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## The Mission of Wheeling Jesuit University

## Educating for Life

The Jesuit traditions of educational excellence and service to others guide all the programs at Wheeling Jesuit University. By integrating learning, research, and economic development with classical knowledge and Christian revelation, the University seeks to foster competence, creativity, and innovation both throughout and beyond the campus community. Graduates of the University enter the world of work with socially responsible goals, a lifelong appetite for learning, and the desire to make our universe a better place.

## Educating Men and Women for Others

In its faculty and students, its research, and its outreach, the University is national and international. Yet, as the only Catholic college in West Virginia, Wheeling Jesuit also values its distinctive mission to the immediate area, educating local men and women and returning them to enrich their own communities. Wheeling Jesuit University firmly believes its graduates will enter into the professional world, prepared to use their God-given talents not solely for personal fulfillment but as men and women in service to others.

## Educating for Leadership

To model the Jesuit concern for regional and global neighbors, the University welcomes people of all creeds, races, and nationalities to share in the intelligent pursuit of excellence. The University promotes close student-faculty contacts and encourages students to develop their full potential for leadership. Through a grounding in the liberal arts and, above all, the example of Jesus Christ, the University endeavors to produce intelligent, moral leaders who will champion the Jesuit values of faith, peace and justice. Wheeling Jesuit envisions a dynamic leadership role for the University in the lives of its students and in the world at large.

## Introduction

## Wheeling Jesuit University in Brief

Founded: 1954

Curriculum: Four-year programs with 27 majors in liberal arts and sciences, nursing, allied health and business areas.

Undergraduate Degrees granted: Bachelor of Arts, Bachelor of Science, and Bachelor of Science in Nursing Special options: Pre-professional programs in law, medicine, physical therapy, dentistry, and veterinary medicine. Other special programs include: Laut Honors Program, Study Abroad, Semester in Washington, independent major, internships.

Affiliation: Catholic, Society of Jesus, students of all denominations welcome.

Average class size: 17 students per class; 91 percent of all course offer ings have fewer than 30 students.

Student/Faculty ratio: 13.6 to 1

Location: Suburban setting, Wheeling, West Virginia: a city of 31,000. On I-70, one hour's drive from Pittsburgh; 5 hours from Washington, D.C. and 3 hours from Cleveland.

Residence Halls: Housing available for all who choose to live on campus. 74 percent of students reside on campus.

Student Financial Aid: 99\% of all students receive some form of financial assistance. Admissions: Students urged to apply as early as possible in senior year. Acceptances are on a rolling basis.

University Mascot: Cardinal

University Motto: Luceat Lux Vestra - "Let Your Light Shine"

