topics in Literature
EN 225	Peace/Justice Themes in American Literature
EN 318	Romantic Writers
EN 321	American Novel
EN 322	American Drama
EN 323	American Poetry
EN 360	Development of English Drama

HISTORY

HS 110 Emergence of the Modern West

A survey of several centuries of Western history. An introduction to major developments, figures, tendencies, and terms. **3 credits**

HS 151 World Cultures, Their History and Development

Introduction to world cultures as a contemporary problem and possibility. Beginning with the assumption that the world is a social, economic, political, and cultural entity produced through contestation and cooperation of peoples around the globe, the course looks at major practices through which the world culture has been and continues to be made, including capitalism, colonialism, and war. Methodologies to historical problems are examined. **3 credits**

HS 170 History of the United States to 1865

A general survey emphasizing the political, economic, and cultural development of the United States from the colonial era to the end of the Civil War. **3 credits**

HS 171 History of the United States since 1865

Continuation of HS 170; both may be taken independently. General study of modern America from 1865 to the present. **3 credits**

HS 198 Introduction to United States Labor History

An examination of the history of the American labor movement and working class culture in the United States from 1800 until the present. The 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**

HS 201 Introduction to Modern Asia

An introductory overview of modern Asia from the decline of the early modern empires to the impact of European and American imperialism, cultural renaissance, nationalist movements, creation of independent nation states, postcolonial developments, and U.S.-Asian relations. **3 credits**

HS 202 Modern China

A brief overview of China's history before 1949; the foundation of the People's Republic of China, Taiwan; the career of Mao Zedong; the Great Leap; Cultural Revolution, 1966–1976; Deng Xiaoping; and the present period. **3 credits**

HS 203 Modern Japan

An introduction to the development of an industrial society, parliamentary government, mass culture, and imperialism from the Meiji reforms of the late 19th century through World War II to the present. **3 credits**

HS 205 (WS 205) History of American Women

A study of the history of women in America from the colonial era to the present focusing on struggles for equal rights, family, sexuality, feminism, leadership, and the impact of race, class, and ethnicity. **3 credits**

HS 207 History of the American City

An examination of the changes in the history of the American city from colonial origins to its industrial-urban expression in the early 1900s to the postindustrial-global city of today. Changing definitions of public space, community, municipal politics and economics, (global and local), cultural diversity and immigration, city culture, urban architecture, suburbanization, and domestic life will provide the focus of our inquiry. **3 credits**

HS 210 Western Culture

A study of major dynamics of the North Atlantic world. Focus on significant ideas, figures, practices, texts, institutions, or issues. Methodologies are applied to investigate historical problems. **3 credits**

HS 213 Europe Since World War II

A study of the reconstruction of European politics and society after 1945: the emergence of Cold War in Europe; decolonization; economic cooperation and development; East-West relations; and the end of the Cold War. **3 credits**

HS 217 History of the British Isles

A study of metropolis and empire. Traces the development of Ireland, Scotland, Wales, and England and examines from postcolonial perspectives the history and culture of the multi-ethnic, multinational British Empire that stretched over five continents until its dissolution. **3 credits**

HS 218 Irish-American History

Why did some seven million people leave Ireland for North America from the 17th through the 20th centuries? What did this migration mean for the country they left and more especially, the country that received them? How did the United States transform the immigrant Irish and their children, and how did the Irish transform the United States? This course will seek to understand the dynamic, ongoing impact of this mass migration on the economic, political, and cultural development of the United States, where 45 million people today claim some ancestral connection to Ireland. **3 credits**

HS 226 Caribbean History

Study of key themes and major events in the Caribbean from initial European contact to emergence of independent states. Cross-cultural approach that recognizes shared history not only within the Caribbean, but also with Africa and the American South. **3 credits**

HS 230 African-American History

An examination of the Black experience in the U.S., including slavery, emancipation, reconstruction, segregation, the Great Migration, Civil Rights, and industrialization. **3 credits**

HS 233 American Constitutional History

An overview of the U.S. Constitution from its origins in the Revolutionary War, with an interest in the Articles of the Confederation and the Declaration of Independence. Standpoints of both the Federalists and the Anti-Federalists will be discussed. In addition to an examination of landmark cases in the legal heritage of the United States, the course will investigate the political, economic, and social conditions behind those cases, and the Constitution in general. The class will look at a wide range of topics, including origins of the Constitution, its development in the formative era of the republic, the War of 1812, the presidential elections of the 1830s and 1840s, and continuing through the outbreak of the Civil War. A short section on contemporary issues will conclude the course. **3 credits**

HS 246 History of Utopias: Utopia/Dystopia/Science Fiction

An examination of classical and modern utopian visions and movements in the context of U.S., European, and non-Western history. Utopia can be defined as an imaginative construction of a whole society. Can utopia be theorized as a vision of the future, or a record of the past? Are all utopias politically progressive? The course makes use of historical texts, films, and literature. **3 credits**

HS 250 Multiculturalism in U.S. History

A study of the development of American society focusing on the role of African Americans, Native Americans, Hispanic Americans, and Asian Americans. Concepts of multicultural diversity, racism, and intergroup relations will be explored within a comparative historical framework. **3 credits**

HS 261I (MU 261I) Electronic Culture, Experimental Music

A team-taught course structured around the proposition that music does not just reflect society, but foreshadows new social formations and economic and technological change in a prophetic and annunciatory way. Students will be expected to treat music as a historically determined and socially constructed practice. The course will address new musical ideas and the parallel developments in electronic culture. The focus is music that exists because of the use of electronics rather than music that simply uses electronics. The musical and social spaces of today re-conceptualize aural reality through new sounds, new rules for playing sounds, and new demands for listening. The class is profoundly interdisciplinary, fusing cultural history and music theory. **3 credits**

HS 304 Popular Culture

An exploration of critical approaches to popular culture. The course examines popular music, film, literature, and television, as well as investigates subcultures and other forms of cultural mediation in U.S., European, and non-Western history. This course locates popular culture in its social, cultural, and intellectual context. **3 credits**

HS 322 (AR 322, WS 322) Representations of Women: High Art/Popular Culture

A study and critique of concepts of gender and sexuality in representative cultural texts (film, painting, music, and television). Critical and source materials are drawn from art history, cultural studies, feminist theory, and history. **3 credits**

HS 325I (WS 325I) Girl Cultures

The course draws on the methods and materials of history, women's studies, and cultural critique to introduce students to the fields of girl studies and third wave feminist theory. Using a framework that emphasizes the intersections of gender, race, class, sexuality, and nationality in cultures, theories, and activism that girls and women create and navigate, students gain a deeper understanding of the formation of girl cultures from a theoretical and empirical perspective. Girlhood does not simply reflect society; it foreshadows new social and cultural practices, temporary as they may be, in a prophetic and annunciatory way. Students will be expected to treat girlhood as constituted through experience, a careful analysis of which should lead to the historicization of that process. **3 credits**

HS 351 (WS 351) Women and American Labor History

Contributions of women to the American labor movement; past and current issues in female participation in workers' movements in the United States. **3 credits**

HS 353/354 Special Topics in American History

HS 355/356 Special Topics in American History

Topics vary. **1 to 4 credits**

HS 380I (WS 380I) Special Topics in Women's History

Topics vary. **1 to 4 credits**

HS 392/393 Special Topics in European History

HS 394/395 Special Topics in European History

Topics vary. **1 to 4 credits**

HS 400 Independent Study

Specialized study in which the student engages independently, with the guidance of a faculty member, in researching a historical topic of interest. Open to all students with permission. **Credits vary**

HS 405 Internship

Career and professional opportunities in history including mass media, politics, historical preservation, curating, and teaching. **Credits vary**

PERMISSION REQUIRED PRIOR TO REGISTRATION.

HS 410 Special Topics in Non-Western History: Japanese Animation and Comics

A study and critique of anime (animation) and manga (comic books) in Japan. Anime and manga constitute the perfect medium to visually and narratively capture what is perhaps the overriding issue in present-day Japan: the shifting nature of identity in a rapidly changing society. The course will investigate the ways in which anime and manga present complex issues in an in-depth and sophisticated manner, uncovering identity conflicts, fears over rapid technological advancement and environmental pollution, and other key themes present in contemporary Japanese imaginary. Aesthetics, production, and reception of anime and manga will be explored against the backdrop of Japan's political, social, and cultural history. Students can choose between a creative project such as a digital video pilot for an anime or a manga storyboard, and a major research paper about the historical contexts of these genres. **3 credits**

HS 411/412 Special Topics in Non-Western History

HS 413/414 Special Topics in Non-Western History

Topics vary. **1 to 4 credits**

HS 456 Senior Thesis

During this capstone experience, students pursue challenging independent scholarship that demonstrates depth and breadth of historical knowledge. The student will present a section of their completed thesis to the History faculty and other students. **3 credit**

MATHEMATICS

MAT 100 Basic Algebra Fundamentals

Online review of the core skills and concepts of basic algebra using adaptive computer software. Students will have individualized opportunities to develop fluency with real number operations and computation. Students will use proportional reasoning and solve linear equations in context using multiple representations to deepen understanding. Students will flexibly use the mathematics process skills of problem solving, communication, and making connections to prior learning throughout. **1 credit**

NOTE: PERMISSION TO ENROLL IN THIS COURSE IS CONTINGENT ON THE EVALUATIONS OF PLACEMENT RESULTS.

MAT 105 Basic Mathematics Competencies

This course provides a multi-faceted approach to development of basic mathematics content competencies that align with the requirements for instructional certificate candidates in Pennsylvania. The course uses both adaptive software and guided cooperative learning. Students will have individualized opportunities to develop fluency with fundamental mathematics skills in the areas of Number and Quantity, Algebraic Functions, Geometry, and Statistics and Probability. Students will flexibly use the mathematics process skills of problem solving, communication, and making connections to prior learning throughout. Permission of instructor required. **3 credits**

MAT 106 Introduction to Statistics

An introduction to the concepts of frequency distributions, averages, variability, normal curves, correlation, hypothesis testing, and other topics with applications to business and social sciences. **3 credits**

MAT 110 College Algebra

A review and summary of properties of algebraic functions. An exploration of the solution process of equations and

inequalities. Study of the algebra, behavior, and graphs of functions in a liberal arts context. This course is not a preparation for the study of calculus. See MAT 150. **3 credits**

PREREQUISITE: DEMONSTRATED READINESS FOR MATHEMATICS BY PLACEMENT OR COMPLETION OF MAT 100.

MAT 112 Mathematics in Society

This course explores the connections between contemporary mathematics and modern society. Students will study the mathematical principles required to use mathematics to better understand the world around them. The course will emphasize strong conceptual understanding and appreciation of mathematics for application to daily life experiences.

3 credits

PREREQUISITES: CC 102 OR SKQ 101 AND DEMONSTRATED READINESS FOR MATHEMATICS BY PLACEMENT OR COMPLETION OF MAT 100.

MAT 115 Basic Applied Statistics

A study of the ideas and tools of practical statistics using data in context. Methods and strategies for exploring data graphically and quantitatively are examined, as well as 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. **3 credits**

PREREQUISITE: CC 102 OR SKQ 101 AND DEMONSTRATED READINESS FOR MATHEMATICS BY PLACEMENT OR COMPLETION OF MAT 100.

MAT 120 Introduction to Mathematical Modeling

A study of the use of mathematics to examine a series of genuine elementary applications. Students will consider a contextual situation, develop a mathematical model that describes the situation, use systematic exploration to identify solutions, and examine the behavior of the solutions in the context of the situation at hand. Models considered include: arithmetic, quadratic, geometric, and logistic, as well as combinations of these. **3 credits**

PREREQUISITES: CC 102 OR SKQ 101 AND DEMONSTRATED READINESS FOR MATHEMATICS BY PLACEMENT OR COMPLETION OF MAT 100.

MAT 130 Transcendental Functions

A study of algebraic, exponential, logarithmic, and trigonometric functions in preparation for the study of calculus. Topics include: properties of algebraic expressions, solution of algebraic equations and inequalities, graphs and properties of algebraic and transcendental functions, solution of transcendental equations. **3 credits**

MAT 150 Precalculus

A study of algebraic, exponential, logarithmic, and trigonometric functions in preparation for the study of calculus. Topics include: properties of algebraic expressions, solution of algebraic equations and inequalities, graphs and properties of algebraic and transcendental functions, and solution of transcendental equations. **3 credits**

PREREQUISITE: DEMONSTRATED READINESS FOR MATHEMATICS BY PLACEMENT OR COMPLETION OF MAT 100.

MAT 151I (CHM 151I, BIO 151I) Computer Applications for Science and Mathematics

An introduction to the practical application of computer hardware and software to problems in the sciences and mathematics. Topics include basics like using a graphical user interface and common office applications. More advanced topics include computer interfacing to instruments, mathematical modeling, curve fitting, molecular modeling, and others. No computer background is assumed. Three hours lecture/workshop/ demonstration weekly. **3 credits**

PREREQUISITES: CHM 111, BIO 110 OR PCS 221, MAT 160, CC 100 OR SKW 101, CC 101OR SKC 101, AND CC 102 OR SKQ 101 OR PERMISSION FROM THE DEPARTMENT CHAIR.

MAT 160 Calculus I

An introduction to calculus and its applications. Topic include: limits, continuity, the rules of differentiation, implicit differentiation, first and second derivative tests, curve sketching, anti-derivatives, the relationship between differential and integral calculus, definite integrals and the area under a curve. **4 credits**

PREREQUISITE: DEMONSTRATED READINESS FOR CALCULUS BY PLACEMENT OR COMPLETION OF MAT 150.

MAT 260 Calculus II

A continuation of single-variable calculus and its applications. Topics include definite integrals and the area under a curve, volumes and other applications of the integral, integration techniques (such as trigonometric substitution, integration by parts, and partial fractions), and sequences and series. **4 credits**

PREREQUISITE: MAT 160.

MAT 300 Modern Algebra

A formal introduction to the construction of proof via the classical theory of finite groups. Properties of group morphisms are used to prove the Cayley, Cauchy, and Sylow Theorems. The concept of a ring is introduced as an abstraction of the integers. The rational numbers are constructed as a quotient field of the integers. **3 credits**

PREREQUISITE: MAT 160.

MAT 301 Probability and Statistics

An introduction to elementary probability theory, combinatorial analysis, random variable distribution functions, and discussion of the Law of Large Numbers and Central Limit Theorem. **3 credits**

PREREQUISITE: MAT 360.

MAT 302 Linear Algebra

An examination of properties of vectors and matrices. Solution of systems of linear equations, Gaussian elimination, and iterative techniques. Algorithms for determining inverses, determinants, eigenvalues, and eigenvectors. **3 credits**

PREREQUISITE: MAT 160.

MAT 303 Linear Programming

An introduction to linear programming techniques that solve real applied problems. The focus is on using linear programming techniques, applications, models, algorithms, and a computer software package to solve optimization, product-mix, transportation, scheduling, assignment, and hiring-firing problems. Methods learned include the revised simplex method, duality, sensitivity analysis, integer programming, and sparse matrix techniques. **3 credits**

PREREQUISITE: MAT 160.

MAT 308 Numerical Methods

An introduction to numerical techniques implemented on microcomputers to find roots of equations, solutions to linear and nonlinear systems, and definite integrals. **3 credits**

PREREQUISITES: MAT 302 AND CSC 110.

MAT 321 Applied Discrete Mathematics

A selection of topics from set theory, combinatorics, graph theory, algebra, Boolean algebra, formal logic, and computer science, both useful and basic to students in applied mathematics, computer science, and engineering. Formal mathematical proofs via induction, combinatorial arguments, truth tables and propositions, Russell's Paradox, principle of inclusion and exclusion, the pigeonhole principle and analysis of algorithms, countably and uncountably infinite sets, generating functions, recurrence relations, and lattices. **3 credits**

PREREQUISITE: MAT 160.

MAT 325 Geometry

An examination of independence and completeness of axiomatic systems. Euclidean and non-Euclidean geometries, including finite and projective geometries. Construction of proofs in Euclidean geometry in two and three dimensions. **3 credits**

MAT 331 Differential Equations

An introduction to solvability techniques for separable, linear, and exact first order equations; methods of undetermined coefficients and variation of parameters; Laplace transform methods for systems with constant coefficients and qualitative arguments and iterative methods. **3 credits**

PREREQUISITE: MAT 260.

MAT 340 Number Theory

An account of classical number theory as well as some of the historical background in which number theory evolved. Especially intended for prospective secondary teachers to provide familiarity with the number theory and basic concepts of mathematical proofs and reasoning: the division algorithm, the Euclidean algorithm, primes and their distribution, the theory of congruence, Mobius inversion, perfect numbers, the Fermat Conjecture, and Fibonacci numbers. **3 credits**

MAT 360 Calculus III

An introduction to multi-variable calculus and its applications. Topics include: Polar coordinates, vector analysis, parametric curves, differential calculus of several variables, multiple integration, Green's theorem and Stokes' theorem. **4 credits**
PREREQUISITE: MAT 260.

MAT 398/399 Junior Seminar

An opportunity for junior mathematics majors to research current trends and topics of interest in an area of mathematics or engineering, and present a seminar and paper devoted to this topic. Students work in conjunction with a faculty mentor. The course covers topics in scientific research and presentation. One hour of seminar per week. **1 credit each**

MAT 400 Independent Study

An intensive, independent study of topics such as graph theory or the study of mathematics using computer algebra systems. **1–6 credits**
PERMISSION FROM THE DEPARTMENT CHAIR REQUIRED. PREREQUISITE: MAT 302.

MAT 498/499 Senior Experience

An independent, professional experience for senior mathematics majors within their field, designed in consultation with a faculty mentor. May involve research, an internship, or an independent project. One hour of seminar per week, plus additional time as needed. **2 credits each**

MUSIC

MU 102 The Musical Experience

Introduction to the elements of melody, rhythm, harmony, texture, orchestration, and form. Acquaints the student with the various styles of music from Baroque to jazz. **3 credits**

MU 115 (TR 115) Musical Theatre

This course examines the various influences that led to the creation and evolution of American musical theatre. We will study its' relevance on cultural and social history through audio, video, readings, and discussions. The textbook, *Musical Theatre: A History (Second Edition)* by John Kenrick, will serve as the main reference, while the PBS video series, *Broadway: The American Musical*, will provide added insight and multimedia from important moments and productions. **3 credits**

MU 217 Music and Culture

Introduction to the music of non-western cultures, including Bali, India, China, and Thailand. Emphasizes music's ability to mirror the culture that produces it. **3 credits**

MU 218 Understanding Jazz

Introduction to the complex and fascinating history and development of jazz, America's major contribution to world music. **3 credits**

MU 223 Crises in Creation

Engages the student in classical music by examining case studies of composers working or being in conflict with some outside force. Studying this issue can involve historical, sociological, religious, philosophical, and political issues and ideas as well as musical ones. **3 credits**

MU 261I (HS 261I) Electronic Culture, Experimental Music

A team-taught course structured around the proposition that music does not just reflect society, but foreshadows new social formations and economic and technological change in a prophetic and annunciatory way. Students will be expected to treat music as a historically determined and socially constructed practice. The course will address new musical ideas and the parallel developments in electronic culture. about the focus will be music that exists because of the use of electronics rather than music that simply uses electronics. The musical and social spaces of our day re-conceptualizesaural reality through new

sounds, new rules for playing sounds, and new demands for listening. The class is profoundly interdisciplinary, fusing cultural history and music theory. **3 credits**

MU 400 Independent Study

Allows students to pursue vocal or instrumental lessons on a tutorial basis. **1–2 credits**

MU 481 Carlow Choir

Students rehearse and perform with the Carlow Choir. May be repeated four times. **1 credit**

PHYSICS

PCS 201 General Physics I Lecture

PCS 202 General Physics II Lecture

An introduction to physics. First semester topics include classical mechanics, heat, and thermodynamics. Second semester topics include sound, electrostatics, magnetism, electrodynamics, and light. Three hours of lecture and one hour of recitation weekly. **3 credits each**

PREREQUISITE: MAT 150. PCS 203 IS A CO-REQUISITE FOR PCS 201 AND PCS 204 IS A CO-REQUISITE FOR PCS 202. PCS 201 IS A PREREQUISITE FOR PCS 202.

PCS 203 General Physics I Laboratory

PCS 204 General Physics II Laboratory

A workshop where students will get firsthand knowledge of physical principles and experimental methods through the use of apparatus designed to demonstrate the meaning and applications of these principles. The topics that are explored in physics laboratory are complementary to the material covered in the lectures. First-semester topics include classical mechanics, heat, and thermodynamics, while second-semester topics include wave motion, sound, electrodynamics, light, and quantum theory. **1 credit each**

PREREQUISITE: MAT 150. PCS 201 IS A COREQUISITE FOR PCS 203 AND PCS 202 IS A COREQUISITE FOR PCS 204. PCS 203 IS A PREREQUISITE FOR PCS 204.

PCS 221 Physics I with Calculus Lecture

PCS 222 Physics II with Calculus Lecture

An introduction to physics using calculus. First semester topics include classical mechanics, heat, and thermodynamics. Second semester topics include wave motion, sound, electrodynamics, light, and quantum theory. Three-hour lecture and one-hour recitation weekly. **3 credits**

PRE- OR COREQUISITE: MAT 152 OR MAT 160. PCS 223 IS A COREQUISITE FOR PCS 221 AND PCS 224 IS A COREQUISITE FOR PCS 222. PCS 221 IS A PREREQUISITE FOR PCS 222.

PCS 223 Physics I with Calculus Laboratory

PCS 224 Physics II with Calculus Laboratory

A workshop where students will get firsthand knowledge of physical principles and experimental methods through the use of apparatus designed to demonstrate the meaning and applications of these principles. The topics that are explored in physics laboratory are complementary to the material covered in lecture, and the experiments are illustrative of the concepts discussed in the lectures. First-semester topics include classical mechanics, heat, and thermodynamics, while second semester topics include wave motion, sound, electrodynamics, light, and quantum theory. **1 credit each**

PRE- OR COREQUISITE: MAT 152 OR MAT 160. PCS 221 IS A COREQUISITE FOR PCS 223 AND PCS 222 IS A COREQUISITE FOR PCS 224. PCS 223 IS A PREREQUISITE FOR PCS 224.

PHILOSOPHY

PH 100 Introduction to Philosophy

Introduction to the history and problems of philosophy. Philosophers from Plato to contemporary thinkers such as Descartes, Sartre, Marx, Kierkegaard, Augustine, Aquinas, and others will be covered. The course is designed to grant a general overview of the development of the philosophic tradition of the West. **3 credits**

PH 102 Political Philosophy

Overview of key figures in political philosophy such as Plato, Aristotle, Locke, Hobbes, Marx, and Machiavelli. The goal will be to relate the theories of these crucial thinkers to contemporary political issues of the day and see how their thought has shaped the understanding of political concerns. **3 credits**

PH 103 Philosophy of Human Existence

Introduction to fundamental ideas in history of philosophy leading to existentialism. Such thinkers as Nietzsche, Heidegger, Sartre, Kierkegaard, and others will be discussed and studied in order to grasp a sense of how their thought has influenced the philosophy of the present era. **3 credits**

PH 105 Introduction to Moral Reasoning

Investigation of the history of ethics and its pertinence to contemporary morality. The course will focus on the traditional ethical theories of such thinkers as Plato, Aristotle, Aquinas, Augustine, Kant, Hume, Mill, Sartre, Marx, and others. It will also examine contemporary ethical issues as they relate to the history of ethical philosophy. **3 credits**

PH 107 Philosophy of Education

The course is designed to investigate the evolution of major theories throughout the history of Western philosophy. As a consequence, this course is geared toward understanding the relationship between education and political philosophy. **3 credits**

PH 204 Introduction to Logic

Introduction to practical analytic skills necessary for critical thinking and coherent argumentation. The course is an argumentative speaking and writing class with a quantitative logical component including propositional and categorical logic. Students will write 10 two- to three-page papers. **3 credits**

PH 205 Problems in Philosophy

(Special Topics) Usually offered at least every other semester. Such topics as philosophy and rock and roll, and philosophy and poetry are examined in an attempt to creatively expand the philosophic agenda. **3 credits**

PH 206 (AR 206) Aesthetics

Investigation of the history of aesthetics and its pertinence to art. The role of art as a vehicle of philosophic expression will be examined along with the aesthetic theories of such thinkers as Plato, Aristotle, Kant, Nietzsche, Schopenhauer, and Marx. Film and music will also be used in the class, as well as an examination of poetry and its philosophic and aesthetic significance. **3 credits**

PH 208 Philosophy and the Holocaust

Explores aspects of the history of the European Holocaust during World War II. Will examine ideas of Nietzsche, Schopenhauer, Darwin, Frankl, Augustine, Leibniz and Robert J. Lifton. Theological questions will also be discussed. The course will include reading and a generous portion of film in an attempt to understand and think through this horrible and tragic event. There will be no exams in the course, but rather the writing of papers on various topics that shall be studied. **3 credits**

PH 210 Biomedical Ethics

Study of the perplexing ethical problems of life science, biomedical research, and healthcare policy and how these topics relate to central philosophic issues within the field of ethics. The course is very interactive, using film, guest speakers, lectures, and classroom discussions on central issues of biomedical ethics of our time. These issues will be related to traditional philosophic positions and problems. **3 credits**

PH 280I (TR 280I) Philosophy and Theatre

This interdisciplinary course compares two periods in the history of Western philosophy with two periods in the history of Western theatre. Students will study major works in both philosophy and theatre. **3 credits**

PH 301 Public Health Ethics

Public health ethics addresses the moral and ethical concerns surrounding local, national and global health initiatives, responses to health crises, and general environmental safety. This course explores the ethical questions raised as well as

theories and frameworks applied in public health, in an effort to address issues such as the primacy of the individual over society and/or vice-versa, community ethics, and the plurality of our conceptions and understanding of justice. The relationship between individuals, communities and policy makers is explored, as this problematic triad is at the center of public health ethics issues. **3 credits**

PH 313I (WS 313I, POL 313I) Women in Politics: Running for Office

An exploration of women's politics and political interest using feminist theories and gender-specific positions that lead to an understanding of what motivates individuals to run for office. Gender-specific concerns and obstacles confronted by women interested in political participation and leadership will be covered. **3 credits**

PH 315I (TR 315I) Theatre in Political Philosophy

Students will study the interdisciplinary relationship between theatrical productions and politics with particular emphasis on the uses of theatrical techniques to promote political philosophies in contemporary American politics. **3 credits**

PH 323 Philosophy and Film

Examines major traditional philosophic issues and questions from the standpoint of contemporary cinema. Many films will be used in the class along with readings concerning the history of philosophy. The class is designed to be interactive with an emphasis on viewing film as a way of doing philosophy. **3 credits**

PH 325I (TR 325I) Philosophy, Humor, and Comedy

Interdisciplinary class designed for philosophy or theatre minors. The class is an overview of Western comedy and humor from the perspective of the history of Western philosophy. **3 credits**

PH 328I (BIO 328I) Evolution

Interdisciplinary class designed to provide the student with a sound foundation in the biology, history, and philosophy of evolutionary theory. There are no prerequisites and the course may be taken by any upper-level student. It meets a major course requirement for biology or philosophy. **3 credits**

PH 355 (WS 355) Feminist Philosophy

A study of philosophies of women and women's philosophies such as those of Woolf, de Beauvoir, Chodorow, Gilligan, and post-structural feminists. The course is designed to examine the development and impact of feminist thought and theory in contemporary society. **3 credits**

PH 400 Independent Study

A course designed for the student who would like to study an individual philosopher in depth, or a particular problem in philosophy or system of thought such as Sartre, Existentialism, Rationalism, and other topics. **Credits vary**

PH 401 APPLIED BIOMEDICAL ETHICS

Advanced study of ethical issues in the health sciences. Focuses on case studies and contemporary articles. **3 credits**
PREREQUISITE: PH 210.

PH 402 Contemporary Philosophy

Introduction to the major philosophers and philosophical movements of the contemporary era. May include analytic philosophy, psychoanalysis, phenomenology, structuralism, semiotics, and deconstruction. **3 credits**

PH 403 Single Philosopher

An in-depth study of a single philosopher such as Sartre, Plato, Descartes, Hegel, Freud, or Heidegger, which will allow students, under the supervision and guidance of a faculty member, to explore in detail the thought and writings of a philosopher of their choice and interest. An overview of the philosopher will be undertaken, possibly as well as particular issues and problems that the philosopher addresses. **Credits vary**

SECONDARY EDUCATION

SE 311 Reading and Writing Across Disciplines

This course introduces secondary education students to a variety of methods for teaching reading and writing in the content areas. Students are immersed in critical thinking concepts and strategies that enable them to identify and analyze the structure of their discipline. They incorporate knowledge of their particular discipline into what research has documented about reading and literary theories in order to understand the role of reading and writing within that discipline. The focus is content literacy. Central to this course is the idea of using writing as a means of coming to know. **3 credits**

SE 350 Secondary Curriculum and Methods

This course positions secondary students to understand the relationship between curriculum theory and practice. With a focus on creating learning environments that foster critical and imaginative thinking and problem solving, students design and present lesson plans and develop units that enable the adolescent (grades seven–12) to explore concepts and pursue a particular inquiry. Students will incorporate various forms of questioning and assessment, understand issues related to classroom management, and develop strategies to ensure that students with special education concerns are included. This course enables students to understand the importance of reflective teaching and prepares them for the student teaching experience. **4 credits**

SE 400 Independent Study

Study of topic(s) of particular interest to the student. **Credits vary**

SE 402 Field Experience in Secondary Education

Experiences arranged to meet particular needs or goals of students preparing to teach at the secondary level. **1 credit**

SE 409 Student Teaching in Secondary Education and Seminar

Sixteen weeks full-time teaching experience in a junior or senior high school setting under the direct supervision of a cooperating teacher and university supervisor. After a brief observation period, the student teacher is expected to demonstrate competency in planning, facilitating, and assessing learning activities. The student teacher gradually assumes full classroom responsibilities. Students may teach in more than one content area. Verification of competence is determined jointly by the cooperating teacher and university supervisor. Student teachers are also required to attend university seminar meetings throughout the student teaching experience. **12 credits**

PREREQUISITES: COMPLETION OF ALL MAJOR COURSE REQUIREMENTS, PROFESSIONAL SEQUENCE REQUIREMENTS, AND MINIMUM GPA OF 3.0.

NOTE: NO OTHER COURSE MAY BE TAKEN WHILE A STUDENT IS REGISTERED FOR SE 409 WITHOUT SPECIAL PERMISSION OF THE CHAIR OF SECONDARY EDUCATION.

SPECIAL EDUCATION

SPED 230 Foundations of Special Education

This course serves as an introduction to the field of special education. Included among the topics addressed are the history of special education; its legal and legislative foundation; and the purpose of the Individual Education Plan (IEP), its development and requirements for implementation. A focus on the nature and causes of disabilities will give students an overview of the needs of exceptional children. The entire range of disabilities requiring special education intervention will be addressed. This includes children with hearing losses; visual problems; speech disorders; attention deficit; traumatic brain injury; autism; emotional, behavioral, and social disorders; mental retardation; learning disabilities; physical disabilities; and giftedness. Current trends will focus on minority representation, inclusion, and standards. Models for collaboration, including the multidisciplinary team and trans-disciplinary approaches for effective communication with family and among related service providers, will be addressed. Finally, definitions, prevalence, causes, assessment, characteristics, and educational considerations for several exceptionalities will be reviewed. This course is designed to nurture in students a critical stance towards research, theory, and practice. The goal is that students become educated consumers of the special-education knowledge base. For this purpose, the prevailing as well as alternative perspectives on topics will be reviewed. In addition, cultural diversity and social justice will be emphasized throughout the course. **3 credits**

SPED 332 Instructional Support in Reading, Writing, and Mathematics

Designed for the general education teacher, this course focuses on prevention and early intervention for struggling learners

in general and inclusive classrooms. The instructional cycle of assessment, planning, instruction, and progress monitoring combines holistically to develop an effective learning environment for all learners. Specific instructional and learning strategies to improve literacy and mathematics are introduced, practiced, and applied in a 30-hour field placement in a classroom with students exhibiting learning difficulties. Emphasis on the reading-writing connection is included. Examination of current practices in the implementation of responsiveness to intervention (RTI) models and understanding of universal design for learning (UDL) prepares teachers to meet the learning needs of all students, including those identified as having special needs and those students who are at risk. Models and methods for collaboration and communication with other teachers and parents are examined. **3 credits**

PREREQUISITE: SPED 234. CO/PREREQUISITE: ED 312 OR EDML 320.

SPED 334 Instructional Support for Content Areas (PreK–8)

This course focuses on expanding the understanding of development and cognition in and academic and functional performance of students with disabilities, how these are similar to and different from all developing students, and how this understanding informs the teaching of students with disabilities in the primary and middle school environments. Another area of exploration is the way in which these differences need to be addressed within a standards-aligned system that demands high expectations of students with disabilities so that they have true access to the general education curriculum. This course will enhance the development of a range of instructional supports and use of validated practices in prospective teachers for inclusive settings, especially in content area subjects, but also the supporting skills of reading, written language, and math, that are necessary for success in today's classrooms. **3 credits**

PREREQUISITE: SPED 230.

SPED 336 Instructional Support for Content Areas (7–12)

This course focuses on expanding understanding of development and cognition in and academic and functional performance of students with disabilities, how these are similar to and different from all developing students, and how this understanding informs the teaching of students with disabilities in the secondary school environments. Another area of exploration is the way in which these differences need to be addressed within a standards-aligned system that requires high expectations of students with disabilities so that they have true access to the general education curriculum. This course will enhance the development of a range of instructional supports and the use of validated practices in prospective teachers for inclusive settings, especially in content area subjects, but also the supporting skills of reading, written language, and math, necessary for success in today's classrooms. **3 credits**

PREREQUISITE: SPED 230.

SPED 360 The Arts for Special Populations

This course is designed to provide a fundamental background in how various arts disciplines can be used to instruct students with disabilities at the elementary through secondary level. Emphasis will be placed on specific teaching and learning strategies that integrate the arts in order to assist students in reaching their learning goals and objectives. Participants will explore the selection, adaptation, and development of instructional materials across curriculum areas and student's needs. **3 credits**

SPED 450 Early Intervention (PreK–8)

This course focuses on the professional knowledge and skills needed to provide young children (birth through age 8) with effective interventions across a variety of settings. Special attention is given to building partnerships with related service providers and families in culturally/linguistically diverse settings. Students evaluate Individualized Family Service Plans (IFSP) and Individual Education Plans (IEP), and design appropriate instructional strategies in a 30-hour field placement. Special attention is given to language development, facilitating play as a learning activity, and instructional strategies that promote inclusion in typical settings. Implications of medical advances and routines for daily care including feeding, dressing, toileting, and other activities of daily living are examined. **3 credits**

PREREQUISITE: SPED 230.