## Accreditation and Memberships

Wheeling Jesuit University is accredited by the following accrediting entities:

```
Accreditation Council of Business Schools and Programs (ACBSP)
Commission on Accreditation of Athletic Training Education (CAATE)
Commission on Accreditation in Physical Therapy Education (CAPTE)
Commission on Collegiate Nursing Education (CCNE)
Committee on Accreditation for Respiratory Care (CoARC)
Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)
North Central Association of Colleges and Schools, The Higher Learning Commission (NCA-HLC)
Teacher Education Accreditation Council (TEAC)
    TEAC-Teachers Education Program
    TEAC-Education Leadership
West Virginia Higher Education Policy Commission (WVHEPC)
Wheeling Jesuit University holds memberships in the following organizations:
American Council of Colleges and Universities (ACC&U)
American Council of Education (ACE)
Appalachian College Association (ACA)
Association of American Colleges and Universities (AAC&U)
Association of Catholic Colleges and Universities (ACCU)
Association of Governing Boards (AGB)
Association of Jesuit Colleges and Universities (AJCU)
The Council of Independent Colleges
National Association for Women in Catholic Higher Education
National Association of Independent Colleges and Universities
West Virginia Campus Compact
West Virginia Independent Colleges and Universities
Wheeling Jesuit University is a member of the following athletic organizations:

\section*{Non-discrimination Policy}

Wheeling Jesuit University does not discriminate on the basis of race, creed, color, national origin, handicap, sex of marital status in the consideration of eligible students for admissions, scholarships, awards and financial aid. The University has established procedures to address such issues which can be located in the Discrimination / Harassment section of the Student Handbook and in the Policies section located on the Human Resource website. Questions, concerns or complaints can be directed as follows:

University Employees:
Associate Vice President for Administration
Whelan Hall
(304) 243-8152

\section*{Students:}

Dean of Student Development
or
Associate Vice President for Administration
Swint Hall 201
Whelan Hall
(304) 243-2350
(304) 243-8152

\section*{Adherence to Federal Guidelines}

Wheeling Jesuit University adheres to guidelines as mandated by the federal government.

\section*{Notice to all Current and Potential Students}

This catalog attempts to provide accurate and up-to-date information concerning admissions requirements, curriculum and the general rules and regulations of the University.

You are hereby given notice that Wheeling Jesuit University reserves the right to unilaterally make changes, at any time, in admissions requirements, curriculum and the general rules and regulations of the University that it believes, in its sole discretion, to be in the best interest of the University and students. A change in curriculum could result in additional course work and requirements causing an increase in expenditure of both time and money required to obtain a desired certification or degree. Any changes will be included in the catalog of the following year but will be effective as of the date of implementation.

The provisions of this catalog are not to be regarded as a contract between the student and Wheeling Jesuit University. By enrolling in the University, the student explicitly acknowledges and accepts the provisions provided in this NOTICE.
Association of Jesuit Colleges and UniversitiesBelow are the 28 Jesuit institutions of higher education that constitute the entire membership.
Boston College, Boston, MA ..... 1863
Canisius College, Buffalo, NY ..... 1870
College of the Holy Cross, Worcester, MA ..... 1843
Creighton University, Omaha, NE ..... 1878
Fairfield University, Fairfield, CT ..... 1942
Fordham University, New York City, NY ..... 1841
Georgetown University, Washington, DC ..... 1789
Gonzaga University, Spokane, WA ..... 1887
John Carroll University, Cleveland, Ohio ..... 1886
Le Moyne College, Syracuse, NY ..... 1946
Loyola College in Maryland, Baltimore, MD ..... 1852
Loyola Marymount University, Los Angeles, CA ..... 1911
Loyola University, New Orleans, LA ..... 1912
Loyola University of Chicago, IL ..... 1870
Marquette University, Milwaukee, WI ..... 1881
Regis University, Denver, CO ..... 1877
Rockhurst College, Kansas City, MS ..... 1910
Saint Joseph's University, Philadelphia, PA ..... 1851
Saint Louis University, St. Louis, MS ..... 1818
Saint Peter's College, Jersey City, NJ ..... 1872
Santa Clara, Santa Clara, CA ..... 1851
Seattle University, Seattle, WA ..... 1891
Spring Hill College, Mobile, AL ..... 1830
University of Detroit Mercy, Detroit, MI ..... 1877
University of San Francisco, San Francisco, CA ..... 1855
University of Scranton, Scranton, PA ..... 1888
Wheeling Jesuit University, Wheeling, WV ..... 1954
Xavier University, Cincinnati, Ohio ..... 1831Wheeling Jesuit University is a member of the Association of Jesuit Colleges and Universities in the United States.

\section*{Admission Procedures}

\section*{Freshmen Admissions}

Candidates for admission to the freshmen class must submit to the Admissions Office:
1. An official application
2. A non-refundable \(\$ 25\) application fee, which will be waived for candidates applying on-line or through a formal campus visit
3. An official high school transcript
4. A copy of the SAT or ACT scores.

\section*{Transfer Admissions}

Candidates applying for admission with advanced standing must submit to the Admissions Office:
1. An official application
2. A non-refundable \(\$ 25\) application fee, which will be waived for candidates applying on-line or through a formal campus visit
3. Official transcripts of all previous college work from each institution attended.

\section*{Admission Requirements}

\section*{Freshmen Students}

Requirements for admission to Wheeling Jesuit University include:
1. A high school diploma or its equivalent
2. 16 units of high school academic courses
3. Submission of the official results of either the new Scholastic Assessment Test I (SAT) or the American College Testing Program (ACT).

Letters of recommendation and a list of extracurricular activities also are encouraged.

The 16 units of high school courses should be distributed as follows:
English 4
Mathematics 3
History/Social Sciences 3
Laboratory Science 2
(Science Major-3 recommended)
Academic Electives 4
(Foreign Languages are recommended)
In exceptional cases, the Academic Life Committee may waive certain requirements when an applicant's record shows promise of achievement. Applicants for programs in the natural sciences should have completed one unit of biology and one unit of chemistry.

Applicants interested in preparing for future study in the physical therapy doctorate program should have a minimum 3 years of lab science (including physics).

\section*{International and ESL Students}

Wheeling Jesuit University welcomes applicants from foreign countries. General admission requirements are as follows:
1. students will satisfy acceptance standards for day division and
2. a high school GPA of 3.0 and a high school or diploma or equivalent and
3. certification of proficiency in English as a second Language is achieved by a 550 paper based, 213 computer based and 80 through the internet on the Test of English as a Foreign Language (TOEFL)

\section*{Notes:}
1. International students failing to meet English proficiency requirements may opt to enroll in the English Language Institute at Wheeling Jesuit University, a center for intensive English training. Proficiency certification by this program meets the English language requirement for admission.
2. Since the U.S. Department of Immigration and Naturalization requires international students to certify financial responsibility, certification of financial resources sufficient to cover college costs must be submitted by the appropriate financial institution. Tuition, room and board and required fees must be paid in full prior to beginning classes.
3. Students for whom English is a second language have no further requirement in modern language.

\section*{Transfer Students}

General requirements for transfer students are as follows:
1. Cumulative college GPA of 2.3 or higher and
2. Official transcripts of all previous college work from each institution attended must be submitted when applying for admission.

\section*{Notes:}

Candidates may be asked to submit an official high school transcript upon request by the transfer counselor. Transfer credit is only awarded for course work completed at accredited institutions in which a student earned a grade of C or higher. Grades of C- are not accepted.

For those students who have earned an associate's degree from a regionally accredited institution, the University will accept that associate's degree (and all related credits) in total for transfer credit. For those students who have earned a Bachelor's degree from a regionally accredited institution, the University will accept that degree and all credits, but will also waive all core requirements except philosophy and religion. Students with an A.A., A.S., B.A., or B.S., will need to complete only the following core requirements: PHI 205, a 200 or 300 level RST course and either PHI 305 or RST 305. Evaluation of credits will be made by the Registrar at the time of acceptance. The University accepts credits only. The computation of a student's grade point average (GPA) will begin with courses taken at the University. Full-time students are classified as follows:

Freshman - Less than 27 semester hours
Sophomore - minimum of 27 semester hours
Junior - minimum of 60 semester hours
Senior - minimum of 90 semester hours
Transfer students are bound by the academic requirements stipulated in the catalog in effect during their first semester at the University. Any students transferring in during a summer session will be guided by the catalog requirements of the following semester.

\section*{Special Departmental Regulations}

Bachelor of Science in Nursing (BSN) - All nursing students, regardless of the number of transfer credits, must meet the requirements of the Nursing curriculum, including the prerequisite core and cognate courses. A student may apply appro-
priate courses taken at other accredited institutions of higher education toward these required courses or may meet some requirements by challenge exams.

\section*{Transfer Students Graduation Requirements}

Transfer students must complete 30 hours at Wheeling Jesuit University as well as complete all graduation requirements with these possible exceptions:
1. Complete the remaining core curriculum requirements as determined by the Registrar prior to the initial registration.
2. Complete at the University not less than 18 credit hours required for the major (to be determined by the Chair of the major department).

\section*{Pre-Entrance Health Forms}

All entering students are required to return the WJU pre-entrance health forms and verification of health insurance. The following are mandatory requirements prior to admission: Official documentation of a PPD (tuberculin skin test) within 12 months prior to start of classes, Tdap (Tetanus-Diphtheria-Pertussis) within the last 10 years, and \(2 \mathbf{M M R}\) vaccines (Measles, Mumps and Rubella). Polio vaccination is required only for students that have resided outside the United States in wild poliovirus endemic countries in the past 12 months.

Students are strongly recommended to receive: Hepatitis B vaccination (a series of 3 injections) or they must sign the WJU waiver and Meningococcal vaccination (at least 5 years before starting college) or they must sign the WJU waiver. If you are a health science major, you may be required to receive the Hepatitis B vaccine or your placement for clinical practice could be affected.

The following vaccines are recommended by the American College Health Association (ACHA) but not required: Varicella (if no previous history of chicken pox), Influenza (yearly, may be required if health science major), and HPV (Human Papillomavirus Vaccine).

Please do not forward any medical documents via e-mail to maintain privacy of your personal information. Documents can be mailed or faxed (304) 243-2035 to the Health Center. Please call the Health Center at (304) 243-2275 for any questions or concerns regarding requirements.

\section*{Special Programs}

\section*{Early Admission}

Outstanding high school juniors may apply for Early Admission, which is available to students with extraordinary records who wish to enter Wheeling Jesuit University at the close of the junior year.

\section*{Advanced Placement}

Wheeling Jesuit University will grant credit and advanced placement to applicants who have successfully completed college-level courses taken in high school. The applicants must take the Advanced Placement (AP) examination of the College Entrance Examination Board or the International Baccalaureate Program (IB) in the subject for which advanced placement is desired. The decision of the University is based on the nature of the course taken and a score of 3,4 or 5 on the AP examination or 5,6 , or 7 on the IB examination. Please contact the Registrar's Office for more detailed information.

\section*{Dual Enrollment - Classes for High School Students}

Wheeling Jesuit University will accept high school juniors and seniors on a special student basis at the special rate to be determined by the Board of Directors. Course enrollments, however, are limited to the number of places available in the course, at a maximum of six credit hours per academic year at this special rate.

Upon successful completion of a course, the student earns regular college credit, applicable in a degree program at the University (provided the student is accepted by the University as a degree student) or used for transfer to another institution. In some cases, the high school student may be able to use the credit to fulfill a high school requirement, as well as have it recorded on a Wheeling Jesuit University transcript.

High school students dropping from their class/classes in any given semester will follow the refund schedule listed in the catalog for all students.

\section*{Communications with Wheeling Jesuit University}

Wheeling Jesuit University
316 Washington Avenue
Wheeling, WV 26003
Phone: 304-243-2000
FAX: 304-243-2243
www.wju.edu

\section*{Inquiries regarding:}

\section*{Should be addressed to:}
\begin{tabular}{|c|c|}
\hline Academic Affairs & Vice President for Academic Affairs \\
\hline & 304-243-2321 \\
\hline Admissions: Undergraduate & Director of Admissions \\
\hline & 304-243-2359; 800-624-6992 \\
\hline Adult Student Information & Office of Adult and Continuing Educations \\
\hline & 304-243-2250; 800-873-7665 \\
\hline Athletics & Director of Athletics \\
\hline & 304-243-2365 \\
\hline Business and Student Accounts & Student Accounts \\
\hline & 304-243-2222 \\
\hline Classroom of the Future & Center for Educational Technologies \\
\hline & 304-243-2388 \\
\hline Financial Aid & Director of Financial Aid \\
\hline & 304-243-2304; 800-624-6992 \\
\hline Health Services & Coordinator of Health Services \\
\hline & 304-243-2275 \\
\hline Student Academic Records & Registrar \\
\hline & 304-243-2238 \\
\hline Student Development and Housing & 304-243-2257 \\
\hline
\end{tabular}

\section*{Campus Resources}

\section*{Faculty}

A strong teaching faculty is the principal academic resource of Wheeling Jesuit University. All courses are taught by fulltime or adjunct faculty members with advanced degrees. Most senior faculty teach introductory as well as advanced seminars. While teaching and scholarship are the primary concerns of the faculty, the University encourages continuing education and research through a sabbatical program and faculty development funds. Faculty are able to update their own learning and bring new concepts and methods to their teaching roles, including increasing use of modern technologies.

\section*{Campus Ministry and the Service for Social Action Center}

As campus ministers at Wheeling Jesuit, a Catholic, Jesuit university, we invite you to experience the Ignatian tradition. St. Ignatius Loyola (1491-1556), the founder of the Jesuits, urged men and women to listen to the voice of God speaking in their hearts, and to discover how God acts in our lives and in all creation. WJU's Campus Ministry, with the Service for Social Action Center, strives to develop a community of faith, worship and service to others. Led by Jesuits, pastoral ministers and student leaders, Campus Ministry serves to mentor students in all aspects of their lives.

Campus Ministry, located on the lower level of the Chapel of Mary and Joseph, offers prayer and reconciliation, celebration of the sacraments, worship, retreats and spiritual direction. The Service for Social Action Center, located on the Acker Science Center Bridge and in the Lundy Lounge, coordinates service opportunities in Wheeling, throughout the United States, and abroad.

Through word and sacrament, prayer and service, reflection and action, we enter the Ignatian way of life, making our love of God in Christ active in our world. We want to meet you, hear your ideas and provide opportunities for your spiritual growth during this unique time in your life. Please stop by our offices or contact us so we can get connected.

\section*{Bishop Hodges Library}

The WJU Library's facility provides ample space for group learning and quiet study. The library's extensive collection of print, multimedia, and electronic resources serve our campus community both on campus and via a distance.

The print book collection contains over 159,000 volumes. In addition, the library provides access to 81 scholarly electronic resources which provide indexes, abstracts, or full-text to newspapers, research journals and other publications. The library has over 122,000 eBooks many of which are downloadable. The library's multimedia collection provides access to 1,278 DVD's and over 44,172 streaming audio/visual items. The library maintains a collection of 232 current serial subscriptions, which is supplemented by a collection of over 135,000 microforms that provide access to archived periodicals. The library also has a Curriculum Resource Center with items professional education majors can use to supplement resources for their classroom teaching experiences.

The library has agreements with national and regional library consortia to provide access to materials not available at Bishop Hodges Library.

Professional librarians are available to provide students with assistance on the use of information resources. Assistance is available in person, phone, or email. The library's instruction librarian provides instruction at professor's request in the classroom on the use of library resources.

The library provides desktop and laptop computers for student use in the library. In addition, wireless access is available throughout the library. Also, copy machines, microform readers/printers, DVD/VCR player, hole punch, staplers, and paper cutters are available.

The library is available to meet the academic research needs of Wheeling Jesuit students. The library is open for an average of 87 hours per week during the Fall/Spring semesters with extended hours during finals weeks. However, the library's electronic resources are available \(24 / 7\) anywhere one has access to a computer. For more information on the library visit our web site at http://libguides.wju.edu/bhl

\section*{Information Technology Services}

ITS computer labs are open to all Wheeling Jesuit University students. The computer labs are located in each residence hall, the Acker Science Center, Donahue Hall, NTTC Ground Floor, \& the McDonough Center. Students use ITS labs to complete computer-related assignments, check e-mail or to access the Internet. Some classes meet regularly in ITS labs for computer-assisted instruction. Students' accounts for WJU e-mail, Academus, and Blackboard are supplied by ITS.

\section*{Academic Resource Center (ARC)}

The Academic Resource Center (ARC) is the place to go where students who want to succeed can find professionals and peers who are willing to listen, question, and help provide effective strategies to complete academic tasks. The ARC can be thought of as an extension of the classroom where learning continues in a collaborative environment. Academic assistance is available through tutoring, study groups, workshops, and other forms of academic support.
The ARC encourages students to take responsibility for their own academic achievement and become successful, life-long learners. Students may call the ARC or stop in to set up an appointment with a tutor or professional staff member for assistance. The ARC also offers students a quiet, comfortable study environment including a computer lab with standard computer applications, departmental course software, and self-paced instructional software.

The services provided by the ARC are available to Wheeling Jesuit University students at no additional charge. Visit the Academic Resource Center on the Web at www.wju.edu/ar to view the current schedule of operation and learn more about what the ARC has to offer.

\section*{Disability Services}

Wheeling Jesuit University encourages faculty, staff and administration to assist students with disabilities in achieving academic success. The University offers students with documented disabilities reasonable accommodations on a case-bycase basis with confidentiality in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Students with special needs due to physical or learning disabilities should contact the Disability Services Director at 304-243-4484. A learning disabilities specialist is available to provide assistance with time management, study skills or strategies that specifically address learning disability issues.

In order to receive assistance, students must disclose their disability to the University, provide current (within three years) and comprehensive documentation concerning the nature and extent of the disability and communicate their specific needs to the Disability Services Director. Wheeling Jesuit University is committed to providing reasonable accommodations to students with disabilities; however, it is the responsibility of these students to seek out available assistance on campus and to utilize individualized adjustments. Students with disabilities requiring specific housing accommodations must contact Student Development before June 1.

Ultimately, all students are responsible for their own academic achievement. They must attend classes, complete course assignments and fulfill all University requirements for their chosen field of study.

\section*{Media Services}

The Media Services department provides multimedia equipment and services to faculty and administration. Audiovisual equipment can be reserved through the online ITS Helpdesk and will be delivered to instructional locations on campus. Currently, various rooms in Donahue Hall, Acker Science Center, and the NTTC building have built-in media systems for computer demonstrations, video or internet presentations and document imaging.

\section*{Performing Arts and Lectures}

Wheeling Jesuit University's Troy Theater is the venue for a vibrant and active performing arts program. The program encompasses a variety of disciplines including: acting, vocal music, dance, set design and construction, lighting/sound technology, stage properties, costuming, stage management and house management. A typical season consists of four student productions that include drama or comedy, children's theater, one act plays or readings and a fully staged musical production complete with a professional orchestra. The WJU Singers' concerts, a diverse and educational series of invited professional productions and a multi-disciplinary series of guest lecturers complete the season. The performing arts program at Wheeling Jesuit University is designed to develop and enhance the students' overall appreciation for the arts through active participation or as an audience member. Students are encouraged to become involved and to explore their creative talents. Auditions are open to all WJU students.

\section*{Additional Campus Resources}

Wheeling Jesuit University offers learning resources you won't find anywhere else in the nation. In the Erma Ora Byrd Center for Educational Technologies (CET), you will find internships and hands-on opportunities to study current global trends in business, technology and education. The CET is home to NASA's premier educational resource program, The Classroom of the Future. The Challenger Learning Center simulates space missions to teach science and math to more than 13,000 elementary and high school students on the campus each year.

The Clifford M. Lewis, SJ Appalachian Institute promotes research, service, and advocacy for and with the people of Appalachia. Wheeling Jesuit students and faculty and visiting schools from across the country are encouraged to participate in service and experiential learning immersion trips focusing on cultural awareness, direct service, and environmental and public health education. Students and faculty also focus on community based research initiatives working in conjunction with the Appalachian Outreach and Advisory Committee. The Appalachian Institute offers a wealth of public programming for students and the general public that focuses on contemporary issues related to energy choices, healthy living, water quality, and cultural appreciation. The Institute is the driving force behind sustainability initiatives on campus with the Student Sustainability Club, cardboard and paper recycling, campus garden, and dorm energy competitions.

\section*{Student Services}

\section*{Division of Student Development}

Wheeling Jesuit's Division of Student Development is dedicated to assisting students by providing quality support, co curricular activities and developmental programs. Wheeling Jesuit University is committed to the academic and social development of each student including his or her intellect, values, emotions and purpose. Student Developments' goal is to empower students to become ethical decision makers, spiritual life discerners, global leaders and engagers in the pursuit of personal knowledge that leads to community and self-fulfillment.

An integral part of the WJU academic environment, Student Development provides a holistic view to educating students. By providing activities and leadership opportunities beyond the classroom, Student Development assists the University in producing students who can and will contribute to the community and helps each to become more competent, virtuous and responsible citizens. Student Development is comprised of the following offices: Residence Life, Student Activities and

Event Planning, Performing Arts, Career Services, Health Center, Global Student Services, Campus Safety and Security. Most Student Development departments, in addition to the Office of the Dean of Student Development, can be found in Swint Hall.

\section*{First Year Program}

Beginning with the summer orientation program and continuing throughout most of the fall semester, an orientation program is conducted on the campus for all new students including transfer students. Two summer orientation programs are available: New Student Orientation for traditional aged first-year students and Transfer Student Orientation for new transfer students with prior college experience. Students will receive detailed information about these programs upon their deposit to attend the University.

A variety of activities are offered to give some idea of the dimensions of the collegiate experience. In the fall, welcome weekend begins before the start of classes (usually the 3 or 4 days preceding the first day of classes), during which new first-year students may adjust to their surroundings, meet classmates, settle into a new room and familiarize themselves with the campus and its services. This fall orientation program is required of all new first-year students and is part of the First-Year Seminar class curriculum. The First Year Program (FYP), which includes the First Year Seminar, a one-credit course taken in the fall semester, is designed for traditional aged first year students and covers a wide variety of topics, both academic and social.

Meetings with faculty advisors, socials and discussions on student life, help the new student become acquainted with Wheeling Jesuit University. The orientation programs, under the direction of the Director of Student Life and a group of specially trained upper class students called Luceats, provides an opportunity for all new students and their parents to adjust to the collegiate experience.

\section*{Housing and Residence Life}

Since the majority of the University's undergraduate students reside on campus, special emphasis is given to the six residence halls and their programs. The residence life program is an essential part of the student's life, as it can provide the union of learning with the art of living. First-year and sophomore students who do not reside with their parent(s) or legal guardian within a reasonable commuting distance from home are required to live on-campus. Junior and senior students may elect to live off-campus but may face financial penalty in doing so; they are encouraged to talk with Financial Aid before making decisions to live off-campus.

The Residence Life staff informs students of University policies and rules and assists them in their adjustment to the University environment. All domestic students living on campus must utilize a campus meal plan; contact the Office of Residence Life for more information about meal plans and to enroll.

On-campus living provides a balance of challenge and support for residents, allowing residents to learn about themselves and others and to take responsibility for themselves and their development. Therefore, the role of Residence Life is to contribute to the development of residents through the creation of diverse and positive living environments. The Director oversees the office and works closely with Area Coordinators, live-in professional staff that have responsibility for working closely with their residents; each Area Coordinator oversees two residence halls.

\section*{Meal Plans}

A resident student who withdraws will be charged for meals up through the end of the week of withdrawal. The remainder is refunded.

This refund policy applies to voluntary withdrawals.

\section*{Additional Information}
1. Meal plans will not be changed after the second Monday following the beginning of classes. Specific dates will be printed on the top of meal plan change forms each and every semester. These dates and the relevant forms can be picked up from the Housing and Residence Life Office in Swint Hall 201.
2. Single rooms in the residence halls are only available when space permits. Single rooms will be offered on the basis of academic credit only after a two week housing freeze which happens at the beginning of each and every semester. Single rooms have an additional fee to be determined by the Board of Trustees.
3. All students with less than 60 academic credits must live on campus in the residence halls, unless they live with their legal guardians and commute from within a reasonable distance from the University. The Office of Residence Life determines housing status for each student on a case-by-case basis.

All students living on campus are required to sign a housing contract which is legally binding for the entire academic year. Any student who moves off campus without prior permission from the Office of Residence Life is subject to pay the entire housing fee for the academic year. Any student who breaks a housing contract at any point during the academic year is subject to pay for the entire housing fee for the academic year. The Office of Residence Life Career Advising

\section*{Career Services}

Career advising is infused throughout the campus of Wheeling Jesuit University and students can find career resources in many areas. Career Advisers (CAs) are professional staff who supplement their regular work with career advising. CAs are assigned to students based on specific student and alumni groupings that may vary from year to year. CAs are trained to assist student with basic career needs, including writing resumes, cover letters, and how to use the College Central Network to access internship and job postings. Students are also encouraged to talk with faculty about job possibilities within their majors and about possible internship sites. Wheeling Jesuit students and alumni have access to our thorough online career source - the College Central Network (CCN) - 24 hours a day. Simply by logging on to www.collegecentral.com/wju and using their student ID\# as students' "Access ID," students can create a profile, submit a resume and use local and national job boards to find internships and jobs. Students can also make a connection with alumni who've signed up to serve as career mentors via the CCN. To do so, students only need to visit the "Career Mentoring Network" option and use the password "jesuitlinks" to gain access; through this resource, students can connect directly with Wheeling Jesuit alumni who are eager to provide career assistance.

Students who post resumes on the CCN will automatically receive direct feedback from a Career
Adviser; students may also contact the Office of the Dean of Student Development in Swint 209 or 304-243-2350 to request a meeting with a Career Adviser.

Career planning can be broken down into three phases depending on student needs:

\section*{Phase 1: Career Exploration}

Freshmen and sophomores who are undecided about their major or don't know what to do with the major they have chosen should research career options within their majors.
The internet has a wealth of resources for this kind of research and students are advised to also speak with faculty within their majors.

\section*{Phase 2: Experiential Education}

The College Central Network has various resources to connect students with internships, student research opportunities, and summer, part-time, and full-time jobs. It's very important that students develop work-related skills by taking advantage of such
experiences during your college years. Students are strongly encouraged to hold employment and/or internships during their time of study at Wheeling Jesuit University.

\section*{Phase 3: Transition}

The transition process begins at the end of the junior year. The University offers programs to help juniors and seniors along the way to post-graduation planning; it is important that students take initiative to attend these programs. Generally, students have
four options after graduation: 1) full or part-time employment, 2) graduate or professional school, 3) opportunities in a variety of volunteer/service programs (such as the Peace Corps or Jesuit Volunteer Corp), or 4) enlistment in military service. Students may also choose to complete a post-graduate internship program.

Some ideas on how to help students plan for their career early in their college career are highlighted in the four year plan below.

FRESHMEN - Develop a Plan ■
+ Assess interests and values
+ Choose a major
+ Seek opportunities to develop skills
Begin their professional development by joining a student organization or club
Attend leadership development workshops
Consider volunteer / service opportunities that may complement educational / work
experiences
Research major and career options related to your interests
Become familiar with the college catalog regarding general studies and requirements for majors offered at Wheeling Jesuit University
Meet with your academic advisor regularly
Maintain a good GPA
Apply for summer jobs and internship opportunities
+ Become familiar with resources available on the College Central Network
SOPHOMORES - Build a Foundation ■
+ Plan a meaningful and marketable education
+ Hone work-related skills
Join relevant student and professional organizations or work toward a leadership
position within an organization
Seek additional internship(s) or work-related experiences
Continue in or select an additional volunteer / service experience
Learn how to develop a portfolio
Declare a major if you have not done so
Meet with your academic advisor to confirm a degree plan
Get to know professors teaching in your major; ask them about potential job opportunities within that degree field.
Choose electives that will provide additional desirable skills
Maintain a good GPA
Develop your professional resume
Talk to alumni regarding specifics about your major or chosen career
+ Use the College Central Network to search for internship, employment opportunities, and to connect with alumni (using the Career Mentoring Network option) in your field.
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JUNIORS - Evaluate your Progress
+Assess experiences

+ Develop networking opportunities
+ Become knowledgeable about the job-search process and / or graduate school
Explore graduate and professional school options and requirements
Develop your networking skills
Conduct information interviews with professionals in your field
Attend seminars related to your major
Update your professional resume
Seek additional internship information and volunteer experiences
Maintain a good GPA
Continue to update your portfolio with samples of your work
Attend career and wellness workshop sessions
Continue involvement in leadership positions in student organizations
+ Upload your resume on the College Central Network to receive feedback from a Career
Adviser.
SENIORS - Decide and Commit
+ Practice mock interviews
+ Begin job search process and / or graduate school application process
+ Attend job fairs
Update and polish resume
Identify references and obtain letters of reference
Practice mock interviews
Prepare for and attend job / graduate school fair opportunities
Revise and update your portfolio - complete with examples of work
Maintain a good GPA
Attend career workshop sessions
Continue seeking networking opportunities
+ Use the College Central Network to search and apply for jobs, to prepare for interviews, and to
make connections with alumni in your field of choice via the Career Mentoring Network on the
CCN.case-by-case basis.