SPED 451 Assessment in Special Education

This course is designed to familiarize teacher candidates with the many ways in which assessment accompanies instruction in today's classrooms. A strong emphasis is placed on linking assessment with planning for instruction and on developing Individual Education Plans for students identified as eligible for special education services. Students will learn to identify, choose, and administer appropriate assessment measures, both formal and informal, in the classroom for identification of disabilities in students. Emphasis is placed on developing the understanding necessary to interpret assessment data, using that information to plan instruction for students in a standards-aligned system. Among the specific topics covered are

progress monitoring and its relationship to response-to-intervention in the general education classroom, functional behavioral assessment and its relationship to behavioral intervention plans, and issues of assessment with children from culturally and linguistically diverse communities. **3 credits**

PREREQUISITES: SPED 230, SPED 332, AND SPED 334 OR SPED 336.

SPED 452 Transitions to Adulthood

This course is designed to prepare special education teacher candidates to assist students with disabilities and their families as they navigate transition points such as moving from preschool to school and from secondary settings to work or post-secondary education. Effective instructional practices that support transition at each level will be a central part of this course, as will the range of delivery methods for effective transition. Transition remains a challenge for individuals with disabilities, despite the focus on providing students with disabilities access to the general education. Special educators need to understand the processes and procedures of transition from secondary school to post-secondary settings. They must develop facility with the tools that support transition regardless of the setting in which education takes place. A key focus will be on the vocational choices, training, and education available to young adults with disabilities and the major societal challenges that face young adults as they make the transition into adulthood. Understanding transition assessment and incorporating transition planning into IEP development will also be a focal point of this course. The differing legal requirements between the Individuals with Disabilities Education Act and the Americans with Disabilities Act will be a central part of this course. The field component of this course involves visits to sites that prepare individuals with disabilities to enter the post-school environment. **3 credits**

PREREQUISITES: SPED 230, SPED 332, SPED 336, AND SPED 451.

SPED 460 Communication and Technologies in Special Education

This course focuses on language development from birth to adult in individuals with disabilities, the range of communication needs often displayed, and alternative technologies to support those needs. An area of particular emphasis is the teacher's role in supporting language and communication development in the classroom and as a contributing member of the transdisciplinary team. Collaborative models and communication strategies for developing effective working relationships with team members will be examined. In addition, students will study the role of augmentative and alternative communication (AAC) and assistive technologies; their selection, function, and application for promoting independence for learning and living. Opportunities for hands-on exploration of a variety of devices, both low and high tech, including switches, augmentative communication devices, alternative keyboards, specialized computer software, adaptive equipment, and other items available in Carlow's Assistive Technology Library will be utilized. **3 credits**

PREREQUISITES: SPED 230, SPED 332, AND SPED 334 OR SPED 336.

SPED 470 Meeting the Learning Needs of Students with Mild/Moderate Disabilities

This course is designed to support special education teacher candidate mastery of the range of instructional approaches available for teaching students with mild to moderate disabilities in today's classrooms, including specialized strategies for the teaching of reading, written language, mathematics, and social skills. The course addresses the special educator's role in the continuum of classroom settings and the teaching methods utilized with this population. Teacher candidates explore the conceptual frameworks required by teachers as they identify student ability levels and learning styles, and plan for appropriate instruction for all learners. Adaptation of existing educational materials and curriculum are often required to implement a successful program. Universal design for learning and instruction is an integral part of this course. Teacher candidates will learn to utilize current research and evidence-based practices that are used in the education of students with mild/moderate disabilities. They will learn strategies from multiple instructional approaches. They will learn to use principles of instructional design that will permit them to address Pennsylvania state standards and assessment anchor content standards in the classrooms in which they teach that will meet students' IEP goals and objectives. **3 credits**

PREREQUISITES: SPED 230, SPED 332, SPED 334 OR SPED 336, SPED 451.

SPED 472 Positive Behavior Supports (PreK-8)

This course is intended to provide teachers with an understanding of the etiology and conditions of student behavior, equipping them with strategies to manage classroom behavior effectively. The techniques of Applied Behavioral Analysis will be introduced. Identification of students at risk, including children with emotional, social, and behavioral disorders, and the development of effective intervention strategies, will be covered. A variety of methods for data collection and the analysis of the information generated by these methods are included in the course. Functional Behavioral Assessments (FBA) and the development of the Behavior Improvement Plan (BIP) will be explored so that a beginning teacher is prepared with numerous options when dealing with problem behaviors in a positive and proactive manner. **3 credits**

PREREQUISITES: SPED 230, SPED 332, AND SPED 334 OR SPED 336.

SPED 474 Positive Behavior Supports (7–12)

This course is intended to provide teachers with an understanding of the etiology and conditions of student behavior and equip them with strategies so that they may manage classroom behavior effectively. The techniques of Applied Behavioral Analysis will be introduced. Identification of students at risk, including children with emotional, social, and behavioral disorders, and the development of effective intervention strategies will be covered. A variety of methods for data collection and the analysis of the information generated by these methods are included in the course. Functional Behavioral Assessments (FBA) and the development of the Behavior Improvement Plan (BIP) will be explored so that a beginning teacher is prepared with numerous options for dealing with problem behaviors in a positive and proactive manner. **3 credits**
PREREQUISITES: SPED 230, SPED 332, AND SPED 336.

SPED 476 Teaching Methods for Students with Severe/Profound Disabilities

This course is designed to prepare students to teach children and young adults with severe/profound disabilities. Learning objectives will cover student assessment and program design, along with the implementation of an appropriate educational program. In addition, communication methods, self-help skills, activities of daily living, as well as socialization, will be addressed with this population. This course will include a 30-hour field placement in an authentic learning environment—a nationally accredited Approved Private School that demonstrates “best practices” with this population. The field placement will reflect the special education program, either a PreK-8 or 7-12 age group. This will provide the student with excellent teaching models and the opportunity to learn from a variety of experts and practitioners in the field including teachers, paraprofessionals, administrators, speech and language therapists, occupational therapists, physical therapists, and rehabilitation technologists. The student, through hands-on learning, will experience the challenges and rewards of teaching children and young adults who are challenged by severe/profound disabilities. **3 credits**
PREREQUISITES: SPED 230, SPED 332, AND SPED 334 OR SPED 336.

SPED 478 Autism Spectrum Disorders

This course is designed to prepare teachers to work in a variety of environments serving children and young adults with Autism Spectrum Disorder (ASD) including the general education classroom, inclusive settings, and specialized settings. Evidence-based practice, philosophical approaches, and specific intervention techniques are examined. These practices are considered within the continuum of services and collaborative models utilized in designing effective instructional environments for students with ASD. Attention is given to current and evolving research related to etiology, brain function, and early intervention as well as Applied Behavior Analysis, PECS, and TEACH practices. **3 credits**
PREREQUISITES: SPED 230, SPED 451, AND SPED 472 OR SPED 474.

SPED 490 Student Teaching in Special Education

A culminating experience that will demonstrate the integration of theory and effective practices in special education. The students will achieve this through an on-site eight-week experience with children and youth who have a range of disabilities. A mentor teacher is assigned to provide daily feedback and guidance in the planning, preparation, instruction, and evaluation of the effectiveness of learning experiences for children and youth with special needs. A university supervisor oversees the student teaching experience and students attend bi-weekly seminars at Carlow. **6 credits**
PREREQUISITES: COMPLETION OF ALL SPECIAL EDUCATION CERTIFICATION REQUIREMENTS WITH A MINIMUM GPA OF 3.0. NOTE: NO OTHER COURSES MAY BE TAKEN WHILE A STUDENT IS REGISTERED FOR SPED 490 WITHOUT SPECIAL PERMISSION OF THE CHAIR OF SPECIAL EDUCATION.

THEOLOGY

TH 101 Religion and Human Experience

A study of the dynamics of human experience and the religious understanding of God as mystery. The course also explores the human experience of grace, love, prayer, sin, and salvation. **3 credits**

TH 141 The God Question Today

A study of contemporary images and concepts of God, particularly those that can be related to the Jewish and Christian experience. **3 credits**

TH 143 The Church as a Developing Community

A consideration of biblical, historical, and theological questions about the Church. **3 credits**

TH 147 Myth, Symbol, and Sacrament

This course examines the dynamics of the revelation of God and the sacred through the unique language of myth and symbol, and the experience of sacrament. **3 credits**

TH 151 Search for Human Values

An introduction to Christian moral theology, along with an examination of theories about value formation, the development of personal conscience, and the relationship of religious faith to ethical decision making. **3 credits**

TH 155 Mercy and Justice in the World

This course explores the body of literature known as Catholic Social Teaching—the voice of the Church raised to address social problems in the world. Often described as “the Church’s best kept secret,” Catholic Social Teaching offers insight into the profound revelation of God’s justice demanding the dignity of peace for those who suffer inequalities, and the challenge to address social structures that threaten the dignity of communities. **3 credits**

TH 156 Love, Marriage, and Family

Exploration of the human values in marriage, love, and family from a Christian perspective. Biblical, systematic, ethical, and pastoral approach. **3 credits**

TH 160 History of Christianity

A study of the development of Christianity from its beginning until the present. Course conceived as an ecumenical experience. **3 credits**

TH 190 Major World Religions

A theological approach to Hinduism, Buddhism, Judaism, Christianity, and Islam with a particular emphasis on the prospects of dialogue between Christianity and the other major religions. **3 credits**

TH 215 Catholicism

An introduction to Roman Catholic Christianity. Historical perspectives will be considered. Primarily, though, emphasis will be placed on the particular hermeneutics with which Catholicism approaches scripture and sacrament. Emphasis will be placed on Catholicism in the modern world. **3 credits**

TH 221 Women and Religion

An exploration of the religious experiences of women and the expectations placed on women by churches. The course will discover women’s place as participants in the believing and ministering community. **3 credits**

TH 232 The Four Gospels

A study of the literary and theological characteristics of each of the four gospels as four faith portraits of the early Christian church and their experience of Jesus of Nazareth. **3 credits**

TH 233 Introduction to the Old Testament

An introduction to the Old Testament as a religious document of ancient Israel. The major themes introduced are: revelation, inspiration, interpretation, salvation history, and the importance of contemporary scholarship for understanding the historical, linguistic, cultural, literary, and religious contexts of the various books. **3 credits**

TH 234 Introduction to the New Testament

A study of the New Testament with special emphasis on the experience of the early Christian communities that produced the epistles and the gospels. **3 credits**

TH 236 Pauline Thought

Consideration of Paul as the first great Christian theologian, highlighting the principal themes in his writing. **3 credits**

TH 241 Jesus the Human Face of God

An examination of the historical, developmental, and contemporary theological issues concerning Jesus of Nazareth. **3 credits**

TH 248SL Theology of Mercy

This service-learning course explores the depth and riches of the mercy of God through “small acts of service and charity” (C. McAuley). Utilizing the theological literature of the Sisters of Mercy and other theologians, the student incorporates wisdom and service in light of the mercy of God. **3 credits**

TH 255 Writing the Sacred

An introduction to writing in the discipline of theology. Theological writing does not describe reality, but creates it. Writing in this mode is like a “breath that touches in words” (Irigaray). **3 credits**

TH 310 Special Topics

A very focused course on a particular theological topic. Designed specifically for theology minors. Open to all majors with adequate background. **3 credits**

TH 330 Prophets of the Old Testament

A study of the major and minor prophetic books of the Old Testament with emphasis on their theological and ethical teachings. **3 credits**

TH 350 (CHM 350) Miracles: Science and God

How does God “work” in the world and how is that work perceived in light of the “laws of nature.” Studies in the fields of theoretical physics and quantum mechanics suggest exciting possibilities for a 21st-century theology of divine action. In particular, this course will investigate the relationship between what Thomas Aquinas referred to as “primary cause” (the origin of all things) and “secondary causes” (all the interactions we perceive in the empirical world). **3 credits**

TH 352 Contemporary Moral Problems

Exploration of the basic principles of Christian moral decision making. This survey of major moral problems includes Christian perspectives on human sexuality, the value of human life raised by the medical profession, and issues of social justice. **3 credits**

TH 360 Christianity and American Society

An exploration of the relationship between Christianity and the American experiment. Historical, theological, cultural, political, and sociological questions will be addressed pertaining to this relationship. **3 credits**

TH 400 Independent Study

An independent study in theology is not limited to theology minors, but a student must have demonstrated a level of independent research in theology before enrolling in this course. **Credits vary**

THEATRE

TR 103 Introduction to Theatre Arts

An introduction to the styles and conventions of the major periods of theatre in Western culture that develops an approach to theatre as a performing art. **3 credits**

TR 105 Theatre in Production

An introduction to the experience of live theatre that makes use of the wide variety of theatrical productions in the Pittsburgh area to help the student develop analytic and critical skills. **1 to 3 credits**

TR 115 (MU 115) Musical Theatre

This course examines the various influences that led to the creation and evolution of American musical theatre. We will study its' relevance on cultural and social history through audio, video, readings, and discussions. The textbook, *Musical Theatre: A History (Second Edition)* by John Kenrick, will serve as the main reference, while the PBS video series, *Broadway: The American Musical*, will provide added insight and multimedia from important moments and productions. **3 credits**

TR 203 Oral Interpretation of Literature

Experience in using the voice expressively through interpretation of prose, poetry, and drama under various performance conditions. **3 credits**
PREREQUISITE: SPED 230.

TR 205 Acting

An introduction to the conventions and methods of the actor's art, which provides a basis for both the beginning actor and students who wish to increase their appreciation of stage performance. **3 credits**

TR 206 Directing

An introduction to the fundamentals of interpreting and realizing a production from script to public performance. **3 credits**

TR 210 Special Topics

Provides an opportunity to present specially designed courses in individual and distinctive topic areas. **3 credits**

TR 217 Shakespeare's Theatre

An introduction to Shakespeare's plays from a theatrical and structural point of view, emphasizing production concepts. **3 credits**

TR 218 History of Musical Theatre

An overview of the many forms of musical theatre from ancient Greek to Brecht, from opera to the modern Broadway musical. **3 credits**

TR 219 Contemporary Theatre

An introduction to the various styles of current theatrical performances from realism to contemporary eclectic styles. **3 credits**
PREREQUISITE: SPED 230.

TR 280I (PH 280I) Philosophy and Theatre

This interdisciplinary course compares two periods in the history of Western philosophy with two periods in the history of Western theatre. Students will study major works in both philosophy and theatre. **3 credits**

TR 315I (PH 315I) Theatre in Political Philosophy

Students will study the interdisciplinary relationship between theatrical productions and politics with particular emphasis on the uses of theatrical techniques to promote political philosophies in contemporary American politics. **3 credits**

TR 325I (PH 325I) Philosophy, Humor, and Comedy

Interdisciplinary class designed for philosophy or theatre minors. The class is an overview of Western comedy and humor from the perspective of the history of Western philosophy. **3 credits**

TR 400 Independent Study

Enables students to design a course in an area of theatre not covered by current courses. Requires the approval and sponsorship of a faculty member prior to registration. **Credits vary**

WOMEN'S AND GENDER STUDIES

WS 101 Introduction to Women's and Gender Studies

An introductory course exploring the historical conditions of women and gender in modernity. **3 credits**

WS 120 (POL 120) Introduction to Leadership and Women

An exploration of theories, scholarship, and styles related to leadership behavior and skills. Students will recognize, observe, and appreciate styles of leadership, especially among women. Particular emphasis is given to the contributions and changes they make at all levels of their lives for the good of systems of various sizes. **3 credits**

WS 205 (HS 205) History of American Women

A study of the history of women in America from the colonial era to the present focusing on struggles for equal rights, family, sexuality, feminism, leadership, and the impact of race, class, and ethnicity. **3 credits**

WS 209 (AR 209) Women and Art

An investigation of the history of art through the lens of feminist critical theory. Explores the production and status of women artists and patrons as well as the representation of women in art from the Renaissance to the present. Students critically engage with course materials through class dialogue, written assignments, and collaborative projects. **3 credits**
PREREQUISITE: AR 102.

WS 211 Women and Creativity

An interdisciplinary approach to how women have been valued for their creativity and how women value and express their own creativity. The course takes a broad cultural approach to creativity and innovation across the disciplines. **3 credits**

WS 221 (TH 221) Women and Religion

Exploration of the religious experiences of women and the expectations placed on women by churches. The course will discover women's place as participants in the believing and ministering community. **3 credits**

WS 228 (POL 228, SO 228) Gender Law and Public Policy

This course analyzes laws, public policies, and practices that have constructed and regulated gender in the public and private sectors, with special attention to employment and education. It examines the historical constructions of gender as a concept in American society, including how and why this concept was institutionalized publicly and privately in various arenas of the U.S. at different historical junctures. The course will conclude with a study of the progress that has been made in dismantling gendered institutions and the challenges that remain. **3 credits**

WS 230 (SO 230) Women in Culture and Society: A Cross-Cultural, Interdisciplinary Approach

An interdisciplinary examination of issues of gender in U.S. society and across other cultures. The basis of gender differences is explored, and then the course examines a number of aspects of society and culture—economics, politics, families, education, communication, and religion—in terms of gender differences. **3 credits**
PREREQUISITES: CC 100 OR SKW 101, CC 101 OR SKC 101, AND CC 102 OR SKQ 101.

WS 233I (EN 233I) Visions of Social Change: Global Women's Writing

An interdisciplinary course that draws on the pedagogy and disciplines of women's studies and English to explore global women's writing about social justice. The interdisciplinary approach of the literary materials and women's studies perspectives is integrated into students' readings, research, and collaborative in-class projects. **3 credits**

WS 235 SL Girls in American Society

This course examines the social experience of girls in American society. There is a particular focus on the socially constructed meanings of girlhood, the social and economic disadvantages faced by girls, and the role of feminist practice in countering those disadvantages. It offers an opportunity to develop knowledge through feminist research and theory and consider what it means to practice feminism in the public sphere. The topics of focus are meant to enrich the experience of undergraduate women currently mentoring pre-adolescent girls as part of the Strong Women Strong Girls program. **3 credits**

WS 236 (CM 236) Gender Differences in Communication

An examination of gender differences in communication that are sustained by cultures. Students will explore how gender roles are created and perpetuated. They will then examine the ways our interpersonal and social interactions, including our experience with the mass media, influence our probability of success, satisfaction, and self-esteem. In assignments and discussion, students will link theory and research on gender and communication with their personal lives. **3 credits**

WS 237 Special Topics: Women's Studies

Course to be offered in a topic area of a women's studies core course. Course satisfies Women's Studies Core and Women's and Gender Studies Minor requirements. **3 credits**

WS 250 Images of Women in Film

Introduction to the basic vocabulary and techniques of analysis and criticism by examining images of women in film. **3 credits**

WS 251S (SO 251S) Cross-Cultural Perspectives on Child-Rearing and Child Care

This course is a cross-cultural examination of child-rearing and child care that focuses on contemporary societies ranging from developing countries to highly industrialized societies. The course also considers cross-cultural variations, practices, and a critical examination of the adequacy of child rearing and child care in American society. **3 credits**

WS 265 (PY 265) Psychology of Women

An overview of theories and current research on the psychological nature of women, specifically related to the adult life cycle of women from adolescence through maturity. Adult female life will be examined with particular emphasis on critical periods of development as these developments affect the emotional life of the modern woman. **3 credits**

WS 300 (EN 300) Environmental Justice

This cross disciplinary examination of environmental justice issues explores works by various authors and contemporary films. The cross disciplinary approach of the literary materials and women's studies perspectives is integrated into students' readings, research, and collaborative in-class projects. **3 credits**

WS 310 (SO 310) Women and Work

This course examines the experiences of women in paid and unpaid work. Women comprise a significant and growing portion of the labor force. Their positions and experiences are very diverse and rooted in the specific historical and social contexts in which they live and work. The course begins with an overview of gender in society and the structure of the United States economy. It will examine the history of women's employment and women's current status in the workforce. A significant portion of the semester will be devoted to women in poverty and low-wage work. The course will conclude with an exploration of the strains associated with women's professional work experiences. **3 credits**

WS 313I (PH 313I, POL 313I) Women in Politics: Running for Office

An exploration of women's politics and political interest using feminist theories and gender-specific positions that lead to an understanding of what motivates individuals to run for office. Gender-specific concerns and obstacles confronted by women interested in political participation and leadership will be covered. **3 credits**

WS 320 Feminist Theories

This course introduces students to a variety of theories that address the imbalance of power between men and women and the oppression and discrimination that result. Through a focus on feminist theories on gender as a central element of power, students become familiar with the field of feminist scholarship on women and gender. The course also introduces students to the intersections among gender, race, class, and sexuality in the lives and writings of diverse women. Upon completion of this course, students will understand a variety of feminist theories, including the theory of gender, race, class, and sexuality as interlinked, as well as the principles informing women's activism. **3 credits**

WS 322 (AR 322, HS 322) Representations of Women: High Art/Popular Culture

A study and critique of concepts of gender and sexuality in representative texts (film, painting, music, and television). Critical and source materials are drawn from art history, cultural studies, feminist theory, and history. **3 credits**

WS 325I (HS 325I) Girl Cultures

The course draws on the methods and materials of history, women's studies, and cultural critique to introduce students to the fields of girl studies and third wave feminist theory. Using a framework that emphasizes the intersections of gender, race, class, sexuality, and nationality in cultures, theories, and activism that girls and women create and navigate, students gain a deeper understanding of the formation of girl cultures from a theoretical and empirical perspective. Girlhood does not simply reflect society; it foreshadows new social and cultural practices, temporary as they may be, in a prophetic and annunciatory way. Students will be expected to treat girlhood as constituted through experience, a careful analysis of which should lead to the historicization of that process. **3 credits**

WS 351 (HS 351) Women and American Labor History

Contributions of women to the American labor movement; past and current issues in female participation in workers' movements in the United States. **3 credits**

WS 355 (PH 355) Feminist Philosophy

A study of philosophies of women and women's philosophies such as those of Woolf, de Beauvoir, Chodrow, Gilligan, and post-structural feminists. The course is designed to examine the development and impact of feminist thought in contemporary society. **3 credits**

WS 380I (HS 380I) Special Topics in Women's History

Topics vary. **1 to 4 credits**

WS 400 Independent Study

3 credits

WS 415 (SW 415) Women, Work and Well-Being

This course explores the history of women and work through a series of case studies. Gender roles, race and ethnicity and socioeconomic factors will be considered in discussion. It also looks at the impact of the work environment on the well-being of women. **3 credits**

WS 485 Internship

For internship credit, students engage in practical work experience through placement negotiated with a faculty member prior to registration. Open to sophomores, juniors, and seniors. **Pass/Fail. 1 credit**

COLLEGE OF LEADERSHIP AND SOCIAL CHANGE

Accelerated Programs

Accelerated programs provide opportunities for qualified students to begin graduate level coursework while an undergraduate that can lead to the completion of the undergraduate and graduate degrees in less time. Students in one of Carlow's accelerated degree programs can earn up to 12 credits that count towards completion of both the bachelor's and master's degrees.

The College of Leadership & Social Change offers the following accelerated programs:

- Accelerated Master's in Business Administration Program (BS or BA to MBA)
- Accelerated Master of Science in Fraud and Forensics (BS or BA to MS in Fraud and Forensics)
- Accelerated Master of Science in Professional Counseling (BS or BA to MS in Professional Counseling)
- Accelerated Master of Arts in Student Affairs (BS or BA to MA in Student Affairs)
- Accelerated Master of Arts in Psychology (BS or BA to MA in Psychology)

Entrance requirements into the accelerated programs include:

- Junior or Senior standing
- 3.0 Cumulative GPA
- Application
- Approval of the graduate program director and the student's advisor
- Completion of prerequisite course work, where applicable
- Meet residency requirements by having completed 15 credits in residence at Carlow, including 9 credits of undergraduate coursework in the major

Students must earn at least a B- or higher in accelerated program courses to remain in this track. Following completion of an accelerated program, students will have a streamlined application process to complete their master's degree.

Following completion of an accelerated program, students have streamlined application processes to complete the master's degree if they intend to enroll immediately following their undergraduate career. Satisfactory performance (B- or higher) in accelerated program classes is needed to stay in the accelerated program.

ACCOUNTING, FRAUD, AND FORENSICS DEPARTMENT

MAJORS

- Accounting
- Forensic Accounting

MINORS

- Accounting

ACCELERATED PROGRAM

- BA/BS to Master of Science in Fraud and Forensics

ACCOUNTING, FRAUD, AND FORENSICS DEPARTMENT POLICIES

RESIDENCY REQUIREMENT

A student must complete a minimum of 18 credits from the Accounting Department to earn a bachelor's degree. Grade requirement: a student must complete all major, minor, and support courses with a minimum grade of C.

DECLARING A MINOR

Any student declaring a minor offered by the Accounting or Management Departments is assigned a minor advisor from within the business programs. The student, in consultation with the accounting/management advisor, and with her/his major advisor, selects the specific minor course requirements. Students majoring in other fields can earn a minor in Accounting.

ACCOUNTING MAJOR

The Accounting major requires the student to complete 33 credits in Accounting as well as courses in the Business Management and Information Technology Management curriculum. Students can opt for a double major and/or a minor by combining accounting with another discipline by consulting with their advisor.

The Accounting major leads to the Bachelor of Science degree. The curriculum integrates a strong accounting, business, technology, and liberal arts education with the requirements for application for various licenses, such as a Certified Public Accountant (CPA) as established by the Commonwealth of Pennsylvania. (Please see the Pennsylvania Institute of CPAs website for current licensure requirements.) Students also participate in an internship or practicum that enables them to earn experience in the field of accounting.

Major Requirements:

ACC 104, ACC 205, ACC 305, ACC 306, ACC 307, ACC 311, ACC 312, ACC 405, ACC 407, ACC 413, ACC 460, BSM 103, BSM 202, BSM 207, BSM 301, BSM 302 or 401, IT 143, IT 200, IT 242, IT 250SL and MAT 115

ACCOUNTING MINOR

A student who chooses to major in another discipline can also consider a minor in Accounting. The student must complete six courses in Accounting, chosen in consultation with an accounting advisor, to fulfill the minor requirements.

Minor Course Requirements:

ACC 104, ACC 305, ACC 306, plus three of the following courses: ACC 205, ACC 307, ACC 311, ACC 312, ACC 405 or ACC 407.

FORENSIC ACCOUNTING MAJOR

Carlow is one of the few universities nationwide that offers an undergraduate degree in Forensic Accounting. Forensic Accounting is a rapidly growing area of accounting concerned with the detection and prevention of financial fraud and white-collar criminal activities. Forensic Accounting is the integration of accounting, auditing, and investigative skills. Forensic Accounting includes litigation support and investigative accounting. These areas deal with issues related to the quantification of economic damages caused by employee theft, securities fraud, insurance fraud, asset misappropriations, fraudulent statements, and professional negligence.

The forensic Accounting major leads to a Bachelor of Science degree. All forensic Accounting majors also earn a major in Accounting. In addition, graduates of the Forensic Accounting program are qualified to sit for the Certified Public Accountant (CPA) exam and the Certified Fraud Examiners (CFE) exam. (Please see the Pennsylvania Institute of CPAs website for current licensure requirements.) These credentials are recognized globally and are regarded as an indicator of excellence in the accounting and anti-fraud professions.

Major Course Requirements:

ACC 104, ACC 205, ACC 305, ACC 306, ACC 307, ACC 311, ACC 312, ACC 405, ACC 407, ACC 413, ACC 460, ACF 331, ACF 332, ACF 333, ACF 440, BSM 103, BSM 202, BSM 207, BSM 301, BSM 302 or 401, IT 143, IT 250SL, IT 200, IT 242, IT 372, and MAT 115

BA/BS TO MASTER OF SCIENCE IN FRAUD AND FORENSICS ACCELERATED PROGRAM

Undergraduate students from all majors are invited to apply to Carlow's Master of Science in Fraud and Forensics program prior to graduation (majors from other fields may petition to apply). Juniors and seniors admitted to this program would be permitted to take MFF courses while they are still undergraduate students. This includes the following:

1. MFF 710 Fraud and Forensics Community Experience, (2 credits), starts each August
2. MFF 711 White Collar Crime, (3 credits), fall semester

3. MFF 721 Legal Elements of Fraud, (3 credits), spring semester.

The courses offered have been pre-selected as optimal for undergraduate students. To be given graduate credit, all graduate courses must be passed with a B- or above. These eight credits will also be counted toward the 120 credits needed for the undergraduate degree and be concurrently posted on the graduate transcript. Graduate courses will count for graduate credit only if the student earns a B- or higher; graduate courses will count for undergraduate credit even if the student earns a C+ through D-.

This opportunity can save students time and money if they are planning on start Carlow's MFF program upon graduation. This is also an opportunity for students to engage in higher-level work and interact with graduate students while completing their undergraduate coursework. The classes will have both undergraduate and graduate students.

To remain in this program, students will need to maintain a 3.0 overall GPA average. The opportunity to enter the Fraud and Forensics program will present a path to a graduate degree unlike that offered by other universities. This program is an Accelerated Bachelor's to Master's degree program. However, the student does not complete the program any faster—it takes an additional year regardless of taking MFF courses during their undergraduate career. As a result, the student does not graduate from the MFF any earlier.

Accelerated Master of Science in Fraud and Forensics begins at the start of the student's senior year. In addition to the requirements for enrolling in Carlow's accelerated programs (Accelerated Programs section above), entrance into the accelerated master of science in fraud and forensics program requires that MFF 710 Fraud and Forensics Community Experience (2 credits) be taken prior to beginning the program. Final and full admission to the MFF may be granted upon completion of the undergraduate degree from Carlow.

COMMUNICATION DEPARTMENT

MAJORS

- Communication and Media
- Corporate Communication

MINORS

- Communication
- Digital Storytelling

PROGRAM

- Early Assurance Agreement with University of Pittsburgh Graduate School of Public and International Affairs Masters Programs

COMMUNICATION AND MEDIA MAJOR

The major in Communication & Media prepares you for the exciting 21st-century careers in all areas of communication practice and leads to a Bachelor of Arts degree. Our program offers a diverse curriculum that prepares you to both create and critique messages so that you are able to advocate for organizations, clients, and causes. The Communication & Media major provides you with the knowledge and skills that every employer values – excellent written, oral, and digital communication skills along with a strong foundation in communication theories, strategies, and ethics.

This major is designed for students who seek to use communication knowledge and skills in a variety of dynamic careers in marketing communication, social media, public relations, and other communication specialties. Graduates find exciting positions in mass media, business, and government, and are also prepared for study in a variety of graduate programs.

Required Courses:

SSC 100 (PY 100), SSC 120 (CM 120), SSC 200 (POL 200), SSC 321, and PY 320 or PY 325 or SO 422

Required Communication Courses:

CM 104, CM 200, CM 210, CM 232, CM 242, CM/EN 260, CM 300, CM 360 (EN 360), CM 405, CM 450, CM 457, plus nine credits of additional Communication electives in consultation with an advisor

All credits taken in major courses must be completed with a minimum grade of C.

CORPORATE COMMUNICATION MAJOR

This distinctive interdisciplinary major is the only Corporate Communication program in Western Pennsylvania that combines required courses from both Departments of Communication and Business Management, leading to a Bachelor of Arts degree. Students graduate with knowledge and skill sets in Communication along with an understanding of theories and concepts in Business. Particular emphasis is placed on the development of writing, speaking, marketing, leadership, and team building—skills that are necessary for careers as communication practitioners in corporate settings. Recent graduates are working in marketing communication, public relations, event planning, corporate training, and human resources. Students also engage in exciting internship opportunities with corporations, hospitals, government, and in advertising and public relations firms.

Required Communication Courses:

CM 104, CM/SSC 120, CM 200, CM 210, CM 232, CM 242, CM 300, CM 405, CM/SSC 321, CM 450, CM 457

Required Business Management Courses:

BSM 103, BSM/CM 202, BSM 203 (PY 204), BSM 301, BSM 404, BSM 410

Plus 9 elective credits from either Communication or Business Management courses in consultation with your advisor. All credits taken in major courses must be completed with a minimum grade of C.

COMMUNICATION MINOR

The Communication minor focuses on building and maintaining relationships across diverse groups and cultures. This minor may appeal to you if you are interested in counseling, health professions, psychology, or other fields where interpersonal communication skills are essential. Business students also find a minor in Communication extremely helpful in enhancing their interpersonal skills and their career readiness. The Communication minor can be customized to compliment your academic and career needs.

18 credits: CM120 (required), CM210 (recommended), and four elective courses selected with a Communication academic advisor.

- All 18 credits must be completed with a minimum grade of C.
- At least 6 credits must be completed at the 200 level or higher.
- At least 9 credits must be completed in residence at Carlow.

DIGITAL STORYTELLING MINOR

Undergraduate students from all majors can add a minor in Digital Storytelling to learn how to tell engaging stories within the multimedia landscape. Students will develop an understanding of journalistic and documentary approaches to storytelling; practice skills in interviewing, writing, research, collaboration and creating thinking; and learn the basics of visual and audio media production.

Digital Storytelling students will create videos, podcasts, blogs, feature stories or other digital content on topics that they are passionate about. At Carlow, we especially encourage narratives about marginalized groups or individuals, who are often overlooked by mainstream media.

The minor requires a total of 18 credits:

- CM 104 Introduction to Media & Society
- CM/EN 260 Writing for Media
- AR/CM/EN 307 Media Criticism

- CM/EN 360 Digital Storytelling
- Two courses in media production taken at Pittsburgh Filmmakers or with another education partner (courses and location must be approved by your minor advisor).

All 18 credits must be completed with a grade of C or higher to earn the minor.

Communication and Media majors and Corporate Communication majors can overlap a maximum of three (3) courses (9 credits) with major requirements to fulfill the Digital Storytelling minor.

MANAGEMENT DEPARTMENT

MAJORS

- Business Management
- Human Resource Management

MINORS

- Business Management
- Human Resource Management
- Information Technology Management
- Marketing

ACCELERATED PROGRAM

- BA/BS to Master of Business Administration

MANAGEMENT DEPARTMENT POLICIES

RESIDENCY REQUIREMENT

A student must complete a minimum of 18 credits from the Accounting, Fraud, and Forensics or Management Departments to earn a bachelor's degree. Grade requirement: A student must complete all major, minor, and support courses with a minimum grade of C.