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The mission of WJU's Office of Career Services is to provide progressive services and resources that help students and alumni prepare for and manage their careers, learn job-seeking skills and locate suitable internship as well as employment. Career Services offers many activities, services and resources to assist all students in their transition from college to postgraduation pursuits in the world-of-work or graduate school. The Office is staffed by a Director who works with a team of Career Advisers; each residence hall is assigned a Career Adviser to meet residential students' career planning needs.

Some of the services that may be found useful are individual career counseling, career or graduate school fairs, career planning including resume, cover letter, and interview preparation, presentations on various topics and job search skills. Career, internship and graduate school information is available in the career library as well as on the University's premier online career source, the College Central Network. All enrolled WJU students can access the College Central Network by using their student ID numbers to log in at www.collegecentral.com/wju. The College Central Network provides students with a wealth of career resources ranging from Resume and Cover Letter preparation, access to national job and internship postings, preparation videos and podcasts, and the Alumni Mentoring Network where students can communicate with alumni in their fields any time of the day. The College Central Network is also available to alumni regardless of year of graduation and to employers seeking to recruit Wheeling Jesuit University students for job and internships.

The Office of Career Services at Wheeling Jesuit University is a member of the National Association of Colleges and Employers (NACE) and the Upper Ohio Valley Career Seminars Consortium (UOVCSC). The Office is located on the sec-
ond floor of Swint Hall and is open weekdays from 8:30 a.m. to 5 p.m. Appointments for individual assistance are recommended. 304-243-2464.

\section*{Student Activities}

The Office of Student Activities and Event Planning offers a variety of opportunities for the campus community to engage in recreational and/or educational opportunities. The Campus Activities Board (CAB) is a student organization that works with the Office to bring performers, comedians and a wide variety of entertainment and educational programs to the WJU community. This organization also sponsors dances and various other campus events. The Office also oversees the student areas in Swint Hall, including student lounges, the Theater, and the Rathskeller and Convenience Store. In addition to programming every weekend, CAB works with the Student Government Association and other campus organizations in hosting large events such as Welcome Week, Homecoming Weekend and Last Blast.

The Rathskeller, or the "Ratt," as it is more commonly called, is an on-campus pub and café that provides the WJU community with a social meeting and gathering place. The Rathskeller observes all state and local laws concerning alcohol consumption and provides a variety of non-alcoholic beverages for underage students and those who choose not to consume alcohol. A variety of non-alcoholic drinks and snacks are available for purchase at the Ratt.

In cooperation with the Student Government Association, the Office oversees the campus Intramural Program. The Intramural Program is directed by student commissioners who plan and implement the various offerings such as flag football, basketball, kick-ball and other seasonal sports and activities that students request.

All WJU students are encouraged to participate in or take advantage of these various programs. Most events sponsored by the Office of Student Activities and Event Planning, CAB and Student Government are free of charge to WJU students who pay a semester Student Activities Fee and can be found advertised in the online events calendar.

\section*{Health Center}

The Health Center is located in Swint Hall. It is staffed by a full-time secretary and a part-time registered nurse. The nurse is available four days a week to offer services of basic triage, minor first aide, some over the counter medications and other low intensity services at no extra charge. The Health Center provides healthcare resources internally and works as a liaison between external health care providers when needed. The Health Center is dedicated to promoting the Wheeling Jesuit University mission for educational excellence and service to others by providing a holistic model of health care. All health records and visits are kept confidential unless otherwise directed by the student.

\section*{Student Government}

Wheeling Jesuit University Student Government provides students with a means of participation in the direction and government of the University. Student Government conducts regular meetings, officers are elected by the student body and various chairs are appointed by the officers. Board members serve on campus-wide committees, regularly communicate student concerns to members of the University's administration and involve other students in the governance process of the University.

Senators are class officers and four are elected at large to represent their members in the Student Government. A Commuter Student Organization seeks to meet the special needs of commuting students. Each class elects its own officers, who serve as senators, for the purpose of promoting class unity through various activities.

\section*{Student Organizations}

The University has a number of clubs and special interest groups which meet the needs of a diverse student body. Some of these include: Biology Club, Chemistry Club, Physics Club, and Students for Life, Performing Arts Club, Residence Hall Council, Martial Arts Club, WV Student Nurses, JAPOT (Peace and Justice Organization), Future Executives Club, PEERS, Black Student Union and the Society for Women. A current list of organizations can be found on the University Web site. Some of the larger clubs on campus are as follows:

The Campus Activities Board is a group of students who volunteer under the direction of the Director of Student Activities to plan and sponsor a variety of activities both on and off campus.
These events include, but are not limited to concerts, comedians, coffeehouses, homecoming, spring carnival, movies and dances. Off campus recreational trips may include, skiing, hiking and white water rafting.

Honoraries include groups which are local chapters of national honor societies. Academic honor societies are all managed through the appropriate academic department. They are Alpha Epsilon Delta is a national honorary society for Pre-Health Professions; Alpha Mu Gamma is a national honorary society open to students who have distinguished themselves in modern languages; Alpha Phi Sigma is a national honorary society for students in Criminal Justice; Alpha Sigma Nu is for men and women who distinguish themselves in scholarly pursuits, loyalty and service to the University and community are eligible for membership in the National Jesuit Honor Society; Beta Beta Beta Biological Honor Society is a national honor society for students in biology; Gamma Sigma Epsilon is a national honor for chemistry majors; Kappa Delta Pi. International honor society in education; Kappa Mu Epsilon is a national honor society for mathematics; Lambda Beta is the national honor society for Respiratory Therapy; Lambda Pi Eta is a national honor society for students in Communications; Phi Alpha Theta is a national honor society for philosophy; Phi Sigma Tau is an honor society for history; Physical Therapy Honor Society is an honor society for students in physical therapy; Psi Chi is a national honor society for psychology; Sigma Iota Rho is a national honor society open to students who have distinguished themselves in the academic areas of international studies, international business or peace studies; Sigma Beta Delta is a national honor society that recognizes business majors who have distinguished themselves in academics and leadership; Sigma Pi Sigma is a national honor society for physics; Sigma Tau Delta. An international honor society for English; Sigma Theta Tau International Nursing Honor Society is an international honor society for nurses who have distinguished themselves in nursing scholarship and leadership.

\section*{Student Publications}

Jewelweed is a literary review published at Wheeling Jesuit University and edited with the assistance of the English Faculty. Submissions are open, and the magazine is listed in national creative writing directories. Students serve on the editorial board and may submit work for review and possible publication.

The student newspaper, the Cardinal Connection, is written edited and published regularly. Staff positions are open to students who wish to develop journalistic skills.

The World Wise is the official publication of the International Students Club.

\section*{Student Rights and Responsibilities}

Wheeling Jesuit University as an educational institution is committed to providing for its students a campus environment in which serious study and learning can take place. The University considers all students, residents and non-residents as its partners in the responsibility of creating and maintaining that environment. All students are expected to conduct themselves accordingly and are expected to abide by all the policies and regulations of the University as a condition of academic acceptance to the University. While many such policies and regulations are discussed in this catalog, students are expected to be familiar with the University's academic catalog and other publications regarding such matters.

Judicial authority in non-academic affairs is vested in the Division of Student Development through the Dean for Student Development and his/her delegates. The Student Conduct process is described in the Student Code of Conduct and Sanctions section of the WJU Student Handbook, available online or in hard copy through the Dean of Student Development Office.

\section*{Athletic Activities}

Wheeling Jesuit University offers a well-balanced athletic program of intercollegiate, intramural and club sport activities.

\section*{Intercollegiate Athletics}

Wheeling Jesuit is a member of the Mountain East Conference, composed of 12 member institutions. A Division II Member, National Collegiate Athletic Association (NCAA), Wheeling Jesuit competes on the intercollegiate level in men's and women's basketball, men's and women's soccer, men's and women's track, men's and women's swimming, men's and women's cross country, men's and women's golf, women's volleyball, men's and women's lacrosse, women's fast-pitch softball and men's baseball, and wrestling.

\section*{Intramurals}

The University sponsors a strong intramural program all year long. Among the intramural sports are flag-football, soccer, volleyball, basketball and softball.

\section*{Athletic Facilities}

The Alma Grace McDonough Health and Recreation Center, completed in 1993, is the home of the "Cardinal" basketball and volleyball squads and is also used for a variety of recreational activities. It features a 2,500 seat gymnasium with two full-size basketball courts, one main cross court for varsity games and an elevated jogging track with a warm-up area. The Health and Recreation Center also includes an indoor six-lane, 25 yard swimming pool, an aerobics room, a multipurpose room and two racquetball courts. The James Trueman Fitness Center, which is equipped with Nautilus machines, free weights and cardiovascular equipment, is also housed in the Center.

In 1998, the University opened the Outdoor Athletic Complex which includes the James LaRosa field, the Bill Van Horne Grandstand, the Lenore Retzer Joseph Press Box, tennis courts, softball diamond and track facilities. This facility is used for soccer, track and other sporting events. The

Emily LaRosa field is also used for soccer, rugby and lacrosse matches as well as intramural events.
The University encourages personal and group physical fitness. It is the aim of the University to provide a variety of competitive activities and to strongly encourage students to participate in one or more of the sports programs and to develop leadership, teamwork and a positive attitude in student-athletes.

\section*{Counseling Center}

The Counseling Center serves students by providing education, prevention and intervention dealing with a variety of personal issues and concerns. Staffed by a licensed professional counselor, the center promotes individual growth and development and assists students in their adjustment to and through University life. Throughout the academic year, the Counseling Center presents educational programs that focus on student concerns. Services are available to all on an individual and confidential basis. The Counseling Center is located in Whelan Hall.

\section*{Services for Students with Disabilities}

Wheeling Jesuit University is committed to providing accessible facilities and reasonable academic accommodations to students with physical or learning disabilities. The University complies with Section 504 of the Rehabilitation Act
of 1973 and the Americans with Disabilities Act of 1990.In order to receive accommodations under Section 504 and ADA, students with disabilities must self-identify to the University, provide current (within three years) and comprehensive documentation concerning the nature and extent of the disability and communicate their needs to the Wheeling Jesuit University Disability Services Director before they begin their studies on campus. The Disability Services director is located in the Center for Educational Technologies, CET Room 210, 304-243-4484.

Students with disabilities that require specific housing accommodations should contact Residence Life before June 1 st to ensure their needs can be met.

\section*{Parkhurst Dining Services}

The University's Dining Service is provided by Parkhurst Dining Services, which employs an experienced staff to deliver exceptional culinary experiences. The dining service features a dynamic program tailored to meet all WJU students. While a campus meal plan is available to residential students (via the Office of Residence Life), all students and employees can use "munch money" that they put on their ID cards to eat in the dining hall and the campus coffee shop, both ran by Parhurst. The campus coffee shop, also known as the Kiosk, located in the lower part of Swint Hall, is designed to cater to faculty and students on the run or seeking a coffee shop environment with a great view of the campus lawn. The dining room, also known as the B-room, is located in Swint Hall and offers dining hours throughout the day. Students are encouraged to express their voice about the campus dining service through participation in the Student Government Association or my contact the General Manager of Parkhurst (office location inside of the dining hall).

\section*{English Language Institute}

The English Language Institute is a language school for students from non-English speaking nations who come to learn English. The English Language Institute is located on the ground floor of Ignatius Hall. Through short, intensive courses, students acquire the knowledge of English necessary for travel, professional or occupational communication, or admission to a United States institution of higher education. To offer the most effective education, class sizes tend to be small. Traditional University students benefit from interacting with these International students.

The English Language Institute is located on campus and is affiliated with the University. Classes are available for students enrolled in the University, students anticipating enrollment, or individuals here only to learn English. For further information, contact the ELI Coordinator.

\section*{Campus Safety, Security, and Parking}

The Campus Safety and Security Office is responsible for vehicle registration, parking and the security of the campus. A member of the campus safety and security staff is available 24 hours a day. Student Safety and Security Assistants are also on patrol during the late evening hours during the semester. Any member of the community or guests on campus may contact Campus Safety and Security to receive an escort from one place on campus to another. Escort service will be provided by either the safety and security officer or the student security assistants' team on duty. For a fee, students are permitted to have automobiles on campus, however, vehicles must be registered at the Campus Safety and Security and follow working regulations.

\section*{Financial Aid Information}

The Financial Aid Office coordinates the University, federal and state financial aid programs. This office also provides information regarding scholarships, loans and grants from private sources (non-institutional, non-governmental aid). Detailed information about the variety of aid opportunities and how to apply for them is described in the Financial Aid Programs section of this catalog.

\section*{Financial Aid Programs}

Financial aid is awarded on the basis of scholastic achievement, financial need or a combination of both. Offers of assistance are designed to supplement the resources of the family and may vary per academic year.

For federal, University, state and most private aid, family resources are measured by the needs analysis formula of the Free Application for Federal Student Aid (FAFSA). A family's Expected Family Contribution (EFC) is based upon the information submitted on the FAFSA, which includes income, assets, number of people in the family and other family factors. All students are required to file the FAFSA if they wish to apply for federal, state and University aid and scholarships.

The FAFSA is filed electronically at www.fafsa.gov, an official U.S. Department of Education Web site. You may submit your signatures via U.S. mail or electronically using a PIN. You can apply for your PIN at www.pin.go.

The difference between the Expected Family Contribution and the Cost of Education (COE) for an academic year represents a student's "financial need."

Financial assistance may be in the form of federal, state, University or private aid. There are three types of aid: grants ("gift aid," including scholarships), loans (low interest loans requiring repayment) and work opportunities.

All financial aid is disbursed directly to students' accounts for charges relating to tuition, fees, room and board. Aid exceeding student account charges may be issued as a refund to the student for other educational expenses (books, supplies, etc.).

\section*{How to Apply}
1. The student must be accepted for admission to the University in order to receive an official offer of financial aid. If applying after January 1 of the high school senior year, an applicant should apply for financial aid and for admission concurrently.
2. An applicant for aid must submit the Free Application for Federal Student Aid and list Wheeling Jesuit University Federal school code: 003831. Most states use the FAFSA for their grant programs; check with your state grant - agency for details. Once the FAFSA has been filed and processed, the Department of Education (DOE) will send
- the student and the University an electronic SA provided the student listed the correct Federal school code. The student and Wheeling Jesuit can make corrections on the
SAR and send electronically to DOE for reprocessing.
3. WJU may require verification of information and may request a copy of an applicant's IRS Federal Tax Transcript, the applicant parent's/spouse's IRS Federal Tax Transcript and the WJU Verification Worksheet.

\section*{Wheeling Jesuit and Federal Aid Programs}

Wheeling Jesuit University aid will only be awarded for a total of four years. Federal aid will be awarded until the student has reached the aggregate loan \& Pell Grant limits. Students who take longer than four years to complete a bachelor's degree may appeal to use Wheeling Jesuit aid for an additional semester. The Financial Aid Committee will review and decide the outcome of the appeal request. Wheeling Jesuit aid requires full-time enrollment. No student who has Wheeling Jesuit aid as a part of a financial aid package will receive grant assistance in excess of his or her direct costs with the University.

\section*{Academic Scholarships}

The Wheeling Jesuit University Scholarship Program provides financial assistance to students who demonstrate potential for scholarship and leadership. These awards are based on demonstrated merit and may be unrelated to financial need. (However, the awards may affect other need-based aid in the aid packages.)

\section*{Institutional Scholarships \& Grants}

\section*{Competitive Scholarships}

Admitted incoming students may compete during their senior year in high school for academic and merit based awards. Renewal of these scholarships requires academic progress, required GPA and required major.

\section*{Stephen J. Laut, S.J. Memorial Scholarships}

Four-year full tuition scholarships are awarded each year to two winners of a competition among entering freshman who plan to enter the Laut Honors Program at Wheeling Jesuit University. Competition is open to high school seniors with these qualifications: 3.4 cumulative high school average and a combined score of 1100 on the SAT or a composite score of 24 on the ACT. To retain this scholarship for the following year, a student must attain a 3.0 cumulative GPA at the end of the freshman year, 3.1 cumulative GPA at the end of the sophomore year and 3.2 cumulative GPA at the end of the junior year.

\section*{The Arrupe Award}
is an award over a four year period provided that they maintain a 2.5 cumulative grade point average. This competition is open to entering freshmen who have a distinguished record of community service as a Christian leader. Recipients must continue to be actively involved as a leader in a campus-based community service organization.

\section*{The Choral Award}
is an award over a four year period and based on competitive auditions and interviews that take place early in the spring. Auditions are open to entering freshmen with choral experience. Recipients must be participants in the University's choral groups each year to receive the entire award.

\section*{The Music Ministry Award}
is an award over a four year period and based on competitive auditions and interviews that take place early in the spring. Auditions are open to freshmen with liturgical music experience. Recipients must actively participate in the chapel music programs (including four concerts per year).

\section*{Mount de Chantal Music Scholarship}

A one-year renewable scholarship of \(\$ 10,000\) is awarded annually to an incoming freshman female student who maintains a cumulative GPA of 3.0 and participates actively in music performance on campus in a conducted ensemble. Made possible by the Sisters of the Visitation, who for 160 years operated Mount de Chantal Visitation Academy in Wheeling, the scholarship continues their legacy of nurturing musical talent in an exemplary educational setting. Applicants must be faith-filled high school seniors with a record of Christian service, a minimum high school GPA of 3.5 , and a minimum score of 1100 on the SAT and/or 24 on the ACT. An essay is required for consideration, and finalists will be invited to campus for an audition and interview.

\section*{Endowed Scholarships}

Unless specifically noted, no special application is necessary. Admitted students with FAFSA results on file will be considered for these scholarships as funding becomes available. For the most up-to-date scholarship information, please visit our website at: www.wju.edu/admissions/finaid/scholarships.as.

\section*{Adamiak (John and Helen Regiec) Memorial Scholarship}

Established by Col. Carol Adamiak Yarnall ' 63 and William C. Yarnall in loving memory of Carol's parents, John Adamiak and Helen Regiec Adamiak. This scholarship benefits a student who fits one of the following criteria: a graduate of Bishop Donahue High School, a member of the St. Francis Parish or a resident of Marshall County, WV.

\section*{Berthold/Neal Family Scholarship}

Established by the Berthold/Neal Family this scholarship provides financial assistance to a deserving student(s) from Ohio, WV and PA based on the recommendation of the Admissions Office.

\section*{Biery (Guy and Marie Paul) Memorial Scholarship Fund}

Established in loving memory of Guy and Marie Paul Biery this scholarship assists needy students who are residents of Ohio County, WV and graduates of Wheeling Central Catholic High School.

\section*{Bodkin (Sally) Memorial Music Ministry Scholarship}

This award is based on a competitive audition for students with liturgical music experience and was established in honor of a WJU alumna from the class of 1969.

\section*{Cardinal Athletic Scholarship}

Established by the Cardinal Athletic Club. This scholarship is awarded to a student with outstanding athletic ability who meets all academic eligibility requirements, who is committed to performing community service and who graduated from an OVAC member school. An emphasis is placed on those who will represent WJU athletics in an exceptional manner.

\section*{Carrigan (Thomas F.) Alumni Scholarship}

An award established by the WJU Alumni Association in memory of alumnus and first alumni director, Tom Carrigan. Alumni children or grandchildren with a cumulative GPA of 2.5 who display compassion, commitment and a work ethic which involves genuine friendship and loyalty are eligible for consideration. Application and interview required.

\section*{Chambers (James B.) Memorial Scholarship}

Awards available to residents of Ohio County, WV who demonstrate need and academic promise.

\section*{Chicarella Psychology Scholarship}

Established by Rosemary Chicarella to benefit a competent student who demonstrates need and who is majoring in psychology.

\section*{Class of 1965 Septimi Scholarship}

Established by the members of the class of 1965, this award is available to students who demonstrate need, are in good academic standing and who are relatives of WJU alumni. Priority is given to relatives of the class of 1965 graduates. Number and amounts vary.

\section*{Class of 1972 Scholarship}

Established by the members of the class of 1972 on the occasion of their 25th reunion. This scholarship is awarded to help an average student from a middle class family who is not eligible for larger academic scholarships. An alumni committee will select the recipient with first preference given to children, grandchildren and relatives of the class of 1972.

\section*{Class of 1974}

To benefit a student that is a legal child, grandchild, niece, or nephew of a member of the class of 1974. Recipient must be enrolled as a full-time student and maintain a cumulative GPA of 2.5. If no relatives from the class of 1974 are available then the award will be released to a legal child, grandchild, niece, or nephew of any WJU alumni.

\section*{Cogan (Virginia Frantz and Maurice W.) Memorial Scholarship}

Funded by the Cogan family, this scholarship is awarded to incoming or returning students that demonstrate financial need. Preference will be given to athletes from Cleveland St. Ignatius area.

\section*{CONSOL Fund}

To benefit a student from Greene County, PA.

\section*{Costain (Thomas P./Patricia L. Giglio-Salle) Memorial Scholarship}

To benefit a student who demonstrates need that participates in the Campus Ministry Music Program and maintains a cumulative GPA of 2.5 .

\section*{Currie (Rev. Charles, S.J.) Philadelphia Alumni Scholarship}

Established by the Philadelphia Alumni Chapter to benefit a child, grandchild, niece or nephew of a Philadelphia alumnus/ a. Recipient must reside within the Philadelphia southeast/five county region for more than \(50 \%\) of his or her life. If there is no Philly resident, then a child, grandchild, niece or nephew of a PA resident will be considered. Preference will be given to juniors and seniors.

\section*{DiPiero (Vicky) '65 Diversity Scholarship}

Awarded to a minority student from West Virginia. Student must maintain a cumulative GPA of 2.5.

\section*{DiTrapano (Lidano) Scholarship}

Through the generosity of a friend of the family, this scholarship was established in memory of Lidano DiTrapano and is awarded each year to a student from Charleston Catholic High School or from the Charleston, WV area who demonstrates need.

\section*{Eick (Theodora) Scholarship}

Established in loving memory of Theodora Eick this scholarship benefits a student from either Belmont County, OH or Ohio County, WV.

\section*{Gannon (Rev. Edward J., S.J.) Scholarship}

Donated by a grateful alumnus in honor of a favorite professor. The Gannon scholarship is available to juniors and seniors who demonstrate need.

\section*{Greene (M. Virginia) Scholarship}

Established in loving memory of M. Virginia Greene to benefit a student who demonstrates need.

\section*{Hacala Family Scholarship Fund}

To provide annual financial assistance to an academically committed student(s). Must maintain a B average or better, demonstrate the humility to serve the world and God and the leadership to inspire others to service in the model of the family of Mary Niebauer Hacala.

\section*{Hanzely (Rev. Joseph B., S.J.) Scholarship}

To benefit a student majoring in Science.

\section*{Hawk (Henry and Beverly) Scholarship}

Funded by these generous friends of the University, the Hawk award is for students with high academics who are graduates of Lima Central High School and who demonstrated need.

\section*{Hearst (William Randolph) Appalachian Scholarship}

Established by the William Randolph Hearst Foundation to assist students from West Virginia and the surrounding Appalachian area who demonstrate need, academic promise and intend to reside in the U.S. at the completion of their education. Number and amounts vary.

\section*{Helm (Robert and Mimie O'Hara '84) Scholarship}

To benefit a sophomore or junior who shows great aptitude for learning but who has yet to achieve full academic success. Recipient will be selected by the Financial Aid Office with input from the current Rector. Recipient also must exhibit the core values of WJU.

\section*{Hess (Margaret Blackford) Scholarship}

For worthy students from West Virginia with priority given to Wheeling and Ohio County, WV students.

\section*{Hodges (Bishop Joseph H.) Scholarships}

Funded by a generous grant from the Sarah and Pauline Maier Foundation and the Diocese of Wheeling-Charleston, these scholarships are available to West Virginians who demonstrate financial need, academic potential, high moral standards and leadership qualities.

\section*{Dr. John Hollingsworth Scholarship}

To benefit an incoming freshman from the Greater Ohio Valley area majoring in the science or medical field who demonstrates financial need. This award is renewable based on the recipient maintaining a cumulative GPA 3.0 following the sophomore year of study.

\section*{The Jesuit Fathers Scholarship}

The Jesuit Fathers developed an endowment from their contributed salaries to aid students who demonstrate financial need. A minimum of 50 awards are given yearly.

\section*{Jones (Dr. Lee) Scholarship}

Awarded to a student with intellectual curiosity who wants to continue their education, particularly in the field of theology, and who demonstrates compassion by their service to the less fortunate. A commitment to sports/ fitness is a plus factor.

Kirby (Philip C. \& Evelyn F.) Memorial Scholarship
Established in memory of Philip C. \& Evelyn F. Kirby. Financial assistance is provided to students coming to WJU from the 3rd Congressional District of WV, or from Talbot County, MD.

\section*{Kirk (Nolan Lacey) Memorial Scholarship}

Established by a generous but anonymous donor through the WJU Alumni Association, this award is available to students who demonstrate need, with preference given to those from Pittsburgh, PA or the surrounding metropolitan area. Amount and number of awards vary.

\section*{Knights of Columbus Scholarship}

An award made to West Virginia students whose fathers are members in good standing. The scholarship award is based on academic promise and financial need. Applicants must complete a Knights of Columbus Wheeling Jesuit University application with corresponding information by July 15th. Applications and instructions are available from the Financial Aid Office or from your father's Knights of Columbus Council.

\section*{Lantz (The Lewis and Melissa) Scholarship}

Funded in 1993 by Phyllis Lantz Batson in memory of her parents, Lewis and Melissa Morgan Lantz, this award is available to students from Wetzel County, WV.

\section*{McConnell (Herbert W.) Family Scholarship}

Awarded on the basis of need and academic promise to students from Wheeling, WV, these scholarships are available through the generosity of Mary Rose McConnell.

\section*{McCune/Greene County Scholarship}

To benefit students who demonstrate need from Greene County and Washington County, PA.

\section*{McDonough (Bernard P. and Alma G.) Scholarship}

A competitive scholarship based on high academic achievement for students from Wood County, WV.

\section*{McShain (The John and Mary) Minority Scholarship Endowment}

Established and supported by John McShain Charities, Inc., of Philadelphia, PA in support of minority students who demonstrate need and academic promise.

\section*{Merlo (William and Kathryn K.) Appalachian Endowment}

Established in 1993 by generous friends of the University, this award is available to students who have a parent working in the coal mining industry. Please notify the Financial Aid Office if you qualify.

\section*{Murphy (Joseph J. and Virginia R.) Memorial Scholarship}

For the purpose of academic, non-athletic scholarships in the undergraduate and graduate schools as the university sees fit. Preference is to be given to the undergraduate school.

\section*{Nesbitt (Florence Irene) Scholarship}

Established to benefit an undergraduate student.

\section*{The Pride Scholarship}

Donated by honorary degree recipient and country music star, Charley Pride, and his wife, Rozene Pride, this scholarship is awarded annually to a minority student on the basis of academic achievement and outstanding leadership.

\section*{Rakosky Memorial Scholarship}

Financial assistance to students who demonstrate need with preference to residents or former residents of Washington County, PA.

\section*{Riser (Leonard P.) Memorial Scholarship}

Provides financial assistance to an academically committed student(s) who maintains a B average or better, who has demonstrated strong moral principles and is a citizen of the United States of America.

\section*{Schafer (Mr. and Mrs. Edward C.) Scholarship}

Established by Mary E. Schafer in loving memory of her parents Mr. and Mrs. Edward C. Schafer. This scholarship benefits students who aspire to a religious or secular education. First preference given to Schafer heirs.

\section*{Schenk (Albert and Kathleen) Endowed Scholarship}

Established by Kathleen Schenk in memory of her husband, Albert Schenk III. It is to benefit local students within a 50mile radius of the University who demonstrate financial need.

\section*{The St. Patrick Weston Scholarship}

Funded through the generosity of a friend from the Weston area to assist students from St. Patrick Parish in Weston, WV who demonstrate need and maintain a cumulative GPA of at least 2.75 .

\section*{Stifel (George E.) Nursing Scholarship}

For graduates of the Ohio County Public School system. If no one qualifies, residents of Ohio County and surrounding counties will also be considered. Number and amounts vary.

\section*{Summit 2000}

Awarded to incoming or returning students who demonstrate need and have a minimum cumulative GPA of 2.5.

\section*{Szitar (Mary Magdalene) Memorial Scholarship}

For deserving students, Catholic or non-Catholic, from Belmont County, OH who demonstrate need. Number and amounts vary.

\section*{Troy (Rev. William F., S.J.) Memorial Scholarship}

Awarded to students of academic ability and demonstrated need from the Greater-Wheeling area. This scholarship is funded by the faculty, staff and administrators of the University who also maintain and administer this fund.

\section*{Werner-Ritz Pre-Med Scholarship}

Established through the generosity of a special friend of Dr. Tom Ritz, this award is available to a junior or senior pre-med student who demonstrates need.

\section*{Wertz Memorial Psychology Scholarship}

Established in loving memory of Frederick and Elizabeth Wertz, this scholarship benefits a competent student who demonstrates need and is majoring in psychology.

\section*{Winkler Memorial Scholarship}

Established by Mr. and Mrs. Richard J. Winkler in loving memory of their daughter, Rosemarie Winkler Undegrave ' 81. This scholarship will be awarded annually to students who demonstrate need and are majoring in business administration.

\section*{WJU Charter Guild Scholarship}

To benefit a junior or senior student who demonstrates need, who entered WJU as a freshman and maintains a minimum cumulative GPA of 2.5 .

\section*{Yarnall (William and Col. Carol) Scholarship}

Awarded to a student(s) that is in need of financial assistance, that maintains a cumulative GPA of 3.0 and who is from the following areas: 1st Preference - West Virginia, 2nd Preference - Ohio, and 3rd Preference - Kentucky.

\section*{Ziegler (Edouard S. \& Simone J.) Scholarship}

Established to benefit a student who demonstrates high academic promise. Students must be a recipient of the WJU Presidential Scholarship.

\section*{Externally-Supported Scholarships}

\section*{Diocesan Scholarship}

Funded by donations of parishioners in the Wheeling-Charleston Diocese, these scholarships are based upon financial need and academic promise. Students apply to the Diocese.

\section*{Circle of Vision Scholarship Program}

Was developed by the West Virginia Independent Colleges and Universities, which raises funds that provide support to students at member schools. Major contributors to this annual campaign will have named scholarships awarded to WJU students who are residents of WV with demonstrated need and academic excellence.

\section*{Project Best Scholarship}

Funded by Project Best (Building Efficiency by Striving Together) for an employee (or spouse or child) working for a sponsoring company/labor union in the construction industry. Applications available from and submittable directly to Project Best in Wheeling, WV or the Follansbee, WV. /Steubenville, OH area. One or two scholarships of \(\$ 1,000\) each awarded annually by the University. They are renewable if no new recipients are found in any year.