DECLARING A MINOR

Any student declaring a minor offered by the Accounting, Fraud, and Forensics or Management Departments is assigned a minor advisor. The student, in consultation with the accounting/management advisor, and with her/his major advisor, selects the specific minor course requirements. Students majoring in other fields can earn a minor in Accounting, Business Management, Human Resource Management and Technology, or Information Technology Management.

BUSINESS MANAGEMENT MAJOR

Business Management gives particular emphasis to an understanding of the behavioral and systemic challenges that people face in organizations—profit and nonprofit—by providing students with a thorough knowledge of management concepts and applications. The Business Management major encompasses a course of study leading to a Bachelor of Science degree. This four-year program relates the analytical, the behavioral, and the conceptual theories of business and develops a perceptive and orderly approach to management situations. Students can opt for a double major by combining Business Management with another discipline by consulting with their advisors.

Requirements:

BSM 103, ACC/BSM 104, BSM 202, BSM 203, BSM 207, BSM 226, BSM 301, BSM 302, BSM 410, BSM 413, BSM 419, BSM 460, EO 201, EO 202, IT 143, IT 200, IT 250SL, MAT 115, and SSC 321

BUSINESS MANAGEMENT MINOR

A student who chooses to major in another discipline can also consider a minor in Business Management. The student must complete six courses in Business Management. The minor must consist of BSM 103, BSM 202, BSM 226, BSM 301, and two other BSM courses at the 300/400 level. These additional courses must be approved by the minor advisor.

HUMAN RESOURCE MANAGEMENT MAJOR

Students in the Human Resource Management take foundational courses in human resources and psychology to develop skills required for the recruitment, retention, and development of the 21st Century workplace. Students who successfully complete this major are qualified to sit for the Society of Human Resource Professionals (SCHRM) examinations.

Requirements:

BSM 103, ACC/BSM 104, BSM 226, BSM 231, BSM 328, BSM 329, BSM 333, BSM 408, BSM 413, BSM 460, HRIS 101, HRIS 102, IT 250SL, PY 101, PY 122, PY 203, PY 285

Note: there are no elective courses in this major.

HUMAN RESOURCE MANAGEMENT MINOR

A minor in Human Resource Management and Technology can be pursued by a student with specific interest. A student must complete BSM 103, BSM 226, BSM 328, BSM 333, and two additional courses from BSM 231, BSM 329, BSM 408, HRIS 101, or HRIS 202.

INFORMATION TECHNOLOGY MANAGEMENT MINOR

The Information Technology Management minor is a great addition to any major since information technology will surely be part of most careers of the future. A minor in Information Technology Management can be pursued by a student from any discipline with interest in this area. A student must complete six courses in Information Technology Management chosen in consultation with an ITM advisor.

Minor Course Requirements: 18 credits

IT 250SL, IT 205, IT 235, IT 242, IT 372 and ACC 205 or HRIS 101

MARKETING MINOR

The Marketing minor provides students with a series of courses that will prepare them to pursue various career paths within the field of marketing. Opportunities in marketing are broad; therefore, the requirements for the minor are designed to give students as much flexibility across offerings in communication and business. The Marketing minor is particularly beneficial to students who plan to pursue positions in the areas of copywriting, advertising, market analysis, public relations, and social media management.

Required Courses:

BSM 203 or CM 232, CM 242, BSM 301

Elective Courses:

Take 9 credits of electives (at least 2 courses must be 300-level or higher) from the following: BSM 404, BSM 410, BSM 419, CM 240, CM 260, CM 360.

BA/BS TO MASTER OF BUSINESS ADMINISTRATION ACCELERATED PROGRAM

Undergraduate students with a major in any of the business programs or Respiratory Care are invited to apply to Carlow's MBA accelerated program prior to graduation. Juniors and seniors admitted to this program would be permitted to take up to nine credits of MBA courses while they are still undergraduate students. These nine credits would apply toward the 36 credit MBA, leaving just 27 credits to finish the MBA, which could be done in one year if a student chooses to attend full-time and chooses the Business Administration track. Students must enter the MBA program within two years of completion of their bachelor's degree. Student may choose three (3) of the following courses:

- MBA 711 Business Writing
- MBA 722 Strategic Analysis
- MBA 732 Financial Planning & Analysis
- MBA 752 Advances in IT and IT Management

Graduate courses will count for graduate credit only if the student earns a B- or higher; graduate courses will count for undergraduate credit even if the student earns a C+ through D-.

These nine credits will also be counted toward the 120 credits needed for the undergraduate degree. Admission into the program will be provisional. Full and final admission to the MBA may be granted upon completion of the undergraduate degree from Carlow and fulfillment of any additional criteria.

This opportunity can save students time and money if they are planning on starting into Carlow's MBA program. It is also an opportunity for students to engage in higher-level work and interact with graduate students while completing their undergraduate coursework. To stay in the program, students will need to maintain a 3.0 average. Please review the College of Leadership & Social Change's information on requirements in the Accelerated Programs section above. Final and full admission to the MBA may be granted upon completion of the undergraduate degree from Carlow and fulfillment of any additional criteria.

POLITICAL SCIENCE DEPARTMENT

MAJORS

- Political Science

MINORS

- Economics
- Political Science
- Pre-Law
- Public Policy
- Sociology
- Web Design and Development

PROGRAMS

- 3/3 BA or BS/JD Partnerships between Carlow University and the University of Pittsburgh & Duquesne University Schools of Law
- Early Acceptance Assurance Agreement with the University of Pittsburgh Graduate School of Public and International Affairs (GSPIA)

POLITICAL SCIENCE MAJOR

Political Science is the academic discipline that studies power and policy: how power is acquired; the challenges to retaining power; the impact of power on the relations between and among institutions and individuals in society; and the policies that result. Courses cover American politics, comparative politics, and international relations, and are designed to engage students in discourse regarding the concepts, organizations, and models that are at the core of the study of power and politics in the United States and internationally. Students will examine issues of control, freedom, gender, and influence as they study and assess the manner in which power and authority have impacted the development and organization of societies, relations between and among nations, and the management of conflict and peace.

The program is designed to provide students with a comprehensive background in the discipline; develop students' capacity to think critically and mindfully; train students to become informed, engaged and reflective citizens; and facilitate the acquisition of tools for analytical reasoning, primary and secondary research, and oral and written communication.

All majors are required to complete 51 credits (17 credits in SSC and 34 in POL), which situate the learner in social sciences and provide an introduction to American government, global politics, political theory, research methods, and a capstone experience. Graduates of the program in Political Science are admitted to law and graduate programs and are prepared for

careers in advocacy, legislative and policy analysis, journalism, international security analysis, and international business.

Required Courses: 36-credits: Core Course Requirements (21-credits)

- POL 101 (FA E/O)
- POL 180 (SP E '20)
- POL 209 (FA E '20)
- POL 210 (SP E '20)
- POL 230 (FA E '20)
- POL 265 (SP O '21)
- POL287 or SW201(SP O '21)

Required Research Methods Sequence (12-credits)

- DTAN 101
- PY 290 or MAT 115
- SSC 321
- PY 320; PY 325; SO 422 (Choose 1)

Required Internship (3-credits:)

POL 450: Internship Capstone (3 credits)

Elective Courses: 9-credits from among any of the following areas:

(NB: Students can choose 9-credits in one area or from among the three areas)

International & Comparative Politics:

- POL 220 (Every other year FA '21)
- POL 240 (Every other year SP '20)
- POL 350 (International Human Rights)

American Politics:

- POL 255 (Every other year FA '21)
- POL 330 (Every other year SP '21)
- POL 350 (Social Change in America)
- POL 365 (FA O '19)

Public Policy:

- POL 260 (Every other year FA '19) ï POL 290 (TBD)
- POL 313 (Every other year FA '20)
- POL 325 (Every other year SP '20) ï POL/RC 327 (FA O)
- POL/NU 420 (Every semester)

ECONOMICS MINOR

The Economics minor is intended for students with a strong interest in rigorous economics who are majoring in related fields. For instance, this minor should be attractive for students preparing for an MBA program, preparing for law school, preparing for foreign service, or students who are interested in quantitative data analysis in the social sciences.

Required Courses:

EO 201, EO 202

Elective Courses:

Take four courses from the following list. At least two courses must be at the 200-level or above. Note: Some courses require pre-requisites.

BSM 207, BSM 306, BSM 408, HS 198, MAT 115, MAT 160, MAT 260, MAT 360, POL 210, POL 260, POL 287, POL 325, PY 340, SW 303

POLITICAL SCIENCE MINOR

The Political Science minor is open to students in any major interested in studying institutional and policy responses to domestic or international problems, or the political behavior of individuals and groups.

Required Courses:

POL 101, POL 180, POL 209 or POL 210

Electives:

Students choose three political science courses at the 200-level or higher.

Students must complete all coursework with a grade of C or better for credit in the minor.

PUBLIC POLICY MINOR

The Public Policy minor provides students with the knowledge and skills to understand policy information, implementation, and analysis. Students examine motivations and actions that drive governmental and organizational choices that lead to the formation of policies. Attention is drawn to a balance between individual rights and the responsibility of communities. Students learn to cultivate initiative, entrepreneurship, and leadership.

Note: Several courses have pre-requisites. Students are required to complete the pre-requisites unless permission of the instructor is obtained.

Required Courses:

POL 287 and one course in Economics

Electives:

Students must choose from each of the following groups:

GROUP 1 (one course): CM 300, CM 320

GROUP 2 (one course): BSM 413, CM 457, PH 210

GROUP 3: (two courses): POL 228, POL 260, POL 325, POL/NU 420, PY 290, PY 340

GROUP 4: (one course): IT 250SL, IT 242, IT 382, POL 290

Students must complete all coursework with a grade of C" or better for credit in the minor.

PRE-LAW MINOR

The Pre-Law minor is open to students in any major and is designed to provide a structured program of studies in preparation for graduate or professional education or employment in law and law-related fields. The Pre-Law minor extends the liberal arts foundations by developing and enhancing the analytical reasoning, critical reading, and effective communication skills that are required for success in graduate and professional study of law and in legal careers. The selection of required and elective courses is based on recommendations established by the Association of American Law Schools.

Required Courses:

CM 410, IT 250SL, POL 265 (required pre-req POL 101)

Electives:

Students must complete one course from the following groups:

GROUP 1 (one course): ACC 104 BSM 302, BSM 329, BSM 408

GROUP 2 (one course): CM 225, CM 320

GROUP 3 (one course): POL 228, POL 230, POL 325, POL 330, POL 335, POL 350

SOCIOLOGY MINOR

The Sociology minor is open to students of any major who are interested in studying the social dimensions of problems such as inequality, poverty, race, or gender.

Required Course:

SO 152

Electives:

Students must choose five Sociology (SO) courses in consultation with the minor advisor

WEB DESIGN AND DEVELOPMENT MINOR

The Web Design & Development minor allows students to learn how to design and build websites, mobile applications, and to create and manipulate digital images and multimedia for the web. Students who complete the minor will have developed a broad range of skills and the understanding necessary to design and build a web presence. The hallmarks of this minor are the incorporation of design thinking for web design and a minor capstone course that places students into a community of practice. Students will learn the importance of the end-user experience through interactions in the design thinking course and, at the completion of their coursework, will employ their skills in an internship capstone.

Requirements:

- IT 235, IT 301, IT 302, IT 400 (Internship Preparation), and EXP 250 (Summer Internship Capstone at PNC), plus six credits of elective coursework chose in consultation with an advisor

3/3 BA/JD LAW PROGRAMS (DUQUESNE UNIVERSITY AND UNIVERSITY OF PITTSBURGH)

The 3/3 BA/JD or BS/JD provides an expedited path to complete both a bachelor's and a *Juris Doctor* degree in six years. Carlow maintains 3/3 partnerships with the University of Pittsburgh and Duquesne University Schools of Law.

Qualifications:

Students who wish to be considered for participation in the 3/3 programs must meet the following qualifications:

- Complete 90 credit hours of undergraduate work during their first three years at Carlow University (including all Carlow Compass and major requirements);
- Maintain a cumulative GPA of 3.5 or higher
- Score in the 60th percentile of the LSAT

Students who meet these qualifications will have their applications reviewed by the Director of Pre-Law Advising for recommendation as a 3/3 applicant to the selected law school(s). Recommendation is based upon attainment of the above criteria, other indicia of academic achievement, and preparedness for law school. Final acceptance for admission is at the discretion of the director of admissions at the selected law school(s).

Students who meet all requirements and gain admission to either the University of Pittsburgh or Duquesne University School of Law can begin law school during their fourth year of study at Carlow. Students who successfully complete their first year of law school, at either the University of Pittsburgh or Duquesne University (or first three semesters), receive their bachelor's degree from Carlow. Upon completing all requirements for the JD degree, students will receive their law degree. Students may withdraw from the 3/3 program at any time and complete a traditional four-year course of study for the baccalaureate degree.

PSYCHOLOGY AND COUNSELING DEPARTMENT

MAJORS

- Art Therapy Preparation
- Behavioral Neuroscience (interdisciplinary program)
 - Intraoperative Neurophysiological Monitoring (IONM) Track
 - Neuropsychology Track
- Criminology
- Psychology
 - with Concentration in Counseling
 - with Concentration in Crisis and Trauma
 - with Concentration in Child Development

MINORS

- Art Therapy Preparation
- Behavioral Neuroscience
- Counseling (for Non-Psychology Students)
- Criminology
- Crisis and Trauma (for Non-Psychology and Social Work Majors)
- Child Development (for Non-Psychology students)
- Psychology

ACCELERATED PROGRAM

- BA/BS to MS in Professional Counseling
- BA/BS to MA in Psychology
- BA/BS to MA in Student Affairs

OTHER PROGRAMS

- Early Assurance Agreement with University of Pittsburgh Graduate School of Public and International Affairs Masters Programs
- Early Assurance Agreement with Lake Erie College of Medicine's Medical College, School of Dental Medicine, and School of Pharmacy for students majoring in Behavioral Neuroscience (Intraoperative Neurophysiological Monitoring track)

ART THERAPY PREPARATION MAJOR

Art Therapy Preparation is an interdisciplinary major sponsored by the Art and the Psychology & Counseling departments. This program prepares the student for further study in art therapy on a graduate level. The program integrates a strong fine arts background with an in-depth study of psychology and art therapy. Because of Carlow's urban location in the heart of a major medical and therapeutic complex, students have convenient access to observation and practicum experiences.

Major Requirements:

AR 101 or 148, AR 102 or 149, AR 111, AR 114, AR 115, AR 221, AR 224, AR 227, AR 240, AR 315, AR 321, AR 311, AR 331, AR 355, AR 421, AT 205, AT 339, AT 406 or PY 450, AE 326, PY 101, PY 122, PY 203, PY 209, PY 285, WS 209.

ART THERAPY PREPARATION MINOR

Minor Requirements:

AR 111 or AR 115, AR 331, PY 203, PY 285, AT 205, AT 339.

BEHAVIORAL NEUROSCIENCE MAJOR

The Behavioral Neuroscience major is an interdisciplinary program in neuroscience, building upon the strengths of Carlow's biology, psychology, and chemistry programs. Students receive grounding in all three disciplines, in addition to coursework in neuroscience specifically. Students must choose one of the two possible tracks within the major.

The Neuroscience with Intraoperative Neurophysiological Monitoring (IONM) track prepares students for a career in IONM. Students are prepared in neuroanatomy, neurophysiology, and neuropharmacology, and finish the degree with instructors at UPMC's Procirca – Center for Clinical Neurophysiology, where they receive instruction and hands-on training in the operating room. This highly specialized training allows students to observe and assist in up to 150 surgical cases to accumulate the clinical hours necessary to take the ABRET's Certification in Neurophysiologic Intraoperative Monitoring (CNIM) Exam to be a certified Surgical Neurophysiologist.

The Neuropsychology track prepares students for graduate work in neuropsychology or psychology and, ultimately, a career in either area. Neuropsychologists also study the connection between the brain and behavior; this career option often focuses on assessment of neuropsychological functioning in patients. Students majoring in the Neuropsychology track receive a versatile degree that prepares them for graduate work in psychology and neuropsychology.

Required Courses in Behavioral Neuroscience for Both Tracks:

- BIO 110 Foundations of Organismal Biology (4 credits)
- CHM 111/113 General Chemistry I and Lab (4 credits)
- PY 101 Introduction to Psychology (3 credits)
- BIO 120 Foundations of Molecular and Cell Biology (4 credits)
- CHM 112/114 General Chemistry II and Lab (4 credits)
- PY 280 Cognitive Psychology (3 credits)
- NEU 220 Neuroanatomy (4 credits)

Additional Required Courses for Neuroscience with Intraoperative Neurophysiological Monitoring (IONM) Track:

- BIO 205 Anatomy & Physiology I (4 credits)
- BIO 206 Anatomy & Physiology II (4 credits)
- CHM 211/213 Organic Chemistry I and Lab (4 credits)
- MAT 115 Basic Applied Statistics (3 credits)
- NEU 221 Neurophysiology (4 credits)
- BIO 300 Junior Seminar (2 credits)
- Neuromonitoring Fundamentals (Taught at UPMC; 4 credits)
- Introduction to Neuromonitoring for Surgical Procedures (Taught at UPMC; 8 credits)
- Neuromonitoring for Advanced Surgical Procedures (Taught at UPMC; 9 credits)

Total credits for Neuroscience with Intraoperative Neurophysiological Monitoring Track: 72 credits

Additional Required Courses for Neuropsychology Track:

- NEU 300 Neuropsychology (3 credits)
- PY 230I Biological Bases of Behavior (3 credits)
- PY 290 Elementary Statistics & Lab (4 credits)
- SSC 321 Research Methods (3 credits)
- PY 325 Experimental Psychology (4 credits)
- PY 255 Designing Your Life II (1 credit)
- PY 355 Designing Your Life III (1 credit)
- PY 455 Knowledge of Psychology (1 credit)
- NEU 450 Neuroscience Internship (1-3 credits)

Total credits for Neuropsychology Track: 47-49 credits

BEHAVIORAL NEUROSCIENCE MINOR

The Minor in Behavioral Neuroscience is designed for students who are not majoring in Behavioral Neuroscience. It is of

particular interest to Psychology, Biology, and Chemistry majors who would like to focus on Behavioral Neuroscience without majoring in this area. However, other majors are welcome to take this minor, which gives students preparation in all three disciplines (psychology, chemistry, & biology) and some beginning groundwork in Neuroscience. A minimum of 20 credits are required as follows: PY/BIO 230I or BIO/PY 230, NEU 220, BIO 110, PY 101, PY 280, CHM 111, CHM 113. A minimum of ten credits in the minor must be taken at Carlow University.

BEHAVIORAL NEUROSCIENCE/EARLY ACCEPTANCE IN DENTAL, PHARMACY, OSTEOPATHIC MEDICINE (LECOM)

Carlow University students majoring in Behavioral Neuroscience (Intraoperative Neurophysiological Monitoring (IONM) track) may apply for the early acceptance program with Lake Erie College of Osteopathic Medicine (LECOM). This affiliation allows qualified students to earn a four-year bachelor's degree in Biology, Chemistry, or Behavioral Neuroscience from Carlow University and then a Doctor of Osteopathic Medicine (D.O.) degree, a Doctor of Dental Medicine (D.M.D.) degree, or a Doctor of Pharmacy (Pharm.D.) degree from LECOM. The early acceptance program grants academically strong students an opportunity to gain conditionally guaranteed acceptance to LECOM as early as their senior year of high school or during their first or second year at Carlow University. Participation in the program alleviates much of the cost of applying to medical schools, while providing a strong background in scientific and liberal arts courses at Carlow University. After completing their undergraduate education at Carlow University in four years, students matriculate for an additional four years at either the main campus in Erie, Pennsylvania, or a branch campus in Bradenton, Florida, based on the program to which they are accepted.

CRIMINOLOGY MAJOR

Criminology is a major within the Psychology and Counseling Department. The major is designed to provide students with a comprehensive understanding of the nature of crime and the effectiveness and fairness of society's efforts to prevent and to control it. Students engage in a cross-disciplinary approach to the study of crime, offenders, and victims, as well as the agencies, laws, policies, and processes of the criminal justice system. The Criminology Program emphasizes the relationship between psychology and criminology, and addresses how mental health issues, trauma, and societal disadvantages affect crime at the individual and community levels.

A Psychology Concentration is embedded within the Criminology Program, which ensures that students have the knowledge relevant to direct practice professions in the field and helps develop an awareness of the critical role that mental health plays in criminal behavior. Still, students may pair their studies with additional minors in Pre-Law, Counseling, or Crisis & Trauma. Criminology graduates are admitted to law school, graduate programs, and are prepared for careers in domestic and international law enforcement and security, adult and juvenile corrections, and corporate investigative work.

Major Requirements:

- SSC Coursework: SSC 100 (PY 100), SSC 120 (CM 120), SSC 200 (POL 200), AND SSC 321
- Criminology Core Coursework: CRM 100, CRM 101, CRM 300, CRM 400, AND CRM 450
- Psychology Core Coursework: PY 101, PY 122, PY 230/BIO 230I, and PY 290
- Criminology Supplemental Coursework: Take two additional courses from CRM
- Psychology Supplemental Coursework: (Pick 1) PY 352 or PY 340 or PY 440

CRIMINOLOGY MINOR

Students from other majors who are interested in studying issues such as the systems and administration of justice, crime theory, and the intersection of mental health and deviant behaviors may elect to minor in Criminology.

Required Courses:

Criminology Core Coursework: CRM 100, CRM 101, and CRM 300

Electives:

Criminology Supplemental Coursework: Pick 3 additional courses from CRM

PSYCHOLOGY MAJOR

The psychology program aims to develop a scientific approach to the study of human behavior and experience. To this end, students are introduced to research methodology and critical analysis of current findings in a variety of fields of psychology, such as clinical, counseling, developmental, cognitive, social, and experimental. Internships with local facilities and research opportunities help students to learn about their field experientially.

The Bachelor of Arts degree in psychology provides a foundation for students aspiring to graduate study in psychology and counseling. The degree also prepares students to enter training in social service and mental health programs in such areas as therapeutic activities, rehabilitation, casework, child care work, and service coordination.

Students must earn a C- or higher in all major courses. If students earn D+ or below in a major course, they will have to retake the course.

Requirements:

- PY 101 Introduction to Psychology
- PY 122 Lifespan Development
- PY 155 Designing Your Life I: Orientation to Psychology
- PY 203 Personality Theory
- PY 230I Biological Bases of Behavior or PY 230
- PY 255 Designing Your Life II: Career Formation
- PY 280 Cognitive Psychology
- PY 290 Elementary Statistics & Lab
- SSC 321 Research Methods for Social Sciences I
- PY 320 Qualitative Research Methods or PY 325 Experimental Research Methods (may take both)
- PY 340 Social Psychology
- PY 355 Designing Your Life III: Vocation & Avocation
- PY 455 Knowledge of Psychology

Psychology Electives: Choose 1-4 credits in psychology electives. For students in the MS in Professional Counseling Accelerated Program, master's level courses in professional counseling may count towards psychology electives. A minimum of 34 credits is needed for the psychology major. Required Support Courses: 6 credits

- Two English courses, one of which must be at 200 level or higher.

Required Social Change curriculum:

- SSC 100/PY 100 Seminar on the Self
- SSC 120/CM 120 Interpersonal/Relational Seminar
- SSC 200/POL 200 Self in Communities: Local to Global

PSYCHOLOGY MINOR

Requirements: 18 credits in Psychology including PY 101. At least nine credits must be at the 200 level or higher. Transfer students must take at least nine credits at Carlow University.

COUNSELING CONCENTRATION

Counselors assist people with personal, family, educational, mental health, substance abuse, and career issues so that they can lead healthier and more productive lives. Psychology majors interested in the helping professions may consider a concentration in counseling. Those not majoring in Psychology can earn a minor in counseling.

Counseling Concentration for Psychology Majors

The department understands that many of our graduates with their BA in Psychology obtain pre-professional jobs within the helping professions. The concentration in counseling is designed to acquaint the student who is interested in a career in the helping professions with pre-professional-level counselor training.*

The concentration requires the following:

Students are required to satisfy the regular requirements for the major. In addition, they are required to complete at least 12 credits in counseling from the following list of courses: PY 285 (required), PY 380, PY 382, PY 384, PY 420, PY 430, PY 438/PRC 738, PY 440, PY 488, PRC 705, and PRC 710.

A minimum of six counseling credits must be taken at Carlow University.

*The student is cautioned that graduate-level training is required before one can appropriately represent oneself as a professional counselor.

COUNSELING MINOR FOR NON-PSYCHOLOGY MAJORS

The minor in Counseling is offered by the Psychology and Counseling Department for students who are not majoring in Psychology (those who major in Psychology may take a concentration in Counseling). The department recognizes that many students who do not major in Psychology choose careers in the helping professions (social work, nursing, education, sociology, human resources, etc.). The purpose of this minor is to provide pre-professional level knowledge and skills that will assist the student interested in the helping professions.

The minor requires a total of 18 credits beginning with PY 101 and PY 285. Students then choose an additional six credits from the following list of counseling courses: PY 380, PY 382, PY 384, PY 420, PY 430, PY 438/PRC 738, PY 440, PY 488, PRC 705, and PRC 710. Social Work majors may use SW 302 and SW 304, and Art Therapy majors may use AT 205 and AT 339 as counseling courses for the minor. Students complete the minor with six additional credits in any PY course (Social Work majors may use SW 216).

Transfer students who wish to transfer course work from other institutions for this minor must obtain approval for the transfer credit from the chair of the undergraduate Psychology program. Transfer students must take a minimum of nine credits at Carlow, six of which are in Counseling.

CRISIS AND TRAUMA MINOR FOR NON-PSYCHOLOGY AND NON-SOCIAL WORK MAJORS

The minor in Crisis and Trauma is offered through the College of Leadership and Social Change as collaboration between the Psychology and Counseling Department and the Social Work Department for students who are not majoring in Psychology or Social Work. The Psychology and social Work Departments recognize that many individuals who do not major in these areas choose careers for which a grounding in and an understanding of trauma and crisis will help them to become better informed and ultimately more competent professionals in their fields of choice.

Requirements:

PY 285 or SW 302, PY 101 or SW/SO 104, PY/SW 420, PY/SW 430, PY/SW 440, PY/SW 488, and one course from the following list of electives: PY/SW 404I, PY 380, SW 304 or approved special topics course when available with the guidance of a Crisis and Trauma minor advisor.

CRISIS AND TRAUMA CONCENTRATION FOR PSYCHOLOGY AND SOCIAL WORK MAJORS

Studies in the area of Crisis and Trauma provide a foundational focus ranging from immediate crisis assessment, intervention, and management through more specific issues such as child abuse prevention and treatment and partner violence, as well as investigating the impact of trauma for individuals and families. The concentration in Crisis and Trauma provides students with a solid foundation in theory and research pertaining to crisis, abuse and trauma.

Students are required to satisfy the requirements for the major. In addition, they are required to complete the following courses in Crisis and Trauma:

PY/SW 420 Impact of Trauma
PY/SW 430 Crisis Intervention

PY/SW 440 Child Abuse Prevention & Treatment
PY/SW 488 Domestic Violence Seminar

Prior to taking these courses, students need to complete the following pre-requisites: **PY 285 Intro to Counseling OR SW 302 Social Work with Individuals.**

A minimum of six credits in Crisis and Trauma must be taken at Carlow University.

Recommended elective courses to support the Crisis and Trauma concentration include: Psychology of Women, Child Psychology, Family Counseling, and Death & Dying. An internship in a location relevant to issues raised in the Crisis and Trauma courses is strongly recommended.

CHILD DEVELOPMENT CONCENTRATION FOR PSYCHOLOGY MAJORS

The Concentration in Child Development provides students with a solid foundation in theory and research in this area of study. This concentration is helpful for students pursuing employment and graduate training in developmental psychology, counseling, and fields in which additional knowledge of children's growth and development would be helpful.

Students concentrating in Child Development are required to satisfy the regular requirements for the major, including PY 122 Lifespan Development. In addition, they are required to complete at least nine credits in human development from the following list of courses: PY 205 Child Development, PY 206 Adolescent Development, PY 404 Death & Dying, PY 440 Child Abuse & Prevention, PY 441 Parenting, PY 442 Children's Play. A minimum of six credits in the concentration must be taken at Carlow University.

CHILD DEVELOPMENT MINOR FOR NON-PSYCHOLOGY MAJORS

The Minor in Child Development is designed for non-psychology majors who are interested in exploring the biological, behavioral, emotional, cognitive, and social factors that shape child development (Psychology majors may choose a concentration in child development). A minimum of 18 credits is required, beginning with PY 101 and PY 122. Students then choose six credits in Child Development from the following courses: PY 205, PY 206, PY 404, PY 440, PY 441, PY 442. Students complete the minor with six additional credits in any PY course. At least nine credits must be at the 200-level or higher.

Transfer students must take a minimum of 9 credits at Carlow, six of which are in Child Development.

BA/BS TO MA IN PSYCHOLOGY (MAP) ACCELERATED PROGRAM

Undergraduate students with a major in Psychology, Art Therapy, Social Work, or Criminology are invited to apply to Carlow's Master of Arts in Psychology Program (MAP) prior to graduation. Seniors admitted to this program would be permitted to take up to 6 credits while they are still undergraduate students. This includes the following courses:

1. PRC 701: Human Growth and Lifespan Development
2. PRC 702: Social and Cultural Foundations
3. PYM 700: Introduction to Positive Psychology
4. PYM 720: Foundations of Forensic Psychology

The courses offered have been pre-selected as optimal for undergraduate students. To be given graduate credit, all graduate courses must be passed with a B- or above. These 6 credits will also be counted toward the 120 credits needed for the undergraduate degree and be concurrently posted on the graduate transcript. Graduate courses will count for graduate credit only if the student earns a B- or higher; graduate courses will count for undergraduate credit even if the student earns a C+ through D-.

This opportunity can save students time and money if they are planning on starting into Carlow's MA in Psychology program. It is also an opportunity for students to engage in higher-level work and interact with graduate students while completing their undergraduate coursework. To stay in the program, students will need to maintain a 3.0 average.

Formal admission to the program begins your senior year. Please see the Accelerated Programs section above for more information about admission requirements.

Three undergraduate psychology courses serve as prerequisites for specific MAP courses:

1. PY 122 Lifespan Development to take PRC 701
2. PY 285 Introduction to Counseling or SW 302 Social Work with Individuals to take PYM 700
3. CRM 100 Criminology to take PYM 720

Full admission to the MAP may be granted upon completion of the undergraduate degree from Carlow and application to the program.

BA/BS TO MS IN STUDENT AFFAIRS ACCELERATED PROGRAM

Carlow University undergraduate students from all majors are invited to apply to Carlow's Master of Arts Degree in Student Affairs prior to graduation. Juniors and Seniors admitted to this program are permitted to take up to nine graduate credits while they are still undergraduate students. This includes the following courses: STA 703 Foundations of Student Affairs, STA 704 Relational Practice and Leadership*, PRC 701 Human Growth and Lifespan Development, PRC 702 Social & Cultural Foundations, and PRC 705 Helping Relationship.

*Special note: STA 703 is a prerequisite for STA 704.

The courses offered in the Accelerated program have been pre-selected as optimal for undergraduate students. To be given graduate credit, all graduate courses must be passed with a B- or higher. These nine credits will also be counted toward the 120 credits needed for the undergraduate degree. Graduate courses will count for graduate credit only if the student earns a B- or higher; graduate courses will count for undergraduate credit even if the students earns C+ through D-.

This opportunity can save students time and money. This option is ideal for students aspiring to get a master's degree in student affairs or a dual degree in both student affairs and professional counseling. Doing well in this accelerated program can also demonstrate your graduate-school readiness for other programs. To stay in the program, students must maintain a 3.0 average in their graduate coursework.

Formal admission to the program can begin junior or senior year. Please see the Accelerated Programs section above for more information about admission requirements.

Three undergraduate courses serve as prerequisites for specific STA courses under the Accelerated STA curriculum:

- PY 122 or SW 214 to take PRC 701
- PY 203 to take PRC 705
- PY 285 or SW 302 to take PRC 705

Final and full admission to the STA may be granted upon completion of the undergraduate degree from Carlow.

BA/BS TO MS IN PROFESSIONAL COUNSELING ACCELERATED PROGRAM

Undergraduate students with a major in Psychology, Art Therapy, Social Work, Sociology, or Criminal Justice are invited to apply to Carlow's Master of Science in Professional Counseling (MPC) program prior to graduation. Juniors and seniors admitted to this program would be permitted to take up to 12 credits while they are still undergraduate students. This includes the following courses:

5. PRC 701: Human Growth and Lifespan Development
6. PRC 705: Helping Relationship
7. PRC 710: Counseling Theories
8. PRC 702: Social and Cultural Foundations
9. PRC 711: Diagnosis in Counseling (prior name: Abnormal Psychology)
10. PRC 738: Introduction to Substance Abuse Counseling*

*Must take PRC 711 and pass with a B in order to take PRC 738.

The courses offered have been pre-selected as optimal for undergraduate students. To be given graduate credit, all graduate courses must be passed with a B- or above. These 12 credits will also be counted toward the 120 credits needed for the undergraduate degree and be concurrently posted on the graduate transcript. Graduate courses will count for graduate credit only if the student earns a B- or higher; graduate courses will count for undergraduate credit even if the student earns a C+ through D-.

This opportunity can save students time and money if they are planning on starting into Carlow's MS in Professional Counseling program. It is also an opportunity for students to engage in higher-level work and interact with graduate students while completing their undergraduate coursework. To stay in the program, students will need to maintain a

3.0 average.

Formal admission to the program begins your junior year. Please see the Accelerated Programs section above for more information about admission requirements.

Three undergraduate psychology courses serve as prerequisites for specific MPC courses:

4. PY 203 Personality Theory to take PRC 710 or PRC 705
5. PY 122 Lifespan Development to take PRC 701 or PRC 711
6. PY 285 Introduction to Counseling or SW 302 Social Work with Individuals to take PRC 705 or PRC 710

Full admission to the MPC may be granted upon completion of the undergraduate degree from Carlow and application to the program.