\section*{Dr. William J. Steger Education Fund}

Provided by the Ohio County Tuberculosis Association, interest free loans are given to needy respiratory therapy majors from Ohio, Marshall, Brooke, Hancock, Wetzel and Tyler counties in West Virginia, or Belmont County in Ohio. Loans are progressively forgiven over a three-year period to recipients who obtain employment within a fifty-mile radius of Wheeling. Those seeking employment outside the area must repay the loan. Final selection is made by the Ohio County

Tuberculosis Association. Students and their families are encouraged to use the free scholarship searches available on the internet to explore scholarship eligibility from various organizations that offer financial assistance to those meeting specific but extremely diverse criteria. Several scholarship searches are currently available on the internet. These searches and other financial aid information can all be accessed through http://federalstudentaid.ed.go/.'

\section*{Federal and State Aid Programs}

\section*{Federal Pell Grant}

This program is based upon financial need and determined by the family's expected family contribution (EFC) as reported on the SAR.

\section*{West Virginia Higher Education Grant}

Awarded by the State of West Virginia, this grant is based upon financial need and a satisfactory academic record. Deadline April 15. For more information, please visit www.cfwv.com.

\section*{West Virginia Promise Scholarship}

Awarded by the State of West Virginia, this is based on academic achievement in high school. Students must file the FAFSA form and meet the March 1 deadline. Recipients must complete 30 credit hours per academic year and maintain a 2.75 cum. GPA freshman year and a 3.0 cum. GPA thereafter. For more information, please visit www.cfwv.co .

\section*{Other State Grants}

Students may use Pennsylvania Grants (deadline May 1) at Wheeling Jesuit University. Other states may permit the use of their state grants at Wheeling Jesuit University. Check with the Financial Aid Office or your state grant agency.

\section*{Federal Supplemental Educational Opportunity Grant (SEOG)}

This grant is awarded by the University on the basis of exceptional need and first given to students who have Pell Grant eligibility; limited funding.

\section*{Teach Grant}

The Teacher Education Assistance for College and Higher Education (TEACH) Grant Program provides grants to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. For eligibility requirements and service agreement please visit http://studentaid.ed.gov/PORTALSWebApp/students/ english/TEACH.js.

\section*{Federal Perkins Loan}

This low-interest loan is available to students with demonstrated financial need; limited funding.

\section*{Federal Work Study}

This program based on need is awarded to students to supplement other forms of financial assistance. Students earn minimum wage while working on-campus jobs or in community service jobs. Federal Work Study is awarded, but is not guaranteed. It is not credited to the student's tuition account until the student acquires a job, works sufficient hours and signs a form with the payroll clerk to have the earnings credited to his/her tuition account. It is the student's responsibility to find a job; limited funding.

\section*{Federal Stafford Direct Loans}

A low interest federal loan to students is available through the University on a need or a non-need basis. For details on this educational loan program contact the Financial Aid Office.

\section*{Federal Stafford Direct PLUS Loans}

The Federal Parent Loan for Undergraduate Students (PLUS) is a low interest loan through the university to credit-worthy parents who may borrow cost of education minus any other aid received by the student. For details on this educational loan program contact the Financial Aid Office.

\section*{Alternative Educational Loans}

Loans offered through private lenders to supplement costs not covered by other financial aid programs. A student may borrow cost of education minus any other aid resource. The application process and terms of these leans depend upon the borrower. For details on these loan programs, contact the Financial Aid Office.

\section*{Rights \& Responsibilities of Financial Aid Recipients}

As a consumer of a commodity (financial aid for a higher education), you have certain rights to which you are entitled, and certain obligations for which you are responsible.

\section*{You have the right to know:}
-What financial assistance is available, including information on federal, state and institutional financial aid programs?
-The deadlines for submitting applications for the federal aid programs available.
-The cost of attending the University and its refund policy.
-The criteria used by the University to select financial aid recipients.
-How the University determines your financial need.
-What resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need?
-How much of your financial need, as determined by the University, has been met.
- What portion of the financial aid you received is loan aid and what portion is grant aid. If the aid is a loan, you have the right to know what the interest rate is, the total amount that must be repaid, the repayment procedures, and the length of time you have to repay the loan and when the repayment is to begin.
-How the University determines whether you are making satisfactory academic progress and what happens if you are not.

\section*{It is your responsibility to:}
-Review and consider all information about the University before you enroll.
-Complete all application forms accurately and submit them on time to the right place.
-Pay special attention to and accurately complete your application for financial aid. Errors can result in long delays in receiving financial aid. International misreporting on application forms for federal financial aid is a violation of the law and is considered a criminal offense, subject to penalties under the U.S. Criminal Code.
-Submit all additional documentation, verification, corrections and/or new information requested by the Financial Aid Office.
-Read all forms that you are asked to sign and keep copies of them.
-Accept responsibility for all agreements that you sign.
-Notify the Financial Aid Office of changes in your name, address, housing or enrollment status. (This also applies to loan recipients after they leave the University.)
-Perform the work agreed upon in accepting a work study award.
-Know and comply with the University's deadlines for application or reapplication for aid.
- Know and comply with the University refund procedures.
-Notify the Financial Aid Office in advance when your course load at the University may be less than full-time. Failure to do so will cause delay in the receipt of your funds.
-Notify the Financial Aid Office of any changes in financial status. Failure to do so can result in termination of financial assistance.
-Maintain satisfactory academic progress. Withdrawal from the University or never attending classes will result in partial or full repayment of aid disbursed for the semester involved.

\section*{Withdrawals and Refunds}

Withdrawal from a class or from all classes may impact aid eligibility, both in the semester in which the withdrawal occurs and subsequent semesters. The University's refunds are made based on University policy as specified in the section below of this catalog. Refunds to financial aid programs are made in compliance with the U.S. Department of Education Federal Title IV Refund Policy regulations, state program policies and University regulations.

\section*{Student Withdrawal Financial Aid Refund Policy}

\section*{Federal Return of Title IV Aid (R2T4)}

The Financial Aid Office is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing \(60 \%\) of a payment period or term. The federal Title IV financial aid programs must be recalculated in these situations.

If a student leaves the institution prior to completing \(60 \%\) of a payment period or term, the financial aid office recalculates eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid.
Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned \(=(100 \%\) of the aid that could be disbursed minus the percentage of earned aid \()\) multiplied by the total amount of aid that could have been disbursed during the payment period or term.

If a student earned less aid than was disbursed, the institution would be required to return a portion of the funds and the student would be required to return a portion of the funds. Keep in mind that when Title IV funds are returned, the student borrower may owe a debit balance to the institution.

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.
The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student's withdrawal.

\section*{Refunds are allocated in the following order:}

Unsubsidized Direct Loans (other than PLUS loans)
Subsidized Direct Loans
Federal Perkins Loans
Direct PLUS Loans
Federal Pell Grants for which a Return of funds is required
Federal Supplemental Opportunity Grants for which a Return of funds is required
TEACH Grants for which a Return is required
Iraq and Afghanistan Service Grant for which a Return is required

Other assistance under this Title for which a Return of funds is required (e.g., LEAP)
The University follows the Federal Return of Title IV Aid refund policy. A student who withdraws from the university will have their tuition and mandatory fees refunded based on a weekly percentage using the following table below:

\section*{Refund Schedule}
\begin{tabular}{ll} 
Weeks Completed & Refund \\
Before 1 completed week & \(100 \%\) \\
Before 2 completed weeks & \(80 \%\) \\
Before 3 completed weeks & \(80 \%\) \\
Before 4 completed weeks & \(73 \%\) \\
Before 5 completed weeks & \(67 \%\) \\
Before 6 completed weeks & \(60 \%\) \\
Before 7 completed weeks & \(53 \%\) \\
Before 8 completed weeks & \(47 \%\) \\
Before 9 completed weeks & \(40 \%\)
\end{tabular}

\section*{No refunds after 9 completed weeks}

\section*{Add/Drop Policy:}

A student may have a change of registration during the add/drop period, which is during the first week of the semester. Students may add and drop classes without financial or academic penalty during the add/drop period. After the end of add/drop period, a student may no longer add classes or receive tuition refunds for classes that are dropped and a grade of a W (Withdraw) will be recorded for the class(es).

\section*{Renewal of Financial Aid}

Students must reapply for financial aid each academic year. To process your renewal FAFSA online, go to www.fafsa.e on or after January 1. To remain eligible for aid, students must also maintain satisfactory academic progress. To renew most types of aid, a student must maintain a 2.0 minimum cumulative GPA and earn a minimum of 24 credits per academic year if enrolled as a full-time student.

Part-time students must earn all credits for which they register for each semester. The Financial Aid Office reviews aid eligibility at the end of the academic year. If a student's credit hours or GPA falls below the minimum requirements, financial aid will be withdrawn.

\section*{Veterans}

Wheeling Jesuit University is approved for veterans' benefits. For information concerning veteran eligibility, contact the Registrar's Office or your local Veterans' Administration office. WJU participates in the Yellow Ribbon program.

\section*{Policy Concerning Students Affected by Military Mobilization}

Students called to active duty military service will have one of two options:
1. If enough class instruction has occurred and the faculty member can justify giving a grade of incomplete, the student will have the option of taking an "I." When the student returns, they will be allowed to finish the course work and have the grade changed to the appropriate letter grade. In this case, no tuition will be refunded
2. If the first option is not available or if the student chooses not to take advantage of it, the student will be refunded full tuition and fees for the semester in which they are currently enrolled. If the student is a boarding student, the University will pro-rate their room and board charges for the amount used. Their financial aid package will be adjusted to reflect the lower charges.

\section*{Other Employment Information}

The University's Career Development Center provides information regarding employment trends and placement and average starting salary information. Federal regulations require that average employment salary information of graduates in programs of study designed to prepare them for specific career fields must be available.

At Wheeling Jesuit University programs of this nature are accounting, nursing and the clinical sciences. For more information about job placement and salary averages, contact the Center or the Specific Academic Department. We have local and national information only. No information is maintained regarding graduates.

\section*{Satisfactory Academic Policies and Procedures}

Undergraduate Day; Satisfactory Academic Policies and Procedures: The Federal Regulations require that institutions monitor the academic progress of each student for federal financial aid assistance and the institution certify that the student is making satisfactory academic progress toward earning his/her degree. The determination of progress must be made at least once a year and before the Financial Aid Office releases any federal aid funds for the subsequent semester. Wheeling Jesuit University will monitor credit hour completion requirements and grade point average at the end of each semester. Scholarships may require higher academic standards than those provided under the academic progress guidelines.

Maximum time frame to earn a degree: To quantify academic progress, an institution must set a maximum time frame in which a student is expected to complete a program. For an undergraduate program, the maximum time frame cannot exceed \(150 \%\) of the published length of the program measured in credit hours attempted.

The majority of the undergraduate programs require 120 credit hours for graduation. The maximum time frame for students in the programs is 180 attempted credit hours \((120 \times 1.5=180)\). Students whose programs require more than 120 credit hours for a degree will have a higher limit.

Students are normally expected to complete an undergraduate degree by the end of 4 years. Therefore, students will forfeit their eligibility to participate in federal financial aid programs after 6 years of full time enrollment \((4 \times 1.5=\) 6).

Withdrawals and Pass/Fail (Credit/No Credit) Courses: Grades of W and FA are counted as courses attempted and count toward the maximum time frame.

Incompletes or Grade Changes: Grades of I and X are counted as courses attempted and count toward the maximum time frame. Students must report any grade change to the Financial Aid Office that may impact their financial aid eligibility.

Double Majors and/or Minors: Students who receive approval to pursue a double major/minor will be expected to complete all degree requirements before reaching 180 attempted credit hours.

Change in Major: Students who change their majors will be expected to complete all degree requirements before reaching 180 credit hours.

Transfer Credit Hours: Students who transfer credit hours into WJU will be counted as credit hours completed and count toward the maximum time frame.

Repetition of Courses: If a student repeats a course, both grades will appear on the transcript, but only the highest grade will be factored into the students adjusted GPA. Repeated courses will be counted as courses attempted and count toward the maximum time frame.

2nd Bachelor's Degree: To earn a second bachelor's degree at Wheeling Jesuit University, a student must fulfill the requirements of the new major and fulfill the residency requirements of two full semesters or thirty credit hours earned at WJU. Some majors will involve substantially more than two semesters for completion. Students working towards a second degree are no longer eligible for Federal Pell Grant, Federal SEOG, state aid and institutional aid. Students are limited on how much they can borrow under the Federal Direct Loan Program.

Credit Hour Progression: For students to earn a bachelor's degree you must successfully complete 120 credit hours within a limited time frame. Students are considered to be progressing normally or on pace towards degree completion as follows:

Freshman less than 27 completed semester hours
Sophomore minimum of 27 completed semester hours
Junior minimum of 60 completed semester hours
Senior minimum of 90 completed semester hours
To determine enrollment status of a student, the University will use the number of credit hours in which the student is enrolled for on the first day of classes each semester.
- Credit completion requirement for a full-time student \((12+\) credits/semester): the student is required to complete a minimum of 24 credit hours per academic year.
- Credit completion requirement for a three-quarter-time student (9-11 credits/semester): the student is required to complete a minimum of 18 credit hours per academic year.
- Credit completion requirement for a half-time student ( \(6-8\) credits/semester): the student is required to complete a minimum of 12 credit hours per academic year.

Note: A student who enrolls at different enrollment levels during the academic year will have the credit completion requirement pro-rated. Example, Full-time enrollment -fall semester and half-time enrollment -spring semester, the student must complete a total of 18 credit hours during the academic year.

Qualitative Standards- Grade Point Averages: A student must maintain at least a 2.000 cumulative grade point average (GPA) to be considered making satisfactory academic progress. If the student's GPA falls below the cumulative 2.000 requirement for two consecutive semesters, the student will automatically lose federal financial aid eligibility. Consequently, students must have a higher cumulative GPA in order to retain eligibility for WV PROMISE Scholarship.

The required cumulative GPA is as follow according to the student's academic grade level:
- WV PROMISE Scholarship - Freshmen Year 2.75 and 3.0 thereafter

Procedures: Students receiving financial aid will be evaluated at the end of each semester to determine that he/ she is meeting the standards described above. If the student has reached the maximum number of credit hours without earning the degree, the student will no longer be eligible to participate in the federal financial aid programs.

Federal regulations require that these standards apply to all students. This includes first-time aid applicants, students who have previously enrolled at Wheeling Jesuit University, or those who have not been formally placed on probation.

Financial Aid Warning: The first time a student experiences academic difficultly, they will receive a "financial aid warning" letter. This letter will remind them of the minimum academic requirements for their financial aid programs and strongly recommend them to take advantage of the academic resources available to them. Students will be eligible to receive federal financial aid during the Financial Aid Warning semester. Students will be notified that their academic records will be checked again at the end of that semester. Further action may need to be taken if there are no significant improvements during their warning semester. Students can only receive financial aid for one semester under this "warning" status.

Financial Aid Probation: If a student fails to reach the maximum number of scheduled hours and the Director of Financial Aid determines that the student has fallen below the completion ratio standards for satisfactory progress, the student will be placed on Financial Aid Probation. The student's continued eligibility for federal aid will be at risk. Students who fail to maintain the required minimum GPA will also be placed on Financial Aid Probation.

Students on Financial Aid Probation will receive a separate letter that will outline the academic requirements they must meet in order to receive aid for the following semester. If the student on Financial Aid Probation meets the required conditions of the probation, then the student will be permitted to continue to participate in the federal financial aid programs for subsequent semesters. Students that have been placed on probation will be considered as making satisfactory academic progress for the purpose of receiving financial aid as long as they continue to meet the academic requirements outlined in their probationary letter.

The Financial Aid Office will review the academic records of each student on Financial Aid Probation at the end of each semester. If the student is not meeting the terms outlined on their probationary letter, the student will forfeit their federal financial aid eligibility.

Lack of Satisfactory Progress equals Loss of Federal Financial Aid Eligibility: Students who lost eligibility to participate in the federal financial aid programs for reasons of academic progress can regain that eligibility by enrolling at Wheeling Jesuit University at your own expense (no financial aid assistance). Within the unfunded semester, the student must demonstrate that they are capable of completing a semester without any failures, incompletes, withdrawals and must show the ability to complete their degree requirements within the time frame.

Students who have been academically excluded from the university and decide to re-enroll are not automatically eligible to continue to participate in federal, state or institutional aid programs.

\section*{Right to Appeal:}

A student has the right to submit a written appeal to any decision of ineligibility to continue to receive financial aid. This appeal must be submitted in writing to the Director of Financial Aid within 30 days of notification that the student's aid eligibility has been lost. Appeal letters must be written by the student and submitted via US postal mail, fax or email. All appeal letters must have the student's signature. Appeal letters that are emailed must be submitted through their WJU campus email account, which will represent the student's signature. The Financial Aid Committee will then review all financial aid appeals submitted to the Director of Financial Aid. The appeal can not be based on the need for financial assistance or lack of knowledge that your financial aid was at risk. The appeal needs to be based upon some extenuating circumstance or condition which prevented you from successfully completing your attempted credit hours and/or lack of GPA, or which necessitated that you withdraw from class(es). Students must include in their appeal letter: 1.) Why the student failed to maintain satisfactory academic progress and 2.) What has changed that will allow the student to make satisfactory academic progress during the next semester. Examples of possible situations include death of a family member, serious injury or illness, loss of job, etc.

Students will need to provide documentation along with their appeal letter within the 30 days of notification that the student's aid eligibility has been lost. Examples of possible documentation include death certification, copy of obituary, hospital bills, notification of job loss or overtime work on company letterhead, etc. If no proof of documentation was provided, the Financial Aid Committee will not evaluate the appeal letter. Therefore the student will forfeit any financial aid eligibility.

If you do not have grot yearunds for an appeal or if your appeal is denied, you may still be able to regain your eligibility for future semesters. You will need to enroll at Wheeling Jesuit University at your own expense (no financial aid assistance) and implement an academic plan with the Financial Aid Office and Director of Undergraduate for Success, in advance for the conditions under which eligibility can be regained.

Appeal Approval: Appeals can only be approved if the Financial Aid Appeals Committee determines:
- The student will be able to meet the university's satisfactory academic progress after the next payment period; or
- The student has agreed to follow an academic plan that, if followed it will ensure the student can meet the university's satisfactory academic progress guideline by a specific point in time.

The students whose appeals are granted will receive financial aid on a conditional basis for one semester. The conditions will be outlined in the letter sent to the student granting the appeal. The Financial Aid Committee will review the student's record at the end of each semester to determine their status for the following semester. Students who fail to meet the conditions outlined in their individualized academic plans during their semester will not be able to submit a subsequent appeal.

\section*{Academic Plan Procedure:}

In conjunction with the Director of Undergraduate Success, students will be required to develop a written Academic Plan as part of any appeal process. The Academic Plan will include any of the following:
- Regular meetings throughout the semester with the Director of Undergraduate Success and/or the Academic Resource Center (ARC).
- Required attendance at the beginning of the semester to the Academic Success Workshop.
- Specific steps that the student will take throughout the semester to address the academic difficulties that they encountered in previous semesters.
- Students may be referred to other on-campus departments to address any other problems that may have impacted the student's eligibility to succeed academically.
- Students may also be required to retake courses, review current academic major, faculty early monitoring/ academic alerts, and/or conduct inventory on learning styles.

The student's financial aid eligibility will be reinstated for the upcoming semester upon approval of the students appeal letter and a proposed academic plan. The Financial Aid Committee reserves the right to add additional requirements to the Academic Plan.

\section*{Resources Available for Students:}

The Director for Undergraduate Success
Academic Resource Center
WJU Student Counseling Services - Health Center
Campus Ministry
Career Development Center

\section*{Student Accounts Information}

\section*{Explanation of Fees}

\section*{Full-time day Students}

\section*{Adult/Graduate/Summer Technology Fee}

The adult/graduate/summer technology fee covers the cost of upgrading technology on campus. This is a semester charge for graduate and adult students and summer students.

\section*{Adult New Student Fee}

The adult new student fee is a one-time fee charged to adult and graduate students for setting up files.

\section*{Application Fee}

The student pays the application fee when first applying to the University.

\section*{Athletic Training Fee}

This fee is charged per semester to students enrolled in the athletic training major beginning with their sophomore year. The cost helps cover the additional expense of the major.

\section*{Audit Fee}

The audit fee must be paid to audit a class in any division.

\section*{BOLD Materials Fee}

This materials fee is charged in the first semester of the BOLD program to cover the cost of all printed modules, handouts and copyright fees.

\section*{Challenge Tests}

This fee is assessed to test out of a nursing course.

\section*{Clinical Science Fee}

Any student majoring in any health majors other than nursing must pay a clinical science fee every semester from their sophomore year until they graduate. This fee covers the additional expense of the health majors.

\section*{Degree Certification}

The degree certification fee covers the cost of the graduation ceremony, diplomas, caps and gowns, etc. This fee is charged whether or not the ceremony is attended.

\section*{DPT Science Lab Fee}

This lab fee is charged every term except the first and last term to students enrolled in the Doctor of Physical Therapy program in order to cover the cost of needed lab supplies.

\section*{Faculty Assessment}

This fee is assessed when the faculty gives credit for life experience or professional technical training.

\section*{Graduation Fee}

A graduation fee is incurred by each graduating student regardless of the student's plans to participate in commencement ceremonies. Students will incur the graduation fee with each degree awarded.

\section*{Health Fee - Mandatory Fee}

To assist with providing student health center services and keep cost to a minimum. This is a semester charge for day students.

\section*{I.D. Card}

An initial fee is charged for a WJU identification card.

\section*{I.D. Card Replacement}

A fee is assessed per occurrence to replace a WJU identification card.

\section*{Late Registration Fee}

This is a fee for late registration/confirmation.

\section*{New Student Fee}

The new student fee is a one-time fee charged to full-time day students to cover the cost of setting up a file, orientation.
NSF Fee
All returned checks will be assessed this fee.

\section*{Nursing Fee}

The nursing fee is charged every semester to all nursing students from their sophomore year until they graduate. This fee covers the additional expense of the nursing program.

\section*{Off-Campus Fee}

Any student taking classes at a location other than the main campus must pay this service charge every semester.

\section*{Over-Hours Charge}

This charge is assessed when taking more than 18 credit hours per semester.

\section*{Parking Permit}

A parking permit fee for registering an automobile on campus is assessed annually.

\section*{Professional Writing Fee}

This fee is associated with certain professional writing courses to cover additional expenses of the class.

\section*{Psychology Fee}

This fee is associated with all Psychology courses to cover the cost of disposable goods and services typically related to student research.

\section*{Science Lab Fee}

A science lab fee is associated with any course that has a corresponding lab. The fee pays for additional supplies needed in the lab.

\section*{Student Activity Fee - Mandatory Fee}

This fee funds student activities through student government allocations. Student participation in activities is either free or in some cases at a very minimal cost. This is a semester charge for day students.

\section*{Student Recreation Fee - Mandatory Fee}

This fee is dedicated to the maintenance, repair and replacement of student recreational facilities and/or equipment. It is applied to all full-time undergraduate day students. This is a semester charge for day students.

\section*{Study Abroad Fee}

This fee covers the administrative costs associated with setting up the abroad program. This fee is assessed to all students enrolled in the study abroad program in the fall and spring semesters.

\section*{Technology Fee - Mandatory Fee}

The technology fee covers the cost of upgrading technology on campus. This is a semester charge for day students.

\section*{Tuition Deposit}

Each entering new student is required to make a non-refundable tuition deposit, upon notice of acceptance, to secure their place at Wheeling Jesuit University.

The tuition deposit is credited to the student's account on the first billing of the corresponding semester.

\section*{Payments}

All balances are due and payable by Aug. 1 for the fall semester and Dec. 1 for the spring semester. Summer school classes are to be paid in full by the first day of class. Until payment is made or an externally administered payment plan is accepted, registration will be incomplete and the student may not attend classes or have access to the residence hall or meal plan.

The only alternative to payment in full is through a contract with an external payment plan endorsed by the University. Information regarding an external plan can be obtained from the Student Accounts Office. Wheeling Jesuit University will not issue transcripts and reserves the right to withhold diplomas, statements of honorable dismissals, viewing of grades, etc. for students whose accounts indicate an outstanding balance.

Accounts not paid in full by the required due dates may be assessed a monthly finance charge of one and one quarter percent on the unpaid past due charges. The finance charge will not be assessed against those accounts which have contracted for an external payment plan. During the period of registration (usually one month), interest for current semester charges will be suspended so that all the necessary paperwork relating to loans, federal grant programs, etc., can be processed.

Student financial aid cannot be credited to a student's account until the University's Financial Aid Office has certified aid and the student has completed all paper work, promissory notes and the entrance interview.

Students are responsible for all attorney's fees and other reasonable collection costs and charges necessary for the collection of any amount not paid when due.

\section*{Payment Plan Option}

Wheeling Jesuit University accepts monthly payments made through a payment plan endorsed by the University. For detailed information regarding a payment plan, students should contact the Student Accounts Office.

\section*{Refund Policy - Withdrawal from the University}

\section*{Tuition}

For students who withdraw from the university, the date of formal withdrawal is the date the form is received by the Registrar; this date determines the refund. The University's refunds are made based on University policy as specified in the section below or in the Financial Aid section of this catalog. No refund of tuition is made after the ninth week of a semester.

\section*{Refund Schedule}

The University follows the Federal Return of Title IV Aid refund policy. A student who withdraws from the university will have their tuition and mandatory fees refunded based on a weekly percentage using the following table below:
\begin{tabular}{ll} 
Weeks Completed & Refund \\
Before 1 completed week & \(100 \%\) \\
Before 2 completed weeks & \(80 \%\) \\
Before 3 completed weeks & \(80 \%\) \\
Before 4 completed weeks & \(73 \%\) \\
Before 5 completed weeks & \(67 \%\) \\
Before 6 completed weeks & \(60 \%\) \\
Before 7 completed weeks & \(53 \%\) \\
Before 8 completed weeks & \(47 \%\) \\
Before 9 completed weeks & \(40 \%\)
\end{tabular}

\section*{No refunds after 9 completed weeks}

The above refund applies to withdrawals from the university, not withdrawals from individual courses. Request for withdrawal must be obtained from the Registrar's Office. Neither verbal communication nor failure to appear in class will be considered official notification of withdrawal. Refunds will be granted only to those students who have followed the procedural policy of completing the proper forms.

For students receiving Title IV federal aid, a return of Title IV funds policy will be applied for students who withdraw. Information concerning the return of financial aid is available from the Financial Aid Office.
Students suspended or expelled from the University, regardless of the amount of time remaining in the semester, are not eligible for refunds or rebates for changes associated with housing, meal plans, tuition, or fees. In the case of expelled/ suspended students who also receive Title IV federal aid, a Return of Title IV Refund Calculation will be completed; this may result in the expelled/suspended student owing an additional balance to the University. This information will be determined on an individual basis by the Financial Aid Office.

\section*{Refund Checks}

Students with an actual credit balance are issued an overage/refund check. These checks cannot be processed until a week after the add/drop period - typically the second Friday of each semester. The checks are written on a weekly basis thereafter. These checks can be picked up in the Business Office for full-time day students. They will be mailed to the student's home address if not picked up within a two week period. Students can request to have these checks mailed at any time.

\section*{Cardinal Card/Munch Money}

Money may be deposited on your cardinal card for purchases at the Kiosk, Coffee Shop or to use at the Benedum Room. Any money remaining in any of the accounts from the fall semester will be carried over to the spring semester. If you do not use all the money by the end of the spring semester, you will lose that amount unless you request a refund of that money in writing by May 10 . There is a \(\$ 15\) fee for processing a refund.

\section*{Housing Contracts}

Anyone choosing to live off campus after August 1st without notifying the Office of Housing and Residence Life Office will be assessed the room portion of the bill for the fall semester. Students residing on campus who wish to live off campus for the second semester must notify the Office of Housing and Residence Life Office in writing by November 1st to avoid being assessed the room portion of the bill for the spring semester. The Housing and Residence Life Office in Swint Hall 201.

\section*{The Core Curriculum}

The term "core" at Wheeling Jesuit connotes the "heart" of the curriculum which is centered on the Human Person. Its purpose is to give concrete expression to the Mission of the University: "educating for leadership, educating for life and educating men and women for others."
The core intends to provide all students, regardless of major, with the skills that will enable them to pursue their own integral development and contribute to the common good. In a spirit of free inquiry, it also enables them to articulate a coherent vision of reality and a set of resulting ethical principles. In so doing, it empowers students to discover and to discern that which is true, good and beautiful.
Rooted in the rich Catholic and Ignatian traditions, Wheeling Jesuit affirms that all reality is the work of a loving Creator in whose image and likeness we are made. It views human persons as rational, responsible, communal and called to contribute to creation with their own unique set of skills and opportunities. Convinced that dialogue among differing world views is vital, Wheeling Jesuit welcomes men and women from a rich variety of spiritual and ethnic traditions and encourages all students to grow in their faith as a foundation for promoting peace and justice throughout the human community.

\section*{Concerning Skills}

Students should think creatively and critically and be able to:
Evaluate and construct clear arguments based on the rules of logic
Participate actively in society as scientifically literate citizens
Read various types of literature identify their literary form and assess the accuracy and truthfulness of their content