SOCIAL WORK DEPARTMENT

MAJORS

- Social Work
 - with concentration in Crisis and Trauma

MINORS

- Behavioral Health
- Crisis and Trauma

SOCIAL WORK MAJOR

The Bachelor of Social Work (BSW) degree provides a liberal arts foundation with a concentration in social work theory and practice. The BSW program is based on an understanding of generalist practice that prepares students to engage in the person-in-environment concept and to utilize problem solving to intervene with diverse systems of various sizes, including individuals, families, groups, organizations, and communities. Upon completion of selected courses, Social Work majors must proceed with an application process into the upper-level Social Work requirements. This process must be completed prior to registering for field placement. Every Social Work major is required to participate in a 500-hour agency-based field placement, as well as a corresponding classroom seminar. The Social Work program is accredited by the Council on Social Work Education. Social Work credit is not given for life or previous work experience.

MAJOR REQUIREMENTS:

- SW 104 Introduction to Social Work
- SW 201 Introduction to Social Welfare
- SW 204 Theories and Methods of Practice
- SW 214 Human Behavior and the Social Environment
- SW 216 Communities and Organizations in Praxis
- SW 270 Cultural Awareness
- SW 302 Social Work Casework with Individuals
- SW 303 Social Welfare Policy
- SW 304 Families
- SW 305 Group Work
- SW 321 Research I
- SW 422 Research II
- SW 402 Field Placement I
- SW 405 Field Seminar I
- SW 406 Field Placement II
- SW 407 Field Seminar II

Required Support Courses:

PY 101 and SO 152. All students are required to take BIO 157 or an approved biology course with a lab, and MAT 115 or an approved statistics course.

Major Electives:

Take 18 credits of electives from subjects Communication (CM), Criminology (CRM), Political Science (POL), Sociology (SO), Social Work (SW), or Women's Studies (WS), excluding any courses that are already counting in the major requirements above.

NOTE: IT IS IMPORTANT FOR STUDENTS WHO ARE CONSIDERING THE PROFESSION OF SOCIAL WORK TO BE AWARE OF THE RULES AND REGULATIONS FOR LICENSING. YOU MAY REVIEW THESE ON THE WEBSITE FOR THE PENNSYLVANIA STATE BOARD OF SOCIAL WORKERS, MARRIAGE AND FAMILY THERAPISTS, AND PROFESSIONAL COUNSELORS. STUDENTS SHOULD CONTACT THE BOARD DIRECTLY FOR MORE INFORMATION. IN ADDITION, STUDENTS MAY BE ASKED TO OBTAIN CHILD ABUSE AND CRIMINAL BACKGROUND CLEARANCES AS PREREQUISITES TO A VOLUNTEER OR FIELD PLACEMENT EXPERIENCE.

CRISIS AND TRAUMA MINOR FOR NON-PSYCHOLOGY AND NON-SOCIAL WORK MAJORS

The minor in Crisis and Trauma is offered through the College of Leadership and Social Change as collaboration between the Psychology and Counseling Department and the Social Work Department for students who are not majoring in Psychology or Social Work. The Psychology and social Work Departments recognize that many individuals who do not major in these areas choose careers for which a grounding in and an understanding of trauma and crisis will help them to become better informed and ultimately more competent professionals in their fields of choice.

Requirements:

PY 285 or SW 302, PY 101, PY/SW 420, PY/SW 430, PY/SW 440, PY/SW 488, and one course from the following list of electives: PY/SW 404I, PY 380, SW 304 or approved special topics course when available with the guidance of a Crisis and Trauma minor advisor.

CRISIS AND TRAUMA CONCENTRATION FOR SOCIAL WORK MAJORS

Studies in the area of Crisis and Trauma provide a foundational focus ranging from immediate crisis assessment, intervention, and management through more specific issues such as child abuse prevention and treatment and partner violence, as well as investigating the impact of trauma for individuals and families. The concentration in Crisis and Trauma provides students with a solid foundation in theory and research pertaining to crisis, abuse and trauma.

Students are required to satisfy the requirements for the major. In addition, they are required to complete the following courses in Crisis and Trauma:

PY 420 Impact of Trauma
PY 430 Crisis Intervention

PY 440 Child Abuse Prevention & Treatment
PY 488 Domestic Violence Seminar

Prior to taking these courses, students need to complete SW 302 Social Work with Individuals.

A minimum of six credits in Crisis and Trauma must be taken at Carlow University.

Recommended elective courses to support the Crisis and Trauma concentration include: Psychology of Women, Child Psychology, Family Counseling, and Death & Dying. An internship in a location relevant to issues raised in the Crisis and Trauma courses is strongly recommended.

MINOR IN BEHAVIORAL HEALTH

Carlow University students from all majors except Social Work can add a minor in Behavioral Health through the Social Work department. This minor will prepare students to work in both behavioral health organizations and in settings where behavioral health impacts clients and communities such as in healthcare, education, criminal justice, and advocacy. Students in this minor will learn about the profession of Social Work, including how to develop cultural competence in working with

diverse populations. They will explore the individual and community context of behavioral health as well as learn about case management. Two specific elective courses focused on topics such as practice with groups and families, networking in the community, crisis intervention, substance abuse, or the forensic context will further prepare students to work in this arena. All 18 credits must be completed with a grade of C or higher to earn the minor degree. Social Work majors cannot declare the Behavioral Health minor due to the overlap of course requirements.

Required Courses:

SW/SO 104, SW/SO 214, SW/PY/SO 270, SW 302

Electives (Choose 6 credits):

SW 204, SW/PY/SO 218, SW 226, SW 304, SW 305, SW/PY 352, SW/PY 430, SW/PY 438

SOCIAL CHANGE CURRICULUM

OVERVIEW

The social change curriculum draws from the academic disciplines in the College of Leadership and Social Change: communication management, political science, psychology, social work, and sociology that employ a social scientific approach to the study of human behavior. The curriculum provides an array of academic and co-curricular experiences that are embedded designed to increase students' civic engagement and enhance their psychosocial development, with the goal of moving students into positions as change agents in service to organizations and communities from local to global.

This undergraduate program is grounded within Carlow University's liberal arts tradition, and infused in the disciplines. The pillars of the program are: academics, advocacy, civic engagement, and experiential learning. The classroom experience is augmented by internships and programming, which allows students to participate in applied social science opportunities. This program is responsive to the Mercy mission of social justice and includes the study of empowerment: empowering students to empower others. Students are encouraged to view themselves as scholars, citizens, and leaders. As students move from introductory courses to becoming members of communities of practice, they see themselves both as part of the existing process and as agents of change.

The curriculum builds students' aptitudes in the disciplines and across the liberal arts. The program is designed to allow students to move from competency in the introductory level courses; to proficiency in the upper level courses in the disciplines; to mastery as the students develop and present their own scholarship; and finally to entry into communities of practice. In the first two years of study, students complete three seminars, in addition to discipline-specific courses, designed to introduce them to the theories and tools involved in the study of the social sciences:

- SSC 100/PY 100: Seminar on the Self
- SSC 120/CM 120: Interpersonal Communication
- SSC 200/POL 200: Self in Communities: Local to Global

In the third through fourth years of study, SSC students progress as a cohort through the following seminars:

- The Research Process Series, SSC 321 and a second research course, as specified by chosen major
- An SSC Capstone, SSC390, and/or a discipline capstone

These first-year courses are suspended for adults and transfer students except in those cases where academic programs have substituted an SSC course for a departmental/program requirement.

DECIDING STUDENTS

Students who are uncertain about their academic majors are welcomed at Carlow University. We have designed an innovative program to advance to graduation while choosing an academic major that best suits their interests and talents. The cornerstone is a sequence of three courses that help students identify their skills and interests, as well as their career goals. These classes are the foundation for the examination of self as a psycho-social being who wants to work with others and be a positive change agent in service to organizations or communities at any level of society or business:

- SSC/PY 100: Seminar on Self

- SSC/CM 120: Interpersonal Communication
- SSC/POL 200: Self in Communities: Local to Global

Students who are deciding on a major are also assigned an academic advisor who will help them select classes and identify majors and/or minors that help them achieve their professional goals. Finally, students are strongly encouraged to work with our Office of Career Development for more in-depth information on career planning.

The three classes listed above will count toward graduation and are part of a minor in Leadership and Social Change, which has an interdisciplinary focus that examines leadership and civic engagement from a social science perspective. Drawing from the disciplines of Communication, Management, Political Science, Psychology, Sociology and Social Work, the minor explores concepts, theories, practices and research that are essential to developing leadership skills, including an understanding of self and others, to create career-ready, ethical leaders who will facilitate positive change. The minor consists of 21 credits (seven classes) and begins the three classes listed above.

LEADERSHIP AND SOCIAL CHANGE MINOR

The minor in Leadership and Social Change has an interdisciplinary focus, which examines leadership and civic engagement from a social science perspective. Drawing from the disciplines of Communication, Management, Political Science, Psychology, Sociology, and Social Work, the minor explores concepts, theories, and research that are essential to developing leadership skills, including an understanding of self and others, to create career-ready, ethical leaders who will facilitate positive change. The minor consists of 21 credits (seven classes) and begins with the following three interdisciplinary classes.

- SSC 100/PY 100: Seminar on Self
- SSC 120/CM 120: Interpersonal Communication
- SSC 200/POL 200: Self in Communities: Local to Global

These introductory classes are the foundation for the examination of self as a psycho-social being who wants to work with others and be a positive change agent in service to organizations or communities at a local or global levels.

Once the student has completed these classes, he/she must complete three additional classes, one from each of the following areas:

AREA I: LEADERSHIP

Choose one:

- BSM 408: Labor Relations
- BSM 410: Strategic Planning
- CM 225: Political Communication
- CM 236 (WS 236): Gender Differences in Communication
- CM 300: Leadership and Teambuilding
- POL 120 (WS 120): Introduction to Leadership and Women
- POL 313I (WS 313I, PH 313I) Women in Politics: Running for Office
- PY 265 (WS 265): Psychology of Women
- SO 230 (WS 230): Women in Culture and Society

AREA II: ADVOCACY AND ACTION

Choose one:

- CM/SW 310SL: Youth Media Advocacy Project
- CM 325: Communication and Social Movements
- CM 370: Communication and Health Care
- EN/SW 351I: Literature and Public Policy
- POL 287 (SO 287): Introduction to Public Policy
- SW 226SL: Networking in the Community
- SW 303: Social Welfare Policy

- SSC 321: Research Methods for Social Sciences I

AREA III: SOCIAL JUSTICE ISSUES

Choose One:

- BSM 413: Business Ethics and Social Responsibility
- CM 457: Communication Ethics
- POL 228: Gender, Law, and Public Policy
- PY 270 (SO 270, SW 270): Cultural Awareness and Human Services
- PY 340: Social Psychology
- SW 201: Introduction to Social Welfare
- SW 214 (SO 214): Human Behavior and the Social Environment
- SW 216 (SO 216): Community Organization and Praxis
- SO 260: Urban Community and Politics

While the above courses help students master the concepts and skills related to leadership and social change, the SSC 390: Leadership and Social Change Capstone requires students to put their learning into practice. In SSC 390, students are required to complete a community-based project, and present their work in writing and with a formal presentation. This course satisfies the Ethics and Social Responsibility (ESR) requirement for COMPASS.

Finally, if a student is majoring in one of the following programs: Accounting, Business Management, Communication and Media, Corporate Communication, Criminal Justice, Forensic Accounting, Human Resource Management and Technology, Management in Health Sciences, Political Science, Psychology, Sociology and Social Work, he/she can only count six credits (two courses) in both the major and minor. The student must earn a C grade or better in all courses for the minor. Furthermore, at least one (of minor courses (in addition to the Capstone) must be at the 300 or 400 level.

HEALTH COACH MINOR

The Health Coach minor has an interdisciplinary focus that offers preparation for roles related to health promotion. It is open to any major and designed for students who seek to work with patients or in a health care setting but not necessarily in direct patient care. Drawing from many disciplines, the minor explores concepts, theories, practices and research that are essential to developing leadership skills, including an understanding of self and others, to create career-ready, ethical leaders who will facilitate positive change in health care delivery.

The minor consist of 18-19 credits and would require the following 5 interdisciplinary courses.

- PH 210: Biomedical Ethics
- CM 370: Communication and Health Care
- NU 110: Wellness across the Adult Lifespan (Note: This NU class is open to non-NU students in the minor)
- SSC 300: Health Coach
- SSC 301: Health Coach Practicum

And 2 courses from the following list (at least one of the two courses must be at 300 level or higher).

- BIO 201/202/205/206/207/208: Anatomy and Physiology courses
- BSM 204: Management in Health Services
- CM 232: Organizational Communications
- NU 451: Intro to Epidemiology
- NU 317I/SO 317I: Health Care from a Global Perspective—non-nursing students take SO 317
- PY 285: Introduction to Counseling
- PY/SW 430: Crisis Intervention
- POL/NU 420: Legal, Ethical and Political Issues in Health Care (LEPI)—non-nursing students take POL 420
- SW 226SL: Networking in the Community
- SW 302 Introduction to Case Management

COLLEGE OF LEADERSHIP AND SOCIAL CHANGE

COURSE DESCRIPTIONS

ACCOUNTING

ACC 104 Introduction to Financial Accounting

An introduction to the discipline of accounting; introduces accounting principles, terms and concepts governing the recording, reporting and analyzing of accounting data. The accounting cycle—journal entries, general ledger, trial balances, and financial statements (income statement, balance sheet and cash flow statement) will be studied. The student will also develop a basic understanding of how to analyze financial statements to determine profitability, financial position, and liquidity. **3 credits**

ACC 205 Accounting Information Systems

This course introduces students to the use of software packages and information systems used in accounting and forensic accounting, with particular focus on the use of Quickbooks (TM) program. **3 credits**

PREREQUISITE: ACC 104

ACC 207 (BSM 207) Principles of Finance

An introductory study of financial management of business organizations. Topics include a firm's environment, financial statements, financial analysis and planning, short-term financial decisions, long-term financial concepts, capital structure and dividend policy, sources of long-term financing, expansion and failure of business entities, and the stock market.

3 credits

ACC 305 Intermediate Accounting I

A detailed examination of the component elements of the balance sheet, income statement, and statement of cash flow. Other topics include the environment and theoretical structure of financial accounting, income measurement, profitability analysis, and financial statement analysis. **3 credits**

PREREQUISITE: ACC 104.

ACC 306 Intermediate Accounting II

A continuation of the studies undertaken in ACC 305, with emphasis on the asset side of the balance sheet. Topics include: cash, receivables, inventories, property, plant and equipment, investments, and time value of money. **3 credits**

PREREQUISITE: ACC 305.

ACC 307 Managerial Cost Accounting

An analysis of the planning and control of costs in the manufacturing and service environment. Topics covered include cost terminology; planning and control techniques; computation of material, labor, and overhead costs and variances; and the preparation of cost reports. Job order costing, process costing, and standard costs are covered in detail. **3 credits**

PREREQUISITE: ACC 306.

ACC 311 Personal Federal Taxation

An examination of the impact of the Federal Income Tax system on individuals. The structure of the Federal Income Tax system is studied as it relates to the preparation of individual tax returns. Topics covered include income, deductions, tax rates, tax credits, personal exemptions, and tax calculation. **3 credits**

PREREQUISITE: ACC 104.

ACC 312 Corporate/Partnership Taxation

A study of the federal income tax structure and the concept of taxable income as it relates to partnerships and corporations. Topics covered include gross income determination, business deductions, book to tax differences, and flow-through entities. **3 credits**

PREREQUISITE: ACC 306.

ACC 405 Advanced Accounting I

An introduction to business combinations and accounting for consolidations under the purchase method. Topics covered include consolidated statements, intercompany transactions, IFRS, pensions, segment reporting, and accounting for partnerships. **3 credits**

PREREQUISITE: ACC 306.

ACC 407 Auditing

An examination of the auditing function, including the standards and procedures used by auditors in their examination of financial statements for the purpose of rendering an opinion on them. Topics covered include the evaluation of internal control, design of the audit program, statistical sampling, and EDP auditing. **3 credits**

PREREQUISITE: ACC 306.

ACC 413 Business Ethics and Social Responsibility

An analysis of the role of business in society. Topics include the role of business within the community, the relationship of business with government, and the regulatory environment. The issues studied will involve both market and non-market decisions that have social, political, and ethical ramifications. Also, the effect of values and cultural norms on managerial decision-making and how this relates to managers facing a global environment and diverse workforce will be analyzed.

3 credits

PREREQUISITE: BSM 103.

ACC 460 (BSM 406) Internship & Practicum

Internships and practicums are opportunities for students to apply concepts learned in accounting and business courses by working in a field of interest related to the students' programs of study. Student internships and practicums must meet departmental and university requirements. Students must meet with the course instructor to discuss and to obtain approval for the internship or practicum placement. Open to students who have completed at least 60 academic credits. Students may register for between 1-3 credits. **1-3 credits**

FORENSIC ACCOUNTING

ACF 331 Fraud Prevention and Ethics

An introduction to criminology/understanding human behavior, theories of crime causation, white-collar crime, organizational crime, occupational crime, fraud prevention programs, and punishment and the criminal justice system. The ethics portion covers current professional and ethical issues facing the fraud examiner, and the Association of Fraud Examiners (ACFE) code of ethics. **3 credits**

ACF 332 The Law and Fraud

A study of the statutes and common law principles involved in prosecuting fraud through both criminal and civil systems, as well as the legal pitfalls one may encounter in conducting an investigation. The course includes an overview of the United States legal system, laws related to fraud, individual rights during an examination, criminal prosecution for fraud, the civil justice system, basic rules of evidence, and testifying as an expert witness, as well as the Federal Rules of Civil and Criminal Procedure and the Federal Rules of Evidence. **3 credits**

ACF 333 Fraud Investigation Techniques

A study of the tools and techniques necessary to develop information and evidence when conducting a fraud examination and identifying the perpetrators. It covers how to gather evidence through the examination of documents, interview theory and application, covert operations, sources of information, accessing online information, tracing illicit transactions, and reporting standards. **3 credits**

PREREQUISITE: ACF 331 AND ACF 332

ACF 440 Fraud Examination

A study covering occupational fraud and abuse, including asset misappropriation, corruption, and fraudulent statements. The course provides an understanding of fraud examination methodology and sets forth the schemes used by executives,

managers, and employees to commit fraud against their organizations. It provides an analysis and taxonomy of various kinds of frauds and includes cases that illustrate and help the student understand each type of fraud. Based on extensive empirical research in forensic accounting, the course aids the student in identifying exposure to loss and appropriate prevention, detection, and investigation approaches. **3 credits**

PREREQUISITE: ACF 331 AND ACF 332.

BEHAVIORAL NEUROSCIENCE

NEU 220 Neuroanatomy

This is a one-semester undergraduate-level hybrid course designed to provide students in Behavioral Neuroscience tracks with an in-depth study of the structures contained in the central and peripheral nervous systems at both the microscopic and gross anatomy levels. The course will also introduce basic research and diagnostic techniques used to investigate the nervous system. Attention will be given to clinical case studies that highlight anatomical importance. This is a 4-credit course with 3 hours of lecture instruction and 3 hours of lab instruction per week. **4 credits**

PREREQUISITES: BIO 120 and PY 101, CO-REQUISITE: PY/BIO 230I or PY/BIO 230.

NEU 221 Neurophysiology

This is a one-semester undergraduate-level hybrid course designed to provide students in Behavioral Neuroscience tracks with an overview of neurophysiology and current topics in neuroscience. The course will also introduce basic research and diagnostic techniques used to investigate the nervous system. Attention will be given to developing analytical and communication skills necessary to investigate and report on topics in the field. This is a 4-credit course with 3 hours of lecture instruction and 3 hours of lab instruction per week. **4 credits**

PREREQUISITES: BIO 110, BIO 120, BIO 205, BIO 206, CHM 111/113, CHM 112/114, NEU 220, and PY 101.

BUSINESS MANAGEMENT

BSM 103 Introduction to Business and Management

An introductory course dealing with today's global business environment and management principles. Overview topics include types of business organizations, their structures, dynamics, administration, and work distribution functions such as directing, controlling and staffing, and the roles of women in management. The course culminates in the development of a complete business plan as a major project. **3 credits**

BSM 202 (CM 202) Business Communication

A theoretical and practical application of communication principles related to business. Emphasis is given to written expression in accomplishing human relations objectives necessary for success in working with and influencing other persons. The principles studied in this course are derived from cases involving the writing of business letters, reports, and memoranda. The job-finding process, including letters of application, resumes, and interviews, receives special emphasis. Electronic and telephone communications are covered. **3 credits**

PREREQUISITES: CC 100 OR SKW 101, CC 101 OR SKC 101 AND BSM 103.

BSM 203 (PY 204) Global Management and Organizational Behavior

This course provides an examination of the concepts of global organizational behavior at these varied levels: individual, interpersonal, group, and cross-cultural. Also, managerial applications of the behavioral sciences and human relations theories will be studied and evaluated through a systems viewpoint. Cross-cultural considerations will be examined as well in organizational culture/structure aspects. **3 credits**

PREREQUISITE: BSM 103. CO-REQUISITE: PY 101

BSM 204 Introduction to Healthcare Management

This is an introduction to management in health services. This course will integrate the concepts taught in business management with those in health services. This course will also examine relevant legislation including HIPPA. **3 credits**

PREREQUISITES: BSM 103 AND BSM 226.

BSM 207 (ACC 207) Principles of Finance

An introductory study of financial management of business organizations. Topics include a firm's environment, financial

statements, financial analysis and planning, short-term financial decisions, long-term financial concepts, capital structure and dividend policy, sources of long-term financing, expansion and failure of business entities, and the stock market.

3 credits

BSM 226 Human Resource Management

An introduction to the basics of human resource management. The student will analyze the functions of human resource planning, employment planning, equal employment opportunity, workplace diversity, recruitment, selection, appraisal, development, compensation, employee relations, and labor relations within the context of organizational objectives and the legal environment. **3 credits**

BSM 231 Training and Development

A study of training and development strategies in a variety of professional contexts. The student will examine the role of learning and employee development as a function of human resource management, assessment of training needs, concepts in learning theory, issues in retention and transfer of learning, methods of training, and evaluation of training. Special topics include managerial training, technical training, literacy training, diversity training, and sales training. **3 credits**

PREREQUISITES: BSM 103 AND BSM 226.

BSM 301 Principles of Marketing

An introductory study of the principles and functions of marketing. Topics include product development, market research, channels of distribution, and pricing and promotion. Students will analyze cases dealing with current marketing successes and failures. **3 credits**

PREREQUISITE: BSM 103.

BSM 302 Legal Aspects of Business

An introduction to the legal principles, obligations, and rights related to the conduct of business and industry. Topics include contracts, agency, sales, negotiable instruments, and learning to respond to obstacles and opportunities in the work environment and adapt to unexpected events such as changes in work processes or customer demands. This course also includes a study of the conduct of business as it relates to equal employment, consumer protection, and occupational safety. **3 credits**

BSM 305 Concepts in Health Care Finance

An overview of the essential elements of healthcare finance processes and financial management concepts. Topics will include billing and coding for services provided, financial environment of healthcare organizations, legal and regulatory influences on health care, revenue from health care services, managed care organizations, financial reporting, and analyses processes in different healthcare entities. **3 credits**

BSM 306 Financial Management for Healthcare Professionals

A concentration in the financial management aspects of healthcare organizations. This course will cover the following topics for students interested in the healthcare administration arena: strategic financial planning concepts and processes, costing processes in healthcare organizations, control functions of healthcare managers, capital project analysis, consolidations and mergers in healthcare organizations, capital formation, and cash management. **3 credits**

BSM 328 Compensation

A study of the challenges that organizations must meet in designing and administering a compensation plan that justly and fairly rewards all employees while serving the best interests of the company. The student will analyze the reward systems in terms of both monetary and non-monetary considerations within both union and non-union settings. Special topics include the glass ceiling concept and comparable worth. **3 credits**

PREREQUISITES: BSM 103 AND BSM 226.

BSM 329 Fair Employment Practices

A study of federal, state, and local laws involving fair employment, equal pay, and comparable job worth. Emphasis is on the legal aspects of equal employment opportunity, court decisions, and administrative agencies' rules and guidelines. Concepts are examined through the case method. **3 credits**

BSM 333 Recruitment and Selection

An examination of the importance of recruitment and selection as integral functions of the human resource system. Program development and related fair employment practices will be addressed. Other topics include predictors and measurement of job performance, job analysis, and evaluation of selection criteria. Special emphasis will be placed on the development of interviewing skills. **3 credits**

PREREQUISITES: BSM 103 AND BSM 226.

BSM 404 Consumer Behavior

A study of human behavior as it affects buying decisions. Topics include perception, learning, motivation, social and cultural factors, and comprehensive models of buyer behavior. Also included are selected applications involving opinion leadership, brand loyalty, reference groups, and marketing communications as well as applications to nonprofit marketing. **3 credits**

PREREQUISITES: BSM 103 AND BSM 301.

BSM 408 Labor Relations

A study of the development and growth of the labor movement, including social movements and implications and evolution of the legal framework for collective bargaining in the private and public sectors. Topics include preparation for bargaining and costing of labor contracts, bargaining power, negotiations, impasses, the role of women in labor movements, and the future of labor-management relations. **3 credits**

BSM 410 Corporate Strategic Planning and Policy

A study of effective organizational planning that includes an understanding and application of strategic planning processes and how they translate to tactical and operational endeavors. Students will examine several strategic planning models and apply concepts learned in an organizational case study. Also discussed is the importance of environmental monitoring, teamwork, corporate culture, and dissemination of information. The course will culminate in the team writing of an actual strategic plan. **3 credits**

PREREQUISITE: BSM 103.

BSM 411 Collective Bargaining

A history of labor relations and the collective bargaining process in the United States. The course focuses on contract language and the negotiation and writing of a contract. **3 credits**

PREREQUISITES: BSM 103, BSM 226, AND BSM 408.

BSM 413 Business Ethics and Social Responsibility

An analysis of the role of business in society. Topics include the role of business within the community, the relationship of business with government, and the regulatory environment. The issues studied will involve both market and non-market decisions that have social, political, and ethical ramifications. Also, the effect of values and cultural norms on managerial decision-making and how this relates to managers facing a global environment and diverse workforce will be analyzed.

3 credits

PREREQUISITE: BSM 103. FULFILLS ESR COMPASS REQUIREMENT

BSM 416 Creative and Innovative Management

An introduction to differentiating creativity and innovation from both an individual and organizational perspective by integrating this knowledge into the real work-time situation. Students will demonstrate and critique techniques used to generate new ideas, and overcome both individual and group creative problem solving. Students will analyze methodologies for creative strategy usage and options that foster a positive climate. **3 credits**

PREREQUISITE: BSM 103.

BSM 419 Project Management

A course that builds on basic knowledge of management functions, particularly planning at the strategic, tactical, and operational levels. The course focuses on project accomplishment. Students will learn to identify, allocate, and coordinate human, financial, and technical resources to accomplish organizational goals and objectives. Communication and schedule adherence are essential themes throughout the course. Students will be asked to identify an actual work project, and

complete both a project analysis and a project outline using MS Project as the final assignments in the course. **3 credits**
PREREQUISITE: BSM 103.

BSM 460 (ACC 460) Internship & Practicum

Internships and practicums are opportunities for students to apply concepts learned in accounting and business courses by working in a field of interest related to the students' programs of study. Student internships and practicums must meet departmental and university requirements. Students must meet with the course instructor to discuss and to obtain approval for the internship or practicum placement. Open to students who have completed at least 60 academic credits. Students may register for between 1-3 credits. **1–3 credits**

BSM 461 Special Topics

An upper-level management course designed to provide management majors the opportunity to study topics related to their required studies. In-depth approaches include independent research, review of scholarly publications, and discussion of current global events. Future topics under consideration include European Union, global technology, international ethics, and nonprofit management. **3 credits**

COMMUNICATION

CM 104 Mass Media and Society

An introduction to the study of the mass communication process and the various industries that constitute the mass media in our society. This course examines the development of each of the major mass media; the social and economic status of each medium today; the function of news, advertising, and public relations; and some basic concepts in communication law and ethics. **3 credits**

CM 120 (SSC 120) Interpersonal Communication

An examination of communication theory and research as it applies to the creation, maintenance, or deterioration of interpersonal relationships. Topics include the creation and negotiation of meaning, identity development, social diversity and cultural influences, verbal/nonverbal messages, perception, conflict, power, self-disclosure, and interaction patterns in friendships, families, and work relationships. The course combines theory application and experiential skill development. **3 credits**

CM 180 (EN 180) Journalism Practicum

Students practice newswriting, editing, and crafting other journalistic pieces for the student newspaper. This course provides hands-on experience in all aspects of production of a student newspaper, including design, layout, and editorial practices. **1 credit; may be repeated**

CM 200 Communication Seminar

An introduction to the history and current issues in the study of communication and an exploration of careers in this field. Required of all communication majors. Should be taken at beginning of sophomore year (or upon entry to the major). **1 credit**

CM 202 (BSM 202) Business Communication

A theoretical and practical application of communication principles related to business. Emphasis is given to written expression in accomplishing human relations objectives necessary for success in working with and influencing other persons. The principles studied in this course are derived from cases involving the writing of business letters, reports, and memoranda. The job-finding process, including letters of application, resumes, and interviews, receives special emphasis. Electronic and telephone communications are covered. **3 credits**

PREREQUISITES: CC 100 OR SKW 101, CC 101 OR SKC 101 AND BSM 103

CM 210 Persuasion

An examination of a variety of persuasive theories that are used by individuals, organizations, advertisers, media, governments, and other institutions to influence thinking and behavior. Students investigate elements of persuasion, and

look at how it functions within a variety of private and public contexts. **3 credits**

PREREQUISITE: CC 100 OR SKW 101

CM 225 Political Communication

An examination of various theories and practices of political communication and the range of contexts within which it occurs. Students explore communication employed by government and political leaders, mass media, lobbyists and interest groups, and individual citizens and citizen publics. The course allows students to analyze numerous examples of political communication such as blogs, speeches, debates, campaign advertisements, political protests, and other communication vehicles. **3 credits**

CM 232 Organizational Communication

An examination of theory and research as it applies to communication in various types of organizations. Topics include organizational cultures, communication styles associated with different management approaches, gendered communication styles, power and influence, conflict management, and an analysis of the effects of technology on organizational communication. Students apply these theoretical foundations to the creation and analysis of messages. **3 credits**

PREREQUISITE: CC 100 OR SKW 101.

CM 236 (WS 236) Gender Differences in Communication

An examination of gender differences in communication that are sustained by cultures. Students will explore how gender roles are created and perpetuated. They will then examine the ways our interpersonal and social interactions, including our experience with the mass media, influence our probability of success, satisfaction, and self-esteem. In assignments and discussion, students will link theory and research on gender and communication with their personal lives. **3 credits**

CM 240 Advertising

An introduction to the history, principles, and practice of effective advertising. Students develop strategies for successful campaigns using various media and critically evaluate the ethical, economic, and persuasive effects of advertising. **3 credits**

CM 242 Public Relations

An examination of the principles and practice of effective public relations. Students learn to shape information to meet the goals of organizations in reaching diverse publics. Ethical, social, and economic issues are critically examined. **3 credits**

PREREQUISITE: CC 101 OR SKC 101.

CM 260 (EN 260) Writing for Media

An examination of the principles and practice of writing for media. Students gain experience in writing tightly organized, concise, "hard news" stories. Students will learn interviewing and basic investigative skills, and they will practice writing for print and online media sources. **3 credits**

PREREQUISITE: CC 100 OR SKW 101.

CM 290 Professional Presentations and Interviewing

An exploration of the knowledge and skills for effective communication in contemporary organizations at three distinct levels: public presentations, interviews, and group meetings. Students also develop professional-level skills in the creation and use of visuals for a variety of presentation types. **3 credits**

PREREQUISITES: CC 101 OR SKC 101.

CM 300 Leadership and Team Building

An examination of leadership as the process of managing meanings and influencing others. Students examine the mutually influential leader-follower relationship, competing theories and perspectives of leadership, the process of creating compelling vision, the language of leadership, charisma and communication, and strategies by which leaders motivate, influence, persuade, advocate, address crises, and create change. Also explores team building, the impact of gender/ethnic diversity on leadership, and the role of ethics in leadership. Case studies, discussions, and experiential learning are employed. **3 credits**

PREREQUISITE: CM 232.

CM 307 (AR 307, EN 307) Media Criticism

An introduction to the aesthetic and social analysis of mass media, film, and television through critical writing and discussion. **3 credits**

PREREQUISITES: CC 100 AND CC 101 OR SKW 101 AND SKC 101.

CM 310SL (SW 310SL) Youth Media Advocacy Project (YMAP)

The Youth Media Advocacy project provides high school students with the knowledge, skills, and support to utilize the media to influence policy decisions that impact their lives. Carlow University students meet with high school students to facilitate their work on a media advocacy campaign related to improving their education. Students will garner earned media coverage, create and place high-quality paid media such as print ads and radio spots, and distribute media via the Internet. An ultimate goal of the project is to have youth voices heard by the Pittsburgh media and community leaders in order to create change in the schools. **3 credits**

CM 320 Conflict Management

An investigation of theories, research, principles, and practices of conflict management. Topics include: the nature and functions of conflict; types and metaphors; conflict analysis and assessment frameworks; patterns of behavior, styles, strategies, and tactics used in productive and destructive conflicts; facework; power influences; and outcomes such as violence and forgiveness. In addition, third-party interventions including mediation are introduced. The course combines theory application and experiential skill development. **3 credits**

CM 325 Communication and Social Movements

A critical rhetorical examination of historical and contemporary social movements that combines political, sociological, and communication approaches to explain social movement activity. Students are presented with a range of theoretical tools, perspectives, vocabularies, and concepts, and then shown those concepts in action with case studies of specific movements. This course examines movements such as the women's rights, civil rights, anti-war, and environmental movements. **3 credits**

PREREQUISITE: CC 100 AND CC 101 OR SKW 101 AND SKC 101.

CM 330 (EN 330) Feature Writing

This course examines the principles and practices of feature writing. Students gain experience in interviews, personality profiles, narratives, sidebars, and other forms of "soft news" pieces for publication in print or online. **3 credits**

PREREQUISITE: CC 100 OR SKW 101.

CM 350I (SW 350I) Gender, Race, and Class: Media and Social Change

An analysis of the role the mass media play in developing, sustaining, and challenging stereotypes. Students will explore the impact that media stereotypes have on public policy decisions as they affect groups based on gender, race, and social class. This course is team taught as an interdisciplinary course that integrates perspectives from communication and social work. **3 credits**

PREREQUISITES: CC 100 AND CC 101 OR SKW 101 AND SKC 101.

CM 360 (EN 360) Digital Storytelling

The purpose of this course is to build on skills introduced in CM 260 Writing for Media and to introduce and develop students' knowledge and skills in digital storytelling. Students are introduced to the basics of storytelling (narrative), e-publishing, audio and video production as well as the strategic choices involved in the creation and online distribution of digital messages. Ultimately, this course will prepare students to become proficient in digital forms of communication that are essential for 21st century communication practitioners. **3 credits**

PREREQUISITE: CM 260.

CM 370 Communication and Health Care

An investigation of the critical role of communication in the diagnosis, treatment, and prevention of illness and the promotion of wellness. Designed for any consumer of health care and/or potential employees in widely diverse healthcare industry contexts. Topics include: the influence of culturally diverse views of health, illness, and healing on communication patterns; communication strategies for designing, implementing, and evaluating persuasive health campaigns; impact of gender, race, class, and age on health communication; impact of media (news, entertainment, advertising) on health images and awareness; health advocacy methods to empower individual citizens and communities; patient/consumer-provider

interactions, and ethical issues in health communication. **3 credits**

PREREQUISITE: CC 100 AND CC 101 OR SKW 101 AND SKC 101.

CM 380 Special Topics in Communication

An analysis of selected topics in communication. The course is organized in any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. May be repeated for credit as content changes. **Credits vary**

CM 400 Independent Study

An exploration of an area of study in communication that is not already offered as a course. Students design the course with the consent of a faculty member. **Credits vary**

PREREQUISITE: JR./SR. STANDING AND PERMISSION REQUIRED PRIOR TO REGISTRATION.

CM 405 Internship

An on-the-job placement experience with reflection and analysis. Provides students the opportunity to explore, define, and refine areas of interest, as well as apply communication theory and skills in the workplace context. **Credits vary; may be repeated**

PREREQUISITE: JR./SR. STANDING AND PERMISSION REQUIRED PRIOR TO REGISTRATION.

CM 421 (SO 421, SW 321) Research Methods for Social Sciences I

An interdisciplinary first course in social research methods for students majoring in a social science. Students learn the fundamentals of research design and gain an understanding of a variety of research methods. As a final project, students develop a research proposal. **3 credits**

PREREQUISITES: CC 100, CC 101, CC 102, OR SKW 101, SKC 101, AND SKQ 101.

CM 450 Senior Seminar

A reflection on key areas of communication knowledge and practices. Students develop and present a final work product that demonstrates the knowledge and skills that they have acquired in their communication courses as well as a reflection on how communication study relates to the liberal arts and to contemporary issues. **1 credit**

PREREQUISITE: SENIOR COMMUNICATION MAJORS ONLY.

CM 457 Communication Ethics

An examination of major ethical theories and principles pertaining to interpersonal, organizational, and mass communication. Students focus on a variety of ethical issues and case studies as a method for refining critical thinking and oral/written argumentation skills. Communication ethics literacy, dialogue for understanding, and tolerance in times of disagreement are emphasized. **3 credits**

PREREQUISITE: JR./SR. STANDING OR PERMISSION OF THE DEPARTMENT CHAIR.

CRIMINOLOGY

CRM 101 Introduction to Criminal Justice

This course will provide students with an overview of the criminal justice system, including the historical development, present status, and suggested reforms. Students will learn the terminology of the field and trends in policies and procedures related to victims, offenders, police, attorneys, courts, and corrections. Additionally, students will examine their own beliefs and attitudes as related to crime and response to crime. **3 credits**

CRM 187 (SO 187) Law Enforcement in the 21st Century

An overview of law enforcement agencies and their roles in society with an emphasis on current issues facing police departments and other agencies. **3 credits**

CRM 285 (SO 285) Violence & Victims of Crime

An interdisciplinary seminar focusing on the victims of crimes, with an emphasis on understanding victims' responses,

restorative justice programs, and services for victims of crime. **3 credits**

CRM 303 Prisons and Society

This course addresses theories on forms of punishment and corrections through historical, cultural, and political perspectives. Differences of race and gender, as well as issues related to social control, alternative rehabilitation, and community prevention strategies will also be explored. **3 credits**

CRM 315 (SO 315) Juvenile Delinquency

An analysis of the history of the control and prevention of juvenile delinquency. The course includes an overview of the nature and extent of juvenile delinquency, theories about delinquency, an examination of the justice system, and procedures for juveniles in this system. **3 credits**

CRM 400 Contemporary Issues in Criminal Justice

This undergraduate course will cover current and relevant issues in criminal justice. Areas of focus will vary based on current events and “hot topics” related to the discipline. Students will learn to identify current trends and patterns in the field of criminal justice as a result of completing this course. Possible solutions and policy suggestions will be discussed based on the current contemporary issues covered. **3 credits**

CRM 455 Internship

This internship provides on-the-job placement experience and is open to junior or senior students. Prior to registration, students must discuss the internship with their advisor. **Credits vary; may be repeated**

ECONOMICS

EO 201 Microeconomics

A study of theories concerning the behavior of individuals, households, firms, and industries and their patterns in regard to production and consumption. Examines the influence of the pricing system on the production and distribution of goods and services. **3 credits**

EO 202 Macroeconomics

A study of the basic theory of the determination of output, prices, and employment in the United States’ economic system. The role of monetary and fiscal policies and practices is analyzed. This course also compares other economic systems with that of the United States. **3 credits**

HUMAN RESOURCES

HRIS 101 Human Resource Information Systems Management I

An introductory course to human resource information systems management (HRIS). The student will be given an overview of all functional areas in an HRIS system and become familiar with the most widely used HR management software in the marketplace. Students will learn how each area of an HRIS system interrelates with others and how crucial proper design and management are to the success of the system. Students will experience the design and planning phases of an HRIS system with the aid of Microsoft Project. **3 credits**

PREREQUISITE: BSM 226.

HRIS 202 Human Resource Information Systems Management II

A course designed to complement and build upon HRIS Management I. The student will begin implementing the plan created in the previous course. The focus will be on the recruitment, selection/assessment, and employee tracking areas of an HRIS system. The student will learn how to customize these areas to “fit” an organizational environment. Once implementation is complete, information management strategies will be discussed and students will identify a strategy that addresses the needs of an organization. **3 credits**

PREREQUISITES: BSM 226 AND HRIS 101.

INFORMATION TECHNOLOGY MANAGEMENT

IT 117 Microsoft Excel—Latest Version

A hands-on introductory course that will provide the student with the basic skills and knowledge to create/modify Excel worksheets in order to meet the fundamental needs of an organization. The student will learn how to perform basic formulas and create a Web page using Excel. Key concepts and terminology will be discussed in order to reinforce the hands-on practice. Hands-on instruction, practice, and assignments are given to assess the student's technological skills. This course is designed for students in all majors to enhance their technology skills and knowledge. **1 credit**

IT 143 Microsoft Access—Latest Version

A hands-on introductory course that will provide the student with fundamental knowledge and understanding of Microsoft Access. The student will learn how to perform basic file management operations within the relational database of Microsoft Access. Key concepts and terminology will be discussed in order to reinforce the hands-on practice. Hands-on instruction, practice, and assignments are given to assess the student's technological skills. This course is designed for students in all majors to enhance their technology skills and knowledge but is particularly important for students interested in IT 242 and the database management track. **1 credit**

IT 200 Excel Applications in Accounting and Business

A hands-on progressive course that provides the student with basic to advanced skills to create/modify Excel worksheets in order to meet the fundamental needs of an organization. Students will learn how to perform basic, intermediate and advanced formulas and create a webpage using Excel. Key concepts and terminology will reinforce hands-on practice, while hands-on instruction, practice and assignments are used to assess technological skills. This course is designed for students in all majors seeking to enhance technology skills and knowledge. **3 credits**

IT 205 Foundations of Programming

An introduction to the concepts underlying the development of computer programs. Students will utilize an introductory programming language to learn the foundational concepts of programming while learning practical ways to empower their use of everyday applications. This course can be taken alone by any students interested in learning about programming and advancing in their expertise of Microsoft applications. **3 credits**

IT 235 Web Design

An introduction to Web page creation using Web design software and HTML coding techniques. Topics include Web design theory, Web design terms and techniques, successful website plans, review of HTML coding, tables, text formatting, image formatting, templates and cascading style sheets, and multimedia content. **3 credits**

PREREQUISITES: CC 100 OR SKW 101 AND CC 101 OR SKC 101.

IT 242 Database Management Systems

An overview of database management theory and practice. Students will learn the fundamentals of database application development and how database technologies can be used for competitive advantage in organizations. Topics to be covered will include database theory, normalization, entity relationships, and SQL queries. MS Access will be used for in-class demonstrations and projects. **3 credits**

PREREQUISITES: IT 150, IT 150SL OR IT 250SL AND IT 143 OR PERMISSION FROM THE DEPARTMENT CHAIR.

IT 250SL Information Technology I

A first course in information systems that introduces students to the fundamental concepts related to the use of IT in organizations from a managerial perspective. Students will learn to recognize the strategic value of IT and will become familiar with the different ways in which IT is used in organizations (e.g. enterprise systems, business intelligence). Students will also learn IT skills to improve their personal productivity. The course has been designed to also include hands-on activities, mainly in the areas of databases, Web design, and e-commerce. Students will prepare a business case to propose and justify an IT initiative in a real organization. This course has been designed as a stand-alone portal course in IT for majors in all disciplines. **3 credits**

PREREQUISITES: CC 100 OR SKW 101, CC 101 OR SKC 101, OR PERMISSION FROM THE DEPARTMENT CHAIR.

IT 290I (POL 290I) Politics and Technology

A course that will analyze the new opportunities and challenges that arise at the intersection between politics and technology. In addition to the discussion of the individuals (or stakeholders) to be affected by this interplay between politics and technology, topics will include regulatory aspects in areas such as e-government, data mining, data privacy, telecommunications, and litigation. **3 credits**

IT 301 Design Thinking for Web Design

This course offers an in-depth hands-on approach on the concepts of design thinking and its application to web design and development. Design Thinking is a method used by designers in the ideation and development process phase. This method describes a human-centered, iterative design process that consists of the principles or steps of Design Thinking—*Empathize, Define, Ideate, Prototype and Test*. In this course, learners will utilize the principles of Design Thinking to tackle web usability problems. Learners will utilize the principles of Design Thinking, a solution-based approach in user experience, user interface, and universal design for web applications. **3 credits**

IT 302 Web Applications Development

This course will introduce the learner to the concepts, practice, and application of web applications development, focusing on the use of modern web application markup and programming languages like HTML5, CSS, W3.CSS, and JavaScript with a focus on the concepts and technical needs of client and server-side technologies for web applications. This course equips learners with resources for the design, production, and evaluation of web. Learners will gain hands-on experience in web application ideation and production with in-depth markup programming and server-side programming for data processing and code versioning. At the conclusion of this course, learners will understand the fundamental concepts and practices of web applications development designing and implementing a substantial dynamic web site as part of a project team.

3 credits

IT 333 Advanced Adobe Dreamweaver

A course that deepens students' understanding of the advanced features of the latest version of Adobe Dreamweaver. Students will gain a deeper understanding of the inner workings of Dreamweaver, collaboration through Dreamweaver, integration of other technologies into Dreamweaver, and critical design guidelines and requirements. Besides providing students with a deeper understanding of the Dreamweaver software, this course will also cover the major sections of the Adobe Dreamweaver Expert Certification examination. This certification is a well-respected and internationally recognized credential that demonstrates proficiency in the Dreamweaver software and will set students apart from their competition.

3 credits

PREREQUISITE: IT 235.

IT 342 Advanced Database Systems

A continuation of IT 242 using a server-based DBMS and SQL and revisiting many topics of IT 242 in more depth. Topics: SQL syntax, data retrieval, data definition, security and access rules, and views; data models and enhanced ER diagrams; normalization theory; and introduction to data warehouses, distributed databases, replication, and security. MS SQL server will be used as the DBMS software. Introduction to programming interfaces to databases, ODBC, JDBC, XML. This course is aimed mainly at IT majors interested in database specializations. **3 credits**

PREREQUISITE: IT 242.

IT 355 Documentation in Technology

An introduction to the theory and practice of documentation, including project development, manual organization, and refinement of technical writing skills for information technology. Project includes publishing a draft document, designing online help techniques, developing reference materials, and participating in program design teamwork. **3 credits**

PREREQUISITE: IT 150 OR 150 SL OR IT 250SL

IT 372 Information Security

An overview of information security topics from a managerial perspective. Topics include hacker techniques, legal issues of information security including Pennsylvania's data breach security act, typical corporate security and privacy policies, firewalls, virtual private networks, encryption, identity theft, intrusion protection, desktop protection, Windows security, e-commerce, and wireless security. The concepts within this course are beneficial to all students who intend to work with technology or manage technology within an organization. **3 credits**

PREREQUISITE: IT 150 OR IT 150SL OR IT 250SL

IT 382 Systems Analysis and Design

An introductory course on the efficient and effective assessment, analysis, and design of information systems. The objective of this course is to simultaneously develop planning, analysis and design skills and knowledge about strategies for applying those skills. Class discussion and exercises will focus on the challenges that project managers, business analysts, and software developers face when analyzing, designing, and implementing systems in organizations. Different methods will be used to develop students' understanding of the material. However, the emphasis throughout the course is not on technical (i.e. programming) aspects of systems analysis and design. Students will be expected to read and think about all assigned material in advance of class, as the purpose of classes will be to discuss the material, expose different points of view, and develop the students' analytical skills. **3 credits**

PREREQUISITE: IT 242.

IT 400 Independent Study

A study of specific information technology topics chosen according to students' interest with the approval and assistance of the faculty. **3 credits**

IT 460 Internship/Practicum/Research Experience

An internship/practicum is an opportunity for students to apply concepts learned in business courses. The student must meet departmental and university requirements for participation. The internship/practicum allows the student to experience working in a field of interest for future employment. The research experience affords the student an opportunity to work with a Management Department faculty member to perform in-depth research in business areas of interest. Terms of the research agreement are negotiated with the participating faculty member. Junior or senior status is required. **1–3 credits**

POLITICAL SCIENCE

POL 101 Introduction to American Government

An introduction to the components of the American political system. Attention is given to: political institutions their structures and roles; the exercise of power; government performance and results; the impact of political decisions on society; and the development of political attitudes. **3 credits**

POL 120 (WS 120) Introduction to Leadership and Women

An exploration of theories, scholarship, and styles related to leadership behavior and skills. Students will recognize, observe, and appreciate styles of leadership, especially among women. Particular emphasis is given to the contributions and changes women leaders make at all levels of their lives for the good of systems of various sizes. **3 credits**

POL 180 The History of Political Thought

An examination of seminal literature and concepts of Western political philosophy, the continuity and innovation that characterize the Western tradition, as well as its relevance to contemporary political problems. The consciousness of the student is examined regarding the complexity of political realities and political thinking. The student is encouraged to think more critically about his or her personal identity within the current political parameters. **3 credits**

POL 200 (SSC 200) Self in Communities: Local to Global

This course provides opportunities for students to develop an understanding of self within social, political, and economic systems. The course considers the self as formed through ethnicity, racial identity, social class, gender, and family factors. Students will examine the neighborhoods and communities in which they grew up, and will reflect on ways in which these immediate environments contribute to an identity and to the development of values and goals. The course then moves to an exploration of globalization and the role of the media in this process. **3 credits**

POL 209 Introduction to Comparative Politics

This course surveys government institutions, practices, and politics and explores the role of government in economic and social affairs in developing as well as advanced industrial countries. The course considers the relationship among capitalism,

democracy, and economic development, and provides an introduction to the comparative method. Examines cross-national comparison to gain insight into political dynamics. **3 credits**

POL 210 Introduction to International Relations

An overview of international history followed by a careful examination and comparison of competing international relations theories. Important structural processes and issues will be examined, as well as contrasting theoretical approaches and questions. Major concepts include war, peace, globalization, human rights, and international law. **3 credits**

POL 220 The Structure of Conflict: Local to Global

This course presents an overview of conflict: why we fight and why we are motivated, or not, to seek resolution. The course introduces theories of conflict and examines contested relationships through the framework of culture, gender, power dynamics, and resource allocation. The course integrates a skill-building approach to introduce students to concepts and techniques in the recognition, deconstruction, and resolution of conflict in local and global environments. **3 credits**

PREREQUISITE: CC 100 OR SKW 101.

POL 228 (SO 228, WS 228) Gender Law and Public Policy

This course analyzes laws, public policies, and practices that have constructed and regulated gender in the public and private sectors, with special attention to employment and education. It examines the historical constructions of gender as a concept in American society, including how and why this concept was institutionalized publicly and privately in various arenas of the United States at different historical junctures. The course will conclude with a study of the progress that has been made in dismantling gendered institutions and the challenges that remain. **3 credits**

PREREQUISITE: CC 100 OR SKW 101.

POL 230 Foundations of American Political Development

This course focuses on the development of America's institutions: Congress, the presidency, and the courts. The study of American political development is concerned with the nature of political change over time, the path by which we reached our present political state, broad patterns in American politics, and the exceptional nature of American politics and political history compared to that of other capitalist democracies. A variety of questions relating to periods of American political and constitutional history or political development are pursued. **3 credits**

PREREQUISITE: CC 100 OR SKW 101, OR POL 101.

POL 240 The Politics of Terrorism

An exploration of related topics such as political culture, social culture, religion, and political organizations and their links to terrorism. This course will explore the concept of terrorism, the use of violence, the dynamics of war, the political economy of former colonial regimes, dependent economies, and how the world's distribution of resources affects state nations.

3 credits

POL 250 Applied Politics

This course provides experiential learning opportunities for participation in seminars, workshops, conferences, and other special events on topics of interest to the political science and public policy students. Such experiences include, but are not limited to: PLEN seminars, advocacy days, and leadership conferences. **Credits vary**

POL 255 (SO 255) Law, Marriage, and Family

A survey of the law of family relations, including the law of marriage and annulment, divorce, legitimacy of children, custody, and adoption. The course reviews the formation, maintenance, and dissolution of the family unit, including custody, support, and property rights involving spouses, partners, and children. **3 credits**

PREREQUISITE: POL 101 OR PERMISSION FROM THE DEPARTMENT CHAIR.

POL 260 (SO 260) Urban Politics

An examination of theories about how cities developed and function and the importance of cities in today's world. We consider the development of U.S. urban centers as well as others throughout the world. The course also focuses on social life and social problems within cities. Pittsburgh is used as an example throughout this course. **3 credits**

PREREQUISITES: POL 101 OR SO 152; CC 100 OR SKW 101.

POL 265 Constitutional Law I: U.S. Government and Powers

This course explores major cases and controversies in the interpretation of the U.S. Constitution, Articles I through VI. The course examines the powers and limits of the U.S. Supreme Court and its relationship to other branches (executive and legislative) of the federal government. It considers the federal structure and powers at the national and state levels, with special focus on the question of powers retained by states. **3 credits**

PREREQUISITE: POL 101 OR PERMISSION FROM THE DEPARTMENT CHAIR; CC 100 OR SKW 101.

POL 287 (SO 287) Introduction to Public Policy

An analysis of public policy as well as an overview of how citizens identify issues and concerns and influence policy through civic engagement and advocacy efforts. The relationship of public policy legislation to social problems is explored, with attention given to women and other disadvantaged groups. The acquisition of analytical skills necessary to understand, improve, and participate in the policy making process is emphasized. **3 credits**

PREREQUISITES: POL 101, OR SO 152.

POL 290I (IT 290I) Politics and Technology

This course will analyze the new opportunities and challenges that arise at the intersection between politics and technology. In addition to the discussion of the individuals (or stakeholders) to be affected by this interplay between politics and technology, topics will include regulatory aspects in areas such as e-government, data mining, data privacy, telecommunications, and litigation. **3 credits**

POL 313I (WS 313I, PH 313I) Women in Politics: Running for Office

An exploration of women's politics and political interest using feminist theories and gender-specific positions that lead to an understanding of what motivates individuals to run for office. Gender-specific concerns and obstacles confronted by women interested in political participation and leadership will be covered. **3 credits**

POL 325 (SO 325) Race, Law, and Public Policy

This course will examine laws and public policies that have been constructed to address issues surrounding race in the areas of education, employment, and housing. It analyzes the historical constructions of race as a concept in American society, including how and why this concept was institutionalized publicly and privately in various arenas of the United States at different historical junctures. The course includes an examination of the progress that has been made in dismantling radicalized institutions since the Civil Rights era. **3 credits**

PREREQUISITES: POL 101 OR SO 152; CC 100 OR SKW 101.

POL 327 (RC 327) Respiratory Care Education

This course examines the key educational concepts including teaching and learning strategies and techniques, learner characteristics, learning styles, technology in education, and the evaluation of teaching and learning. This course will also extend into the ethical, legal, and economic foundations of the educational process, health literacy in the adult client population, gender, socioeconomic, cultural attributes of the learner, and educating learners with disabilities. **3 credits**

POL 330 American Political Institutions: Congress, the Presidency, and the U.S. Supreme Court

This course will explore the institutions of American government: Congress, the presidency, and the Supreme Court. The course is designed to provide an analytical and applied understanding of American institutional structures by requiring students to "think politically" and systemically, and strengthening essential skills of political action: effective writing and speaking in the context of the processes of political institutions. **3 credits**

PREREQUISITE: POL 101, CC 100 OR SKW 101.

POL 335 Mock Trial and Court Advocacy

This course provides an opportunity to learn firsthand about the work of attorneys in the courtroom, understand the judicial system, sharpen critical thinking, and refine public speaking ability. Students will explore the fundamental process of the adversarial system of justice, including the basic rules of trial procedure and evidence. The course will combine mock trial exercises, demonstrations, and class discussion to enable students to develop the skills of advocacy. **3 credits**

POL 336 Mock Trial and Court Advocacy

Course may be repeated. **1-3 credits**

PREREQUISITE: POL 335.

POL 350 (SO 350) Social Change in America: Decades that Made a Difference

In this course students will identify and study the significant and enduring cultural shifts created by social and political movements began following WWII and culminating in the passage of the Civil Rights Act of 1964. These years and forces that profoundly and permanently transformed American life, institutions and culture include: the civil rights movements, rock and roll, the counter-culture, and the dominance of TV in American popular culture. Students will also examine some of the most salient tensions and conflicts of the post-war era: between the demands of security and respect for civil liberties; conformity to social, religious, and political norms and the expression of individuality; increasing wealth and opportunity and the unavailability of these goals, all of which will be analyzed in the context of sociological theories and practices. **3 credits**

POL 365 Constitutional Law II: Civil Rights and Civil Liberties

This course builds on the development of the Supreme Court's roles, relationships, and powers by examining the first ten amendments, with emphasis on the First Amendment freedoms of speech, expression, association, and the clauses with respect to religious freedom. The notion of fair treatment in the justice system is examined through the role of the justices as interpreters of law in American society. **3 credits**

PREREQUISITES: POL 101, POL 265, OR PERMISSION FROM THE DEPARTMENT CHAIR.

POL 420 (NU 420) Legal, Ethical and Political Issues in Health Care

Focus is on legal, ethical, and political issues in health care. Legal and ethical principles that guide healthcare practice issues are discussed. Political forces that influence change in contemporary health care are examined. Global differences and their relationship to American healthcare practice are explored. The student takes an active role in the policy process. **2 credits (2 theory; 0 clinical)**

PREREQUISITE: COMPLETION OF ALL JUNIOR LEVEL NURSING COURSES.

POL 437 (NU 437) Legal, Ethical and Political Considerations for the RN

This course focuses on the legal, ethical, and political issues that registered nurses encounter in the current healthcare environment. Legal and ethical principles that guide professional nursing practice are discussed. Political forces that influence change in contemporary health care and healthcare reform are examined. The leadership roles of professional nurses in these areas are explored. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: NU 412 AND NU 413.

POL 450 Internship

This internship is an experience that demonstrates the integration of theory and application in a political or social setting. In addition, this experience introduces students to career choices and advocacy roles. Open to juniors and seniors.

Credits vary; may be repeated

PREREQUISITES: POL 101, POL 180, POL 230, POL 287 OR PERMISSION FROM THE DEPARTMENT CHAIR.

PSYCHOLOGY

PY 100 (SSC 100) Seminar on the Self

This course assists students in knowing themselves. Students participate in various learning experiences to evoke self-exploration and awareness from a variety of perspectives. This self-awareness will lead the student on a journey of self-discovery concurrently with an appreciation for how the social and behavioral sciences understand and contextualize the individual. **3 credits**

PY 101 Introduction to Psychology

A survey of the general field of psychology including the fundamental areas of learning, sensation perception, cognition, behavior, motivation, personality, adjustment, and the biological basis of behavior. **3 credits**

PY 122 Lifespan Development

An examination of the patterns of growth, change, and stability in behavior that occur across the human lifespan. Starting with conception, the course explores the biological, psychosocial, and cognitive theories that help us observe and explain

human behavior from life's beginnings through the end of life. **3 credits**

PY 155 Designing Your Life I; Orientation to Psychology

An orientation to the psychology major, this course introduces students to psychology as a field of study and as a major. Students will be introduced to what to expect as a psychology major, including writing using APA formatting. This course will use principles and concepts from psychological science and related areas in order to aid students in planning their lives through their college years and beyond. **1 credit**

PREREQUISITES: PY 101 AND SSC 100.

PY 203 Personality Theory

Analyses of personality theories with emphasis on understanding and improving behavior are presented. Various ways to cope with and learn from stress and how to foster growth are also explored. **3 credits**

PREREQUISITE: PY 101

PY 204 (BSM 203) Global Management and Organizational Behavior

This course provides an examination of the concepts of global organizational behavior at these varied levels: individual, interpersonal, group, and cross-cultural. Also, managerial applications of the behavioral sciences and human relations theories will be studied and evaluated through a systems viewpoint. Cross-cultural considerations will be examined as well in organizational culture/structure aspects. **3 credits**

PREREQUISITE: BSM 103. CO-REQUISITE: PY 101

PY 205 Child Psychology

An examination of the basic principles and theories of development from conception to middle childhood. Emphasizes social, emotional, and cognitive development. **3 credits**

PREREQUISITE: PY 101 or PY 122

PY 206 Adolescent Psychology

A comprehensive investigation of the bio-psycho-social development of the adolescent, with an emphasis on diversity. Major theoretical approaches are presented along with current research. **3 credits**

PREREQUISITES: PY 101 or PY 122

PY 207 Adult Development

An overview of the various problems and possibilities that emerge in adulthood. Main objectives include acquiring a working knowledge of the research and theories of young adulthood, middle age, and the elder years. Topics such as life cycle transitions in sensation, cognition, memory, intimacy, marital states, sexuality, spirituality, mental health, and death and dying are explored. Emphasis is placed on how to cope and grow from adolescence through adulthood. **3 credits**

PREREQUISITES: PY 101 and PY 122

PY 209 Abnormal Psychology

An overview of psychological disorders. Diagnosis, etiology, and modern treatments are explored. A bio-psycho-social perspective is emphasized with special attention given to the Diagnostic and Statistical Manual of Mental Disorders. **3 credits**

PREREQUISITE: PY 101

PY 216/EC 206 Child Development: Ages Six to Nine

This course addresses the physical, cognitive, and psychosocial development of children in grades PreK through four. The student is introduced to major concepts and theories of child development and the scholarship and research that inform these concepts and theories. The course is designed to promote connections between one's understanding of child development and how that understanding informs those who work with this age group. **3 credits**

PY 218 (SO 218, SW 218) Forensic Treatment and Correction

An exploration of interdisciplinary practices within the correctional environment that present serious challenges to healthcare professionals who work in the correctional system. This course emphasizes a team approach in providing treatment to forensic consumers as well as the general population of a correctional environment. **3 credits**

PREREQUISITE: PY 101

PY 219 Preadolescent and Early Adolescent Development

This course addresses the physical, cognitive, and psychosocial development of older school-age children and young teens (i.e., grades four through eight). The student is introduced to major concepts and theories of preadolescent and early adolescent development, and the scholarship and research that inform these concepts and theories. The course is designed to promote connections between one's understanding of early adolescent development and how that understanding informs those who work with this age group. **3 credits**

PY 230I (BIO 230I/PY 230) Biological Bases of Behavior

Biological Bases presents an in-depth focus on neuroanatomy, the nervous system, and other biological processes relevant to human thought and behavior. Students will learn the structure and function of the nervous and endocrine systems, with a specific focus on how biological systems influence psychological functions and vice versa. Students will become familiar with the terminology and research methods of both biology and psychology, and will be introduced to exciting interdisciplinary neuroscience fields. **3 credits**

PREREQUISITE: PY 101.

PY 255 Designing Your Life II: Career Formation

This course focuses on the practical details of "designing one's life" in terms of career formation. Topics will include: personal qualities tied to life success, mentors and networking, resume preparation, and career readiness. **1 credit**

PREREQUISITE: PY 101.

PY 265 (WS 265) Psychology of Women

An overview of theories and current research on the psychological nature of women, specifically related to the adult life cycle of women from adolescence through maturity. Adult female life will be examined with particular emphasis on critical periods of development as these developments affect the emotional life of the modern woman. **3 credits**

PREREQUISITE: PY 101

PY 270 (SO 270, SW 270) Cultural Awareness and Human Services

An introduction to practical social service process-stage approach to ethnic and cultural groups. Given our culturally diverse society, intervention practice approaches have universal application to service specific populations. Drawing on cultures as holistic designs for living, insights and strategies for addressing human needs and concerns from a culturally sensitive perspective will be covered. **3 credits**

PREREQUISITE: SW 104/104SL OR PERMISSION FROM THE DEPARTMENT CHAIR.

PY 280 Cognitive Psychology

An exploration of the basic concepts and contemporary topics in cognitive psychology. Topics to be covered include perception, attention, pattern recognition, consciousness, and memory; and the representation of knowledge, language, cognitive development, thinking, and artificial intelligence. Traditionally, cognitive psychologists have studied these topics without full consideration of the biological mechanisms underlying each of these areas. In this course students will also examine the current research from within the area of cognitive neuroscience for a better understanding of the role these biological mechanisms play in cognition. **3 credits**

PREREQUISITE: PY 101 WITH A GRADE OF C- OR HIGHER OR PERMISSION OF THE DEPARTMENT CHAIR.

PY 285 Introduction to Counseling

An introduction to the basic principles of and various approaches toward counseling. Emphasis on supervised role-playing and on how to begin to become therapeutically effective. **3 credits**

PREREQUISITE: PY 101. THIS COURSE IS A PREREQUISITE FOR ALL OTHER COUNSELING COURSES—PY 380, PY 382, PY 384, PY 420, PY 430, PY 440, AND PY 488

PY 286I (EN 286I) The Psychology of Literature

This course explores the connection between psychological concepts and literary texts. Students will examine myths, fairy tales, contemporary fiction, drama, and poetry from literary and psychological perspectives, analyzing parallels between psychoanalytic theory and authors' characters and, at times, authors' lives. This interdisciplinary approach encourages

students to discover and articulate how psychology and literature reflect the core concepts that define humanity. **3 credits**
PREREQUISITE: SKW 101

PY 290 Elementary Statistics and Lab

An introduction to the calculation and interpretation of statistics for the behavioral sciences including measures of central tendency, variability, percentiles, correlation, and such inferential techniques as the t-test, chi-square, and analysis of variance. **4 credits**
PREREQUISITE: CC 102 OR SKQ 101.

PY 306 Research Methods

An examination of the scientific method as it is used in psychology research. The course explores the various aspects of the research process (e.g., experimental design, analysis, scientific report writing) and how to critically evaluate research. PY 306 prepares the student to become a knowledgeable consumer of psychological research with the ultimate goal of conducting research in advanced courses. **3 credits**
PRE- OR CO-REQUISITE: PY 290.

PY 320 Qualitative Research Methods

An introduction to the theory and application of qualitative research methods commonly used in psychology and related social science fields. Students will explore the nature of qualitative research, the existing theoretical grounding for qualitative research, learn a foundational phenomenological method and approach for collecting qualitative data, and analysis of qualitative results. Students are expected to apply these skills in class as they engage the qualitative analysis process. **3 credits**
PRE-REQUISITE: PY 101; PRE- OR CO-REQUISITE: SSC 321

PY 325 Experimental Psychology

Experimental Psychology is a hands-on upper-level research course. Students will develop skills in applying each step of the scientific method, with particular attention to the experimental method. A primary focus of the course will be for the student to plan and complete a research project that contributes new knowledge to the field. **4 credits**
PREREQUISITES: PY 290 AND SSC 321.

PY 340 Social Psychology

An exploration of the behavior of the individual in the context of multiple social influences and groups (family, school, neighborhood, and society at large). Topics include: social perception and cognition; attitude and attitude change; attraction, affiliation and love; pro-social and antisocial behavior; violence and aggression; prejudice and discrimination; stereotyping, sex roles; and public opinion. **3 credits**
PREREQUISITE: PY 101 WITH A GRADE OF C- OR HIGHER OR PERMISSION OF THE DEPARTMENT CHAIR.

PY 352 (SW 352) Forensic Psychology

An introduction to the science or act of attempting to determine criminal culpability based on an individual's current level of psychological functioning at the time of an offense. It also focuses on an individual's psychological functioning relative to criminal acts with which the offender has been charged. **3 credits**
PREREQUISITE: PY 101

PY 355 Designing Your Life III: Vocation & Avocation

This course emphasizes a framework for approaching career and life from a design perspective taking into consideration such issues as living one's vocation as well as avocation. Finding and experiencing meaning-making in work and life; the importance of happiness; and the significance of understanding and implementing Flow theory will be discussed. In addition, key considerations regarding graduate school, future specialized training and employment in the field of psychology and counseling are emphasized. **1 credit**
PREREQUISITE: PY 101

PY 380 Family Counseling

An overview of the fundamental concepts of general systems theory from which family therapy has developed. Although

principles from other major theories are discussed, the primary theoretical approach taught is Bowenian Family Systems Theory. The emphasis is on looking at both functional and dysfunctional aspects of family systems and observing rigid, repetitive sequences of behavior, the crossing of hierarchical levels of organization, the lack of clear individual and family boundaries, and pathological verbal and nonverbal communication patterns. Family dynamics are discussed as these relate to and influence the individual development of each family member. **3 credits**

PREREQUISITE: PY 285 WITH A GRADE OF C- OR HIGHER.

PY 382 (SW 382) Counseling and Therapy for the Aged, Sick, and Dying

An examination of the contemporary problems of the elderly with special emphasis on crises of illness and bereavement. **3 credits**

PREREQUISITE: PY 285 WITH A GRADE OF C- OR HIGHER.