Use basic mathematical methods to solve quantitative problems
Students should communicate effectively and be able to:
Write fluently, grammatically and eloquently
Search effectively for information using contemporary tools
Assemble and deliver a cogent oral presentation with poise
Engage in reasoned and informed inquiry and discussion
Communicate across cultures and language
Recognize and use non-verbal and symbolic codes of communication
Define problems, identify methods of approaching them and build models to resolve them
Use modern technology effectively in all of the above

\section*{Concerning a vision centered on the person}

A goal central to Jesuit education is that students develop a vision of reality that enables than to ask questions leading to an understanding of:

The nature of persons: their origin, historical context and destiny
The place of persons in the world community in the past, present and future
The role of persons in contemporary culture, including an understanding of the scientific world view, the aesthetic view and experience of life, the philosophical and religious dimension of life and the historical context of culture
The ethical implications of their vision of the person
The integration of methods and content of the various disciplines

\section*{Concerning Values}

In addition to the skills and vision described above, the core should also help students to develop the following attitudes and convictions:
A commitment to and passion for lifelong learning
A commitment to base their lifelong ethical decisions on their vision of the person and of the world
A deep respect for all persons, resulting in a desire to know and learn from men and women from various cultural, religious and racial backgrounds
A strong desire to serve others, improve the human condition and promote faith, peace and justice
A willingness to take leadership roles in their professional work, with a particular commitment to ethical decision- making in personal and professional situations
A sense of responsibility for their actions and the consequences of their actions

\section*{Distribution Requirements}

Composition
One of the following, to be determined by placement:
\begin{tabular}{lll} 
COMP 105 & Process of Composition & \((3 \mathrm{crs})\) \\
COMP 110 & Composition Seminar & \((3 \mathrm{crs})\)
\end{tabular}
\begin{tabular}{lll} 
Fine Arts - Every student must complete \\
FAS 1xx & Any one FAS 100-level course & \((3 \mathrm{crs})\) \\
Mathematics - One of the following: & \\
CSC 108 & Introduction to Structured Pro- & \((3 \mathrm{crs})\) \\
CSC 110 & Computer Science I & \((4 \mathrm{crs})\) \\
MAT 102 & Mathematics in Society & \((3 \mathrm{crs})\) \\
MAT 105 & Introduction to Statistics I & \((3 \mathrm{crs})\) \\
MAT 108 & Pre-Calculus & \((3 \mathrm{crs})\) \\
MAT 111 & Calculus I & \((4 \mathrm{crs})\)
\end{tabular}

\section*{Modern Languages}

Two courses in the same language or completion of 111 or one upper-level course ( \(200+\) ) depending on placement testing results. Nursing students and Health Science majors must only complete SPA 106.

\section*{Literature}

First Level Literature:
LIT 120 Literary Foundations: Methods and Genres (3 crs)

Second Level Literature:
LIT 250* Literary Explorations: Conflicts and Cultures (3 crs)

\section*{History}

First Level History:

HIS 110 The Twentieth Century
(3 crs)

Second Level History:

HIS 120* Historical Methods
(3 crs)

\section*{Science}

Two courses from those listed, but the two must be from separate disciplines (3 crs each):
\begin{tabular}{|c|c|}
\hline CHE 105 & Introductory General, Organic \& Biochemistry \\
\hline CHE 107 & Chemistry for Non-Science Majors \\
\hline CHE 110 & General Chemistry I \\
\hline BIO 105 & The Process of Biology \\
\hline BIO 107 & Evolutionary \& Ecological Biology: \\
\hline & The Dynamic Environment \\
\hline BIO 108 & The Form \& Function of Biological Organisms \\
\hline BIO 109 & Cells and Chromosomes \\
\hline BIO 128 & Anatomy \& Physiology I \\
\hline ENS 110 & Environment and Sustainability \\
\hline GSC 110 & Integrated Sciences I \\
\hline GSC 120 & Integrated Sciences II \\
\hline GSC 135 & Science of Health \\
\hline PHY 104 & Physical Science \\
\hline PHY 105 & General Physics \\
\hline PHY 107 & Astronomy \\
\hline PHY 108 & Geology \\
\hline PHY 110 & Physics I \\
\hline PHY 130 & Physics for Allied Health \\
\hline PHY 131 & Earth and Space Science \\
\hline
\end{tabular}

\section*{Social and Behavioral Sciences}

One of the following courses:
\begin{tabular}{lll} 
POS 110 & American Political Process & \((3 \mathrm{crs})\) \\
PSY 110 & General Psychology & \((3 \mathrm{crs})\) \\
ECO 110 & Macroeconomics & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Global Perspectives}

One of the following courses:
\begin{tabular}{lll} 
INS 111 & World Community & (3 crs) \\
SSC 105 & Social Science from a Global Perspective & \((3 \mathrm{crs})\) \\
SSC 110 & Anthropology & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Philosophy}

First Level Philosophy:
PHI 105* Logic and Knowledge (3 crs)

Second Level Philosophy:
PHI 205 Philosophy of the Human Person (3 crs)

Theology
First Level Theology/Religious Studies: one of the following 3 crs)
\begin{tabular}{lll} 
RST 106 & The Religious Quest & (3 crs) \\
RST 107 & Catholicism & \((3 \mathrm{crs})\)
\end{tabular}
*RST 106 or 107 are prerequisites for all other RST courses.

Second Level Theology/Religious Studies: a selection of most 200 and 300 level courses ( 3 crs ).
**Cannot be satisfied by RST 305.
Ethics/Moral Theology
RST 305 or PHI 305*
(3 crs)

\section*{First Year Seminar}

FYS 101
(1 cr)

\section*{Special Notes:}
1. Developmental courses, intended to develop requisite proficiency, may not be used to satisfy core curriculum requirements. These include COMP 101 Writing; REA 101 Reading; MAT 101 Algebra Review. No more than 6 credits and development courses may be counted as electives toward graduation requirements.
2. Prerequisite courses must be completed before enrolling in subsequent core courses.
3. International students who do not place in ENG 105 or ENG 110 will be required to complete developmental English Language courses. Students, who are not able to place into ENG 105 or ENG 110 after completion of the first developmental English course, must complete another semester of developmental courses. Failure to achieve proficiency in English after the completion of two developmental English Language courses may result in dismissal from the University.
4. *Once a student matriculates at Wheeling Jesuit University, he or she may not transfer in credit for LIT 250, HIS 120, PHI 105, or PHI 305/RST 305.

\section*{Academic Programs of Study}

A student must fulfill the requirements of a major concentration. The student must sign a first major no later than before registration in the spring semester of his/her sophomore year. A major cannot be added after registration in the fall semester of the student's junior year.

Wheeling Jesuit offers the degree of Bachelor of Arts or Bachelor of Science in the following disciplines:
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    Accountancy
    Applied Science (Students in the Engineering 3/2 program with Case Western Reserve University or West Virginia
    University)
Athletic Training
Biology
Business Administration
Management
Marketing
Personal Financial Planning
Chemistry (B.S., B.A.)
Communications and Composition
Communication Studies
Integrated Marketing Communications
Media Writing
Professional Communications
Computer Sciences
Criminal Justice
Engineering Science
3/2 Engineering Program with WVU or Case Western Reserve University (student will graduate from WJU with
a Bachelor of Science, major in Applied Science)
English
Creative Writing
Fine Arts
Literature
Environment and Sustainability
Sustainable Biofuels
Sustainable Energy Systems
Sustainable Chemistry
French
General Science—Physics
History
International Studies
Mathematics
Nursing
Philosophy
Physics
Political and Economic Philosophy
Political Science
Professional Education

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Biology (9 - Adult)
Chemistry (9 - Adult)
English/Language Arts (5 - Adult)
General Science (5 - Adult) add-on to undergraduate degree
History/Social Studies (5 - Adult)
Liberal Students Elementary Education (K-6, Multi-Subjects)
Mathematics (5 - Adult)
Physics (9 - Adult)
Spanish (5 - Adult)
Special Education - Multi-Categorical (K-6 or 5 - Adult) add-on to undergraduate content license major
Psychology
Mental Health Sciences
Behavioral Psychopharmacology
Cognitive Neuroscience
Advanced Statistics and Data Management
Respiratory Care Practitioner
Romance Languages
Spanish
Theology and Religious Studies

A student-designed Independent Major is available; please contact the Director of the Honors Program. Major requirements are explained in discipline listings.

\section*{Minors}

In addition to completing the requirements of a major, a student may declare a minor in another academic discipline. Minors must be declared by registration in the spring semester of the student's junior year.

The following minor programs are available:
Accountancy
Biology
Art
Business
Catholic Studies
Chemistry
Classical Studies
Communications \& Composition
Computer Science
Creative Writing
Criminal Justice
English
Film Studies
History
International Studies
Justice, Gender and Diversity
Law and Society
Literature

Mathematics
Peace and Justice Studies
Philosophy
Physics
Political Science
Psychology
Spanish
Theology/Religious Studies
Writing (Pending approval by the Academic Policy Committee and the full Faculty)

\section*{Double Major}

Double majors are possible for some students and required for secondary preparation program students. Major requirements are specified under discipline listings in this catalog. For majors which have common courses, at least 18 credit hours must be earned from non-overlapping courses in each of the two major areas. Approval for a double major must be secured from the advisor of the first major and the chair of the second major. Double majors may require more than the normal four years for completion.

\section*{Second Bachelor's Degree}

Students who earned a first bachelor's degree at another institution and are seeking a bachelor's degree at Wheeling Jesuit, must fulfill the requirements of the new major and fulfill the residency requirements of two full semesters or thirty hours of credit earned at Wheeling Jesuit. The University's core requirements are waived except for nine hours of philosophy and religious studies. Some majors will involve substantially more than two semesters for completion. A student whose previous bachelor's degree was earned at Wheeling Jesuit is exempted from the Philosphy/Religious Studies requirement.

\section*{Special Academic Programs}

\section*{Professional Education Department (Teacher Preparation Program)}

Contact Person: Jeremy Vittek, Ed.D., Ph.D.
A Wheeling Jesuit University student may follow an education sequence which will result in recommendation for West Virginia Teacher Certification for grades K-12 if the student is able to demonstrate competencies at appropriate levels. The Professional Education Department is open to students majoring in biology, chemistry, English, French, general science, elementary education, mathematics, physics, Spanish, and social studies (history or political science). Further information can be found under the title Professional Education Department.

\section*{Honors Program}

Director: John Whitehead, Fine Arts
The essential design of the Honors Program is to offer outstanding University students the opportunity to explore, in an atmosphere of inquiry unclouded by grade anxiety (participating students receive \(\mathrm{Cr} / \mathrm{NCr}\) ), a topic or topics whose general breadth will encourage a multi-faceted approach. While a single faculty member mentors the Stephen J. Laut, S.J., Honors College (LHC) and another faculty member, selected by the rising senior honors students, mentors the Ignatian Honors Seminar (IHS), both initiatives are actually about a plurality of voices and insights; authorities from within the faculty and beyond visit the seminars and interact with students during the course of the year's exploration of an intellectual topic. More important, the seminar students also explore the world beyond the classroom via field trips and service engagement.

Exceptional students who have demonstrated during their first two years at the University both within and beyond the LHC that they have the potential for leadership and are motivated by cross-disciplinary intellectual inquiry are invited to compete for a limited number of berths in the IHS. The IHS scholars assume significant responsibility for honors seminar curricula, including the design of a service-learning unit they administer to the LHC and, for seniors, the presentation of a capstone scholarly project at the University's Annual Undergraduate Research Symposium (in addition to their individual major disciplinary requirements).

\section*{Requirements}
1. Students fulfill University requirements as indicated by core and major.
2. LHC students are invited into the program by virtue of their high school GPA, standardized college-board scores, and written performance on an essay assigned by the honors program. At the University, they participate in a three-credit annual seminar that introduces them to the honors program and, each year, explores a series of rotating intellectual topics through four modalities: physical, spiritual, cultural, and service. First-year students must maintain a minimum 3.0 GPA after the first semester and a 3.3 cumulative GPA in subsequent semesters. Qualified University students not initially invited into the program at matriculation may seek admission to the program during their first year on campus.
3. Students in the LHC who demonstrate outstanding intellectual and leadership initiative in and beyond the honors program are invited to compete for a limited number of berths (usually between 6-10) in the IHS, where as rising juniors they join with the rising seniors to form that year's elite seminar. Qualifications include a minimum 3.5 cumulative GPA after the first semester of sophomore year (to be maintained throughout all subsequent semesters at the University) and a substantial written application, which may lead to an additional interview before a panel of honors program faculty and students (both current and alumni).
4. A student in the LHC or IHS whose credentials dip below minimum qualifications may petition for a probationary semester. Students who are not meeting minimum expectations of the honors program in regard to their contribution to the program will be invited to improve their performance or resign.

Both LHC and IHS meetings are as scheduled by the individual faculty mentor; the registrar lists meeting times as Wednesday evenings, but the seminars do not meet every week, they do not meet only on Wednesday evenings, and they do not always meet at the same time or place. Students will always be given ample warning about changes of day and time. Over the course of the full, two-semester academic year, students will meet the equivalent of the contact hours for a traditional three-credit, one-semester course.

\section*{Study Abroad Programs}

Wheeling Jesuit University encourages travel and study abroad as part of the educational experience of students. Extended programs of one or two semesters in length, as well as shorter study tours, are available through Wheeling Jesuit's collaboration with other Jesuit universities and with other study abroad consortia. Study Abroad programs are coordinated through the Director of Study Abroad. There is a fee incurred for all study abroad programs.

\section*{Independent Major}

The independent major is a student-constructed major available as an alternative to one of the standard concentrations. This innovative program provides the opportunity to study subject areas not otherwise available at the University. An independent major will involve courses from two or more academic disciplines and may include a variety of non-traditional courses such as independent study courses, field-experience courses and courses taken at other accredited institutions. The result, however, must be a carefully integrated interdisciplinary sequence.

Approval for an independent major must be secured from the Honors Council and the Academic Dean before the beginning of the junior year. Only students in good academic standing may enter. Independent majors have included psychosocial aspects of aging, comparative western cultural studies, health care counseling, architectural design, graphic journalism, public health administration and juvenile delinquency rehabilitation

\section*{Independent Study}

Each department provides independent study courses, commonly numbered 172, 272, 372 and 472 , so that a student can undertake an academic project which lays outside the regular course offerings. These projects, frequently related to a student's career interests or preparation for further study, can be based on the discipline of a particular department or on the integration of that discipline with other areas of knowledge (e.g., a project in bioethics or the history of science). To be eligible to undertake an independent study project, a student must be a junior or senior in good academic standing.

Students may also work independently with a faculty member in an established course. The section number will be listed as \(99,98,97\), etc.

A student is limited to one such course per semester. A grade will be assigned for the course. Individual study projects must be approved during the first week of a semester (add/drop week) by the departmental contact person and by the Vice President for Academic Affairs. A student interested in an independent study project should first discuss the project. Forms to add an Independent Study are located on the Registrar's webpage—www. wju.edu/Registrar.

\section*{Tutorials}

Courses listed in this catalog but not currently offered may be taken as a tutorial under the direction of a member of that department. Approval of the faculty advisor, the instructor, the departmental contact person and the Vice President for Academic Affairs must be obtained in advance. Forms for tutorial courses are located on the Registrar's website atwww.wju.edu/Registrar.

\section*{Internships and Field-Experience}

Internships are sponsored by several departments and many regional organizations. Typically organized as 1-3 credit courses in coordination with off-campus agencies and businesses, on-campus units or sponsored programs, the internships are arranged and finalized by the sponsoring department in collaboration with the Registrar's Office. Faculty members in the sponsoring departments provide guidance and assign grades and credits for courses, which are commonly identified by a 373-374, 473-474 listing. Students earn 1 credit hour for every 45 hours worked. Internships are effective academic tools because they supplement theoretical study with practical learning experiences for upperclassmen. Students interested in internships should confer with their faculty advisor to get more information.

A similar practical approach to university study is the field experience, available in a number of departments, usually as part of a regular course. In the field-experience approach, arrangements are made for an individual or the class to visit a location which provides the resources for learning.

\section*{Academic Procedures \& Regulations}

\section*{Graduation Requirements}

To be eligible for graduation, a student must:
1. Complete the required core curriculum courses;
2. Complete the requirements in at least one major;
3. Complete a minimum of 120 credit hours with an adjusted grade point average (GPA) of 2.000 or above;
4. Complete at the University not less than 18 credit hours required for the major (to be determined by the Chair of the major department);
5. Residency Requirement-Must complete the last 30 hours, required for a degree, at Wheeling Jesuit University (must receive approval from the Vice President for Academic Affairs for a waiver of this requirement)
6. Satisfy all financial obligations to the University;
7. Complete assessment tests and interviews which may be required; and
8. Submit an application for graduation within the prescribed time frame as published by the Registrar's Office.

Students who plan to graduate by August 31st and are no more than two courses short of meeting their degree requirements after the completion of the spring semester may petition the Vice President of Academic Affairs for permission to participate in the spring commencement ceremony

\section*{Financial Requirements for Graduation}

All balances are to be paid in full prior to graduation activities. If the student's account has an outstanding balance, he/she may not be permitted to participate in any or all graduation functions, including actual graduation ceremonies. Also, any student having a balance due on his/her account will be unable to receive his/her diploma or transcripts.

\section*{Grades}

The number of grade points received in any one course is obtained by multiplying the course grade (in quality points) by the number of credits in the course; e.g., a grade "A-" in a three-credit course equals 11.1 quality points ( \(3 \times 3.7\) ).The GPA (Grade Point Average) is computed by dividing the total of the quality points received in a specified number of courses by the total number of credits in those courses. The adjusted GPA is the grade point average as adjusted to account for grades from courses which are repeated or which substitute for courses in the individual's academic record. Official grades used by Wheeling Jesuit University and their grade point equivalents are as follows:


\section*{NOTE: While C-, D+, and D may be passing for an Individual performance, an AVERAGE of C (2.0) is required for graduation.}

At the end of a semester a teacher may assign a grade of " I " if, at the time the grade is submitted, the student is passing the course, but because of unusual or emergency circumstances (e.g., illness), has further work to submit. An incomplete grade may be assigned only if a student has completed all of the course work assigned and due before the last day for course withdrawal. Incompletes may not be given simply for the purpose of improving a grade by doing additional work. The instructor will then turn in this form with his or her final grades at the end of the semester. In the absence of such a request, the instructor may give a final grade of "I" on the grade sheet. A grade of "I" not converted to a final grade by the end of the third week of the following semester will automatically be changed to a grade of "F."

\section*{Transfer of Credit}

Wheeling Jesuit students who wish to take courses at another accredited institution need to consult the Registrar's office for necessary forms and procedures and for all necessary approvals regarding the transfer of credit. Transient forms are available on the Registrar's website at www.wju.edu/Registrart.

\section*{Pass/Fail (Credit/No-credit) Option}

Juniors and seniors with cumulative GPA's of 2.5 or better may register for one course each semester on a credit/noncredit basis, provided that the course is not one required in the core curriculum or in the student's major or minor. This choice on the part of the student must be indicated at the time of registration, and may not be altered during the progress of the course. For passing work in the course, the mark of "CR" and the credit-hours received are recorded on the student's permanent record; if the student does not pass the course, the mark of "NCR" is recorded on the permanent record, but hours attempted are not recorded. The marks of "CR" and "NCR" are not computed in the GPA. Once a student has registered for a class as credit/non credit, he or she cannot, at a later date, request that the class be taken for a grade.

\section*{Repetition of Courses}

Students may repeat a course one time if they receive a grade of C- or lower, or if they need a higher grade to meet the specifically stated requirements to enter or continue in a major or a program. Students who choose this option must complete the identical course. If a student repeats a course, both grades will appear on the transcript but only the highest grade will be factored into the student's adjusted GPA.

\section*{Access to Grades}

Grades and other academic records are also available to duly constituted University committees, which may include one or more students acting in official capacities. Grades will also be released to parents if a student has signed a FERPA waiver form filed in the Registrar's Office. This waiver form permits parents access to the academic record for the duration of the student's enrollment. Parents may also gain access to academic records with proof of dependency as demonstrated on their federal income tax paperwork.

\section*{Examinations}

Semester grades are based upon regular exercises, quizzes, tests, the student's class participation (depending upon the instructor's policy), and the final examination in the course. At least one formal test (of an hour's duration) or equivalent evaluation will be given in each course each half-semester, exclusive of any quizzes and of the final examination. A for-
mal final examination is required for each course offered in a semester, to be given at the time and place designated in the examination schedule published by the Registrar's office.

\section*{Director for Undergraduate Student Success}

The Director for Undergraduate Student Success is dedicated to helping undergraduate students succeed academically and persist to graduation. As coordinator of First-Year Seminar, the Director's goal is to help students make the academic and social transition from high school to college by strengthening the skills needed to succeed in college and by fostering bonding with others in the WJU community. In addition to coordinating FYS, the Director is available to assist transfer students, commuters, veterans, or any other undergraduate students facing academic adjustment issues.

The Director also coordinates an early warning system for students demonstrating at-risk behaviors, such as missing class, failing to hand in assignments, or doing poorly on exams. By reaching out to students who are in jeopardy of getting into academic difficulties, the Director attempts to intervene before the damage is irreparable. Sending emails of concern, meeting with students, advising students, and helping students create academic success plans are ways the Director can help struggling students. Students on probation are required to meet with the Director at the beginning of the semester to create an academic success plan and schedule one or more individual or small-group sessions at the Academic Resource Center. The Director works closely with the Students Outreach and Retention team, a campus-wide administrative group that identifies and provides outreach to students who may be experiencing difficulty in pursuit of their academic goals.

A student who will have an extended absence because of an illness or accident can notify the Director, who will then contact all of that student's professors and keep the student's doctor's excuse on file, saving the student from trying to deal with several different people during a stressful or difficult time.

Despite the Director's efforts, students sometimes choose to leave school or transfer to another university. Before leaving, those students should see the Director to fill out the appropriate paper work and complete the exit interview.

\section*{Academic Dishonesty and Integrity Policy}

The academic community at Wheeling Jesuit University prides itself not only on encouraging intellectual growth but also on fostering moral development by maintaining an environment of honesty, trust, and respect. The responsibility to maintain this environment rests with students as well as faculty members.

Graduates of Wheeling Jesuit University place a high value on the education and degree they have received, which can be attributed to high standards of excellence and the aforementioned environment of honesty, trust, and respect. Students involved in academic dishonesty are contributing to the breakdown of this system. Failure to fulfill this responsibility can result in:
- Lack of trust in the student body;
- Loss of individual integrity;
- Loss of individual self-esteem;
- Loss of University integrity;
- Loss of value of a degree.

Wheeling Jesuit University recognizes that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code.

The Student Honor Code (adapted by Student Government in spring 2002) states: "We, as unique members of the Wheeling Jesuit University community, strive for constant improvement of ourselves through discipline, honesty,
and responsibility. While embodying the values of integrity, accountability, and respect for others, we wish to be instruments of hope, justice, and righteous action." Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. The quality of a Wheeling Jesuit University education is dependent upon the community acceptance and enforcement of the Honor Code.

For more information about academic honesty, contact Academic Affairs, Student Development, or your department chair.

\section*{Academic Dishonesty Guidelines}

\section*{What is academic integrity?}

Academic integrity means giving credit where credit is due in an academic setting. It is an ethical obligation of all people who perform intellectual work, including students, faculty members, and administrators, to preserve the importance of academic integrity. If the source of intellectual work is not cited correctly, then the person who uses that source has engaged in theft of intellectual property.

\section*{Why is academic integrity important?}
1. Lack of academic integrity is unfair to you. When you come to the University, you are committing yourself to engagement in learning and growth. If you commit an academic integrity violation, then you have cheated yourself out of important experiences that could change your life.
2. Lack of academic integrity is unfair to others. Other students will be disadvantaged if you have access to illicit information because it will diminish the meaning of grades. Grade inflation is detrimental to all students' grades. In addition, it is unfair to future employers and clients: if someone hires you as his/her accountant or nurse, he/she expects you to have the expertise in all areas of that field. You are cheating your employer or client by lacking the skills or knowledge that you claim to possess.
3. Lack of academic integrity lowers the reputation of the school. A poor reputation will make Wheeling Jesuit University's degree much less valuable. If grades are inflated because of cheating, then the grades earned will have little meaning to those organizations for which student grades are important. As a result, graduate programs, future employers, and University accreditation boards will question the viability of the school as a place of learning.

\section*{What constitutes a violation of academic integrity?}
1. It is unethical to present as your own work the ideas, representations, or work of another.
2. In addition, if you permit someone else to present your ideas, representations, or work as his/her own intellectual property, then a violation of academic integrity has occurred.

\section*{What does "intellectual property" mean?}

Intellectual property refers to "property (as an idea, invention, or process) that derives from the work of the mind or intellect" (http://www.merriam-webster.com). In other words, intellectual property refers both to one's original ideas and to the manner in which one represents those ideas. Some concrete examples of intellectual property are: ideas, words, phrases from a document; an individual's interpretation of-or argument about-a particular topic, work, etc.; a student's original contribution to a classroom discussion; a published piece of work; a computer program; images on a web page; an oral presentation; a math problem; a lab report; a clinical assessment; and/or an answer on a test. If you are unsure of the originality of your idea or concept, consult your instructor for clarification and/or proper citation.

\section*{To what do the phrases "academic assignments" and "evaluation" refer?}
"Academic assignments" and "evaluation" refer to the tools that your instructor may use to measure your intellectual growth and understanding. Examples include-but are not limited to-papers, exams, quizzes, and presentations.

\section*{What actions constitute a violation of academic integrity under the first definition above?}

An academic integrity violation under Definition \#1 involves the practice of any form of deceit in the proceeding of an academic evaluation. More specifically, if a student depends on the aid of others in a manner either expressly prohibited or not authorized by the instructor in the research, preparation, creation, writing, or publication of work submitted for academic credit or evaluation, the student has committed a violation of academic integrity.

\section*{Some examples of this type of academic dishonesty include:}
- Using unauthorized "study guides," websites, or databases in the preparation of a paper;
- Looking over others' exams to see if they have transcribed similar answers;
- Using devices or referring to materials or sources not authorized by the instructor, including all types of technology (e.g., e-mail, websites, camera phones, or stored information on a calculator);
- Referring to literal or electronic "cheat sheets" during an exam;
- Possessing, buying, obtaining, or using a copy of any material intended to be used as an instrument of academic evaluation prior to its administration;
- Buying papers off the Internet;
- Asking a student in an earlier class for information on a quiz or assignment that you will take in the same class later that day/week;
- Submitting the work of another person in a manner that represents the work to be one's own;
- Allowing one or two people in a group project do all of the work;
- Presenting as one's own, for academic evaluation, the ideas, representations, or words of another person or persons without customary and proper acknowledgment of sources;
- Fabricating data from empirical research;
- Changing data on a lab report in order to demonstrate desired (but not actual) results;
- Fabricating sources and experts for a paper;
- Attempting to influence or change one's official academic record (e.g., paying an employee of the Registrar's office to change final grades).

\section*{What actions constitute a violation of academic integrity under the second definition above?}

An academic integrity violation under Definition \#2 involves active violations of academic integrity on another's behalf. If a student knowingly allows another student to cheat and/or assists another student in the practice of academic dishonesty, both students have violated academic integrity. More specifically, if a student provides aid to others in a manner either expressly prohibited or not authorized by the instructor in the research, preparation, creation, writing, or publication of work submitted for academic credit or evaluation the student has committed a violation of academic integrity.

\section*{Some examples of this type of academic dishonesty include:}
- Letting someone look over your old paper for a class as he/she prepares a similar paper for his/her class;
- Allowing someone else to look at your exam to see if he/she has transcribed similar answers;
- Providing another student with a literal or electronic "cheat sheet" for an exam;
- Sending unauthorized content to a student during an exam or in-class assignment via cellular phone, email, etc.;
- Possessing, selling, obtaining, or giving a copy of any material intended to be used as an instrument of academic evaluation prior to its administration;
- Selling previously written papers;
- Sharing information with a student about a quiz or assignment in a class that you attended earlier that day/ week;
- Knowingly permitting your ideas, representations, words, and/or written work to be submitted by another person in a manner that represents that work to be his/her own.

\section*{What if I reuse part—or all—of my own work from a previous class in order to complete a current assignment?}

Unless your instructor sanctions this course of action, the act of resubmitting ideas, representations, or written work that has been submitted at any time in any form for credit in another course constitutes a violation of academic integrity. When an instructor expects each student to submit original work for a given academic assignment, it is academically dishonest to present as original content any ideas, representations, and/or written work that have been previously prepared and/or evaluated.

\section*{What are consequences for violating academic integrity?}

The sanctions that may be imposed upon finding that an offense related to academic integrity has been committed include:
A. Reduction in grade, or assignment of a failing grade, on the paper or examination in which the offense occurred.
B. Reduction in grade, or assignment of failing grade, in the course in which the offending paper or examination was submitted.
C. Dismissal from the course in which the offense occurred without the opportunity to re-enroll in that course at a future date.
D. Dismissal from the department in which the student has declared a major, and/or exclusion from courses offered in that department, either permanently or for a stated period of time.
E. Placement on academic probation for a specific period of time.
F. Suspension from the University for a specific period of time.
G. Dismissal from the University without expectation of re-admission.

These sanctions may be imposed individually, in whole or in part, or in any combination. Sanctions A and B are within the authority of the individual faculty member to impose, subject to appropriate discussion with the student or students, during which the department chair may or may not be present. Sanctions C and D are under the specific