PY 384 Counseling and Therapy for Alcohol and Drug Addiction

An overview of holistic and interdisciplinary approaches is taken toward understanding and treating addictions and ways to foster healthy recovery. Emphasis is on diagnostic procedures, etiological understandings, clinical syndromes, and the physical, psychosocial, and spiritual effects on the individuals, family, and society. Pretreatment, treatment, and post-treatment approaches are also explored. **3 credits**

PREREQUISITE: PY 285 WITH A GRADE OF C- OR HIGHER.

PY 404I (SW 404I, SO 404I) Death and Dying

A consideration of the current state of social science knowledge of the death and dying experiences of individuals and families. Students explore the individual and family dynamics of death, grief, and bereavement. Death rituals and practices of various belief systems are discussed as well as the belief system and cultural practices of students. Skills and techniques for coping and healing are also reviewed. **3 credits**

PREREQUISITE: PY 101 or PY 122 OR PERMISSION FROM THE DEPARTMENT CHAIR

PY 410 Advanced Research Seminar

Advanced Research Seminar provides students with the opportunity to further develop research skills and apply these skills on independent, supervised, or collaborative research projects. The course is structured as a seminar in which students discuss their various projects while receiving instruction on research design, research ethics, and data analysis. Students in the course can choose to work on an independent project of their own, supervised research with a faculty member, or collaborative research with the course instructor and peers. Student research work will culminate in a paper and/or presentation. **3 credits**

PREREQUISITE: PY 320 OR PY 325 or PRC 733

PY 420 (SW 420) Impact of Trauma

This course introduces the student to the field of psychology trauma. The course will be composed of lectures, discussions, guest speakers and videos. It will provide the student with an understanding of the various types of trauma and treatment, trauma theory, the impact of trauma on the mind, body and spirit, and the historical development of trauma as a clinical entity. Students will gain an appreciation of the depth of trauma and trauma rejections in the fields of social work and psychology. **3 credits**

PREREQUISITE: SW 104 OR PY 285

PY 430 (SW 430) Crisis Intervention

An introduction to the various types of crisis situations practitioners may encounter. In addition, the course will offer various techniques and provide presentations on a variety of components needed to assist the student in understanding the concepts of crisis intervention and debriefings. Crisis events can occur in a variety of ways, and how practitioners deal with these events can be the difference between healing and hindrance. Emphasis will be upon a general understanding of the implications of techniques to modify, manage, and cope with crisis situations. **3 credits**

PREREQUISITE: PY 285 or SW 302 OR PERMISSION FROM THE DEPARTMENT CHAIR

PY/SW 438 Introduction to Substance Abuse Counseling

This course reviews key concepts to substance abuse counseling, including theoretical models for understanding and treating chemically dependent clients. Various screening and assessment tools, drug history, and interviewing skills will be reviewed to help students assess the severity of addiction and develop an initial treatment plan. Treatment settings and

interventions commonly used with chemically dependent clients will also be reviewed. The purpose of this course is to provide students the introductory knowledge and techniques necessary to provide basic competent counseling and psychological services to substance abusers. Attention is paid to the interplay of conceptual knowledge and specific clinical skills and interventions, and the process of familiarization and personal introspection necessary to work comfortably with substance abusers. Additionally, students will be able to make appropriate diagnosis of substance-related disorders, and to make appropriate referrals for treatment.

PREREQUISITE: PY 101

PY 441 Parenting

This course will investigate parenting from both a nurturing and maltreatment perspective. Areas that will be explored are the dynamics of the parent/child relationships; social issues and concerns that impact parenting; how parent/child relationships evolve developmentally (birth through adolescence); various parenting styles and implications; the neuroscience of human relationships. This course will also offer Nurturing Parenting Program Facilitator Training certification. **3 credits**

PREREQUISITES: PY 101 and PY 122

PY 442 Children's Play

This course provides a basic understanding of the dynamics of children's play using a framework of social and emotional development. Students will also gain an understanding of basic play communication skills, which will allow them to connect with children and demonstrate empathy through the process of play. **3 credits**

PREREQUISITES: PY 122 OR PY 205

PY 440 (SW 440) Child Abuse Prevention and Treatment

This course is designed to familiarize students with child abuse in its multiple forms. Students will have the opportunity to learn the many signs and symptoms of child maltreatment that manifest in both childhood and adulthood, and will investigate poisonous pedagogy, open/closed family systems, and the impact of shame on lives. Students will have an opportunity to gain an in-depth understanding of the types of child abuse as well as the signs and behaviors associated with each type. **3 credits**

PREREQUISITES: PY 122 and PY 285 or SW 302

PY 450/451 Internship

An opportunity for students to apply basic psychological principles to field work with physically, mentally, and socially disabled children and adults in local rehabilitation, social service, and educational facilities. **Credits vary**

PY 455 Knowledge of Psychology

This online course covers key content across the subfields of psychology in order to complete psychology majors' understanding of the field of psychology as well as prepare them for upcoming assessments such as the psychology GRE.

1 credit

PREREQUISITES: PY 101 and PY 255; CO-REQUISITE PY 355

PY 488 (SW 488) Domestic Violence Seminar

An overview of the knowledge and skills needed to understand abuse in relationships. Students will study the dynamics of domestic violence, counseling techniques, legal ramifications, and referral sources. Competencies developed in this course can be usefully applied when assisting battered women and their children. **3 credits**

PREREQUISITE: PY 285 or SW 302

PY 490 Supervised Research Project

The purpose of PY 490 Supervised Research Project is to allow our upper-level psychology major the opportunity to further develop his/her research skills. To that end, the student works with a faculty member to develop a research project. This project requires the student to identify a topic, complete a review of the salient literature, propose a research question or hypothesis, and conduct a study designed to examine or test that research question or hypothesis. The student works in collaboration with the faculty member throughout the project. **3 credits**

SOCIOLOGY

SO 104 (SW 104) Introduction to Social Work

An introduction to social work as a profession, its historical development, and current practice settings. The course focuses on the history, philosophy, and structure of social movements, social policy, and social services in the United States. Emphasis is placed on critical thinking as it applies to professional values and ethics, and areas of practice. This course is required for Social Work majors but is also applicable for students from related fields who want to explore the history and structure of social services and social work. Students are required to complete a 40-hour service-learning experience.

3 credits

SO 152 Introduction to Sociology

A general survey of sociological concepts aimed at a basic understanding of modern society and its complexities. Culture, society, and individuals are studied within the framework of social institutions. The emphasis is on the interaction between the individual and society. **3 credits**

SO 187 (CRM 187) Law Enforcement in the 21st Century

An overview of law enforcement agencies and their roles in society with an emphasis on current issues facing police departments and other agencies. **3 credits**

SO 201 (SW 201) Introduction to Social Welfare

An exploration of the historical development of social welfare policies, the relationship of policy to social welfare programs and service, and social work values. **3 credits**

SO 214 (SW 214) Human Behavior and the Social Environment I

An introduction to theories of human behavior related to how personality, environment, and culture interact with one another to shape the individual. The lifecycle of individuals is reviewed in the context of families, groups, and larger social systems including the cultural, social, and physical environment. This knowledge is useful to social workers and other practitioners in dealing with problem situations, whether created by individuals or by environmental factors. **3 credits**

PREREQUISITES: SW 104/104 SL, PY 101, OR PERMISSION FROM THE DEPARTMENT CHAIR.

SO 216 (SW 216) Human Behavior and the Social Environment II

A continuation of HBSE I (SO/SW 214) that explores theories of human behavior in groups, organizations, and communities. A social work ecosystems perspective is combined with sociology and group psychology theories that promote a working knowledge of the operation and impact of macro-systems on human behavior. Primary consideration is given to concepts of empowerment, diversity, population-at-risk, and the promotion of social and economic justice. **3 credits**

SO 218 (PY 218, SW 218) Forensic Treatment and Correction

An exploration of interdisciplinary practices within the correctional environment that present serious challenges to healthcare professionals who work in the correctional system. This course emphasizes a team approach in providing treatment to forensic consumers, as well as the general population of a correctional environment. **3 credits**

PREREQUISITE: PY 101

SO 228 (POL 228, WS 228) Gender Law and Public Policy

This course analyzes laws, public policies, and practices that have constructed and regulated gender in the across public and private sectors, with special attention to employment and education. It examines the historical constructions of gender as a concept in American society, including how and why this concept was institutionalized publicly and privately in various arenas of the United States at different historical junctures. The course will conclude with a study of the progress that has been made in dismantling gendered institutions and the challenges that remain. **3 credits**

PREREQUISITES: POL 101 OR SO 152 AND CC 100 OR SKW 101.

SO 251S (WS 251S) Cross-Cultural Perspectives on Child-Rearing and Child Care

This course is a cross-cultural examination of child-rearing and child care that focuses on contemporary societies ranging from developing countries to highly industrialized societies. The course also considers cross-cultural variations, practices, and a critical examination of the adequacy of child rearing and child care in American society. **3 credits**

SO 255 (POL 255) Law, Marriage and Society

A survey of the law of family relations, including the law of marriage and annulment, divorce, legitimacy of children, custody, and adoption. The course reviews the formation, maintenance, and dissolution of the family unit, including custody, support, and property rights involving spouses, partners, and children. **3 credits**

PREREQUISITE: POL 101 OR PERMISSION FROM DEPARTMENT CHAIR.

SO 260 (POL 260) Urban Communities and Politics

An examination of theories about how cities developed and function and the importance of cities in today's world. We consider the development of U.S. urban centers as well as others throughout the world. The course also focuses on social life and social problems within cities. Pittsburgh is used as an example throughout this course. **3 credits**

PREREQUISITES: POL 101 OR SO 152 AND CC 100 OR SKW 101.

SO 270 (PY 270, SW 270) Cultural Awareness and Human Services

An introduction to a practical social service process stage approach to ethnic and cultural groups. Given our culturally diverse society, intervention practice approaches have universal application to service-specific populations. Drawing on cultures as holistic designs for living, insights and strategies for addressing human needs and concerns from a culturally sensitive perspective will be covered. **3 credits**

PREREQUISITE: SW 104/104SL OR PERMISSION FROM THE DEPARTMENT CHAIR.

SO 285 (CRM 285) Violence & Victims of Crime

An interdisciplinary seminar focusing on the victims of crimes, with an emphasis on understanding victims' responses, restorative justice programs, and services for victims of crime. **3 credits**

SO 315 (CRM 315) Juvenile Delinquency

An analysis of the history of the control and prevention of juvenile delinquency. The course includes an overview of the nature and extent of juvenile delinquency, theories about delinquency, an examination of the justice system, and procedures for juveniles in this system. **3 credits**

SO 287 (POL 287) Introduction to Public Policy

An analysis of public policy, as well as an overview of how citizens identify issues and concerns and influence policy through lobby and advocacy efforts. The relationship of public policy legislation to social problems is explored, with attention given to women and other disadvantaged groups. The acquisition of analytical skills necessary to understand, improve, and participate in the policy making process is emphasized. **3 credits**

PREREQUISITE: SO 152 OR SW 104/104SL.

SO 289 Evidence and Procedures

This course is an in-depth look at the application of the procedural requirements of the U.S. criminal justice system as mandated by the U.S. Constitution, state constitutions, the Federal Rules of Criminal Procedure, and the state rules of criminal procedure. The course covers the procedures required by the criminal justice system and the courts, from the initial suspicion of a crime to post-conviction. The Fourth, Fifth, and Sixth Amendment safeguards of the U.S. Constitution are emphasized, with a particular focus upon the purposes of arrest law, the law of warrants, search and seizure, the exclusionary rule, trial procedures, and other process remedies. **3 credits**

SO 290 (POL 290) Introduction to Fraud Investigation

This course will introduce students to the nature and extent of fraud. Students will learn the legal elements of fraud, the methods employees use to commit occupational fraud, and the basic principles involved in fraud investigation. It examines the sociology of fraud: the drivers for commission of occupational fraud; structural mechanisms to deter fraudulent conduct; and the manner in which fraud should be investigated and resolved in order to provide future practitioners of criminal justice with an understanding of the evolving problems of white collar crime such as business fraud and cybercrime. **3 credits**

SO 305 Contemporary Sociological Theory

This course is an overview of contemporary sociological theory in the conflict, functionalist, and micro-interactionist traditions. Students learn how to read theory from primary and secondary sources and develop an understanding of theory building throughout the course. Emphasis throughout the course is on the connection between theory and observation of social life. **3 credits**

SO 310 (WS 310) Women and Work

This course examines the experiences of women in paid and unpaid work. Women comprise a significant and growing portion of the labor force. Their positions and experiences are very diverse and rooted in the specific historical and social contexts in which they live and work. The course begins with an overview of gender in society and the structure of the U.S. economy. It will examine the history of women's employment and women's current status in the workforce. A significant portion of the semester will be devoted to women in poverty and low-wage work. The course will conclude with an exploration of the strains associated with women's professional work experiences. **3 credits**

SO 312 Poverty and Related Social Problems

An examination of poverty and other social problems which may include homelessness, teen pregnancy, alcoholism, racism, sexism, ageism, domestic violence and other violence against women, drug abuse, gang behavior, and urban violence. **3 credits**

SO 315 (CRM 315) Juvenile Delinquency

An analysis of the history of the control and prevention of juvenile delinquency. The course includes an overview of the nature and extent of juvenile delinquency, theories about delinquency, an examination of the justice system, and procedures for juveniles in this system. **3 credits**

SO 316 Greed and Violence in American Society

An examination of greed and violence in everyday life and across social institutions such as education, the family, business, politics, and religion. In this interdisciplinary course, team-taught by faculty from Communication Studies and Sociology, theories from both disciplines are studied and applied by students as they seek to understand and explain the very visible and far-reaching incidents of violence and greed in our society. **3 credits**

SO 317I (NU 317I) Health Care from a Global Perspective

An overview of health from a global perspective synthesizing the theory and practice of international health. The concepts of culture, globalization, and global stratification provide the framework for consideration of global health issues. **3 credits**

SO 325 (POL 325) Race, Law and Public Policy

This course will examine laws and public policies that have been constructed to address issues surrounding race in the areas of education, employment, and housing. It analyzes the historical constructions of race as a concept in American society, including how and why this concept was institutionalized publicly and privately in various arenas of the United States at different historical junctures. The course includes an examination of the progress that has been made in dismantling radicalized institutions since the Civil Rights era. **3 credits**

PREREQUISITES: POL 101 OR SO 152 AND CC 100 OR SKW 101.

SO 365 Globalization

This course examines global social interaction. Questions concerning the interactions among societies and benefits and problems arising from globalization are explored. Also, the impact of global relations on the social sciences is discussed. **3 credits**

SO 404I (PY 404I, SW 404I) Death and Dying

A consideration of the current state of social science knowledge of the death and dying experiences of individuals and families. Students explore the individual and family dynamics of death, grief, and bereavement. Death rituals and practices of various belief systems are discussed as well as the belief system and cultural practices of students. **3 credits**

PREREQUISITE: PY 101 or PY 122 OR PERMISSION FROM THE DEPARTMENT CHAIR

SO 421 (CM 421, SW 321) Research Methods for Social Sciences I

An interdisciplinary first course in social research methods for students majoring in a social science. Students learn the fundamentals of research design and gain an understanding of a variety of research methods. As a final project, students develop a research proposal. **3 credits**

PREREQUISITES: CC 100 OR SKW 101; CC 101 OR SKC 101; AND CC 102 OR SKQ 101.

SO 422 (SW 422) Research Methods II

An applied course designed for students to gain field experience in social science research. Students complete a comprehensive research project in the field using the research design created in SO 421. **3 credits**

PREREQUISITE: SO 421, MAT 106 OR MAT 115 OR PY 290

SO 488 (SW 488) (PY 488) Domestic Violence Seminar

An overview of the knowledge and skills needed to understand abuse in relationships. Students will study the dynamics of domestic violence, counseling techniques, legal ramifications, and referral sources. Competencies developed in this course can be usefully applied when assisting battered women and their children. **3 credits**

PREREQUISITE: SO 152

SSC COURSES

SSC 100 (PY 100) Seminar on the Self

This course assists students in knowing themselves. Students participate in various learning experiences to evoke self-exploration and awareness from a variety of perspectives. This self-awareness will lead the student on a journey of self-discovery concurrently with an appreciation for how the social and behavioral sciences understand and contextualize the individual. **3 credits**

SSC 120 (CM 120) Interpersonal Communication

The course examines how persons use interpersonal communication to create and maintain relationships and/or cause them to deteriorate. Some issues include: the creation and negotiation of meaning; role of communication in the development and maintenance of self-identity; nature and impact of verbal and nonverbal messages; and interpersonal perception processes and errors. It considers social diversity and the impact of cultural differences on communication and relationships. **3 credits**

SSC 200 (POL 200) Self in Communities: Local to Global

This course provides opportunities for students to develop an understanding of self within social, political, and economic systems. The course considers the self as formed through ethnicity, racial identity, social class, gender, and family factors. Students will examine the neighborhoods and communities in which they grew up and will reflect on ways in which these immediate environments contribute to an identity and to the development of values and goals. The course then moves to an exploration of globalization and the role of the media in this process. **3 credits**

SSC 300 Health Coach

This course provides a study of key issues concerning health care and is aimed at developing heightened understanding of, and practical approaches to, supporting patients in the community. Students identify obstacles to effective health care, as well as team-based strategies, for enabling at-risk patients to play more active roles in promoting their health and well-being. Students will develop a comprehensive series of bio-psycho-social insights for promoting positive health behaviors, enabling patients to move past their perceived obstacles and boosting overall adherence. This course provides students with the academic foundation and preparation for effectively serving as health coaches in the community. **3 credits**

SSC 301 Health Coach Practicum

This course provides a study of key issues concerning health care and is aimed at developing heightened understanding of, and practical approaches to, supporting patients in the community. Students identify obstacles to effective health care, as well as team-based strategies, for enabling at-risk patients to play more active roles in promoting their health and well-being. Students will develop a comprehensive series of bio-psycho-social insights for promoting positive health behaviors,

enabling patients to move past their perceived obstacles and boosting overall adherence. This course provides students with the academic foundation and preparation for effectively serving as health coaches in the community. **1 credit**

PREREQUISITE: SSC 300

SSC 321 (SW 321) Research Methods for Social Sciences I

This is the first in a sequence of research methods courses for students in the Social Change majors. This course familiarizes students with the most common research methods used in the social and behavioral sciences, with an emphasis on critical thinking and becoming informed consumers of research. This course culminates with the final project in which students prepare a research proposal. **3 credits**

PREREQUISITES: CC 100, 101, 102 OR SKC 101, SKW 101, SKQ 101.

SSC 390 Leadership and Social Change Capstone

As the capstone experience for all students completing the minor in Leadership and Social Change, this course is designed to encourage reflection on concepts and skills in this interdisciplinary minor. The course also provides students with the opportunity to demonstrate learning by completing a community-based project, and delivering a written and oral final presentation. This course satisfies the Ethics and Social Responsibility (ESR) requirement for Compass. **3 credits**

PREREQUISITES: COMPLETION OF SSC 100, 120 AND 200 WITH A GRADE OF C- OR BETTER, JUNIOR STATUS, OR PERMISSION OF COORDINATOR FOR SSC MINOR COORDINATOR.

SOCIAL WORK

SW 104 (SO 104) Introduction to Social Work

An introduction to social work as a profession, its historical development, and current practice settings. The course focuses on the history, philosophy, and structure of social movements, social policy, and social services in the United States. Emphasis is placed on critical thinking as it applies to professional values and ethics, and areas of practice. This course is required for Social Work majors but is also applicable for students from related fields who want to explore the history and structure of social services and social work. **3 credits**

SW 201 (SO 201) Introduction to Social Welfare

An exploration of the historical development of social welfare policies, the relationship of policy to social welfare programs, the delivery of social support services needed to fulfill basic human needs, and social work values. **3 credits**

SW 204 Theories and Methods of Practice

Designed to introduce students to theoretical and practical knowledge that will become a foundation for the entry-level professional. Topics covered include social work values, assessment, confidentiality, and contemporary theories in social work as they relate to practice with client systems. Basic psychopathology is reviewed in relation to current methods used in treatment. Students will gain an understanding of the theories behind various methods and techniques and continue to build upon them as lifelong learning takes place. In addition, skill-building sessions are included as a key component of the course in order for students to experience the learning process from both the knowledge and practice levels. **3 credits**

PREREQUISITE: SW 104/104SL OR PY 101, OR PERMISSION FROM THE DEPARTMENT CHAIR.

SW 214 (SO 214) Human Behavior and the Social Environment I

An introduction to theories of human behavior related to how personality, environment, and culture interact with one another to shape the individual. The life cycle of individuals is reviewed in the context of families, groups, and larger social systems including the cultural, social, and physical environment. This knowledge is useful to social workers and other practitioners in dealing with problem situations, whether created by individuals or by environmental factors. **3 credits**

PREREQUISITES: SW 104/104SL, PY 101, OR PERMISSION FROM THE DEPARTMENT CHAIR.

SW 216 (SO 216) Communities, Organizations, and Groups: Theory and Praxis

This course explores human behavior in groups, organizations, and communities to achieve a theoretical, conceptual, and practical understanding of the workings of the macro-social environment. An ecosystems perspective is combined with sociology and group psychology theories that promote a working knowledge of the operation and interrelatedness of macro systems and human behavior. Primary consideration is given to concepts of empowerment, diversity, populations-at-risk, and the promotion of social and economic justice at the local, national, and global levels. **3 credits**

SW 218 (PY 218, SO 218) Forensic Treatment and Correction

An exploration of interdisciplinary practices within the correctional environment that present serious challenges to healthcare professionals who work in the correctional system. This course emphasizes a team approach in providing treatment to forensic consumers as well as the general population of a correctional environment. **3 credits**

PREREQUISITE: PY 101

SW 226SL Networking in the Community

An exploration of the community resources and services that are available to social workers and the populations they serve. Students will be required to spend time at agency settings in order to better understand the service delivery system and its impact on people. **3 credits**

SW 270 (PY 270, SO 270) Cultural Awareness and Human Services

An introduction to an intersectional approach to ethnic and cultural groups. In the course, students will learn to apply and communicate an understanding of the importance of diversity and difference in shaping life experiences relevant to all levels of Social Work practice. Using a paradigm that recognizes the role of oppression and discrimination, students will develop self-awareness and self-regulation skills to manage the influence of personal biases and values in working with diverse clients and constituencies. **3 credits**

PREREQUISITE: SW 104 OR PERMISSION FROM DEPARTMENT CHAIR

SW 280 Immigration in the United States

Social Workers and professionals in a range of fields will work with immigrants and need to be prepared to bring both knowledge and cultural humility to their work. In this course, students will learn about immigration within the context of the United States and the local community. They will learn about refugees and immigrants using an intersectional approach by listening and reading about the lived experiences of these populations. Students will also explore the political and legal atmosphere for immigrants today. Finally, students will learn concrete skills for working with refugees and immigrants in the context of helping professions. **3 credits**

SW 302 Social Work Casework with Individuals

An exploration of the basic knowledge, values, and skills of the profession of social work. The student becomes familiar with theoretical knowledge, develops basic interviewing skills, and utilizes value clarification to understand what is involved in effective, ethical social work practice and case management in a diverse society. (Micro practice course.) May be taken by non-Social Work majors with permission of the instructor. **3 credits**

PREREQUISITES: SW 104

SW 303 Social Welfare Policy and Analysis

The historical, economic, social, and political facets of policies are examined from the social work practitioner perspective. Policies as society's response to human social problems will be analyzed and discussed for their immediate and long-range implications. Special attention will be given to governmental entities and non-profit organizations that address social problems through service provisions. Each student will analyze in-depth one social welfare policy. **3 credits**

PREREQUISITE: SW 201 OR PERMISSION FROM DEPARTMENT CHAIR.

SW 304 Social Work with Families

An enhancement of the application of knowledge and skills of generalist social work practice designed to enhance the skills introduced in SW 302. Discussion and simulation of assessment, intervention, and practice with families are emphasized. (Mezzo practice course). **3 credits**

PREREQUISITES: SW 302 OR PERMISSION FROM THE DEPARTMENT CHAIR.

SW 305 Social Work with Groups

An enhancement of the application of knowledge and skill of generalist social work practice and is designed to build upon SW 302. Discussion and simulation of practice with educational, support, task, and therapeutic groups are emphasized.

3 credits

PREREQUISITES: SW 302 OR PERMISSION FROM THE DEPARTMENT CHAIR.

SW 310SL (CM 310SL) Youth Media Advocacy Project (YMAP)

The Youth Media Advocacy project provides high school students with the knowledge, skills, and support to utilize the media to influence policy decisions that impact their lives. Carlow University students meet with high school students to facilitate their work on a media advocacy campaign related to improving their education. Students will garner earned media coverage, create and place high-quality paid media such as print ads and radio spots, and distribute media via the Internet. An ultimate goal of the project is to have youth voices heard by the Pittsburgh media and community leaders in order to create change in the schools. **3 credits**

SW 321 (SSC 321) Research Methods for Social Sciences I

This is the first in a sequence of research methods courses for students in the Social Change majors. This course familiarizes students with the most common research methods used in the social and behavioral sciences, with an emphasis on critical thinking and becoming informed consumers of research. This course culminates with the final project in which students prepare a research proposal. **3 credits**

PREREQUISITES: CC 100, 101, 102 OR SKC 101, SKW 101, SKQ 101.

SW 350I (CM 350I) Gender, Race, and Class: Media and Social Change

An analysis of the role the mass media play in developing, sustaining, and challenging stereotypes. Students will explore the impact that media stereotypes have on public policy decisions as they affect groups, based on gender, race, and social class. This course is team taught as an interdisciplinary course that integrates perspectives from communication and social work. **3 credits**

PREREQUISITES: CC 100 OR SKW 101 AND CC 101 OR SKC 101.

SW 351I (EN 351I) Literature and Public Policy

This interdisciplinary course examines the relationship between authors whose works inspired or reflected social justice activism and public policy changes in the 19th and 20th centuries. The interdisciplinary approach of the literary materials and social work perspectives is integrated into students' readings, research, and collaborative in-class projects. Students read and analyze fiction, such as *Maggie: Girl of the Streets*; drama, such as *A Raisin in the Sun*; and music, such as "Strange Fruit." **3 credits**

SW 352 (PY 352) Forensic Psychology

An introduction to the science or act of attempting to determine criminal culpability based on an individual's current level of psychological functioning at the time of an offense. It also focuses on an individual's psychological functioning relative to criminal acts with which the offender has been charged. **3 credits**

PREREQUISITE: PY 101

SW 382 (PY 382) Counseling and Therapy for the Aged, Sick, and Dying

An examination of the contemporary problems of the elderly with special emphasis on crises of illness and bereavement.

3 credits

PREREQUISITE: PY 285 WITH A GRADE OF C- OR HIGHER

SW 400 Independent Study

An exploration of an area of study in social work that is not already offered as a course. Students design the course with the consent of a faculty member. **Credits vary**

SW 402 Field Placement I

This is a supervised field placement in a selected human service agency that allows the student to integrate theory with micro, mezzo, and macro practice. Only Social Work majors who have been fully admitted to the Social Work program may register for this course. The field placement sequence should be the final course sequence. **5 credits**

COREQUISITE: SW 405.

SW 404I (SO 404I, PY 404I) Death and Dying

A review of the current state of social science knowledge of the death and dying experiences of individuals and families. Students explore the individual, family, and community dynamics of death, grief, and bereavement. Death rituals and practices of various belief systems are discussed as well as the belief system and cultural practices of students. **3 credits**
PREREQUISITE: PY 101 or PY 122 OR PERMISSION FROM THE DEPARTMENT CHAIR

SW 405 Field Placement Seminar I

A seminar designed to bring students together in a group setting to help integrate the field experience with practice skills and theory. Concurrent enrollment in SW 402. Only Social Work majors who have been fully admitted to the Social Work program may register for this course. The field placement sequence should be the final sequence that students take. **3 credits**

COREQUISITE: SW 402.

SW 406 Field Placement II

This is the second in a two-part sequenced field placement series. The field placement is designed to develop students' advanced skills and increase competence in utilizing skills acquired in SW 405. Concurrent enrollment in SW 407 is required. Only social work majors who have been fully admitted to the social work program may register for this course. The field placement sequence should be the final sequence that students take. **5 credits**

COREQUISITE: SW 407.

SW 407 Field Placement Seminar II

A seminar designed to advance a student's integration of theory with practice via the field experience in SW 406. Concurrent enrollment in SW 406. Only Social Work majors who have been fully admitted to the Social Work program may register for this course. The field placement sequence should be the final sequence that students take. **1 credit**

PREREQUISITES: SW 402, SW 405. COREQUISITE: SW 406.

SW415 (WS 415) Women, Work and Well-Being

This course explores the history of women and work through a series of case studies. Gender roles, race and ethnicity and socioeconomic factors will be considered in discussion. It also looks at the impact of the work environment on the well-being of women. **3 credits**

SW420 (PY 420) Impact of Trauma

This course introduces the student to the field of psychological trauma. The course will be composed of lectures, discussions, guest speakers and videos. It will provide the student with an understanding of the various types of trauma and treatment, trauma theory, the impact of trauma on the mind, body and spirit, and the historical development of trauma as a clinical entity. Students will gain an appreciation of the depth of trauma and trauma rejections in the fields of social work and psychology. **3 credits**

PREREQUISITES: SW 104 OR PY 285.

SW 422 (SO 422) Research Methods II

An applied course designed for students to gain experience in social science research. Students complete a comprehensive research project using the research design created in SW 321. **3 credits**

PREREQUISITE: SW 321, MAT 106 OR MAT 115 OR PY 290. THE RESEARCH SEQUENCE SHOULD EITHER BE TAKEN PRIOR TO FIELD PLACEMENT OR CONCURRENT WITH FIELD PLACEMENT.

SW 430 (PY 430) Crisis Intervention

An introduction to the various types of crisis situations practitioners may encounter. In addition, the course will offer various techniques and provide presentations on a variety of components needed to assist the student in understanding the concepts of crisis intervention and management. Crisis events can occur in a variety of ways and, as practitioners, how we deal with these events can make the difference between healing and hindrance. Emphasis will be upon a general understanding of the implications of techniques to modify, manage, and cope with crisis situations. **3 credits**

PREREQUISITE: PY 285 OR SW 302

SW 440 (PY 440) Child Abuse Prevention and Treatment

This course is designed to familiarize students with child abuse in its multiple forms. Students will have the opportunity to

learn the many signs and symptoms of child maltreatment that manifest in both childhood and adulthood and will investigate poisonous pedagogy, open/closed family systems, and the impact of shame on lives. Students will have an opportunity to gain an in-depth understanding of the types of child abuse as well as the signs and behaviors associated with each type. **3 credits**

PREREQUISITES: PY 122 AND PY 285 OR SW 302

SW 488 (PY 488) (SO 488) Domestic Violence Seminar

An overview of the knowledge and skills needed to understand abuse in relationships. Students will study the dynamics of domestic violence, counseling techniques, legal ramifications, and referral sources. Competencies developed in this course can be usefully applied when assisting battered women and their children. **3 credits**

PREREQUISITE: PY 285 OR SW 302

COLLEGE OF HEALTH AND WELLNESS

NURSING DEPARTMENT

MAJORS

- Nursing

PROGRAMS

- BSN Program
- RN-BSN Program
- BSN Second Degree Program
- BSN Step Ahead Program

ACCELERATED PROGRAM

- RN-BSN to MSN Accelerated Option Program

NURSING POLICIES

Nursing policies are explained fully in the Nursing Department Undergraduate Student Handbook. Refer to it for specific, complete information. The Nursing Department reserves the right to make policy changes in the curriculum outline to address ongoing accreditation standards and/or professional regulations.

The following are some selected summaries:

- Students must earn a minimum grade of C (2.0) in each of the prerequisite and COREQUISITE support courses for the major and all major courses within the time frame designated in the curriculum guide.
- BSN students must earn a cumulative test average grade of 79.00% to successfully complete all nursing courses.
- BSN students must attain a minimum GPA of 3.0 prior to enrolling in the first clinical nursing course. Students must maintain a cumulative GPA of 3.0 each semester. A “pass” must be achieved in each clinical component. Policies are in place for the student who does not achieve acceptable academic achievement. A student who falls below a 3.0 GPA will be placed on probation in the next semester; failing to return to a cumulative 3.0 GPA by the end of the probation semester will halt progression into nursing courses until the cumulative GPA returns to 3.0 or higher. A student may only be on probation two times throughout the program.
- A person convicted of any felony may be prohibited from licensure by the state at any time.
- If the program of studies is interrupted, re-entry at a later time is dependent upon the curriculum, availability of class space, and completion of required re-entry procedures.
- Statute of Limitations: Students must successfully complete all requirements for the baccalaureate degree in nursing (BSN) within a period of eight academic years, five years for RN/BSN, excluding an approved leave of absence, from the time of initial matriculation at Carlow University; and six academic years in the BSN and five years for RN-BSN programs, excluding an approved leave of absence, from the time of taking the first nursing (NU) course.
- In compliance with the State Board of Nursing regulations and policies of clinical agencies, students are required

to pass a physical exam yearly. They must maintain professional liability insurance, immunizations, CPR certification, background checks, fingerprints and other requirements as described in the Nursing Department Undergraduate Student handbook. The Nursing Department reserves the right to make changes in policies and/or the curriculum outline.

PROGRAM STUDENT LEARNER OUTCOMES

Throughout the undergraduate program, the student will be involved in the process of becoming more fully aware of self as a person and learner who is free to think clearly and creatively, actively pursue intellectual endeavors, respond ethically in a spirit of cultural competence and social justice, and ready to participate in opportunities for long-term learning.

The BSN and RN-BSN graduate is expected to:

1. Integrate theories and concepts of human experience from the humanities and social/natural sciences into professional practice.
2. Transition into the professional nursing role: demonstrating critical reasoning, providing respectful, compassionate care, valuing lifelong learning and practicing within professional, legal and ethical frameworks.
3. Demonstrate leadership and interprofessional collaborative communication to achieve patient safety, quality improvement and patient advocacy in healthcare delivery systems.
4. Integrate evidence; clinical experience; interprofessional perspectives; and patient-centered (or individual, family, and community) preferences into the plan of care.
5. Implement information technology knowledge, skills and attitude in the delivery of patient-centered care in diverse settings.
6. Apply basic knowledge of the impact of political, financial, and regulatory systems on the rapidly changing healthcare environment.
7. Demonstrate effective written and verbal communication skills for respectful interprofessional collaboration.
8. Collaborate with individuals, the interprofessional team, and the community to promote positive health outcomes and decrease health disparities.
9. Incorporate professional nursing standards and accountability into safe and competent individual and system-level practice.