authority of the department chair, in consultation with department faculty and with the concurrence of the Academic Dean and/or his/her designee. Sanctions E, F, and G are under the specific authority of the Academic Life Committee and/or the Academic Dean to impose. All violations are reported to the Faculty Academic Integrity Officer, who will keep a record of student violations of academic integrity. Before the faculty member formally notifies the student of the sanction(s), the faculty member may contact the Faculty Academic Integrity Officer to determine whether this is the student's first academic integrity violation. If the faculty member learns that the student has been guilty of a prior violation, he or she may choose a more severe sanction.

In all cases of alleged violations of academic integrity, the student has the right to confidentiality and to a fair hearing of the matters at issue. Consequently, the student will meet with the Faculty Academic Integrity Officer, who will review with the student the concept of academic dishonesty, the sanction(s) imposed by the faculty member, and the process by which a student can appeal the instructor's charge of an academic integrity violation. The student will either accept or appeal the charge.

If this is the student's first recorded violation of academic integrity and he/she opts to appeal, the Faculty Academic Integrity Officer brings the case to the Academic Life Committee for discussion and vote. If this is the student's second recorded violation of academic integrity, the Faculty Academic Integrity Officer automatically brings the case to the Academic Life Committee, regardless of the student's decision to accept or appeal the charge. If the Committee determines that the student has committed a second violation of academic integrity, the Committee may impose sanctions E, F, and/or G in addition to the faculty member's original sanction(s).

In all appeal cases, both the student and the faculty member bringing the allegation have a right to appear before the Academic Life Committee to make statements about the truth or falsity of charges. Each party may request to bring a relevant member of the WJU community with him/her to the hearing. The chair of the Academic Life Committee approves or denies this request on a case-by-case basis. Having heard all parties, the Committee determines whether or not the student has committed a violation of academic integrity. The Committee's decision is subject to appeal to the Academic Dean, whose hearing of the case and subsequent action is conclusive.

In any case involving a violation of academic integrity, the following parties may receive official correspondence about the incident: the student, the faculty member who imposed the initial sanction(s), the Director of Undergraduate Student Success, the student's advisor, the chairperson of the department in which the offense occurred, the chairperson of the department in which the student has declared a major, and the Academic Dean.

A record of the student's academic integrity violations will be maintained by the Faculty Academic Integrity Director of five years after graduation and then destroyed.

\section*{Add/Drop Policy}

A student may have a change of registration during the add/drop period, which is during the first week of the semester. Students may add and drop classes without financial or academic penalty during the add/drop period. After the end of the add/drop period, a student may no longer add classes or receive tuition refunds for classes that are dropped and a grade of a W (Withdraw) will be recorded for the class(es).

\section*{Withdrawal Policy}

Any first time, first semester student will be treated as a Deposit Withdrawal during the add/drop week (the first week of classes). The withdrawal form does not need to be completed.

Returning students may also withdraw from the institution during the add/drop week. In these cases the last date of attendance will be the last day of finals of the previous semester and an official withdrawal form must be with the Director of Undergraduate Student Success., in person or by phone

The last date of attendance must be included on the form. The last date of attendance is the last day the student attended courses at WJU.

An official email noting the student's withdrawal will be sent to pertinent offices, faculty, administration, and staff, from the Registrar's Office.

Students who plan to leave WJU after add/drop week will be directed to fill out the withdrawal form with the Director of Student Success. The student may get the form from the Director of Student Success or download it from the registrar's online site and complete it before meeting with the Director. Upon completing the form the student will sign and date the front of the form and initial and date the back of the form. Both the signature and initials indicate the student's intention to notify other pertinent offices of his/her withdrawal. If the student cannot complete the withdrawal form in person, the Director of Student Success may complete the form with the student via phone conversation.

\section*{Medical Leave of Absence Policy}

Undergraduate students may request a Medical Leave of Absence (MLOA) in cases where the student's health hinders successful academic progress. The approval of MLOA for undergraduate students will come from the Director of Undergraduate Student Success. The policy and subsequent procedure for requesting MLOA is as follows:
1. Student must submit a written letter requesting leave of absence for medical reasons. This letter must be addressed to the WJU Director of Undergraduate Student Success. This letter must outline the need for the leave, the anticipated length of time for the leave and the anticipated time of return to academic studies, if known.
2. The physician or health care practitioner treating the student for said medical issue must submit written documentation to the WJU Director of Undergraduate Student Success outlining the medical necessity for the requested medical leave and its anticipated duration.
3. Considering all information provided and any additional consultation needed, the WJU Director of Undergraduate Student Success will rule on the requested medical leave. The decision will be communicated to the student in writing within and no longer than 10 working days of the completed request, which will not be considered as complete until all materials are submitted. This correspondence will also include the steps that the student must take to request re-enrollment after being released by the treating physician to return to academic studies.
4. The WJU Director of Undergraduate Student Success will notify the registrar of any student withdrawal due to medical leave of absence. The Director will also notify all necessary university departments (e.g., Registrar, Financial Aid, Student Accounts, IT, Student Housing, instructors, and academic advisors) of the student's leave so that appropriate actions can be taken within their domain.
5. Should the request be denied, the student can appeal the decision to the Chief Academic Officer (CAO) within 10 working days of notification of the initial decision. The CAO will compile all information necessary and make a ruling within 10 working days of receiving the appeal. Written documentation of the decision will be provided to the student by the CAO's office. The decision of the CAO is final.
6. All correspondence regarding the request for MLOA will be maintained in the student's official academic record housed in the Registrar's Office.

\section*{Re-enrollment after MLOA}

After being released by the treating physician or health care practitioner to return to academic studies, the following steps must be followed:
1. The student must apply for re-admission to the University.
2. The student must submit a written letter to the WJU Director of Undergraduate Student Success requesting to return to academic studies at least 4 weeks before the requested return date.
3. The treating physician or health care practitioner must submit a letter to the WJU Director of Undergraduate Student Success releasing the student to return to academic pursuits. Should any stipulations, on-going treat-
ment or accommodations be applied to this return, they must be outlined in this letter or be provided by the practitioner in another written form to the Director stated above. Should conditions be placed on the student's return that fall under the Americans with Disabilities Act, all policies regarding requesting reasonable accommodations must also be followed as outlined in the Wheeling Jesuit University Student Handbook. It is the student's responsibility to seek out the reasonable accommodations and provide all necessary documentation to receive the reasonable accommodation.
4. All above documentation regarding the student's eligibility for re-enrollment will be reviewed by the WJU Director of Undergraduate Student Success. The Director will consult with other administrators on campus as necessary, and will make the decision regarding re-enrollment and communicate this decision to the student within 10 working days of receiving the completed documentation. This response will include the allowable, reasonable accommodations.
5. Granting of the re-enrollment request will be communicated by the WJU Director of Undergraduate Student Success to the Registrar's Office and all necessary university departments.
6. The actual point of re-enrollment with respect to course work will be decided upon by the Director of Undergraduate Student Success in consultation with the director of the student's program of study. In cohort programs, this may require that a student sit out until the next cohort of students comes through the program to the appropriate point of re-entry.
7. If the request for re-enrollment is denied, the student may appeal this decision to the CAO in writing within 10 days of receiving the denial. The CAO will review all documentation provided and render a decision which will be communicated to the student in writing within 10 days of receiving the appeal. The decision of the CAO is final.
8. All correspondence regarding a request for re-enrollment will be maintained in the students official academic record housed in the Registrar's Office.

\section*{Academic Standing}

\section*{Student Status}

Students are classified as follows:
First-year students less than 27 earned semester hrs.
Sophomores between 27 and 59 earned semester hrs.
Juniors between 60 and 89 earned semester hrs.
Seniors \(\quad 90\) or more earned semester hrs.
Every student in the University must maintain an adjusted grade point average (GPA) of 2.0 overall and in the major in order to be considered in good academic standing. A student who holds a grant-in-aid must remain in good academic standing. A student who holds a scholarship must maintain at least the GPA specified by the conditions governing the scholarship in order for it to be renewed for subsequent years. The adjusted, overall GPA is used for the purposes of academic probation, academic suspension, and academic dismissal.

\section*{Academic Probation}

Academic probation carries a serious warning to the student because unless improvement is noted during the probationary period academic suspension or dismissal may follow. A student whose cumulative adjusted GPA falls below 2.0 is automatically placed on academic probation. A first semester first-year student will not be placed upon proba-
tion unless her or his average falls below a 1.8. A student may remain on probation for more than one semester provided significant progress is made toward earning the requisite cumulative 2.0 adjusted GPA.

While on academic probation a student:
1. must meet with the Director of Undergraduate Student Success and her or his advisor prior to starting the next semester to develop a binding academic improvement plan;
2. may be limited to the number of courses or credit hours she or he may take in a semester;
3. may have special restrictions placed on the program of studies by the Chief Academic Officer;
4. may not hold office in student government and may be prevented from participating in University activities, departmental clubs, or class boards;
5. may not serve as an editor of any student publication; and
6. may not practice or participate in varsity athletics or major theatrical productions (unless required by the student's major program of study).

It is the student's responsibility to adhere to probationary restrictions. A student who fails to meet the probationary restrictions placed upon him or her is eligible for immediate suspension or dismissal. Students should be aware that academic probation and loss of financial aid eligibility are separate and distinct issues.

\section*{Academic Suspension}

Academic suspension is an enforced termination of formal studies at Wheeling Jesuit University for at least one semester. A student is eligible for suspension when any of the following occurs:
1. grades of " \(F\) " are awarded in two or more courses in a single semester;
2. there has been a failure to achieve the required minimum GPA at the end of the academic year (first year
students 1.6 , sophomores 1.8 , juniors and seniors 2.0 );
3. there has been a failure while on academic probation to show significant improvement;
4. the student has spent two or more semesters on academic probation; or
5. The student has not adhered to provisions of probation.

Students who are suspended at the end of the spring semester may not attend summer session classes offered by the University. The student may appeal the decision in writing to the Chief Academic Officer according to the deadlines established in the letter of suspension. Students who intend to return to the University need to contact the Chief Academic Officer to learn what conditions are placed upon their return. At the end of the period of suspension, the student must formally request reinstatement by writing to the Chief Academic Officer. This formal letter should include statements indicating how the conditions for readmission have been met; official transcripts of any collegiate work must be received in the Registrar's Office before the application will be considered by the Dean. A student returning from suspension will be placed on academic probation.

\section*{Academic Dismissal}

Academic dismissal is a permanent termination of formal studies at Wheeling Jesuit University. A student is eligible for dismissal when any of the following occurs:
1. grades of "F" are awarded in two or more courses in a single semester;
2. there has been a failure to achieve the required minimum GPA at the end of the academic year (first year students 1.6 , sophomores 1.8 , juniors and seniors 2.0 );
3. there has been a failure while on academic probation to show significant improvement;
4. the student has spent two or more semesters on academic probation; or
5. The student has not adhered to provisions of probation.

\section*{Clinical Progression Policy: Nursing and Health Science Majors}

Wheeling Jesuit University students entering clinical sequences at area hospital and health agency affiliates are in a special situation: they are preparing themselves for certification/licensing examinations; they are given significant responsibility
for the well-being of patients under their care; and they represent to their professional community the quality and ethical dimension of their education at WJU.

Consequently, the University sets academic standards for progression in clinical work for each health-related major, as described under these headings later in the catalog or in a handbook specifically prepared for each major: nursing, respiratory therapy, nuclear medical technology. The University also reserves the right to exclude any student who in the opinion of his/her instructors has demonstrated behavior or attitudes incompatible with safe, ethical and professional development or who do not successfully complete a criminal background check, which could seriously jeopardize the welfare of patients.

\section*{Additional Academic Regulations}

\section*{Course Withdrawal Policy}

Students may alter their course schedule without academic penalty by dropping or adding courses during the official dropadd period as announced in the academic calendar. Courses mav not be added after the last dav of the drop-add period. The following regulations apply to withdrawals from the courses:
1. From the end of the drop-add period until 20 days before the last day of class, a student may withdraw from a class provided they have the approval of the instructor and faculty advisor. A student will not be permitted to withdraw if she or he has already earned a final grade, including an "FA" (failure due to absences) at the time of midterm grades. Please note that a student is not considered withdrawn from a class until the completed forms are received in the Registrar's Office.
2. If a students stops attending a course without processing the required paperwork-considered an unauthorized with-drawal-the student will be assigned a grade of FA by the course instructor.
3. It is the responsibility of the instructor of a course to contact a student, who is registered for a course, but stops attending to alert them to the possibility of receiving a grade of "FA."
4. All appeals to this policy must be submitted to the Vice President for Academic Affairs

Forms for all course changes or withdrawals may be obtained from the Registrar's office or by visiting the Registrar's webpage at www.wju.edu/Registrar .

\section*{Class Attendance}

Prompt and regular attendance at all the classes, laboratories and other activities that are part of a course is expected of every student, and it is the student's responsibility to keep a record of absences.
Failure to attend a class or a laboratory for any reason is counted as an absence; University policy does not differentiate 'excused' from 'unexcused' absences. Freshmen and all students on academic probation are permitted no more than six absences in 3-credit courses that meet three times a week. For courses that meet fewer than three times weekly, or are taught for fewer credits, the number of allowed absences is proportionately reduced. In 4-credit courses or higher, the number of allowed absences is also determined proportionately. Late entry into a class either by adding the course or late enrollment constitutes absence from that class. Attendance policy for upperclassmen is set in each course by the instructor, who will announce the policy at the first meeting of the course. The credit and grade which a student receives for a course should reflect the student's active participation, as well as the ability to complete assignments and pass tests. Exceeding the maximum number of absences could result in a grade of "FA," (failure due to excessive absences).

\section*{Non-Degree Status}

Persons who wish to take classes at WJU but who do not want to seek a degree or who are unsure of their interest in earning a degree may do so by contacting the Admissions Office at 304-243-2359. Non-degree students are not required to submit high school or college transcripts; however, they must file an application and the \(\$ 25\) application fee. Non-degree students must, after earning 12 semester hours at Wheeling Jesuit University, either apply for admission to a degree program or declare themselves permanently as non-degree students. Students from other institutions must provide a transient form from their institution stating that they are in good academic standing and have permission to enroll in the course(s).

\section*{Course Audits}

Students who audit a course are expected to attend class regularly but are not required to do course work or take examinations but are expected to attend class regularly. Note that no grade or University credit is given for courses audited. Once a student has registered for a class on an audit basis, he or she cannot, at a later date, request that the course be converted into credit. Permission to audit forms are available in the Registrar's Office or on the Registrar's webpage, www.wju.edu/ Registrar.

\section*{Limitations on Courses}

Regular Session The normal course load for a semester is 15-18 semester hours. Students with a cumulative GPA of 3.0 or better may be allowed to register for more than 18 credits. Students who want to take more than 18 hours must obtain the approval of their academic advisor as well as the Vice President for Academic Affairs. There is an additional fee applied to each credit hour over 18. Students should submit a Course Petition form to take more than 18 hours. This form is available on the Registrar's webpage www.wju.edu/Registrar.

Summer Session A Wheeling Jesuit University student enrolled in the summer school may take no more than four courses ( 12 credit hours) per summer semester. No more than two courses may be taken in a single part of term.

A Wheeling Jesuit University student who takes summer courses at another institution for transfer to the University may take no more than three courses ( 9 credit hours). Before registering elsewhere, students must complete a transient form with advisor and department chair approval. The form can be found on the Registrar's website at www.wju.edu/Registrar.

\section*{Day/Evening Crossover Policy}

Each student's choice of division is determined by personal and career circumstances and responsibilities. The Center for Professional and Graduate Studies offers programs geared to the special educational needs of an adult working student. The day school addresses the needs of the recent high school graduate or the adult student whose primary role during his/ her college years is that of a full-time student. Once a division of the University is selected, each student is bound by its distinct degree requirements and system of advisement. Students may not register for courses outside their division without the written approval of Vice President for Academic Affairs. Day students who wish to take an online course, must submit a "Day Student Registration for an Online Course form". Forms are available on the Registrar's webpage, www.wju.edu/Registrar.

\section*{The Appeal Process}

Students who believe they have been treated unfairly in a course or deserve an adjustment in academic status may appeal their situations, provided they follow proper procedure. After consulting with the faculty advisor, a student's first step in the appeal process is to confer with the person most immediately responsible, usually the instructor. If further steps are necessary, the student should take the appeal, in this order, to the department chair, then the Vice President for Academic Affairs who may seek the recommendation of the Academic Life Committee. A student who intends to appeal a grade must initiate the appeal process within six weeks of receiving the grade.

\section*{Disciplinary Suspension}

Disciplinary suspension is imposed by the Dean of Student Development and is not in itself an academic sanction. However, any student placed on disciplinary suspension with the provision that he or she may reapply for admission to the University must secure the approval of the Vice President of Academic Affairs and department chair of the student's major before taking courses at another institution during the period of suspension. The permission form for taking such courses is obtained on the Registrar's webpage, www.wju.edu/Registrar. (See the Student Handbook for more information about non -academic disciplinary proceedings)

\section*{Readmitted Students}

Students who have withdrawn from the University or take a Medical Leave of Absence, must apply for readmission through the Office of Admissions. Readmitted students who have been away from the University for one calendar year or more will follow the catalog requirements in effect during their first semester of course work after readmission to the University.

\section*{FERPA and Student Records Policy}

FERPA is a Federal law that is administered by the Family Policy Compliance Office (Office) in the U.S. Department of Education (Department). 20 U.S.C. § 1232 g ; 34 CFR Part 99. FERPA applies to all educational agencies and institutions (e.g., schools) that receive funding under any program administered by the Department. Private postsecondary schools, however, generally do receive such funding and are subject to FERPA.

Once a student reaches 18 years of age or attends a postsecondary institution, he or she becomes an "eligible student," and all rights formerly given to parents under FERPA transfer to the student. The eligible student has the following rights:
- the right to have access to his or her education records
- the right to seek to have the records amended
- the right to have control over the disclosure of personally identifiable information from the records (except in certain circumstances specified in the FERPA regulations, some of which are discussed below),
- and the right to file a complaint with the Department.

FERPA generally prohibits the improper disclosure of personally identifiable information derived from education records. Thus, information that an official obtained through personal knowledge or observation, or has heard orally from others, is not protected under FERPA. This remains applicable even if education records exist which contain that information, unless the official had an official role in making a determination that generated a protected education record.

Under FERPA, Wheeling Jesuit University is not generally required to maintain particular education records or education records that contain specific information. Rather, it is required to provide certain privacy protections for those education records that it does maintain. Also, unless there is an outstanding request by an eligible student to inspect and review education records, FERPA permits Wheeling Jesuit University to destroy such records without notice to the student.

\section*{Access to Education Records}

Under FERPA, Wheeling Jesuit University must provide an eligible student with an opportunity to inspect and review his or her education records within 45 days following its receipt of a request. Wheeling Jesuit University is required to provide an eligible student with copies of education records, or make other arrangements, if a failure to
do so would effectively prevent the student from obtaining access to the records. A case in point would be a situation in which the student does not live within commuting distance of Wheeling Jesuit University.

\section*{Amendment of Education Records}

Under FERPA, an eligible student has the right to request that inaccurate or misleading information in his or her education records be amended. While a school is not required to amend education records in accordance with an eligible student's request, the school is required to consider the request. If the school decides not to amend a record in accordance with an eligible student's request, the school must inform the student of his or her right to a hearing on the matter. If, as a result of the hearing, the school still decides not to amend the record, the eligible student has the right to insert a statement in the record setting forth his or her views. That statement must remain with the contested part of the eligible student's record for as long as the record is maintained.

However, while the FERPA amendment procedure may be used to challenge facts that are inaccurately recorded, it may not be used to challenge a grade, an opinion, or a substantive decision made by a school about an eligible student. FERPA was intended to require only that schools conform to fair recordkeeping practices and not to override the accepted standards and procedures for making academic assessments, disciplinary rulings, or placement determinations. Thus, while FERPA affords eligible students the right to seek to amend education records which contain inaccurate information, this right cannot be used to challenge a grade or an individual's opinion, or a substantive decision made by a school about a student. Additionally, if FERPA's amendment procedures are not applicable to an eligible student's request for amendment of education records, the school is not required under FERPA to hold a hearing on the matter.

\section*{Disclosure of Education Records}

Under FERPA, Wheeling Jesuit University may not generally disclose personally identifiable information from an eligible student's education records to a third party unless the eligible student has provided written consent. However, there are a number of exceptions to FERPA's prohibition against non-consensual disclosure of personally identifiable information from education records. Under these exceptions, schools are permitted to disclose personally identifiable information from education records without consent, though they are not required to do so. The following is general information regarding some of these exceptions.
1. School officials within Wheeling Jesuit University, provided the school has determined that they have "legitimate educational interest" in the information. Wheeling Jesuit University considers the following as school officials: professors; instructors; administrators; health staff; counselors; attorneys; clerical staff; trustees; members of committees and disciplinary boards; and a contractor, volunteer or other party to whom the school has outsourced institutional services or functions.
2. Other schools to which a student seeks or intends to enroll.
3. Financial aid officers in connection to financial aid for which the student has applied or which the student has received, if the information is necessary for such purposes as to: determine the eligibility for the aid; determine the amount of the aid; determine the conditions for the aid; and/or enforce the terms and conditions of the aid. With respect to this exception, the term "financial aid" means payment of funds provided to an individual (or payment in kind of tangible or intangible property to the individual) that is conditioned on the individual's attendance at a school.
4. Parents of a "dependent student" as that term is defined in Section 152 of the Internal Revenue Code.
5. Appropriate parties, including parents of an eligible student, in connection with a health or safety emergency.
6. Parents of a student at a postsecondary institution regarding the student's violation of any Federal, State, or local
law, or of any rule or policy of the institution, governing the use or possession of alcohol or a controlled substance. The school may non-consensually disclose information under this exception if the school determines that the student has committed a disciplinary violation with respect to that use or possession and the student is under 21 years of age at the time of the disclosure to the parent.
7. Information that has been deemed "Directory information" that would not generally be considered harmful or an invasion of privacy if disclosed. "Directory information" at Wheeling Jesuit University includes the following: student's name, permanent city and state, e-mail address, telephone listing, photograph, major/minor, participation in University clubs, activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended, grade level or year (such as freshman or junior), and enrollment status (undergraduate or graduate; full-time or parttime).

Wheeling Jesuit University may disclose directory information without consent if it has given public notice of the types of information it has designated as directory information, the eligible student's right to restrict the disclosure of such information, and the period of time within which an eligible student has to notify the school that he or she does not want any or all of those types of information designated as directory information. Also, FERPA does not require a school to notify eligible students individually of the types of information it has designated as directory information. Rather, the school may provide this notice by any means likely to inform eligible students of the types of information it has designated as directory information.

There are several other exceptions to FERPA's prohibition against non-consensual disclosure of personally identifiable information from education records, some of which are briefly mentioned below. Under certain conditions (specified in the FERPA regulations), a school may non-consensually disclose personally identifiable information from education records:
1. to authorized representatives of the Comptroller General of the United States, the Attorney General of the United States, the U.S. Secretary of Education, and State and local educational authorities for audit or evaluation of Federal or State supported education programs, or for the enforcement of or compliance with Federal legal requirements that relate to those programs;
2. to organizations conducting studies for or on behalf of the school making the disclosure for the purposes of administering predictive tests, administering student aid programs, or improving instruction;
3. to comply with a judicial order or a lawfully issued subpoena;
4. to the victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense concerning the final results of a disciplinary hearing with respect to the alleged crime; and
5. to any third party the final results of a disciplinary proceeding related to a crime of violence or non-forcible sex offense if the student who is the alleged perpetrator is found to have violated the school's rules or policies. The disclosure of the final results only includes: the name of the alleged perpetrator, the violation committed, and any sanction imposed against the alleged perpetrator. The disclosure must not include the name of any other student, including a victim or witness, without the written consent of that other student.

As stated above, conditions specified in the FERPA regulations at 34 CFR § 99.31 have to be met before a school may non-consensually disclose personally identifiable information from education records in connection with any of the exceptions mentioned above.

\section*{Annual Notification of Rights}

Under FERPA, Wheeling Jesuit University must annually notify eligible students in attendance of their rights under FERPA. The annual notification must include information regarding an eligible student's right to inspect and review his or her education records, the right to seek to amend the records, the right to consent to disclosure of personally identifiable information from the records (except in certain circumstances), and the right to file a complaint with the Office regarding an alleged failure by a school to comply with FERPA. It must also inform eligible students of the school's definitions of the terms "school official" and "legitimate educational interest."

FERPA does not require a school to notify eligible students individually of their rights under FERPA. Rather, the school may provide the notice by any means likely to inform eligible students of their rights. Thus, the annual notification may be published by various means, including any of the following: in a schedule of classes; in a student handbook; in a calendar of school events; on the school's website (though this should not be the exclusive means of notification); in the student newspaper; and/or posted in a central location at the school or various locations throughout the school. Additionally, some schools include their directory information notice as part of the annual notice of rights under FERPA.

\section*{Law Enforcement Units and Education Records}

A "law enforcement unit" means any individual, office, department, division or other component of a school, such as a unit of commissioned police officers or non-commissioned security guards, that is officially authorized or designated by the school to: enforce any local, State, or Federal law, or refer to appropriate authorities a matter for enforcement of any law against any individual or organization; or to maintain the physical security and safety of the school. The law enforcement unit does not lose its status as a law enforcement unit if it also performs other, non-law enforcement functions for the school, including investigation of incidents or conduct that constitutes or leads to a disciplinary proceeding against a student.
"Law enforcement unit records" (i.e., records created by the law enforcement unit, created for a law enforcement purpose, and maintained by the law enforcement unit) are not "education records" subject to the privacy protections of FERPA. As such, the law enforcement unit may refuse to provide an eligible student with an opportunity to inspect and review law enforcement unit records, and it may disclose law enforcement unit records to third parties without the eligible student's prior written consent. However, education records, or personally identifiable information from education records, which the school shares with the law enforcement unit do not lose their protected status as education records because they are shared with the law enforcement unit.

\section*{Complaints of Alleged Failures to Comply with FERPA}

FERPA vests the rights it affords in the eligible student. The statute does not provide for these rights to be vested in a third party who has not suffered an alleged violation of their rights under FERPA. Thus, we require that a student have "standing," i.e., have suffered an alleged violation of his or her rights under FERPA, in order to file a complaint.

The Office may investigate those timely complaints that contain specific allegations of fact giving reasonable cause to believe that a school has violated FERPA. A timely complaint is defined as one that is submitted to the Office within 180 days of the date that the complainant knew or reasonably should have known of the alleged violation of FERPA. Complaints that do not meet FERPA's threshold requirement for timeliness are not investigated.

If we receive a timely complaint that contains a specific allegation of fact giving reasonable cause to believe that a school has violated FERPA, we may initiate an administrative investigation into the allegation in accordance with procedures outlined in the FERPA regulations. If a determination is made that a school violated FERPA, the school and the complainant are so advised, and the school is informed of the steps it must take to come into compliance with the law. The investigation is closed when voluntary compliance is achieved.

Please note that the eligible student should state his or her allegations as clearly and specifically as possible. To aid us in efficiently processing allegations, we ask that an eligible student only include supporting documentation that is relevant to the allegations provided. Otherwise, we may return the documentation and request clarification. This Office does not have the resources to review voluminous documents and materials to determine whether an allegation of a violation of FERPA is included. An eligible student may obtain a complaint form by calling (202) 2603887. For administrative and privacy reasons, we do not discuss individual allegations and cases via email. Please
mail completed complaint forms to the Office (address below) for review and any appropriate action.

\section*{Complaint Regarding Access}

If an eligible student believes that Wheeling Jesuit University has failed to comply with his or her request for access to education records, the student may complete a FERPA complaint form and should include the following specific information: the date of the request for access to the education records; the name of the school official to whom the request was made (a dated copy of any written request to the school should be provided, if possible); the response of the school official, if any; and the specific nature of the information requested.

\section*{Complaint Regarding Amendment}

If an eligible student believes that Wheeling Jesuit University has failed to comply with his or her request for amendment of inaccurate information in education records or failed to offer the student an opportunity for a hearing on the matter, the student may complete a FERPA complaint form and should include the following specific information: the date of the request for amendment of the education records; the name of the school official to whom the request was made (a dated copy of any written request to the school should be provided, if possible); the response of the school official, if any; the specific nature of the inaccurate information for which amendment was requested; and evidence provided to the school to support the assertion that such information is inaccurate.

\section*{Complaint Regarding Disclosure}

If an eligible student believes that Wheeling Jesuit University has improperly disclosed personally identifiable information from his or her education records to a third party, the student may complete a FERPA complaint form and should include the following specific information: the date or approximate date the alleged disclosure occurred or the date the student learned of the disclosure; the name of the school official who made the disclosure, if that is known; the third party to whom the disclosure was made; and the specific nature of the education records disclosed.

This guidance document is designed to provide eligible students with some general information regarding FERPA and their rights, and to address some of the basic questions most frequently asked by eligible students. You can review the FERPA regulations, frequently asked questions, significant opinions of the Office, and other information regarding FERPA at our Website as follows:
www.ed.gov/policy/gen/guid/fpco/index.html
If, after reading this guidance document, you have questions regarding FERPA which are not addressed here, you may write to the Office at the following address:

\author{
Family Policy Compliance Office \\ U.S. Department of Education \\ 400 Maryland Avenue, SW \\ Washington, DC 20202-8520
}

\section*{Transcripts}

Official transcripts are issued by the Registrar only upon receipt of written permission from the student. Accounts must be cleared in the Student Accounts Office before an official or unofficial transcript is issued. This policy applies to all holds on a student's record.

\section*{Student Achievement}

\section*{Graduation Honors}

Students who have completed at least 60 graded semester hours at Wheeling Jesuit University, and have obtained the qualifying cumulative GPA are awarded the following graduation honors:
Summa cum laude ..... 3.850
Magna cum laude ..... 3.700
Cum laude ..... 3.500

For students with at least 30 but less than 60 graded semester hours, the honors average is:
\[
\text { With distinction } 3.500
\]

Computation of the average is based solely on courses completed at Wheeling Jesuit University. Graduation honors are bestowed at the same time the student's degree is conferred.
Note: The listing of graduation honors in the commencement program is unofficial and is based the

\section*{Awards for Student Achievement}

All graduation honors are initially awarded based on student's academic information from their last completed semester and a warded accordingly.

Commencement Awards Each year at graduation or the graduation banquet, awards are given to seniors who have distinguished themselves.

The Valedictorian is selected on academic merits as that student who has earned the highest average among the graduates. (At least 90 of the hours must be completed at Wheeling Jesuit.)

The Katherine Fouts Award is given for exceptional service to Wheeling Jesuit University and significant contribution to the quality of campus life, without reference to academic performance.

Through a bequest of Emelda Elfrida Paul, Henry F. Paul Silver Medals are awarded to the two under graduate students who earn the highest average in the Bachelor of Arts degree program and Bachelor of Science degree program from a minimum of 60 graded credit hours at Wheeling Jesuit. Medals are also awarded to the two undergraduate students who earn the second highest average from a minimum of 60 graded credit hours in the Bachelor of Arts degree program and the Bachelor of Science degree program at Wheeling Jesuit.

The Archbishop John J. Swint and Mary Woomer medals, reflecting both academic distinction and service to the University, represent the crowning achievement for a student at Wheeling Jesuit University. A minimum " B " average (3.0) is required for eligibility, and selection is by full-time faculty and administrators of the University voting through confidential ballot.

The University Activities Award is given to the student whose participation in a variety of student activities has enriched the University community.

Edward J. Gannon, S.J. Collegian of the Year Award is given to one member of each class, voted upon by classmates.
The Frank R. Haig, S.J. Award of \(\$ 2,500\) is given at commencement each year to the graduating senior in a science field (biology, chemistry, mathematics, physics, psychology, clinical sciences and computer science) who most embodies the concept of "individual excellence for public usefulness." Endowed by Mr. and Mrs. W. W. Holloway, Jr., the award honors the third president of WJU, a distinguished nuclear physicist and civic leader.

The Forrest Kirkpatrick Award is given for high achievement in economics.

The Chares Cumie Scholar Athlete Award is given to the senior who has participated in intercollegiate athletics and has the highest GPA upon graduation.

The Intercollegiate Athlete of the Year Award is given to the outstanding intercollegiate athlete.

Departmental Awards may be given by academic departments to the outstanding student from each discipline.

Honors Diploma/Recognition. Each student who completes the Stephen J. Laut, S.J., Honors College during their first two years at the University is recognized at Fall Honors Convocation and then again at commencement. The smaller number of students who continue in the Ignatian Honors Seminar during junior and senior years receive a diploma attesting to the distinction of the degree. This honor is in addition to other recognition conferred upon them for maintaining high academic averages.

Gloriam Award for Leadership and Excellence An honor awarded annually to a limited number of students in each class in recognition of outstanding leadership and service within the University community and attainment of academic excellence.

Dean's List At the end of each semester, the Registrar's Office and the Office of Academic Affairs compile the names of students who have earned placement on the Dean's List. To be eligible for this distinction, a student must have completed and have been graded for at least 12 credit hours during the given semester and have earned a grade point average (GPA) of at least 3.5 for all courses taken that semester. Courses taken as pass/fail, audited courses, and grades of "I" or "X" do not count toward the minimum of 12 hours needed.

Alpha Epsilon Delta A national honorary society for Pre-Health Professions.

Alpha Mu Gamma A national honorary society open to students who have distinguished themselves in modern languages.

Alpha Phi Sigma A national honorary society for students in Criminal Justice.

Alpha Sigma Nu Men and women who distinguish themselves in scholarly pursuits, loyalty and service to the University and community are eligible for membership in the National Jesuit Honor Society.

Beta Beta Beta Biological Honor Society A national honor society that recognizes students who have distinguished themselves in biology.

Delta Mu Delta An international honor society that recognizes business majors who have distinguished themselves in academics and leadership.

Gamma Sigma Epsilon A national honor society that recognizes outstanding academic achievement by chemistry majors.

Kappa Delta Pi International honor society in education.

Kappa Mu Epsilon A national honor society open to students who have attained academic distinction in mathematics.

Lambda Beta The national honor society that recognizes students who have distinguished themselves in Respiratory Therapy.

Lambda Pi Eta A national honor society for students who have distinguished themselves in Communications.

Mallinckrodt Award Given to the Nuclear Medicine Technology student that excelled both academically and in clinical training.

Phi Sigma Alpha A national honor society for students in political science.

Phi Alpha Tau A national honor society open to students who have distinguished themselves in philosophy.

Phi Sigma Theta A national honor society for students with strong interest and proven track record in history.

Physical Therapy Honor Society An honor society for students who have distinguished themselves in physical therapy.

Psi Chi A national honor society open to students who have distinguished themselves in psychology.

Sigma Beta Delta An international honor society for students in business, management and administration.

Sigma Iota Rho A national honor society open to students who have distinguished themselves in the academic areas of international studies, international business or peace studies.

Sigma Pi Sigma A national honor society awarding distinction to qualifying students of high scholarship and promise of achievement in physics.

Sigma Tau Delta An international honor society for those who have distinguished themselves in English.

Sigma Theta Tau International Nursing Honor Society An international honor society for nurses who have distinguished themselves in nursing scholarship and leadership.

\section*{Summer Session}

Each year the summer session offers a variety of undergraduate and graduate courses. The summer session serves the needs of undergraduate and graduate students from the University and the region. It also serves as a bridge for high school graduates who wish to begin their college work before the fall semester.

\section*{Graduate and Professional Studies Preparation}

\section*{Graduate School}

Many of the undergraduate programs at Wheeling Jesuit are foundations for graduate study; some majors are designed specifically to fulfill the prerequisites of graduate schools in the arts, sciences and social sciences. When a student's needs cannot be fulfilled by an existing program, the independent major, along with faculty guidance and consultation with the director of the proposed graduate program, may be appropriate. Students should consult the appropriate graduate program director for information about graduate programs, procedures for applications and scholarship opportunities. Also, the career library has directories and a large collection of the catalogs of graduate schools around the country.

\section*{Pre-Law School}

Various concentrations and majors at Wheeling Jesuit University can serve as preparation for law school. The following departments offer relevant courses and have had students successfully compete for admission: Philosophy, Political and Economic Philosophy, Political Science, Criminal Justice, History, Communications, Professional Communications, and International Studies. The majority of the American Bar Association-approved law schools grant or deny admission based on the Law School Admissions Test (LSAT) and undergraduate GPA, with the LSAT score as the most important criterion. Faculty in each of the listed departments are happy to speak to you about your plans and the available courses. Be sure to contact us at any time, but especially before pre-registration.

John Poffenbarger, Political Science: jpoffenbarger@wju.edu /x2093 Bridge 112B
Dan Weimer, History: dweimer@wju.ed /x2004 Donohue 101C
James Stover, Philosophy: jstover@wju.edu/x4428 Donohue 126D

\section*{Health Pre-Professional Programs}

WJU offers a well-rounded science and liberal arts education for students seeking careers in health pre-professional disciplines or related fields of study. Areas of study include, but are not restricted to, pre-medical, pre-veterinary, prepharmaceutical and pre-dental programs. Students typically major in biology or chemistry; however, with appropriate prerequisites in the sciences met, alternative programs may be developed. WJU has also established a Health Pre-Professional Committee, consisting of four faculty members. The Committee guides students with program planning so that they will have completed the appropriate courses required by their choice of professional school.

The Health Pre-Professional Committee will also provide professional institutions with additional information relevant to the expected success rate of our students. One of the Committee's functions is, upon the request of a student, to write a collective letter of assessment for the student applying to professional school. The assessment includes not only G.P.A. and scores on preprofessional examinations, but also the consideration of the strengths and weaknesses of the student as observed by his or her professors. All of these materials are then considered in the context of the likelihood that the student possesses the ability and initiative to successfully complete an educational program at the professional level. Because the Committee's recommendations are taken seriously, WJU's well-prepared and motivated students hold an excellent record for acceptance into professional schools.

\section*{Physical Therapy}

Wheeling Jesuit University offers a pre-physical therapy concentration to students interested in entering the physical therapy graduate program. It is designed to prepare students for entry into the professional entry-level program. Students pursue a baccalaureate degree in a major of their choosing in addition to completing the prerequisite courses in biology, anatomy/ physiology, chemistry, physics, statistics, math and psychology. Although students are advised by faculty members in their chosen majors, information and guidance is provided by the Department of Physical Therapy.
\begin{tabular}{lcl} 
Course & Credits & WJU Equivalent \\
Biology & 4 & BIO 109, 121 \\
Chemistry & 8 & CHE 110, 120, 121, 122 \\
\begin{tabular}{l} 
Human Anato- \\
my \& Physiolo- \\
gy
\end{tabular} & 7 & BIO 127, 128, 129 \\
Physics & 8 & See DPT Department Chair \\
\begin{tabular}{l} 
Statistics
\end{tabular} & 3 & PSY 115, MAT 105, MAT 204 \\
Psychology & 9 & PSY 110, 212 \\
\begin{tabular}{l} 
Developmental \\
(in addition to \\
PSY 115 above)
\end{tabular} & & \\
\begin{tabular}{l} 
Other Core
\end{tabular} & 39 & \begin{tabular}{l} 
Requirements in completion of \\
Liberal Arts Core
\end{tabular}
\end{tabular}

The Pre-Physical Therapy Club offers students an avenue to learn more about the profession, to meet with the current graduate students and to prepare for the transition to the graduate program. The graduate professional program consists of two years of intensive course work and clinical assignments spanning six consecutive terms in residence plus one online term at the beginning of their studies.

The graduate earns a Doctor of Physical Therapy degree. The physical therapy curriculum utilizes a problem based learning (PBL) model rather than the traditional lecture method of presentation. The foundation of PBL is the Clinical Science course where students are assigned to tutorial groups of five to eight students and guided by a faculty tutor toward independent study. This curricular design prepares students exceptionally well to enter the clinical setting as creative, reflective and analytical problem solvers, and critical thinkers. This has been verified through our students' high rate of success in their clinical education courses and high passage rate on the licensure examinations.

The Wheeling Jesuit University Doctor of Physical Therapy Program participates in the Physical Therapist Centralized Application Service (PTCAS). Applicants applying to the entry-level professional physical therapist program will apply online using the PTCAS application. The WJU DPT program application soft deadline is December 1. The admission process for the Doctor of Physical Therapy Program Cohort classes begins each summer. To learn more about the PTCAS application process, please visit the PTCAS web site at www.ptcas.or. You must be able to report grades from a minimum of 25 credits of the math/science prerequisite coursework at the time your application is submitted. Please feel free to contact us at dpt@wju.ed or 304-243-2068 with any questions.

\section*{Physical Therapy Admission Requirements}
1. A baccalaureate degree in any field.
2. Candidates must earn at least a 3.0 GPA in all courses for the selected major including the Liberal Arts Core. In addition, candidates must complete the courses listed below with a GPA above 3.0 and with no grades below "C."
3. Interview Process: The interview is a scored admissions activity. Therefore, applicants must pass this interview in order to be further considered for admission into the DPT Program. The objective of the interview is to evaluate the applicant's affective abilities particularly verbal and non-verbal communication, their ability to critically think and their understanding of the profession and the PBL curricular model. Selection for interview is based on the applicant's GPA and evidence gathered in the applicant's file (i.e., letters of reference).The interviews are held in the second half of the month of January. A sample writing exercise will also be required in order to evaluate the applicant's writing abilities.
4. Direct observation of physical therapists working in a variety of settings is recommended. Eighty hours of clinical observation are required. Graduate Record Exam (GRE) scores are required and considered in the admission process.
5.Three letters of reference are required. A full description of the doctor of physical therapy program is available in the Wheeling Jesuit University Graduate catalog.

\section*{Professional and Graduate Studies}

Wheeling Jesuit University offers degree and degree completion programs during evening hours and online which are designed to meet the special needs of the adult professional learner and working public. These programs include a Bachelor of Liberal Arts, a Bachelor of Science in Nursing for registered nurses with an RN to MSN track (also offered online), a Bachelor of Arts in Organizational Leadership and Development, and a Bachelor of Science in Healthcare Leadership (online). Each degree is a self-contained unit whereby all course requirements can be completed by attending evening or online classes. All degree programs are approved for veterans' benefits.

Professional and Graduate Studies also offer an Accelerated Certification for Teaching (ACT) program that provides an online pathway for teacher certification in grades 5 -adult. In addition, an accelerated BA/BS to BSN (second degree nursing) program is offered for individuals looking to make a career change into the field of nursing. For additional and more specific information contact Professional and Graduate Studies, 304-243-2359 or 1-800-873-7665.

\section*{Graduate and Doctoral Programs}

Wheeling Jesuit University offers an M.B.A. (Master of Business Administration) and MSA (Master of Science in Accountancy) program. Both programs are professional in nature and attempt to integrate the traditional liberal arts with a modern career-oriented curriculum. The MSA program prepares students for the CPA exam.

The Master of Science in Nursing (MSN) offers tracks in nursing administration, family nurse practitioner or nursing education specialist. This graduate program is designed for the convenience of working adults and is online. Post-Master's nursing certificates are also available as an option for students.

The Master of Science in Educational Leadership offers two tracks in School or School System Leadership for principal or superintendent licensure and Instructional Leadership for teachers.

The Master of Science in Organizational Leadership (MSOL) is designed to develop the intellectual and personal skills required of managers and executives in today's and future organizations. This program is offered on campus and online.

Wheeling Jesuit University offers a Doctor of Physical Therapy degree. The program uses a "problem-based approach" as its curricular organizing principle. For more information, consult the Professional and Graduate catalog or contact the Professional and Graduate Studies, 1-800-873-7665.

\section*{Programs and Courses of Instruction}

Academic concentrations leading to majors and degrees are listed alphabetically in this catalog. Requirements and recommendations are explained under each heading. Students are responsible for observing these directives to the satisfaction of the major department.

Course Credit. Cour ses are equivalent to three semester hours of credit except where noted.

Prerequisites. A prerequisite is a course or its equivalent that nor mally must be taken and passed before admission to a given course can be approved. Prerequisites are listed at the end of the course description where needed.
Cross-Listed Courses. Numbers in parentheses after a course number indicate that the course is cross-listed in a second department.

\section*{Course Numbering}

Courses are numbered in this way:

090-099 Strengthening courses

100-199 Lower-division or introductory courses (In some cases, these may be take by upper-class students.)

200 and above Upper-division courses

300-489 Upper-division courses; usually taken by majors

490-499 Usually taken by accelerated undergraduate or graduate students

500-699 Graduate-level courses
Special Courses. In addition to course offerings listed on the following pages, each discipline's curriculum includes unlisted courses, offered whenever the need arises. They are commonly numbered in this way:
\begin{tabular}{ll}
\(161,261,361,461\) & Experimental course offering (may be offered two times only) \\
\(171,271,371,471\) & Readings \\
99 & Section number give to Independent Study courses \\
\(273,274,373,374,473,474\) & Internships
\end{tabular}

Tutorials (courses listed in the catalog but not offered in a particular semester) often can be taken by special arrangement with approval of the instructor, chair, and academic dean.

\section*{Typical Course Distribution}

The course listings at the end of the catalog offer an idea of how courses might be distributed over four years. The key is as follows:
\begin{tabular}{ll} 
F & Every Fall \\
S & Every Spring \\
FO & Fall of every odd year \\
FE & Fall of every even year \\
SO & Spring of every odd year \\
SE & Spring of every even year \\
D & On Demand \\
SU & Summer
\end{tabular}

Since exceptions and variations are likely to occur, some rearrangement is inevitable. In many major concentrations, it is advisable to begin the major in the freshman year; such is not possible, however, when the major has prerequisites in the core curriculum. Students who plan to spend a semester or year elsewhere will have to arrange their schedules accordingly. While the normal student course-load is five courses each semester, some programs will require a fuller load from time to time.

\section*{Subject Abbreviations}

The following abbreviations are used throughout the catalog:
\begin{tabular}{|c|c|}
\hline ABR & Study Abroad \\
\hline ACC & Accountancy \\
\hline ART & Art \\
\hline ATH & Athletic Training \\
\hline BIO & Biology \\
\hline BUS & Business \\
\hline CHE & Chemistry \\
\hline CLS & Clinical Studies \\
\hline COM & Communications \\
\hline CRE & Creative Writing \\
\hline CRJ & Criminal Justice \\
\hline CSC & Computer Science \\
\hline CSS & Classical Studies \\
\hline CST & Catholic Studies \\
\hline ECO & Economics \\
\hline EGR & Engineering \\
\hline ENG & English \\
\hline ENS & Environment and Sustainability \\
\hline FAS & Fine Arts \\
\hline FIN & Finance \\
\hline FLM & Film \\
\hline FRE & French \\
\hline GSC & General Science \\
\hline GST & General Studies \\
\hline HIS & History \\
\hline HON & Honors \\
\hline INS & International Studies \\
\hline JGD & Justice, Gender, and Diversity \\
\hline LIT & Literature \\
\hline MAT & Mathematics \\
\hline MGT & Management \\
\hline MKT & Marketing \\
\hline MOL & Modern Language \\
\hline NME & Nuclear Medicine (this program will end at the end of the 2015-16 academic year) \\
\hline NUR & Nursing \\
\hline PED & Professional Education \\
\hline PEP & Political and Economic Philosophy \\
\hline PHI & Philosophy \\
\hline PHY & Physics \\
\hline POS & Political Science \\
\hline PSY & Psychology \\
\hline RET & Respiratory Care Practitioner \\
\hline RST & Theology/Religious Studies \\
\hline SPA & Spanish \\
\hline
\end{tabular}

\section*{Accounting}
(See description of Accounting courses in the Business section)

\section*{Art Minor}

\section*{Contact Person: Georgia Tambasis}

The WJU art program fosters the creative process and provides students with a broad and diverse grounding in the studio arts: drawing, painting, three-dimensional design (object making), sculpture, and ceramics, as well as familiarity with art history. The program offers students the opportunity to develop technical skills and encourages sophistication in thought and creativity so that students develop their own individual visual language and vision; critiques, slide lectures, and museum/gallery visits are integral parts of all art courses. Traditional studio experience is integrated with contemporary art forms so that students are exposed to the full range of studio art. In addition, students learn to write about, speak about, research, produce, and exhibit and document their work.

The Art program assists in the students' preparation for instruction and practice in the visual arts, preparation for professional pursuits at the graduate level, and professional life in the business sector. Art students can readily pair study in art with study of a wide variety of disciplines and majors to enhance their liberal arts educational experience and career opportunities.

\section*{Requirements for Art Minor}

In addition to completion of the University's core curriculum requirements in this discipline, a student must complete any 18 credits of course work:
\begin{tabular}{lll} 
ART 100 & Introduction to Visual Arts & \((3 \mathrm{crs})\) \\
& Four studio art electives & \((12 \mathrm{crs})\) \\
ART 486 & One art history elective & \((3 \mathrm{crs})\) \\
& Capstone Project & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Course Descriptions}

\section*{ART 100 Introduction to Visual Arts (3 crs)}

This course examines the nature, function, and relationships of the visual elements in two-dimensional and threedimensional visual media. Formal analysis of various artworks will be combined with a broad historical overview of human expression in painting, sculpture, and architecture. Central questions addressed are: What is art? What is beauty? What is kitsch? Are artists crazy? Why is art necessary for human beings? Cross listed: FAS 140. F

\section*{ART 120 2-D Design (Mixed Media) (3 crs)}

The focus of this course is to develop the fundamentals of two-dimensional design using a variety of mixed media, such as contact paper, collage, tape, and string. Emphasis will be placed on experimentation with various materials and compositional structures. Such two-dimensional design concepts as figure/ground, positive/negative space, balance, pattern and rhythm will be explored. Cross listed: FAS 146. D

\section*{ART 121 Drawing I (3 crs)}

The focus of this introductory course in drawing is to develop the relationship of inner-vision (what the mind sees) and creation (what the artist's hand produces). Students work on assigned problems in rendering form and exploring various drawing media as a visual process and as an art form. Study of the human figure may be included. Class work, critiques, and discussions will be used to expand to the student's preconceived ideas about art. Cross listed: FAS 147. F

\section*{ART 130 3-D Design (Object Making) (3 crs)}

This is an introductory course of three-dimensional art forms. The basic design elements of form, space, volume, mass, and planes will be explored through various class exercises and projects. A variety of materials, such as paper, wire, found materials (natural or manufactured), clay, and fabric will be used. While the focus of the course is on making functional and nonfunctional art objects, we will spend some time examining the key concepts of threedimensional design, such as proportion, scale, balance, movement, rhythm/repetition, and emphasis/dominance. Cross listed: FAS 151. SE

\section*{ART 150 Studies in Art History ( 3 crs )}

With each chronological period, artists invent new ways of seeing and interpreting the world. In addition to looking at the history of artistic reinvention of forms, this course will emphasize aesthetics (the critical reflection on beauty in art and culture). Major works of western art and architecture from various chronological periods will be explored. Periods and topics vary, including prehistoric art, ancient world art, medieval art, Renaissance art, \(19^{\text {th }}\) century art, Modernism and 20th century art movements, and postmodern and contemporary art. Titles and content may change from semester to semester, so students are encouraged to repeat the course. Cross listed: FAS 141. SO

\section*{ART 151 Studies in World Art and Archaeology (3 crs)}

Visual art and architecture is shaped by its source in particular geographical areas, periods, and cultural beliefs. Using a chronological and thematic approach, this course examines the various influences that shape visual art and architecture within particular cultures, also looking at subsequent influence on other cultures (including our own). Geographical areas of study vary, including the Americas (indigenous peoples), Western and Central Asia, India and Southeast Asia, China, Japan, Korea, the Pacific, and Africa. Titles and content may change from semester to semester, so students are encouraged to repeat the course. Cross listed: FAS 144; may also, according to specific topic of study, be offered as CSS 144. D

\section*{ART 152 Women and Art (3 crs)}

This course will examine the socio-political, psychological, and economic issues that affected women's participation in the visual arts. We will examine women artists ranging from prehistory to the "old master" era through the proliferation of female-produced art in the \(20^{\text {th }}\) century and contemporary art world. Artists covered may include Artemisia Gentileschi, Mary Cassatt, Frida Kahlo, Georgia O'Keefe, Judy Chicago, and Cindy Sherman. Cross listed: FAS 145. SE

\section*{ART 221 Drawing II (3 crs)}

This course provides a further studio experience in drawing with emphasis on experimentation with various drawing media and techniques, including colored pastels, markers, pens, inks, and crayons, and an even greater emphasis on real or invented compositional structures. Study of the human figure may be included. Various concepts such as the figure, foreshortening, gesture, and color will be investigated in-depth. Prerequisite: ART 121. D

\section*{ART 225 Painting: Watercolor (3 crs)}

Exploration of watercolor media is the primary focus of this class. Through studio exercises and projects, students are introduced to the preparation of watercolor paper, indirect and direct methods of painting, color organization, composition, and artistic expression. We will work from complex still lives and landscapes to develop strong optical and technical skills and, in addition, we will consider the meaning, references and the psychological charge that objects may have. Prerequisite: ART 121 or permission of the instructor. D

\section*{ART 235 Collage and Mixed Media (3 crs)}

This course provides development of two-dimensional design with a greater emphasis on material experimentation, color, idea development, and personal expression. The emphasis will be on contemporary approaches to painting and drawing, and may include digital and video media. Prerequisite: ART 100.

\section*{ART 240 Painting I (3 crs)}

Explorations of various painting media are used to introduce students to the fundamentals of painting. Through studio exercises and projects, students are introduced to the preparation of painting supports and grounds, indirect and direct methods of painting, color organization, composition, and artistic expression. Study of the human figure may be included. Class work, critiques, and discussions will be used to expand to the student's preconceived ideas about art. Prerequisite: ART 121 or permission of the instructor. \(\mathbf{D}\)

\section*{ART 486 Capstone Project (2 crs)}

This course, offered on demand, is intended for fine and performing arts students to learn more about their chosen medium by undertaking an in-depth project or series of projects with the consent and under the direction of an appropriate faculty member in that medium. Completion of the requirements may include, as appropriate, readings and discussion, production of original creative or scholarly work, and additional evaluative reflection. Prerequisite: Permission of the Fine and Performing Arts department. D

\section*{Athletic Training}

\section*{Contact Person: David Dennis, MS, ATC}

Athletic training provides a unique experience of professionalism and interaction with athletes and athletic injuries. The athletic trainer may encounter many scenarios throughout the workday. Making decisions, devising treatment protocols, serving as a liaison to the physician, documentation of daily notes, and emergency first aid care are just a few of the scenarios one may encounter on a daily basis. The responsibilities extend to management of an athletic training facility, patient education on health topics such as nutrition, exercise, injury prevention and rehabilitation, and communication with other colleagues in the "sports medicine" umbrella. These may include other athletic trainers, coaches, physicians, nurses, insurance companies, physical therapists, etc.

Upon completion of the Athletic Training Program at WJU, students will be able to:
- Take the national board of certification (BOC) exam to become a nationally certified athletic trainer.
-Upon successful completion of this examination, the individual is able to enter the job force in a variety of settings including high school, college, professional athletics, clinics, hospitals, military services, Olympic training centers and industry to name a few.
- Students will also be well prepared to pursue graduate school with opportunities to work as graduate assistants to further pursue postgraduate degrees.

Potential experiences as a WJU athletic training student: The major of athletic training requires a certain individual who possesses a love for working with the physically active. As part of the requirements for the major and national certification eligibility, the student is required to complete six semesters of clinical education experiences under the supervision of BOC certified athletic trainer. To fulfill this requirement the student will have the opportunity to work with WJU student-athletes plus a variety of other settings in the area including high schools, other colleges, clinics and professional teams. Accepted students are required to follow the ATP student handbook which defines rules, regulations and standards for the student's continued progression in the major. In addition to the to the University's core curriculum requirements defined in this handbook, the Athletic Training major must maintain a cumulative GPA of 2.8 and earn a " C " grade or higher in all the courses listed below.

Accreditation: The Commission on Accreditation of Athletic Training Education (CAATE) is the accrediting agency for all Athletic Training Education Programs. Wheeling Jesuit University is an official CAATE accredited program.

\section*{Requirements for Athletic Training Bachelor of Science Degree}
\begin{tabular}{|c|c|c|}
\hline BIO 127,128 & Anatomy and Physiology I \& Lab & (3 crs) \\
\hline BIO 129 & Anatomy and Physiology II & (3 crs) \\
\hline CLS 121 & Introduction to Hospital Science & (1 cr) \\
\hline CLS 321 & Introduction to Research Health care & (3 crs) \\
\hline PSY 110 & General Psychology & (3 crs) \\
\hline PSY 250 & Sports Psychology & (3 crs) \\
\hline ATH 211 & Introduction to Athletic Training & (3 crs) \\
\hline ATH 212 & Therapeutic Modalities & (3 crs) \\
\hline ATH 222 & Musculoskeletal Anatomy & (3 crs) \\
\hline ATH 231 & Emergency Care for Athletic Trainers & (3 crs) \\
\hline ATH 311 & Therapeutic Exercise of the Lower Extremity & (3 crs) \\
\hline ATH 312 & Therapeutic Exercise for the Upper Extremity & (3 crs) \\
\hline ATH 321 & Evaluation of the Lower Extremity \& Trunk & (3 crs) \\
\hline ATH 322 & Evaluation of the Upper Extremity, Head, \& Neck & (3 crs) \\
\hline ATH 341 & Exercise Physiology & (3 crs) \\
\hline ATH 411 & General Medical Conditions & (3 crs) \\
\hline ATH 412 & Athletic Training Capstone & ( 3 crs ) \\
\hline ATH 421 & Senior Research Study & (1 crs) \\
\hline ATH 422 & Professional Development & (3 crs) \\
\hline ATH 431 & Athletic Training PBL I & (3 crs) \\
\hline ATH 432 & Athletic Training PBL II & (3 crs) \\
\hline ATH 201 & Athletic Training Practicum I & (2 crs) \\
\hline ATH 202 & Athletic Training Practicum II & (2 crs) \\
\hline ATH 301 & Athletic Training Practicum III & (3 crs) \\
\hline ATH 302 & Athletic Training Practicum IV & ( 3 crs ) \\
\hline ATH 401 & Athletic Training Practicum V & (3 crs) \\