*The program outcomes are based upon: The Sisters of Mercy Core Values (Carlow University Mission Statement, 2009), AACN BSN Essentials (2008) and the QSEN Pre-licensure Competencies (2012).

The programs lead to a Bachelor of Science degree in Nursing (BSN) and are fully accredited by the Commission on Collegiate Nursing Education, with the BSN program also approved by the Pennsylvania State Board of Nursing.

OVERVIEW OF UNDERGRADUATE NURSING PROGRAMS

Across the undergraduate programs, students will be involved in the process of becoming more fully aware of self as a person and learner who is free to think clearly and creatively, actively pursue intellectual endeavors, respond ethically in a spirit of cultural competence and social justice. The program serves as a basis for graduate study, and a foundation for lifelong learning.

BSN PROGRAM

Upon graduation, a BSN student is eligible to take the State Board Examination in Nursing (NCLEX-RN) and is prepared to practice as a generalist who is able to utilize the nursing process in a variety of healthcare settings. The urban location of the university offers multiple opportunities for student involvement in many dimensions of health care and contemporary life. Clinical nursing experience is an integral part of the program and is provided at various health agencies in the area. Magee- Women's Hospital of UPMC, UPMC Mercy, various UPMC locations, VA Pittsburgh Health System (Highland Drive and University Drive), Allegheny Health Network, Pittsburgh Public Schools, and community agencies are examples. Students must provide their own transportation. Public transportation is generally available.

Purpose

The purpose of the BSN program at Carlow University is to facilitate students' ability to recognize the integrity and value of each person and to achieve the knowledge, skills and attitudes necessary to promote patient-centered care through professional nursing practice. The program prepares the baccalaureate student to practice as a generalist who is able to utilize evidence-based practice, informatics, and collaborative communication for the delivery of safe, quality care.

BSN Program Requirements:

A nursing major requires 120 credits for graduation. These credits are in courses in the nursing major, general education, support, and the liberal arts, including university Compass requirements. Students enroll in the first clinical nursing course the first semester of the sophomore year in the program following successful completion of required support courses for the major.

Prerequisites and Corequisites to Nursing:

Natural Sciences: BIO 207, BIO 208, BIO 227, BIO 307, BIO 308, and CHM 105. Social and Behavioral Sciences: PY 122; SO 152 or SO 215, MAT 115

Major Requirements:

NU 102, NU 106, NU 110, 2161/2162, NU 2171/2172, NU 223, NU 224, NU 320, NU 3121/3122, NU 3161/3162, NU 3171/3172, NU 3181/3182, NU 3191/3192, NU 4211/4212, NU 4181SL/4182, NU 4111/4112, NU 420, NU 422, NU 451, NU 415, NU 4151 and NU 463

BSN courses begin in the first or second semester of the first year and are arranged in a sequential manner, with learning experiences increasing in complexity. Courses beginning with the number 1 are first-year courses, courses beginning with 2 are sophomore-level courses, and so on.

SECOND DEGREE BSN PROGRAM

Purpose

This program is designed for those who have already completed a Bachelor's degree in another field of study. The time frame for this program is 15 months once all of the pre-requisite courses have been completed. The courses and clinical hours for this program are the same as what is required for the traditional BSN program.

Second Degree BSN Requirements:

A Bachelors' degree from an accredited college/university in a major other than nursing and a cumulative GPA of 3.0 with appropriate pre-requisite course work.

Second Degree BSN Pre-requisites:

Must be completed within the last five years: Anatomy & Physiology I w/Lab (4 Credits), Anatomy & Physiology II w/Lab (4 Credits)

Must be completed within the last 10 years: Chemistry w/Lab (4 Credits), Life Span Development (3 credits, Microbiology w/ lab (4 credits), Nutrition (3 credits, taught by a Registered Dietitian), Pathophysiology (3-4 credits), Sociology (3 credits) and Basic Applied Statistics (3 credits)

Major Requirements:

NU 102, NU 106, NU 110, NU 2161/2162, NU 2171/2172, NU 223, NU 224, NU 320, NU 3121/3122, NU 3161/3162, NU 3171/3172, NU 3181/3182, NU 3191/3192, NU 4211/4212, NU 4181SL/4182, NU 4111/4112, NU 420, NU 422, NU 451, and NU 463

BSN STEP AHEAD PROGRAM**Program Objective:**

To prepare academically qualified Carlow nursing students to take a “step ahead” of their peers as they look toward their professional future that includes graduate education and advanced practice roles.

Students who qualify for this program will earn up to 9 graduate nursing credits by the completion of their BSN degree at Carlow University.

To qualify for the Step Ahead Program, a student will:

- Apply for entry into the Step Ahead Program during the admissions process to Carlow University or at the end of the first semester of sophomore year in the Nursing program.
- Have a high School GPA of 3.5 or score 1170 on the SAT; or have cumulative GPA of 3.5 by the end of the first semester of the sophomore year at Carlow.
- Complete the skills courses (Writing, Speaking and Quantitative Reasoning) prior to starting graduate courses.
- Plan semester schedules to take 6-9 graduate credits in addition to the BSN and university core curriculum requirements in the nursing program.
- Maintain a cumulative GPA of 3.1 during the junior and senior years of the BSN program.

RN-BSN PROGRAM

Purpose

This program is designed for registered nurses seeking a BSN. The purpose of the program is to facilitate students' ability to recognize the integrity and value of each person and to achieve the knowledge, skills and attitudes necessary to promote patient-centered care to enhance professional growth, development, and refinement of professional nursing practice. The program prepares the baccalaureate student to practice as a generalist who is able to utilize evidence-based practice, informatics, and collaborative communication for the delivery of safe, quality care.

RN-BSN Program Requirements:

A current, active, valid, unrestricted nursing license as a Registered Nurse in the state or commonwealth of active current practice is required. Candidates must be a graduate of an accredited Diploma or Associate Degree Program (ADN) to include: Accreditation Commission for Education in Nursing (ACEN), or Commission on Collegiate Nursing Education (CCNE). Must have an earned cumulative GPA of ≥ 2.0 . The RN-BSN major requires 120 credits for graduation. Of this total, 30 credits are advanced standing for the RN license, 24 credits are in the nursing major, and 66 credits are in general education, support, and liberal arts, including university core curriculum requirements.

Prerequisites and Corequisites to Nursing:

University Requirements: SKW and SKC or approved equivalent.

Natural Sciences: BIO 201, BIO 202, BIO 227, and CHM 103 or CHM 105 or approved equivalent.

Social and Behavioral Sciences: PY 122; and SO 152, SO 215, or SO 251; PH 100, PH 210, PH 301 or PH 367 or approved equivalent. MAT 115 or equivalent are recommended program electives.

A minimum of a C grade must be earned in all of the nursing support and nursing courses.

Major Requirements:

NU 405, NU 412, NU 413, NU 430, NU 435, NU 437, NU 440, NU 450

RN-BSN TO MSN ACCELERATED OPTION PROGRAM

The accelerated program prepares academically qualified undergraduate Carlow nursing majors to take a fast-track approach toward their professional future that includes graduate level courses while enrolled in undergraduate studies. Students who qualify for this program may earn up to 13 master's nursing credits by the completion of their BSN degree at Carlow University. Refer to the Department of Nursing RN-BSN Student Handbook for specific policies regarding admission into and progression across the RN-BSN to MSN accelerated program curriculum.

During the RN-BSN to MSN Accelerated Option program plan of study, the student must successfully complete an undergraduate statistics course, achieve and maintain a minimum Carlow cumulative GPA of ≥ 3.0 , and achieve $\geq B$ grade in the MSN accelerated option program courses. Accelerated program students have the opportunity to apply to one of the MSN programs: NCEL, NCEL/MBA Dual Degree, or Individual Across the Lifespan (FNP) or Women's Health Nurse Practitioner (WHNP) programs and must meet the MSN admission requirements including, but not limited to: submission of a current CV, two (2) professional reference letters, philosophy of nursing, a personal goal statement for graduate nursing education, and, for admissions into the FNP and WHNP programs, must have the equivalent of one year full-time direct patient care nursing experience. Please see the Department of Nursing RN-BSN and Graduate Student Handbooks for a complete list of admission requirements.

Have a current, active, valid, unrestricted license as a Registered Nurse. The RN-BSN nursing major requires 120 credits for graduation. Of this total, 30 credits are advanced standing for RN license, 24 credits are in the nursing major, and 66 credits are in general education, support, and liberal arts, including university Compass requirements.

Prerequisites:

Undergraduate nursing and support courses and Carlow Compass courses must be completed before beginning "accelerated" MSN courses.

RN-BSN to MSN Accelerated Option Program Requirements:

Eligibility to begin the graduate courses requires the approval of your Nursing faculty advisor. Only students accepted into the RN-BSN to MSN Accelerated Option Program may take designated MSN core courses to fulfill the minimum credit (120 credit) requirement for the BSN degree. The graduate core courses must begin with NU 743, NU 738 and NU 740. Additional core courses in the accelerated option program include NU 710 and NU 748.

NU 412, NU 413, NU 430, NU 435, NU 440 and NU 450; NU 738, and NU 740, NU 742 (additional MSN course options include NU 710 and NU 748).

In order to begin the accelerated MSN courses students must:

- Have a current, valid, unrestricted license as a Registered Nurse. Clinical coursework must be completed in the Commonwealth or state of current RN licensure.
- Meet both university and clinical agency health requirements.
- Achieve and maintain a cumulative grade point average (GPA) of greater or equal to 3.0 while at Carlow University.
- Achieve a minimum grade of B in the accelerated MSN courses to continue in the accelerated program.
- If a student obtains a grade below a B in an MSN course, the student will return to complete the RN to BSN (not the accelerated option) program and may apply directly to the MSN program after earning the BSN degree.
- A grade below a B in an MSN core course must be repeated if accepted into the MSN program.

Note: an undergraduate Statistics course (e.g., MAT 115 or equivalent) is required for admission to the MSN programs.

HEALTHCARE DATA ANALYTICS AND HEALTH MANAGEMENT PROGRAMS

MAJORS

- Healthcare Data Analytics
- Health Management

HEALTHCARE DATA ANALYTICS MAJOR

From the moment you check in to a hospital or medical provider's office, you start generating information. Every interaction, every lab result, x-ray, diagnostic, prescription, diagnosis, or procedure is collected and kept safe and secure, available to you and your providers to establish a cogent medical history to better serve you. But that information can also do so much more.

It's up to the Healthcare Data Analytics specialists to use – and protect – that data in meaningful ways. It's a discipline that combines medicine, business, and information.

Medicine: One way a healthcare data analyst can use data is predictive: does your health history indicate an increased chance of something more serious? Maybe a treatment successfully used on other patients would work on your chronic condition, too. As patients continue along on whatever paths through the healthcare system, the valuable data they create can be used, anonymously, to assist in finding larger trends in the ever-changing health landscape.

Business: These trends don't just matter to the patients affected by them – they matter to the providers and insurers, too. Health data is used to make business function better, to streamline information-gathering technologies, to simplify and secure the health records themselves, or to connect better treatments to more cost-effective practices. A healthcare data analyst is also a business specialist.

Information: Data protection is more and more important with each passing day, and healthcare data professionals are at the front lines of the battle against leaks, hacks, and information mismanagement. They're the people developing and implementing the best practices in keeping patient data safe, secure, and easily accessible.

LEARNING OUTCOMES

Through the very dynamic Healthcare Data Analytics curriculum, students will gain a great level of understanding of the healthcare field, with special focus on the analytical review and use of data in other business areas. This broad, well-rounded understanding of the industry will provide the students with many opportunities in today's and future job markets. At a high level, students are expected to demonstrate proficiency in the following learning areas upon completion of the academic program:

- Applied learning is used by students to demonstrate what they can do with what they know. This is especially critical to the Healthcare Data Analytics field of study.
- Intellectual skills are used by students to think critically and analytically about what they learn, broadening their individual perspectives and experiences.
- Specialized knowledge is the knowledge students demonstrate about the Healthcare Data Analytics field of study, understanding the relevant current issues professionals are addressing today.
- Broad knowledge of the Healthcare Data Analytics field that transcends the typical boundaries of students in the first two years of higher education. This extensive level of understanding of the industry, as well as knowledge gained through the Carlow Compass, will build the foundation for moving into the business sector.
- Healthcare Data Analytics students will be a part of civic learning, which enables them to respond to social, environmental, and economic challenges at local, national, and global levels.
- All Healthcare Data Analytics students will achieve a high level of digital information literacy. This will equip students with the understanding to manage and analyze data in a responsible, safe, ethical, and effective manner. This includes using current tools, technologies, techniques, and best practices to support industry, facilitate research and solve real world problems.

HEALTHCARE DATA ANALYTICS PROGRAM POLICIES

Healthcare Data Analytics policies are explained fully in the Student Handbook. Refer to that for specific, complete information. The department reserves the right to make policy changes in the curriculum outline to address ongoing accreditation standards and/or professional regulations. The following are some selected summaries:

- Students must earn a final cumulative grade of C or higher (C- is considered unsuccessful) to successfully complete all major courses.
- A person convicted of any felony may be prohibited from licensure by the state at any time.
- If the program of study is interrupted, re-entry at a later time is dependent upon the curriculum, availability of class space, and completion of required re-entry procedures.
- Students are required to complete internships which will necessitate them to travel to the various sites.
- The department reserves the right to make changes in policies and/or the curriculum outline. In order for the student to be eligible for graduation from the program they must complete all the following:
 - Successful completion of all curriculum courses with a minimum grade of C or higher. (Grades of C- and below are considered unsuccessful completion of a course.)
 - Successful completion of all university residency requirements as reflected in the university catalog.
 - Successful completion of all competencies contained in the student handbook.
 - The student must attain a cumulative academic average of 2.0 GPA and the student must work successfully to complete 67% of his/her cumulative credits attempted by the completion of the degree.
 - Students must officially apply to graduate and must complete the 120 credits reflected in the program curriculum.
 - All students must successfully complete and receive verification by the Office of the Registrar of their fulfillment of all course requirements.

Requirements:

HIM 101, HIM 102, HIM 202, HIM 203, HIM 204, HIM 205, HIM 206, HIM 301, HIM 302, HIM 303, HIM 401, HIM 402, HIM 403, HIM 404, HIM 405, HIM 406, HIM 407, IT 250SL, and IT 372

HEALTH MANAGEMENT MAJOR

The Health Management major provides the educational background needed to be competitive in today's healthcare market and provides a solid background in business to complement the health services knowledge. This program prepares students to work in positions in the following areas: health care advocacy, long-term care, health care institutions, insurance, or physicians' practices.

Requirements:

BSM-103, BSM-104, BSM-202, BSM-204, BSM-226, BSM-301, BSM-305, BSM-306, BSM-410, BSM-460, IT-143, IT-200, IT-242, IT-250SL, PH-210, MAT-106 or MAT-115, 1 Biology or Chemistry course, 1 Economics course, and 6 additional credits of electives in consultation with your advisor.

RESPIRATORY CARE PROGRAM

MAJORS

- Respiratory Care

PROGRAMS

- Respiratory Care
- Respiratory Care Degree Completion

RESPIRATORY CARE MAJOR

Respiratory Care is the process of utilizing academic and clinical training to teach students mastery of specialized respiratory skills, which are required in the management and treatment of a variety of patients with cardiopulmonary disorders. Respiratory therapists will treat a large variety of patients including those with asthma, emphysema, cystic fibrosis, respiratory failure, black lung, sleep apnea, cardiac arrest, premature neonates, and more. Respiratory therapists are expected to be active clinicians that identify, analyze, interpret, and implement appropriate treatments to improve the management and outcomes with patients.

Carlow's Respiratory Care program provides a unique, specialized, academic, and technical education that will prepare students to be an integral member of an exclusive healthcare team responsible for performing essential respiratory care functions. The program consists of eight traditional academic semesters and requires the successful completion of 120 credits of study in the designed curriculum. Students will master a variety of specialized skills and be trained to be active clinicians in all areas of respiratory practice. Upon the successful completion of all graduation requirements, the student will be awarded a Bachelor of Science in Respiratory Care and will be eligible to participate in the National Board of Respiratory Care Examinations.

LEARNING OUTCOMES

1. The student will demonstrate proficient knowledge and application of mechanical ventilation and therapeutic adjustments.
2. The student will practice respiratory therapy according to established professional and ethical standards.
3. The student will be able to develop, evaluate, modify, and execute respiratory care treatments.
4. The student will perform, and assist in the performance of, prescribed diagnostics studies and accurately assess the obtained data to determine proper treatment methodologies within respiratory care.
5. The student will administer therapeutic medical gases.
6. The student will be able to proficiently interpret and analyze respiratory information and data.

ACCREDITATION

The Bachelor of Science Respiratory Care program (CoARC # 200617) at its Pittsburgh, PA, Campus holds Provisional Accreditation from the Commission on the Accreditation for Respiratory Care (www.coarc.com). This status signifies that a program that has been granted an Approval of Intent has demonstrated sufficient compliance to initiate a program in accordance with the standards through the completion and submission of an acceptable Provisional Accreditation Self Study Report (PSSR), completion of an initial onsite visit, and other documentation required by the CoARC. The conferral of Provisional Accreditation denotes a new program that has made significant progress towards meeting the Standards of Accreditation. The program will remain on Provisional Accreditation until achieving Continuing Accreditation. It is recognized by the National Board for Respiratory Care (NBRC) toward eligibility to the Respiratory Care Credentialing Examination(s). Enrolled students completing the Provisionally Accredited Respiratory Care program at Carlow University are considered graduates of a CoARC accredited program.

Commission on Accreditation of Respiratory Care
1248 Harwood Road
Bedford, TX 76021-4244
P: 817.283.2835
F: 817.510.1063
E: [www.coarc.com](mailto:info@coarc.com)

RESPIRATORY CARE PROGRAM POLICIES

Respiratory Care policies are explained fully in the Respiratory Care Program Manual and Student Handbook. Refer to them for specific, complete information. The Respiratory Care Department reserves the right to make policy changes in the curriculum outline to address ongoing accreditation standards and/or professional regulations.

The following are some selected summaries:

- Respiratory Care students must earn a final cumulative grade of C or higher (C- is considered unsuccessful) to successfully complete all respiratory care (RC) courses.
- A person convicted of any felony may be prohibited from licensure by the state at any time.
- If the program of study is interrupted, re-entry at a later time is dependent upon the curriculum, availability of

- class space, and completion of required re-entry procedures.
- Respiratory Care students will be required to complete clinical rotations, which will require students to travel to the clinical sites.
- All respiratory care students are required to pass a physical exam, background checks, fingerprints, drug screens, as well as maintain professional liability insurance, immunizations, CPR certification and other requirements as described in the Respiratory Care Program Manual and Student handbook. The Respiratory Care Department reserves the right to make changes in policies and/or the curriculum outline. In order for the student to be eligible for graduation from the Respiratory Care program they must complete all the following:
 - Successful completion of all respiratory care didactic, laboratory, and clinical courses in the program curriculum with a minimum grade of C or higher. (Grades of C- and below are considered unsuccessful completion of a course.)
 - Successful completion of all university residency requirements as reflected in the university catalog.
 - Successful completion of all respiratory care competencies contained in the student handbook.
 - The student must attain a cumulative academic average of 2.0 GPA and the student must work successfully to complete 67% of his/her cumulative credits attempted by the completion of the degree.
 - Students must officially apply to graduate and must complete the 120 credits reflected in the program curriculum.
 - All students must successfully complete and receive verification by the Office of the Registrar of their fulfillment of all course requirements.

Requirements:

RC 100, RC 200, RC 201, RC 221, RC 240, RC 250, RC 251, RC 280, RC 290, RC 305, RC 3100, RC 335, RC 3200, RC 321, RC 355, RC 356, RC 380, RC 381, RC 4100, RC 4200, RC 440, RC 455, RC 456, RC 480, RC 490

Support Courses:

- BIO 157 (OR BIO 110), BIO 207 (OR BIO 201 OR 205), BIO 208 (OR BIO 202 OR 206), CHM 105 (OR CHM 111/113), PH 210, PY 122

RESPIRATORY CARE DEGREE COMPLETION PROGRAM

PROGRAM OVERVIEW

The Bachelor of Science in Respiratory Care Degree Completion program is designed for working Respiratory Therapists who desire to advance their education and obtain a Bachelor of Science degree. The courses within this program are delivered through 100% online instruction by experts in the fields of academia and respiratory care. The curriculum is designed to build upon the skills of credentialed practitioners who wish to broaden their education to prepare for management/leadership positions and advanced respiratory practice. Students will explore a comprehensive specialized curriculum targeted to enhance knowledge in numerous areas such as Evidence Based Practice, Enhanced Theories in Respiratory Care, and Leadership / Management Strategies in Respiratory Care.

LEARNING OUTCOMES

The student will be able to:

- Produce a strategic plan for an effective operational respiratory care department.
- Explain and identify innovative professional management strategies.
- Acquire leadership strategies for utilization in respiratory care.
- Display patient safety and quality improvement concepts in respiratory care.
- Evaluate medical research critically.
- List and describe the major pathophysiological functions of the human body.
- Describe the major ethical issues one must consider when working in a medical environment.
- Determine and apply the appropriate statistical procedures utilized in medical research.
- Define, describe, categorize, and differentiate respiratory pharmacology.
- Apply principles of evidence-based medicine to determine clinical diagnoses, and formulate and implement acceptable treatment modalities.

RESPIRATORY CARE PROGRAM POLICIES

The Respiratory Care Department reserves the right to make policy changes to address ongoing professional educational requirements/changes.

The following are selected summaries for the Respiratory Care Degree Completion Program:

- All courses are delivered in a 100% online format.
- Program requires a minimum of 120 credits including 10 Respiratory Care courses and possible Carlow Compass courses not satisfied by transfer.
- Each student will have their transcript individually evaluated to determine the number of credits successfully transferred into Carlow University.
- Courses are delivered in an asynchronous format. (There NOT a predetermined class time. This allows for working RT's to complete course work at times convenient to them.)
- Respiratory Care students must earn a final cumulative grade of C or higher (C- is considered unsuccessful) to successfully complete all respiratory care (RC) courses. Students may reattempt a course in an effort to obtain the minimum of C grade or higher.
- For enrollment consideration, potential candidates must contain an active CRT or RRT credential, graduated with an A.S. in Respiratory Care from a CoARC approved Respiratory Care program, and possess a minimum GPA of 2.0.
- The Respiratory Care Department reserves the right to make changes in policies and/or the curriculum outline.
- The student must attain a cumulative academic average of 2.0 GPA and the student must work successfully to complete 67% of his/her cumulative credits attempted by the completion of the degree.
- Students must officially apply to graduate and must complete the 120 credits reflected in the program curriculum plan.
- All students must successfully complete and receive verification by the Office of the Registrar of their fulfillment of all course requirements.
- Condensed eight-week course format, which allows for accelerated degree completion.

Requirements:

RC 117, RC 127, RC 207, RC 217, RC 227, RC 277, RC 307, RC 317, RC 327, and RC 407

COLLEGE OF HEALTH AND WELLNESS COURSE DESCRIPTIONS

BSN PROGRAM

NU 102 Professional Issues

This course will focus on the very rudiments of the nursing profession. The student will be introduced to the history, philosophy, processes and the multiple roles involved in nursing practice. The student will be asked to provide assignments that are introspective and start the foundation on which to assess personal values and understand professional responsibilities in nursing. Discussions will involve current issues related to health care: socioeconomics, environments, politics, and known risk behaviors/modifications (QSEN) in theory before clinical experience. **1 credit (1 theory, 0 clinical)**

PREREQUISITE: NURSING MAJORS ONLY.

NU 106 Nutrition

Nutrition and the nursing role in health promotion and disease prevention for individuals, families and groups throughout the life span are emphasized. Food needs for energy (protein, fat, carbohydrate, vitamins, and minerals) will be considered in relation to maintaining nutritional status in wellness and disease states. Nutritional assessments and patient care interventions related to nutrition will be emphasized. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: NURSING MAJORS ONLY.

NU 110 Wellness across the Adult Lifespan

This required freshman-level theory course concentrates on the promotion of health and prevention of disease with individuals, families, groups, and communities across the adult lifespan. The primary focus of this course is the adult population in community settings. The emphasis is on nursing care that addresses the impact of personal, environmental, behavioral, financial, and cultural influences on health outcomes. Current issues, trends, and research relevant to professional nursing practice roles, ethical issues, and health advocacy/policy issues are addressed. **3 credits (3 theory, 0 clinical)**

clinical)

PREREQUISITES: NURSING MAJORS ONLY.

NU 223 Pharmacology in Nursing I

This is an introduction to nursing pharmacology that integrates the concepts of basic pharmacodynamics. A focus is on medication history taking techniques, routes of administration, and legal regulations. **1 credit (1 theory, 0 clinical)**

PRE-REQUISITES: NURSING MAJORS ONLY, CHM 105; COREQUISITES: BIO 207, BIO 227, AND NU 2161/2162.

NU 224 Pharmacology in Nursing II

A presentation of key content areas to conceptualize the important components of nursing pharmacology related to pharmacokinetics, pharmacogenomics, and physiology. The focus is on the major drug groups in terms of: indications, mechanisms of action, drug effects, and contraindications. The principles of altered pharmacodynamics relative to age and ethnicity are included. Specific nursing responsibilities related to drug administration are emphasized, including medication calculations. **3 credits (3 theory, 0 clinical)**

PREREQUISITES: COMPLETION OF ALL FIRST-YEAR NURSING COURSES, BIO 207, BIO 227, NU 2161/2162, AND NU 223; COREQUISITES: BIO 208, NU 2171/2172

NU 2161/2162 Health Assessment and Fundamentals

This theory/ clinical course introduces the student to the process of health assessment based on the principles of anatomy and physiology necessary to meet the needs of individuals throughout the lifespan. The fundamentals of direct patient-centered care using the nursing process to guide safe, competent, legal, ethical, and professional nursing practice will be introduced. Students will examine individual and family roles across diverse populations. Students are afforded opportunities in simulation and clinical settings to apply assessment and communication skills while beginning to implement basic nursing care interventions. **4 credits (3 theory, 1 clinical)**

PREREQUISITES: COMPLETION OF ALL FIRST-YEAR LEVEL NURSING COURSES; COREQUISITES: BIO 207, BIO 227, AND NU 223.

NU 2171/2172 Health Promotion and Disease Prevention

Health promotion and disease prevention are emphasized in this theory/clinical course. Students will have opportunities to provide beginning level direct, holistic patient-centered care utilizing the framework of the nursing process to guide safe, competent and professional nursing practice. This care is directed toward providing health promotion, disease prevention and therapeutic and restorative care to adults. Students will have opportunities to expand upon their knowledge and skills related to therapeutic communication skills and basic nursing care interventions with diverse populations. **4 credits (3 theory,**

1 clinical)

PREREQUISITES: COMPLETION OF ALL FIRST-YEAR NURSING AND SUPPORT COURSES, BIO 207, BIO 227, NU 2161/2162, NU 223; COREQUISITES: BIO 208 AND NU 224. For 2nd degree students, NU 102 and 110 are prerequisites or corequisites.

NU 320 Nursing Research

This course is 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. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: COMPLETION OF ALL SOPHOMORE-LEVEL NURSING COURSES, MAT 115.

NU 3121/3122 Neuropsychiatric and Mental Health Nursing

This required junior-level theory/clinical course is concerned with the provision of safe, quality, patient-centered mental health care with individuals, families, groups, and communities in a variety of healthcare settings. One focus is on nursing care that promotes optimal mental health functioning. A second is on nursing care that assists persons experiencing neuropsychiatric disturbances that negatively impact 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, ethical issues, and mental health advocacy/policy issues are addressed. **4 credits (3 theory, 1 clinical)**

PREREQUISITE: COMPLETION OF ALL SOPHOMORE LEVEL COURSES.

NU 3161/3162 Nursing Care of Children and Adolescents

This junior-level theory/clinical course focus is on the bio-psycho-social needs of infants, children, and adolescents using a family-centered care approach. The emphasis is on the nurse's role in health promotion, prevention, therapeutic and restorative care to children and adolescents from diverse cultures in a variety of settings, based on nursing theories and evidence-based data. **4 credits (3 theory, 1 clinical)**

PREREQUISITE: COMPLETION OF ALL SOPHOMORE LEVEL NURSING COURSES.

NU 3171/3172 Women's Health and Neonatal Nursing

This junior-level theory/clinical course focuses on the nursing care needs of women across the lifespan and care of the mother/neonate dyad in clinical and community settings. Emphasis is placed on patient-centered care of women from adolescence through older adulthood. The impact of pregnancy and childbirth is highlighted. Health promotion of the mother/neonate dyad and the developing family is emphasized. Gynecologic topics and the impact of gender on select disorders are discussed. Safe, competent, and quality nursing care; and political, financial and regulatory systems that impact the health of women and neonates are examined. **4 credits (3 theory, 1 clinical)**

PREREQUISITE: COMPLETION OF ALL SOPHOMORE-LEVEL NURSING COURSES.

NU 3181/3182 Nursing Care of Adults I

This junior-level theory/clinical course is an examination of the professional nursing care of adults experiencing acute and chronic health alterations specific to the cardiovascular, respiratory, neurological and renal systems. Emphasis is placed on the use of the nursing process to prioritize, implement and evaluate nursing care based on the physiologic, psychosocial, educational and cultural needs of this population. Additional foci include advocating for individuals to promote positive health outcomes, collaborating with interdisciplinary health professionals, practicing within legal and ethical frameworks, and identifying current health policies that relate to each unit of study. **4 credits (3 theory, 1 clinical)**

PREREQUISITES: COMPLETION OF ALL SOPHOMORE LEVEL NURSING COURSES; COREQUISITE: BIO 307.

NU 3191/3192 Nursing Care of Adults II

This junior-level theory/ clinical course is an examination of 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 prioritize, implement and evaluate nursing care based on the physiologic, psychosocial, educational and cultural needs of this population. Additional foci include advocating for individuals to promote positive health outcomes, collaborating with interdisciplinary health professionals, practicing within legal and ethical frameworks, and identifying current health policies that relate to each unit of study. **4 credits (3 theory, 1 clinical)**

PREREQUISITE: COMPLETION OF ALL SOPHOMORE LEVEL NURSING COURSES; COREQUISITE: BIO 308.

NU 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**

NU 420 Legal, Ethical, and Political Issues in Health Care

The focus is on legal, ethical and political issues in health care. Legal and ethical principles that guide health care practice are discussed. The student explores the means of delivering care that falls within legal, ethical and culturally competent frameworks. Political forces that influence change in contemporary health care are examined. Global differences and their relationship to American health care practices are explored. **2 credits (2 theory, 0 clinical)**

PREREQUISITE: COMPLETION OF ALL JUNIOR LEVEL NURSING COURSES.

NU 451 Introduction to Epidemiology

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, attributable risk, and relative risk ratio) 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 a description and application of epidemiology. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: COMPLETION OF ALL JUNIOR LEVEL NURSING COURSES.

NU 4111/4112 Leadership into Professional Nursing

This course synthesizes theory and practical nursing experience into nursing practice that is safe, evidence-based, and reflective of a broad-based liberal arts education. It is the merging of knowledge and experience, evaluation of self, and the ability to provide safe and effective patient-centered care. A capstone project (NU 463 Evidence-Based Practice Capstone) will be incorporated into the practicum experience that focuses on development of an evidence-based practice change proposal arising from/within the practicum setting. Also addressed are the issues that affect current nursing care. This course provides an insightful and evaluative transition to professional practice. **4 credits (2 theory, 2 clinical)**

PREREQUISITE: NU 4211/4212; COREQUISITES: NU 422 AND NU 463.

NU 415/4151 NCLEX Review/NCLEX Seminar 2

NCLEX Review and NCLEX Seminar 2. **Pass/Fail. 1.5 credits each**

NU 4181SL/4182 Community Health Nursing

This required senior-level nursing course focuses on the health of the community and various community health nursing roles through which the healthcare 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 processes, health education, evidence-based practice, fiscal responsibility, and public health issues and practices are discussed, so that the student can apply the nursing process in distributive healthcare settings. **4 credits (3 theory, 1 clinical)**

PREREQUISITE: COMPLETION OF ALL JUNIOR-LEVEL NURSING COURSES.

NU 4211/4212 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. **5 credits (3 theory, 2 clinical)**

PREREQUISITE: COMPLETION OF ALL JUNIOR-LEVEL NURSING COURSES. For 2nd degree students, NU 3121/3122 and NU 320 are prerequisites or corequisites.

NU 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. **2 credits (2 theory, 0 clinical)**

PREREQUISITE: NU 4211/4212.

NU 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 Health Care 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. **1 credits (0 theory, 1 clinical)**

PREREQUISITES: NU4211/NU4212 COREQUISITE: NU 4111/4112 AND NU 422.

RN-BSN PROGRAM

NU 405 Nursing Leadership and Management for the RN

This required course focuses on the concepts of nursing leadership and the management skills that are as important to professional nurses as clinical knowledge and skills. Although management theory and process is universal and its principles are used in a variety of organizational settings, this course will focus on the process in nursing administration and the management of health care units, agencies, and workers. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: NU 412 AND NU 413.

NU 412 Professional Nursing Concepts and Practice for the RN

This course explores the wide variety of roles for professional nurses in today's dynamic and evolving healthcare delivery system. Areas of knowledge that professional nurses require in order to be effective in the changing healthcare environment will be addressed. The format of the courses requires the student to be an active participant in the learning process by contributing to discussion of the various topics. **3 credits (3 theory, 0 clinical)**

PREREQUISITE OR COREQUISITE: NU 413.

NU 413 Writing Skills Lab for the RN

This senior course focuses on the development of writing skills to professional levels of competency. This includes the use of APA format and information technology to produce written assignments that meet the professional practice standards of Nursing. A culmination of tools, rubrics, and mechanics will be incorporated throughout this course, emphasizing written communication and information literacy skills that are essential to baccalaureate Nursing education. Use of Learning Management System (LMS) will actively engage students in evidence-based practice and writing activities that include research database searches, discussion boards, blogs, and wiki media. **1 credit (1 theory/0 clinical)**

COREQUISITE: NU 412

NU 430 Research/Informatics/Decision-Making

This required senior level course is designed to assist the bachelor's degree-prepared nurse to be a consumer of and beginning participant in the nursing research process. It will also introduce the student to the use of information technology in the research process. Emphasis is placed on the development of the decision-making skills required to critically appraise published investigations and to utilize research findings to effect positive changes in the health status of individuals and groups through evidence-based clinical practice. **4 credits (4 theory, 0 clinical)**

PREREQUISITE: NU 412 AND NU 413.

NU 435 Capstone: Evidenced Based Practice

This capstone project is a culmination of the learning experiences of the student in the RN to BSN Nursing program. This course focuses on the Quality and Safety Education for Nurses (QSEN) Competencies, Knowledge, Skills, and Attitude framework. The student will develop a written proposal for a quality improvement project derived from evidence-based practice that will enhance clinical outcomes. The proposal focuses on resolution of an issue/problem significant to professional nursing which 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.

2 credits (1.75 theory, .25 clinical)

PREREQUISITE: NU 405, NU 412, NU 413, NU 430, NU 437; COREQUISITE: NU 440 or NU 450

NU 437 (POL 437) Legal, Ethical and Political Considerations for the RN

This course focuses on the legal, ethical, and political issues that registered nurses encounter in the current healthcare environment. Legal and ethical principles that guide professional nursing practice are discussed. Political forces that influence change in contemporary health care and healthcare reform are examined. The leadership roles of professional nurses in these areas are explored. **3 credits (3 theory, 0 clinical)**

PREREQUISITE: NU 412 AND NU 413.

NU 440 Advanced Nursing Care for the RN

This required course is designed for the experienced RN. Students will expand their knowledge of human pathophysiology, pharmacotherapy, and physical assessment. Students will apply prior knowledge of health promotion, patient education, informatics, and evidence-based practice. Students take an active role in developing disease-specific health education. Presentation of course content is conducted through the use of various teaching methodologies. **4 credits (4 theory, 0 clinical)**

PREREQUISITE: NU 412 AND NU 413.

NU 450 Community Health Nursing

This course will provide students with the opportunity to identify, discuss, and evaluate current issues related to community health nursing and public health practice. Students will utilize the nursing process in assisting individuals and groups, as part of the community, to achieve a mutually agreed upon health-related goal. Instructional methods include: lectures, AV presentations, discussion, guest lecture presentations, readings, and implementation of a community health education project.

4 credits, (3 theory, 1 clinical)

PREREQUISITE: NU 412 AND NU 413.

HEALTHCARE DATA ANALYTICS

HIM 101 Introduction to Health Informatics and Information Management

This course introduces the health information management profession, the role of health informatics, and the role of technology in today's healthcare environment. Students will learn about the structure of the U.S. Healthcare system, key legal and ethical issues in health informatics and information management, cultural competence and diversity and forces impacting the state of the U.S. healthcare system. **3 credits**

HIM 102 Medical Terminology

This course provides students with a working knowledge of medical terminology by exploring the root words, suffixes and prefixes of the vocabulary used in healthcare settings. Students review the nervous, skeletal, cardiovascular, muscle and other major systems of the human body, and they discuss terms related to physiology, anatomy, and pathological conditions.

2 credits

HIM 202 Electronic Health Records

This course reviews the many issues and challenges related to the current EHR landscape. Content includes current and planned activities and evidence based in quality, information technology design and development opportunities, clinical terminologies, EHR and analytics platforms and security concerns. There is also a focus on the use of information assets and best practices related to data analytics as it relates to health services and health and wellness. **3 credits**

HIM 203 Clinical Classification Systems I

This is the first of two courses that focus on clinical terminologies, standards, and documentation as it relates to both clinical care and administrative viability of the health system. This course introduces students to clinical classification systems, standard terminologies and standards for health documentation compliance. Students are also introduced to health data analytics and the use of viable data sets. **3 credits**

HIM 204 Clinical Classification Systems II

This is the second of two courses that focus on clinical terminologies, standards, and documentation as it relates to both clinical care and administrative viability of the health system. This course focuses on the clinical, financial and population health/research implications of medical coding as well as the policy and leadership implications of clinical documentation improvement initiatives. **3 credits**

PRE-REQUISITE: HIM 203

HIM 206 Legal Aspects of Electronic Health Records

This course explores laws, regulations, and policies that govern the management of electronic health record platforms and data. Principles such as security, privacy, and confidentiality are discussed in the content of the increasingly wide use of electronic records in health economy. Education of stakeholders and ethical implications of handling health information are reviewed. **3 credits**

HIM 301 Health Informatics Topics

This course is a strategic overview of how informatics systems and data are utilized in healthcare and health services. Topics such as information governance, information access, and how organizations secure data are addressed. Leadership topics such as how organizations leverage informatics solutions to improve outcomes are also discussed. **3 credits**

HIM 302 Health Informatics and Analytics

This course introduces learners to the practice of business intelligence and data analytics as they relate to health and health services. The course focuses on the concepts related to business intelligence applications in informatics as well as tools and technologies used to perform data visualization and data analysis. The course also addresses leadership level topics related to health exchange and the technical management of data assets. **3 credits**

HIM 303 Health Data Statistics

This course reviews the health information management quantitative concepts related to calculations that are commonly used in hospital, physician, and community settings. Statistical concepts related to both descriptive and inferential statistics are also addressed. Learners also work with detailed health information analytics concepts such as data dictionary development and the relationship between data management and determinants of health quality including financial and clinical aspects of health outcomes. **3 credits**

RESPIRATORY CARE

RC 100 Introduction to Respiratory Care Principles

This introductory course serves as the entry point for all traditional respiratory care students. The course is designed to introduce the students to the basic fundamental principles of respiratory care. Topics to be discussed include: the historical development of the respiratory profession and organizational structure, fundamental principles of health care reimbursement, role of the respiratory care practitioner, community respiratory health, health promotion and education, basic legal and ethical aspects of respiratory care practice, utilization of physical principles within respiratory care, provision of services for and management of patients with special needs and transmissible diseases, infection control considerations, medical gas therapy, aerosol therapy, basic clinical lab values, nutrition and various RT math skills. Students will complete preparations to clinical practice, including a review of the fundamental principles of evaluating current scientific literature, proper charting, review OSHA and HIPAA regulations, and accurate completion of all paperwork required to begin clinical rotations. As part of this course, students will also learn to develop cognitive and affective functions that are recognized in emergency situations, including the performance of basic life support procedures. Certification from the American Heart Association in BLS for Health Care providers is rewarded upon successful completion. Lastly, students will initiate a basic discussion of cardiopulmonary anatomy and physiology, and progress to the introduction of the patient assessment. **3 credits**

PREREQUISITES: CHM 105 (OR CHM 111/113), BIO 157 (OR BIO 110), AND BIO 207 (OR BIO 201 OR 205)

RC 200 Respiratory Care Equipment I

This course is designed to instruct the student's basic theory of respiratory care equipment found within the clinical setting. Topics discussed include: basic respiratory equipment operating principles, humidity and aerosol therapy, bronchial hygiene techniques, tracheal suctioning, airways and maintenance, patient monitoring devices, lung expansion equipment and techniques, the production, storage, and delivery of medical gases, and medical gas therapy. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 100-LEVEL SUPPORT COURSES AND RC 100; COREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 250, AND RC 221

RC 250 Respiratory Care Equipment Lab I

This course is designed to allow the students opportunity to apply information from Respiratory Care Equipment I in a laboratory setting. The student will practice techniques for administering nebulizers, oxygen set-ups, incentive spirometry, intermittent positive pressure breathing, chest physical therapy, use of flutter valves, peak flow meters, and other respiratory modalities. **1 credit**

PREREQUISITE: RC 100; COREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, AND RC 221

RC 221 Comprehensive Patient Management

This course is designed to provide the student a comprehensive understanding of various aspects of patient care encountered within respiratory practice. Topics to be discussed include: patient interview process, physical assessment of the patient, chest X-ray evaluation, EKG assessment, clinical laboratory tests, techniques in the diagnosis and treatment of pulmonary disease,

patterns of cardiopulmonary dysfunction, and arterial blood gas sampling and interpretation. The student will also initiate the physiological approach to the etiology, management, and prognosis of the various respiratory diseases. **3 credits**

PREREQUISITES: RC 100; COREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, AND RC 250.

RC 201 Respiratory Care Equipment II

This course is designed to provide the students with the basic theory of respiratory care equipment utilized in airway management. Students will master concepts concerning the differentiation, selection, application and discontinuation of endotracheal tubes, tracheostomy tubes and other artificial airway devices. Students will also be introduced to the equipment needed and application for intubation and extubation procedures. This course introduces students to basic invasive and noninvasive mechanical ventilation machines and patient circuits. **3 credits**

PREREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, RC 250, AND RC 221; COREQUISITES: RC 240, RC 251, RC 280, AND RC 290.

RC 251 Respiratory Care Equipment Lab II

This course is designed to allow the students opportunity to apply information from Respiratory Care Equipment II in a laboratory setting. The student will practice techniques for intubation, extubation, tracheostomy procedures and trach care, use of alternative airway devices, and proper set-up of a mechanical ventilator and patient circuit. **1 credit**

PREREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, RC 221, AND RC 250; COREQUISITES: RC 201, RC 240, RC 280, AND RC 290.

RC 240 Cardiopulmonary Anatomy and Physiology

This course is designed to provide the students with information about the anatomy and physiology of the cardiopulmonary system including the pulmonary system, circulatory system, oxygen transport, diffusion, applied physiology of gas laws, physical principals of gases found in the respiratory system and how they relate to other body systems. Students will be instructed on extensive respiratory physiologic considerations, including normal and abnormal lung alterations within cardiopulmonary diseases. **3 credits**

PREREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, RC 221, AND RC 250; COREQUISITES: RC 201, RC 251, RC 280, AND RC 290.

RC 280 Respiratory Care Pharmacology

The students will be instructed on the pharmacodynamics of respiratory medication administration including the pharmaceutical, pharmacokinetic, and pharmacodynamics phases. In addition, the course covers the extensive principals of respiratory pharmacology including the application, dispensing, dosing, uses and effects of pharmacological agents administered by respiratory care practitioners. Students will also be instructed on pharmacological agents administered for cardiac and renal systems as these apply to respiratory care. **3 credits**

PREREQUISITES: BIO 208 (OR BIO 202 OR 206), RC 200, RC 221, AND RC 250; COREQUISITES: RC 201, RC 240, RC 251, AND RC 290.

RC 290 Respiratory Care in Alternate Settings

This course is designed to instruct the students on appropriate delivery of respiratory care in alternative settings such as home care, long term acute facilities, rehabilitation centers, cardiopulmonary exercise programs, sleep labs, hyperbaric oxygenation, and smoking cessation counseling. The students will receive instruction on home care equipment, therapeutic modalities, patient selection, discharge planning, patient education, and development of a cardiopulmonary rehabilitation program. **3 credits**

PREREQUISITES: BIO 208, RC 200, RC 250, AND RC 221; COREQUISITES: RC 201, RC 240, RC 251, AND RC 280.

RC 3100 Respiratory Care Clinical Education Practicum I

Clinical rotations will allow the student to apply classroom theory in the real world. Students will be exposed to various aspects of patient and cardiopulmonary care. This course provides students with practical clinical experience in the general patient care setting at an approved off-campus clinical facility. The clinical training plans for this rotation will include caring for patients receiving drug aerosol treatments, lung expansion, pulmonary hygiene, and/or oxygen therapy, chart review, chart documentation, MDI administration, and patient monitoring. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 200-LEVEL SUPPORT AND RC COURSES; COREQUISITES: RC 305 AND RC 335.

RC 305 Cardiopulmonary Pathophysiology

The student will be expected to master various pulmonary, cardiovascular, and neurological disorders as these impact cardiopulmonary disorders in terms of definition, etiology, pathogenesis, pathology, pathophysiology, clinical manifestations, monitoring, diagnosis, and treatment. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 200-LEVEL SUPPORT AND RC COURSES; COREQUISITES: RC 3100 AND RC 335.

RC 320 Respiratory Care Clinical Education Practicum II

This clinical course provides the students with clinical education exposure to various aspects of patient and cardiopulmonary specialty areas at approved off-campus clinical facilities. The clinical training plans for this rotation will include administration and review of respiratory care procedures in various alternative settings, such as home care, pulmonary rehabilitation, long-term acute facilities, sleep lab, hyperbaric oxygenation, and pulmonary function laboratory. The clinical director, through site visitation, will supervise and evaluate clinical activities. **4 credits**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 321, RC 355, RC 356, RC 380, AND RC 381.

RC 321 Advanced Patient Management

The students will be instructed in this course through a discussion of advanced cardiopulmonary monitoring procedures and techniques utilized in the management of patients in the critical care setting. Topics include medical emergencies, radiographic imagery, bronchoscopy procedures, EKG assessment and interpretation, hemodynamic techniques and monitoring, interpretation of obtained hemodynamic values, Swan-Ganz catheter indications and applications, blood pressure monitoring, and arterial line indications and applications. **3 credits**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 3200, RC 355, RC 356, RC 380, AND RC 381.

RC 335 Cardiopulmonary Diagnostic Processes

The students are instructed on the assessment, performance, and interpretation of bedside spirometry and pulmonary function studies including: lung mechanics, lung volumes, diffusion studies, and other pulmonary measurements such as bronchial challenge testing, exercise testing, and ABG analysis. Students will also be instructed on proper pulmonary rehabilitation techniques and procedures. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 200-LEVEL SUPPORT AND RC COURSES; COREQUISITES: RC 3100 AND RC 305.

RC 355 Mechanical Ventilation Concepts I

This course contains a comprehensive overview of mechanical ventilation concepts that encompasses ventilator settings, alarm parameters, indications, contraindications, patient selection, scenario-based application, review of pneumatic principles, physiological effects of positive pressure, and complications associated with mechanical ventilator implementation. **3 credits**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 3200, RC 321, RC 356, RC 380, AND RC 381.

RC 356 Mechanical Ventilation Concepts Lab I

The students are expected to utilize the relevant laboratory equipment and concepts in support of the mechanical ventilation concepts course (RC 355). Procedures emphasized include: initial ventilator set-up for invasive and non-invasive ventilation, patient/ventilator system assessment techniques, proper circuit changes and administration of aerosols to ventilated patients. The basic principles and techniques of neonatal and pediatric ventilation are also discussed. **1 credit**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 3200, RC 321, RC 355, RC 380, AND RC 381.

RC 380 Neonatal and Pediatric Respiratory Care I

This course will instruct students to master concepts relating to: normal and abnormal fetal growth and development, fetal gas exchange and circulation, the process of neonatal delivery, and common neonatal and pediatric pulmonary disease processes. Also discussed are the anatomical and physiological changes that occur with fetal and neonatal transition. Students will develop a comprehensive strategy in the diagnosis, interpretation, monitoring, and treatment of breathing disorders identified in the neonatal and pediatric patient. **3 credits**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 3200, RC 321, RC 355, RC 356, AND RC 381.

RC 381 Neonatal and Pediatric Respiratory Care Lab I

The students will be instructed on the respiratory laboratory equipment commonly encountered in the neonatal and pediatric environments. Students will be instructed and participate in a lab setting with emphasis on the skills related to capillary heel sampling, transcutaneous monitoring, apnea monitoring, oxyhoods, isolettes, and neonatal resuscitation. All lab techniques and concepts are in support of the materials presented in the neonatal and pediatric respiratory care I (RC 380) course. **1 credit**

PREREQUISITES: RC 3100, RC 305, AND RC 335; COREQUISITES: RC 3200, RC 321, RC 355, RC 356, AND RC 380.

RC 4100 Respiratory Care Clinical Education Practicum III

This course provides students with practical clinical experience in an approved off-campus clinical site performed in a critical care arena. The clinical training plans for this rotation will include initiation respiratory therapy skills in the intensive care setting including EKG assessment and basic ventilator management. Students will be instructed on the initiation of ventilation support including patient selection, indications, contraindications, hazards, ventilator set-up and optimal setting selection. The clinical director, through site visitation, will supervise and evaluate clinical activity. **4.5 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 300-LEVEL RC COURSES; COREQUISITES: RC 455, RC 456, AND RC 440.

RC 440 Microbiology for Respiratory Care

This course covers the classifications, morphology, cultivation, and inhibition of microorganisms commonly found within healthcare environments. Emphasis is on bacteriology. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 300-LEVEL RC COURSES; COREQUISITES: RC 455, RC 456, AND RC 4100.

RC 455 Mechanical Ventilation Concepts II

This course is a continuation of Mechanical Ventilation Concepts I (RC 355). Areas of discussion include: review of basic modes, effects and complications, stabilization and weaning, advanced modes/forms (CV, HFJV, IRV, liquid ventilation, HFOV) of mechanical ventilation, ventilator graphics, nitric oxide, renal and cardiac impairment considerations. The students will also be instructed on all ventilator graphics and the interpretation and correction of abnormal graphic displays. **3 credits**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 300-LEVEL RC COURSES; COREQUISITES: RC 440, RC 456, AND RC 4100.

RC 456 Mechanical Ventilation Concepts Lab II

The students are expected to utilize the relevant laboratory equipment and concepts in support of the Mechanical Ventilation Concepts II (RC 455) course. Procedures emphasized include: assessment and troubleshooting of ventilator graphics, patient positioning techniques, advanced modes of ventilation, administration of nitric oxide, and advanced neonatal and pediatric ventilation considerations. **1 credit**

PREREQUISITES: SUCCESSFUL COMPLETION OF ALL 300-LEVEL RC COURSES; COREQUISITES: RC 440, RC 455, AND RC 4100.

RC 4200 Respiratory Care Clinical Education Practicum IV

This course provides students with additional practical clinical experience in an approved off-campus clinical site performed in an adult critical care setting, and provides clinical instruction in the neonatal intensive care setting. The training plans for this rotation will include caring for adult patients receiving mechanical ventilation and includes ventilator maintenance, weaning techniques, chart review, hemodynamic monitoring, chart documentation, and patient monitoring. In addition, the students will participate in neonatal clinical rotations and perform ventilator assessments, surfactant administration, neonatal CPAP initiation, and high-frequency oscillatory ventilation. The students will develop and master the skill of ventilator graphic assessment and interpretation. The clinical director, through site visitation, will supervise and evaluate clinical activity.

4.5 credits

PREREQUISITES: RC 440, RC 455, RC 456, AND RC 4100; COREQUISITES: RC 480 AND RC 490.

RC 480 ACLS/PALS/NALS and Respiratory Care Emergencies

Instruction in this course will focus and concentrate on the actions that take place during adult, pediatric, and neonatal cardiac arrest. Subjects covered include a review of BLS, NALS, PALS, ACLS algorithms, pharmacology, EKG recognition, airway management, IV techniques, and defibrillation. Also discussed will be the recognition and treatment of various respiratory emergencies. Students will receive certification in ACLS and a renewal of their BLS upon successful completion of this course.

3 credits

PREREQUISITES: BLS CERTIFICATION, RC 440, RC 455, RC 456, AND RC 4100; COREQUISITES: RC 490 AND RC 4200.

RC 490 Comprehensive Credential Preparation

This capstone course is designed to review and assist in preparation for the written and clinical simulation portions of the CRT and RRT examinations. Students will complete a comprehensive review of disease recognition and management, treatment applications, therapeutic modifications and case study analysis. Test-taking and application skills will be stressed through various methodologies including completion of mock written and simulation examinations. The students will be required to complete a special project that includes the research, assessment and presentation of the approved clinical case topic. All capstone projects must receive written pre-approval by the program director prior to initiating the research of the topic.

3 credits

RESPIRATORY CARE DEGREE COMPLETION PROGRAM

RC 117 Enhanced Theories in Respiratory Care

This course is designed to provide the student with a dynamic view of various advanced respiratory care applications and procedures. The student will investigate new concepts and research related to improvement of patient care. Areas of concentration will include advancements in smoking cessation programs and the role of respiratory therapists as a health coach, advancements in the diagnosis and treatment of COPD, the role of respiratory therapists in hyperbaric oxygenation applications, new advances in management of microbiological pathogens, interventional pulmonary procedures, and enhanced theories for caring for patients receiving mechanical ventilation. **3 credits**

RC 127 Research and Evidence-Based Practice in Respiratory Care

This course is designed to provide the student with a dynamic view of evidence-based practice principles focused on various new respiratory care applications and procedures. The student will investigate new concepts and research related to improvement of patient care. Areas of concentration will include e-cigarettes, new advances in the effects of smoking, hyperbaric oxygenation applications, invasive and non-invasive cardiopulmonary procedures, exploration of imagery scans, and atypical mechanical ventilation procedures. **3 credits**

RC 207 Respiratory Care Practice in Acute and Alternative Settings

This course will explore respiratory care practice in the acute care and alternative care arenas. Focus will include responsibilities of respiratory clinicians in the ER, flight transport, exercise stress testing, metabolic testing, telemedicine, and informatics. **3 credits**

RC 217 Patient Safety and Quality Improvement in Respiratory Care

This course provides foundational principles, concepts, and methods for promoting and improving healthcare quality and patient safety within the profession of respiratory care. Students will investigate micro and macro-system levels with a focus on application at the micro-system level in the healthcare environment. **3 credits**

RC 227 Advanced Respiratory Care Pathophysiology

Respiratory clinicians will discuss and investigate new respiratory care pathophysiological principles, structure, and theories including new advances in the pathology of ARDS and COPD patients, bronchiolitis obliterans with organizing pneumonia, sudden infant death syndrome, pertussis, SARS – severe acute respiratory syndrome, lymphangioleiomyomatosis, hantavirus, the effect of thyroid disorders on the human body, pulmonary alveolar proteinosis, and rhabdomyolysis. **3 credits**

RC 277 Medical Ethics and Legal Principles in Respiratory Care

This course will provide students an introduction to basic ethical and legal topics in healthcare and respiratory care practice. Ethical and legal principles, definitions, applications, and case study scenarios will be utilized to emphasize knowledge, learning and the practical applications in respiratory care. **3 credits**

RC 307 Advanced Respiratory Care Pharmacology

Respiratory clinicians will examine new pharmacology medications, principles, structure, and theories of operation utilized within respiratory care. Specific medication categories to be explored will include cardiac agents, diuretics, antibiotics, surfactants, vasoagents, anti-inflammatory agents, mucolytics, new bronchodilators, anti-arrhythmic agents, applicable medical gases (CO₂, inhaled sedatives etc.), and sedative and hypnotic agents. **3 credits**

RC 317 Leadership and Management Issues in Respiratory Care

Students within this course will examine various theoretical constructs as a means of becoming more aware of their own leadership styles. Application of strategic management models will be studied to improve respiratory leadership and

management skills in others. Students will identify and apply strategic models to analyze problems, formulate strategic solutions, and make sound decisions in the respiratory care forum. **3 credits**

RC 327 (POL 327) Respiratory Care Education

This course examines the key educational concepts including teaching and learning strategies and techniques, learner characteristics, learning styles, technology in education, and the evaluation of teaching and learning. This course will also extend into the ethical, legal, and economic foundations of the educational process, health literacy in the adult client population, gender, socioeconomic, cultural attributes of the learner, and educating learners with disabilities. **3 credits**

RC 407 Capstone – Respiratory Care Project/Portfolio

This course focuses on the creation and development of a senior respiratory care project and portfolio. Students will select an approved respiratory care special project topic and complete a comprehensive analysis, research, report, and presentation discussing all aspects of the topic selected. The student will also learn the proper procedure and expectations while producing a professional respiratory care portfolio. **2 credits**

PREREQUISITES: Completion of all previous level BSRC DC courses. RC 107, RC 117, RC 127, RC 207, RC 217, RC 227, RC 307, RC 317, RC 327, RC 407

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Linda M. Burns
Carol Caliendo
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Marilyn Citron
Maureen Crossen
William DeBernardi
Ellen Dehouske
Richard W. Devlin
Anne Marie Emanuel

Martha Ezzell
Chrystel Gabrich
Phyllis A. Hackbart
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Mary Joy Haywood, RSM
Clare Hopkins
Eileen Hunkele
Carol Johnson
Mildred Jones
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William F. Kraft
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Emma Lucas-Darby
Joan Reale
Robert A. Reed
Mary C. Rothenberger
Linda Schifino
Roberta Schomberg
William Stewart
Judith Touré
Margaret S. Turner
Marlene Winter
Eleanor Wymard

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Suzanne M. Steiner

CAMPUS DIRECTORY

CARLOW UNIVERSITY
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PITTSBURGH, PA 15213
412.578.6000 OR 1.800.333.2275
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Academic Affairs

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E: academicaffairs@carlow.edu

Office of Admissions

Antonian Hall, Third Floor
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E: admissions@carlow.edu

Office of Alumni Relations

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E: alumni@carlow.edu

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E: dso@carlow.edu

Center for Academic Achievement

University Commons, Third Floor
P: 412. 578.6146
E: caa@carlow.edu

Grace Library

University Commons
P: 412.578.6139

Office of Financial Aid

Student Hub, Antonian Hall, Second Floor
P: 412.578.6389
E: finaid@carlow.edu

Office of the President

University Commons, Fifth Floor
P: 412.578.6123

Office of the Registrar

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P: 412.578.6389
E: registrar@carlow.edu

Student Accounts

Student Hub, Antonian Hall, Second Floor
P: 412.578.6389
E: studentaccounts@carlow.edu

Office of Student Affairs

University Commons, Second Floor
P: 412.578.6690

Technology Resources (Help! Services)

University Commons, Second Floor
P: 412.578.8700 (on campus)

University Advancement

Convent of Mercy West Wing, Third Floor
P: 412.478.6019

CONFERENCE FOR MERCY HIGHER EDUCATION

Carlow University
Pittsburgh, PA 15213

College of Saint Mary
Omaha, NE 68124

Georgian Court University
Lakewood, NJ 08701

Gwynedd-Mercy College
Gwynedd Valley, PA 19437

Maria College
Albany, NY 12208

Marian Court College
Swampscott, MA 01907

Mercyhurst College
Erie, PA 16546

Misericordia University
Dallas, PA 18612

Mount Aloysius College
Cresson, PA 16630

Mount Mercy College
Cedar Rapids, IA 52402

Saint Joseph College
West Hartford, CT 06117

Saint Joseph's College
Standish, ME 04062

Saint Xavier University
Chicago, IL 60655

Salve Regina University
Newport, RI 02840

Trocaire College
Buffalo, NY 14220

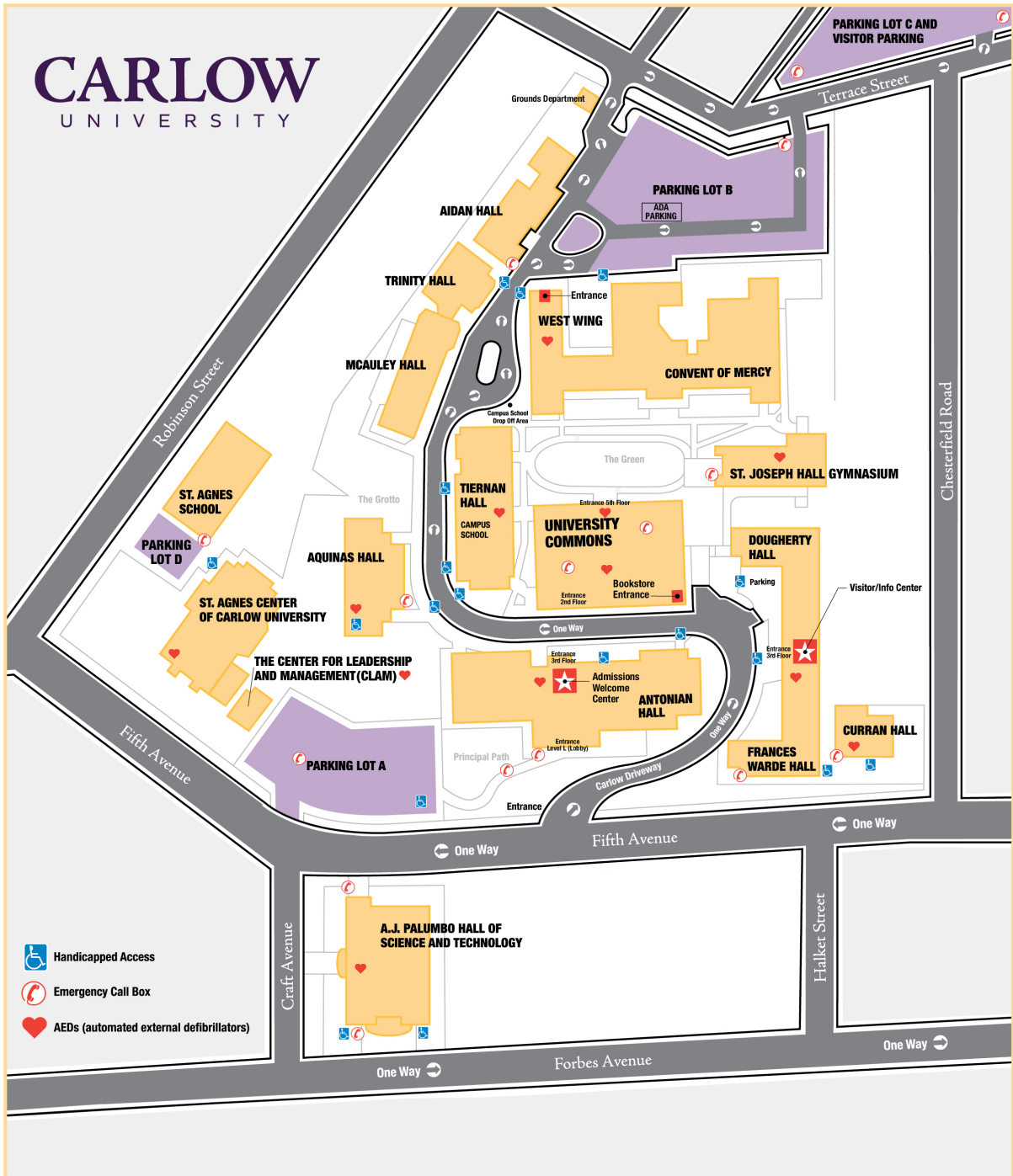
University of Detroit Mercy
Detroit, MI 48219

VISITORS

Visitors are welcome at Carlow University. Advance notice is recommended so that we can ensure an informative and enjoyable visit, as well as make appropriate parking arrangements. Prospective students are urged to visit the campus and meet with students, faculty, and other members of the Carlow community. The admissions offices are on the third floor of Antonian Hall. There are separate admissions areas that serve various populations of adult, graduate, international, and traditional students. Please call 1.800.333.2275 to be directed to the appropriate office for information on programs, admission, office hours, and appointments.

Visitors needing mobility assistance should either alert the Office of Admissions or contact the Carlow University Police Department at 412.578.8898 in advance of the visit.

CAMPUS MAP



CAMPUS MAP

DIRECTORY ON REVERSE

REV. JULY 2019

CAMPUS MAP DIRECTORY

DEPARTMENT/BUILDING	FLOOR(S)
Academic Affairs	
West Wing, adjacent to Convent of Mercy	1
Accounting Department	
Center for Leadership and Management (CLAM)	1
Admissions Welcome Center	
Antonian Hall	3
Advancement	
West Wing, adjacent to Convent of Mercy	3
Alumni Relations	
West Wing, adjacent to Convent of Mercy	3
Art Department	
Antonian Hall	4
Art Studio and Gallery #1	
Frances Warde Hall	Ground
Art Gallery #2	
University Commons	2
Athletics	
St. Joseph Hall	3
Biology Department	
A.J. Palumbo Hall of Science and Technology	2
Bookstore	
University Commons	1
Business Management Department	
Center for Leadership and Management (CLAM)	1
Campus Ministry	
University Commons	2
Campus Life/Residence Life	
University Commons	2
Campus Activities Board (CAB) Office	
University Commons	1
Career Development	
University Commons	2
Celtic Café	
A.J. Palumbo Hall of Science and Technology	1
Celtic Simulation Center for Innovative Learning	
Curran Hall	3, 4
Center for Academic Achievement (CAA)	
University Commons	4
Center for Digital Learning and Innovation (CDLI)	
University Commons	4
Center for Experiential Learning	
University Commons	2
Center for Global Learning	
University Commons	2
Ceramics Studio	
Antonian Hall	1
Chapel/Prayer Room	
University Commons	5
Chemistry Department	
A.J. Palumbo Hall of Science and Technology	3
Communication Department	
Antonian Hall	5
Dining Room	
Tiernan Hall	1
Disabilities Services	
University Commons	4
Education Department	
A.J. Palumbo Hall of Science and Technology	2
English Department	
Aquinas Hall	1
Facilities	
3356 5th Avenue	2
Finance and Administrative Services	
West Wing, adjacent to Convent of Mercy	2
Financial Aid at the Student HUB	
Antonian Hall	2
Fitness Center	
St. Joseph Hall	3

DEPARTMENT/BUILDING	FLOOR(S)
Frank B. Fuhrer Café	
University Commons	2
Gailliot Center	
University Commons	5
Health and Counseling Center	
Frances Warde Hall	4
Help! Services	
University Commons	2
Hopkins Communication Lab	
University Commons	4
Humanities Department	
Aquinas Hall	2
Inclusion and Intercultural Initiatives	
University Commons	2
Information Desk	
University Commons	2
Information Technology	
University Commons	2
Institutional Research, Effectiveness, and Planning	
Aquinas Hall	3
Library Services/Circulation Desk	
University Commons	3
Mailroom	
University Commons	1
Marketing and Communications	
Antonian Hall	6
Massey Mathematics Laboratory	
University Commons	4
Mathematics Department	
A.J. Palumbo Hall of Science and Technology	1
Mercy Heritage	
University Commons	2
Mercy Service	
University Commons	2
Nursing Department	
Curran Hall	6
Police Dispatch Center (Parking Permits, IDs)	
Frances Warde Hall	3
Political Science Department	
Antonian Hall	5
President's Suite	
University Commons	5
Printing Services	
The St. Agnes Center of Carlow University	Basement
Psychology and Counseling Department	
Antonian Hall	5
Registrar's Office at the Student HUB	
Antonian Hall	2
Residence Hall #1	
Frances Warde Hall	1-2, 4-6
Residence Hall #2	
Dougherty Hall	4-10
Respiratory Care Simulation Center and Laboratory	
A.J. Palumbo Hall of Science and Technology	2
Rosemary Heyl Theatre	
Antonian Hall	Lobby
Social Work Department	
Antonian Hall	5
St. Agnes Church	
The St. Agnes Center of Carlow University	1
STEM Digital Learning Laboratory	
A.J. Palumbo Hall of Science and Technology	2
Student Accounts at the Student HUB	
Antonian Hall	2
Student Affairs	
University Commons	2
Student Government Association (SGA) Office	
University Commons	1
Student Lounge	
University Commons	2
Visitor Center	
Frances Warde Hall	3

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