\hline ATH 402 & Athletic Training Practicum VI & ( 3 crs ) \\
\hline
\end{tabular}

\section*{Course Descriptions:}

\section*{ATH 211 Introduction to Athletic Training (3 crs)}

This course is designed to introduce the students to the profession of Athletic Training. Throughout this course, students will learn the history of the profession, information on epidemiology of athletic injuries, pre-participation physical exams, strength training/conditioning, pharmacology, environmental conditions, protective devices, emergency care and nutrition. After completing this course the students should have a basic knowledge of the profession of athletic training. Prerequisites: Admission to the ATP F

\section*{ATH 212 Therapeutic Modalities ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course is designed to explore the current best evidence related to modalities and learn how and when to utilize them. Students will examine general application, pain theories, and application of various modalities to help in treating various injuries. Students will also explore the evidence-based practice by developing systematic reviews of the various modalities while in small groups. This course will be offered in a blended model format with integrating online, lecture, and laboratory experiences. Prerequisites: ATH 211 S

\section*{ATH 222 Musculoskeletal Anatomy (3 crs)}

The purpose of this course is to strengthen the students' knowledge with general musculoskeletal anatomy with a heavy focus on the upper and lower extremities. It will focus on origin, insertion, and nerve innervations of key muscles that promote movement as well as bony landmarks with regards to the skeletal system. The student should gain a very thorough foundation of the muscles of the human body that provide movement to the physically active person. Prerequisites: Admission to the ATP F

\section*{ATH 231 Emergency Care for Athletic Trainers (3 crs)}

This course explores the current best evidence related to emergency care of a patient. Students will be examining the concepts of CPR, AED, and First Aid, as well as transportation and scene management. Additionally, this course will emphasize active participation and role playing. This course will be offered in a blended model format with integrating online, lecture, and laboratory experiences. Prerequisites: Admission to the ATP F

\section*{ATH 311 Therapeutic Exercise of the Lwr Extremity (3 crs)}

This course explores the current best evidence related to injury rehabilitation and return to sport/activity progression. Students will be examining the concepts of rehabilitation and injury management, as well as techniques, environments, and tools that are used regularly in the athletic training profession to help athletes recover from their injury, dysfunctional movement, or disorder. Additionally, this course will emphasize anatomy, functional movement and motor control, and its relationship to understand how to develop strength, range of motion, and stability in rehabilitation programs. This course will be offered in a blended model format with integrating online, lecture, and laboratory experiences. Prerequisites: ATH 321 F

\section*{ATH 312 Therapeutic Exercise for Upper Extremity ( 3 crs)}

This course explores the current best evidence related to injury rehabilitation and return to sport/activity progression. Students will be reviewing the concepts of tissue healing and injury management, as well as techniques, environments, and tools that are used regularly in the athletic training profession to help athletes recover from their injury, dysfunctional movement, or disorder. Additionally, this course will emphasize anatomy and biomechanics and its relationship to understand how to develop strength, power, and endurance rehabilitation programs. This course will also address corrective exercises with an emphasis on evaluation and proper progression to correct any dysfunction or asymmetries. This course will be offered in a blended model format with integrating online, lecture, and laboratory experiences. Prerequisites: ATH 311 S

\section*{ATH 321 Orthopedic Eval of the Lwr Extremity \& Trunk (3 crs)}

This is course is designed to prepare the student to competently assess musculoskeletal injuries as they occur in the athletic training setting. General principles of examination will include anatomical nomenclature, injury classifica-
tion, taking a history, observation, palpation, and examination of motion, strength and neurological status. The second part of the class will become specific to body parts of the lower extremity and the lower thoracic and lumbar spine. At the end of the semester, students should be able to go through a complete examination and give an assessment for any injury involving those body parts. Prerequisites: ATH 222 S

\section*{ATH 322 Orthopedic Evaluation of the Upper Extremity, Head, \& Neck (3 crs)}

This is course is designed to prepare the student to competently assess musculoskeletal injuries as they occur in the athletic training setting. The class will be specific to body parts of the trunk, head, cervical spine and upper extremity. At the end of the semester, students should be able to go through a complete examination and give an assessment for any injury involving those body parts. Prerequisites: ATH 321 F

\section*{ATH 341 Exercise Physiology ( 3 crs)}

This course will focus on the study of physiological systems and how they respond and adapt to exercise. The body's fluids \& electrolytes and body composition will also be studied. Students will be required to learn and understand the physiological adaptations the human body experiences during various modes of physical exertion. An in depth understanding of the circulatory, muscular and pulmonary systems is expected. Laboratory experiences in conjunction with laboratory projects will be utilized to enhance understanding of lecture material. Prerequisites: ATH 211, ATH 222 S

\section*{ATH 411 General Medical Conditions (3 crs)}

This course is designed to inform the student of general medical conditions within the field of health care that otherwise might not be seen in the field of athletic training. Issues other than musculoskeletal and acute traumatic injuries are discussed. A series of guest lecturers comprised of varying health care specialties will help convey the information to students. The student should complete the class feeling confident that they have learned about various other health issues that aren't commonly seen, but could be in the athletic training field. Various skills assessment assignments will be required to be completed by the students. Prerequisites: ATH 312 F

\section*{ATH 412 Athletic Training Capstone (3 crs)}

The purpose of this course is to help the students prepare for the Board of Certification exam which can be taken upon graduation. Topics and concepts will be reviewed throughout the entire semester in correspondence with the 8 domains set forth by the Commission on Accreditation of Athletic Training Education. A required project of a poster presentation based on previous research done will also be completed and submitted to the University's annual research day. Students will take multiple practice exams and learn study techniques to help with preparation for the board exam. In addition to this they will be assisted in the registration process for taking the boards. Prerequisites: ATH 411, ATH 431 S

\section*{ATH 421 Senior Research Study (1 cr)}

This course involves the completion of a research project developed and designed in CLS 321. The student will carry out the research, analyze the data, evaluate ethical considerations, and present the project with a potentially publishable paper and a formal presentation of the research to the faculty of the department. This is an independent project, but the student will work closely with the course instructor and chosen mentors. Prerequisite: CLS 321 F

\section*{ATH 422 Professional Development (3 crs)}

This course is designed to prepare students to enter the professional world of Athletic Training. The course will include such topics as program management, financial resource management, facility design and planning, legal considerations, ethics, pre-participation exams and drug-testing programs. Prerequisites: ATH 411, A TH 431 S

\section*{ATH 431 Athletic Training PBL I (3 crs)}

The course is intended to supply the student with the appropriate knowledge and skills regarding rehabilitation of the injured individual. It encompasses application and problem solving and students are expected to utilize the resources and knowledge gained over the first two years in the program and relates it to the case. They will be respon-
sible for meeting specific objectives related to the cases as well as developing their own objective they deem relevant. The idea now is to look at the "whole person" with an injury or problem and not just the injury itself. It will cover issues within all 8 domains as listed in the \(5^{\text {th }}\) edition competencies by the NATA. The student should complete the course feeling confident they have performed an extensive review of key concepts and points from previous classes and feel like they could approach a real live scenario dealing with the same issues. Prerequisites: ATH 312, ATH 322 F

\section*{ATH 432 Athletic Training PBL II (3 crs)}

The course is intended to supply the student with the appropriate knowledge and skills regarding rehabilitation of the injured individual. It encompasses application and problem solving and students are expected to utilize the resources and knowledge gained over the first two years in the program and relate it to the case. They will be responsible for meeting specific objectives related to the cases as well as developing their own objective they deem relevant. The idea now is to look at the "whole person" with an injury or problem and not just the injury itself. It will cover issues within all 8 domains as listed in the \(5^{\text {th }}\) edition competencies by the NATA. The student should complete the course feeling confident they have performed an extensive review of key concepts and points from previous classes and feel like they could approach a real live scenario dealing with the same issues. Prerequisites: ATH 431 S

\section*{ATH 201 Athletic Training Practicum I (2 crs)}

This course incorporates what students are learning in ATH 211, ATH 231, and ATH 221. Students will learn how to apply those skills learned to real-life clinical scenarios. Students will be required to use the concepts and procedures learned in the above classes and develop clinical proficiency with the physical skills. Students will be required to utilize course material learned and apply these skills during their clinical assignments designated by the Clinical Education Coordinator. This course will offer the students the ability to apply critical, creative, and practical level of thinking in the clinical setting. Students will be required to meet with the professor once a month in a classroom setting to hand in assignments and go over course content. This course will also facilitate education using a blended model format with integrating online and clinical experiences. Prerequisite: Admission into the ATP \(\mathbf{F}\)

\section*{ATH 202 Athletic Training Practicum II (2 crs)}

This course incorporates course material from ATH 201, ATH 211, and ATH 231. Students learn how to apply those skills to real-life clinical scenarios. Students will be required to use the concepts and procedures learned in the above classes and develop clinical proficiency with the physical skills. Students will be required to utilize course material learned and apply these skills during their clinical assignments designated by the Clinical Education Coordinator. This course will continue to offer the students the ability to apply critical, creative, and practical level of thinking in the clinical setting. This course will be offered in a blended model format with integrating online and clinical experiences. Prerequisite: ATH 201. S

\section*{ATH 301 Athletic Training Practicum III (3 crs)}

Junior level practicum courses in the Athletic Training Education Program allow a level of independence to begin to develop. Students are assigned to specific clinical sites where they can utilize their previously learned knowledge and skills in a variety of settings under direct supervision. Students will be required to obtain a minimum of 75 hours per semester. This does not imply the rotation is complete once 75 hours is obtained. Most students will have varying hours above and beyond the required minimum of 75 depending on the clinical site assigned. Students will continue to have a mentor in senior level students while becoming a mentor themselves to sophomore students. Students are required to satisfy psychomotor skills and clinical proficiencies that directly relate to ATH 212 and ATH 341.
Prerequisite: ATH 202. F

\section*{ATH 302 Athletic Training Practicum IV (3 crs)}

This course incorporates what you have learned during your sophomore year and first semester junior year. Students will also use what they have learned in ATH 312 and ATH 322 and apply it to real-life clinical scenarios. Students will be required to use the concepts and procedures learned in the above classes and develop clinical proficiency with the physical skills. Students will be required to utilize the skills learned sophomore year and apply
efficiently to their clinical setting. The students will also be required to start incorporating the concepts and skills learned in the above classes to their clinical settings. This course will continue to offer the students the ability to apply critical, creative, and practical level of thinking in the clinical setting. Students will be required to engage in clinical rotation hours with various teams and settings. This course will be offered in a blended model format with integrating online and clinical experiences. Prerequisite: ATH 301. S

\section*{ATH 401 Athletic Training Practicum V ( 3 crs )}

In this course, we will incorporate what you have learned during your sophomore and junior years and what you are continuing to learn your senior year in your PBL classes and apply it to real-life clinical scenarios. Students will be required to utilize the information learned during their previous years and be able to become leaders of the program and confidently manage patient care and time. This course will continue to offer the students the ability to apply critical, creative, and practical level of thinking in the clinical setting. Students will be required to meet with the professor once a month in a classroom setting to hand in assignments and go over course content. This course will also facilitate education using a blended model format with integrating online and clinical experiences. Prerequisite: ATH 302. F

\section*{ATH 402 Athletic Training Practicum VI (3 crs)}

This course incorporates what you have learned during your sophomore and junior years and what you are continuing to learn your senior year in your PBL classes and apply it to real-life clinical scenarios. Students will be required to utilize the information learned during their previous years and be able to become leaders of the program and confidently manage patient care and time. This course will continue to offer the students the ability to apply critical, creative, and practical level of thinking in the clinical setting. Students will also be required to engage in 75 hours of clinical rotation with various teams and settings. This course will be offered in a blended model format with integrating online and clinical experiences. Prerequisite: ATH 401. S

\section*{Biology}

Harold Andrew Cook, Ph. D., contact person
Jonathan Howard Lief, Ph. D.
Leslie Ann Quinn, Ph. D.
Kenneth Edward Rastall, Ph. D.
Donald Michael Serva, S. J.
Robert David Shurina, Ph. D.
Benjamin Mortimer Stout III, Ph. D

\section*{Core Fulfilling Courses}

BIO 105 The Process of Biology
BIO \(107 \quad\) Evolution and Ecology
BIO 108 Form and Function
BIO 109 Cells and Chromosomes
BIO 128 Human Anatomy and Physiology I

Biology is the study of life. The biology curriculum is designed to awaken the student's interest in the living world; develop scientific habits and methods in the pursuit of knowledge; and train the student in preparation for careers in medicine, dentistry, pharmacy, research, teaching and other technical or biological vocations.

Biology majors must have an overall biology grade point average at or above 2.0 and a passing grade in all required Biology courses to graduate. Additionally, all Biology majors must have a grade point average at or above 2.0 in the sciences (biology, chemistry, math and physics) at the completion of their sophomore year in order to take upper level (300-level and above) courses in biology. Students who do not meet this requirement are not permitted to register for upper level biology courses until their grade point average in the natural sciences is at or above 2.0. In 400 level elective courses that have a laboratory component, the laboratory component ( 1 credit ) is required and may not be audited or taken as pass/fail.

\section*{Requirements for Biology Major Bachelor of Science Degree}

Upon the completion of the biology program, students will demonstrate proficiency in:
1. Understanding the principles \& concepts fundamental to biology
2. Performing laboratory techniques appropriate for entry-level biologists
3. Problem-solving and analytical thinking
4. Oral and written communication

It is generally accepted that student research is a vital component to student learning. Wheeling Jesuit is one of the few universities nationwide that requires all biology majors to complete a two-year research project under the guidance of a Wheeling Jesuit biology faculty mentor. No biology major may receive biology credit for a course that has been taken as an audit or as pass/fail. Laboratory instruction is a necessary component; therefore, no biology student may audit or pass/fail any biology laboratory course, regardless of whether the credits are needed to graduate.

The Biology Department offers two tracks towards a baccalaureate degree. The traditional track broadly prepares the student to excel in a wide range of careers that are available in academia, government or the private sector. The pre-health professions course of study provides students with the appropriate as preparation for medical school, dental school, veterinary medicine, physician assistant (PA) program and physical therapy, and the background to succeed in a graduate program leading to a doctoral degree in biomedical sciences. The program contains the basic science and mathematics components required for application to any of the above listed health professions, in addition to the University's core curriculum requirements.

\section*{Transfers and placement credits}

\section*{Transfer credits}

The Biology Department will allow students to transfer up to sixteen credits of Biology that were earned at an accredited two-year or four-year academic institution. Students wishing to transfer credits must submit a written transfer request to the Biology Department Chair. The request must clearly state the following information: The course name and the institution at which the course was taken; the semester and year in which the course was taken; an official transcript stating the grade earned in the course; a complete syllabus of the course that includes the textbook and author; and the name of the Biology course that the transferred course is to replace. The Biology Chair will obtain a consensus among the Biology Department members to decide whether the transferred course fulfills the requirements of Wheeling Jesuit's Biology curriculum. If the transfer is deemed acceptable, then the Biology Chair will notify the registrar that a particular course is waived in lieu of the transfer. If the course is not acceptable for transfer, then the student must enroll in the course at Wheeling Jesuit.

No transferred course may replace more than one Biology course, unless the transferred course contains an embedded laboratory component. In this case, the request to transfer must include separate grades earned in the laboratory and lecture sections of the course; separate syllabi for the laboratory and lecture sections; and a signed statement from both the laboratory and lecture instructors stating that the student received a C grade or better in each sec-
tion. If both sections are deemed as acceptable, then the student is permitted to transfer in the lecture and laboratory for credit and the Department will notify the registrar. If one or more sections are deemed unacceptable, then the student must enroll in those sections at Wheeling Jesuit. No transfer credits will be accepted for any course in which the student received a grade lower than a C ( 2.0 grade points on a 4-point scale). Furthermore, no upper-level (300level and above) biology courses may be transferred from a Community College or other two-year institution. If the transferred course is a prerequisite for an upper-level course, then the student must receive confirmation of the transfer before registering for the upper-level course. The registrar cannot substitute for the Chair of Biology, nor waive any Biology course without the approval of the Biology Chair.

\section*{Placement credits}

Under special circumstances, a student transferring from another academic institution may believe that \(\mathrm{s} / \mathrm{he}\) has sufficient mastery of course material to be exempt from a particular course, even though the student has not taken the exact equivalent of the course. The student may elect to place out of a particular course under the following circumstances:

The student must present a written request to the Department Chair to place out of a course. The request must include the name and number of the course for which placement credits are to be awarded and furnish evidence that the material was covered at the appropriate level in some course(s) at another academic institution. The evidence must include a complete syllabus, the name(s) and number(s) of the course(s) where the material was covered and official transcripts stating the grade(s) earned. The request form must be signed and dated by the student. The Biology Chair will obtain a consensus among the Biology Department members to decide whether the student has met the necessary proficiencies to be permitted to take the final examination of the course at Wheeling Jesuit. If the request is acceptable, then the student will be notified by the Biology Chair and must take a final examination of the course within one week of being notified. If the student receives a passing grade on the final examination, the Biology Chair will notify the registrar that the student has successfully placed out of a particular course and the student will receive credit for the course. The student will not successfully place out of a course if:
-The student has not furnished proof that the material was covered at the appropriate level at another institution;
-The student has not provided the appropriate syllabi or transcript;
-The student does not take the final exam, for any reason, within a week of notification by the Department Chair;
-The student does not pass the final examination;
-The student has previously attempted to place out of the course.
If the student does not successfully place out of a course, then the student must enroll in the course at Wheeling Jesuit. As with transfer credits, if the student wishes to place out of a course that is a prerequisite for an upper-level course, then the student must receive official notification that \(\mathrm{s} /\) he has been given credit for the course before registering for the upper-level course. No high school or AP course can be used to place out a course at or above a 200level. If a student wishes to use high school or AP courses to place out of a 100-level course, then the student must do so in the freshman year and have earned a score of 4 . This will permit placing out of Biology 107 or 108, but not 109.

\section*{Requirements for a B.S. Degree in Biology, Traditional track}

\section*{I. Core curriculum}

\section*{II. Requirements of the BS in Biology, traditional track}

\author{
A. Biology \\ Biology 107, 108, 109: General Biology sequence \\ General Biology Laboratory component: Biology 121, 122
}

\section*{46 credits}

\section*{45-47 credits}

9 credits
4 credits

Biology 310,322: Genetics with laboratory
Biology 315, 316 Ecology
Biology 320, 321: Vertebrate Biology and Lab
Biology 340, 341: Vertebrate Biology and Lab
Biology 330.331: Developmental Biology with laboratory
Biology Research Component: Bio 375, 376, 475, 480, 482
Biology 424 and 426: Advanced cell and Molecular laboratories
Biology Elective

\section*{B. Chemistry20 credits}
Chemistry 110, 121: General Chemistry with lab
Chemistry 120, 122: General Chemistry with lab
Chemistry 221, 231: Organic Chemistry with lab
Chemistry 222, 232: Organic Chemistry with lab
C. Math and Physics

Math 108 or 111: Pre-calculus or calculus
Math 204: Scientific statistics
Physics 110, 121: General physics with lab
Physics 120, 122: General physics with lab
Total credits

4 credits
4 credits
4 credits
4 credits
4 credits
6 credits
2 credits
6-8 credits

5 credits
5 credits
5 credits
5 credits
16-17 credits
3-4 credits
3 credits
5 credits
5 credits
127-130 credits

Recommended Course Sequence for the B.S. Biology, traditional track


\section*{Requirements for a B.S. Degree in Biology, pre-health professions track}
I. Core curriculum requirements

46 credits
II. Requirements of the BS in Biology, pre-health professions track
A. Biology
Biology 107, 108, 109: General Biology sequence
General Biology Laboratory component: Biology 121, 122
Biology 310,322: Genetics with laboratory
\begin{tabular}{ll} 
Biology 320, 321: Vertebrate Biology and Lab & 4 credits \\
Biology 340, 341: Vertebrate Biology and Lab & 4 credits \\
Biology 330.331: Developmental Biology with laboratory & 4 credits \\
Biology 440, 441: Microbiology and laboratory & 4 credits \\
Biology Research Component: Bio 375, 376, 475, 480, 482 & 6 credits \\
Biology 414: Biochemistry & 3 credits \\
Biology 424 and 426: Advanced cell and Molecular laboratories & 2 credits \\
Biology Elective(s) & \(3-4\) credits
\end{tabular}

\section*{B. Chemistry20 credits}
Chemistry 110, 121: General Chemistry with lab
Chemistry 120, 122: General Chemistry with lab
Chemistry 221, 231: Organic Chemistry with laB
Chemistry 222, 232: Organic Chemistry with lab
C. Math and Physics

Math 111: Calculus
Math 204: Scientific statistics
Physics 110, 121: General physics with lab
Physics 120, 122: General physics with lab
Total credits

5 credits
5 credits
5 credits
5 credits
17 credits
4 credits
3 credits
5 credits
5 credits
127-129 credits

Recommended Course Sequence for Biology, Pre-Health Professions track


\section*{Requirements for a Minor in Biology}

Biology minors must complete the following courses:
BIO 107 Evolution and Ecology
BIO 108 Form and Function
BIO 109 Cells and Chromosomes
BIO 121, 122 General Biology Labs

In addition, the biology minor requires the following coursework in chemistry and math:
2 semesters of general chemistry lecture
One semester of pre-calculus (MAT 108) or calculus

\section*{Course Descriptions}

\section*{BIO 105 The Process of Biology (3 crs)}
(meets the first core science requirement).
An introduction to biology as a way of knowing and communicating about living systems. The themes are how living systems process energy and information, ecologically relate to their environments and evolve over time. The goal of this course is for the student to gain an increased level of proficiency in scientific literacy; including theory application, evaluating evidence and manipulating concepts.

\section*{BIO 107 Evolutionary and Ecological Biology: The Dynamic Environment (3 crs)}

An exploration of how living things relate to each other in both space (ecology) and time (evolution). Included is an overview of the history and diversity of life on earth, an examination of representatives of various taxonomic groups as well as a study of taxonomy itself. BIO 107, 108 and 109 are required for Biology majors, and may be completed in any order.

\section*{BIO 108 The Form \& Function of Biological Organisms ( \(\mathbf{3} \mathbf{~ c r s}\) )}

An overview of the anatomy and physiology of plants and animals, with an emphasis on human structures. The interrelationships of the hierarchical levels of biological organization will be discussed. BIO 107, 108 and 109 are required for Biology majors, and may be completed in any order.

\section*{BIO 109 Cells and Chromosomes ( 3 crs )}

An exploration of variations on the themes of biology at the cellular level, including subcellular architecture and ultrastructure; metabolism; molecular biology; cell signaling; cellular reproduction; and an introduction into the concepts of genetics and development. Since this course will involve the examination of living systems at the molecular level, this course should only be taken after students have had at least one semester of college-level chemistry. Students should have had a successful experience in chemistry at the college level prior to taking BIO 109. Prerequisite: one semester of college-level chemistry. BIO 107, 108 and 109 are required for Biology majors, and may be completed in any order.

\section*{BIO 110 Biology of Reproduction ( 3 crs )}

Reproduction is an impelling force in all biological organisms. This course investigates the processes and strategies of propagation, with major emphases on its evolution and meaning in the human race.

\section*{BIO 121 The Methods of Biology (1 cr)}
(Is required of all biology majors in conjunction with BIO 107, 108 or 109) This fall semester lab is meant to accompany the general biology lectures. The lab is designed to provide intensive training in laboratory techniques that are involved in cell biology. Laboratory exercises include microscopy, genetics, enzymology, biological chemistry and animal behavior. Students will also gain experience in developing critical thinking skills, scientific writing, computer applications and statistical analysis of data.

\section*{BIO 122 General Biology II Laboratory (1 cr)}
(Is required of all biology majors in conjunction with BIO 107, 108 or 109) This is the spring semester lab that is meant to accompany biology lectures. Topics include numerous dissections, taxonomic identifications, a systematic survey of the five kingdoms and ecological studies.

\section*{BIO 127 Anatomy Lab (1 cr)}

This lab features dissection of the organ systems of the cat, with supporting dissections of some other animal organs, including the heart, brain and kidney. Structures of the organs and systems will be correlated with human structures. Corequisite: BIO 128 or 129.

\section*{BIO 128 Human Anatomy and Physiology I (3 crs)}

The first course in a two course sequence that examines the anatomy and physiology of the human body. This course begins with the study of the levels of structural organization and proceeds with an in-depth study of the integumentary, musculoskeletal, nervous and endocrine systems.

\section*{BIO 129 Human Anatomy and Physiology II (3 crs)}

This is the second course in a two-course sequence that examines the anatomy and physiology of the human body.
This course provides an in-depth study of the cardiovascular, respiratory, lymphatic, immune, digestive, urinary and reproductive systems. Prerequisite: BIO 128

\section*{BIO 234 (CLS 234) Pathophysiology (3 crs)}

A survey of the disease processes which affect the tissues, organs or the body as a whole. Special emphasis is placed on infectious diseases, their causes, prevention and treatment. Prerequisites: BIO 128 and BIO 129.

\section*{BIO 242 Cardiopulmonary Physiology ( 3 crs )}

Advanced physiology of the cardiovascular and pulmonary systems. Topics include connective tissues of the heart, ECG interpretation, blood pressure regulation, gas exchange and transport, breathing regulation, respiratory insufficiency and congenital abnormalities. Prerequisites: BIO 128 and BIO 129.

\section*{BIO 310 Genetics (3 crs)}

A thorough familiarization with the principles of classical genetics of representative organisms in all kingdoms, with special emphasis on humans. The function of genes in developmental systems is emphasized. Special topics include consideration of ethical issues. Prerequisite: Successful completion of a core course in mathematics and BIO 109.

\section*{BIO 311 Genetics Laboratory (1 cr)}

A hands-on, practical series of experiments and computer simulations in the analysis of heredity. Corequisite: Bio 210. Prerequisite: BIO 109.

\section*{BIO 315 Ecology ( 3 crs )}

Ecology is an introduction to biological organization at the population, community, and ecosystem level. This course explores the interrelatedness of the biological, chemical, and physical world. Topics include experimental design, mathematical modeling, climate, water balance, energy flow, nutrient cycling, adaptation, community succession, and symbiosis. Prerequisite: BIO 107.

\section*{BIO 316 Ecology Laboratory (1 cr)}

Ecology Laboratory involves the practice of designing field experiments for measuring plant and animal communities. In this course students will compile databases, conduct statistical analyses, and present the results of field ex-
periments in both written and oral formats. Field trips and field work are required. Corequisite: BIO 315. Prerequisite: BIO 107.

\section*{BIO 320 Comparative Vertebrate Anatomy (3 crs)}

An in-depth study of the comparative anatomy and systematic physiology of the vertebrate organisms, with emphasis on evolutionary relatedness. Prerequisite: Biology 107, 108, and 109.Corequisite: Bio 321

\section*{BIO 321 Comparative Vertebrate Anatomy Laboratory (1 cr)}

Experimental, observational and comparative studies of the structure and function of organ systems in vertebrates. Corequisite: BIO 320.

\section*{BIO 330 Developmental Biology ( 3 crs)}

A detailed study of the mechanisms of development, from gametogenesis through organogenesis, with particular emphasis on gene action, induction, cell movements, adhesion and pattern development. Special topics include regeneration and cancer. Prerequisite: Any300-level biology course. Corequisite: BIO 331

\section*{BIO 331 Developmental Biology Laboratory (1 cr)}

Experimental study and embryology of the principles of development in selected invertebrates, amphibians, avians and mammals. Corequisite: BIO 330.

\section*{BIO 340 Cellular and Molecular Biology ( 3 crs)}

A detailed exploration of the physical and chemical processes and the ultrastructure underlying the functional activities of cells; aspects of molecular biology, immunology, programmed cell death, signaling systems and gene regulation in prokaryotes and eukaryotes Prerequisite: BIO 107, BIO 108, BIO 109, and CHE 222. Corequisite: BIO 341

\section*{BIO 341 Cellular and Molecular Biology Laboratory (1 cr)}

Extensive use of basic and advanced instrumentation and the development of laboratory skills in the physiological and biochemical study of the activities of cells and organelles. Topics include subcellular fractionation, techniques used in cell and tissue culture research, and the isolation, purification and characterization of biological macromolecules. Special emphasis is placed on the evaluation and interpretation of lab data, correlation with library research and presentation of data in a scientific report format. Corequisite: BIO 340.

\section*{BIO 375 Student Research I: Biostatistics and Experimental Design (1 cr)}

The first part in a four-part series of student directed research courses. Topics include preparation for an independent research project, conducting a literature search and a thorough review of the pertinent literature, organization and development of a laboratory protocol with planned statistical treatment of data, preparation of a research budget and seminar participation. Students will select a project with the consent and guidance of a faculty mentor. Prerequisite: Junior standing. Note: A research project manual describing the requirements for this project series will be distributed. The student will be expected to acknowledge and agree to the guidelines as delineated. Prerequisite, junior level standing in biology.

\section*{BIO 376 Student Research II: Instrumentation and Data Acquisition (1 cr)}

The second part in a four-part series of student directed research courses. Topics include modifications of protocols, methods and testing materials; data collection and seminar participation. Prerequisite: BIO 375.

\section*{BIO 401 Animal Behavior (3 crs)}

An evolutionary approach to the study of animal behavior. The course will address the adaptive significance of animal behavior focusing on how and why various behaviors have developed. Prerequisite, any 300 level biology course.

\section*{BIO 403 Animal Behavior Laboratory (1 cr)}

A study of animal behavior in the laboratory and field. This course, designed to accompany Animal Behavior 401, will provide students with hands-on experience in studying animal behavior from a nonanthropomorphic point of view. The course will include field trips, laboratory studies, and a personal research project. Regular laboratory reports will be required. Corequisite, Biology 401

\section*{BIO 414 Biochemistry ( \(\mathbf{3}\) cr)}

An intermediate-level course in the description of macromolecular structure and function. Topics include an indepth study of the four classes of Biological macromolecules, enzyme kinetics and metabolic pathways. Emphasis is placed on metabolic processes, their regulation and integration in living systems. Prerequisite: Biology 107, 108, 109, and Chemistry 222.

\section*{BIO 420 Toxicology (3 crs)}

General principles of toxicology, including dose-response mechanisms, metabolism, distribution and the elimination of toxicants. Emphasis is placed upon various mechanisms of toxicity in a diverse representation of chemical substances, carcinogens, mutagens and teratogens. Prerequisite: BIO 340.

\section*{BIO 424 Advanced Physiology Laboratory (1 cr)}

An application of cell and/or organismal physiologic research techniques commonly used in the biomedical and allied health professions. Prerequisites: BIO 320, BIO 340 and BIO 341.

\section*{BIO 426 Advanced Molecular Biology Laboratory (1 cr)}

Students will use advanced experimental techniques in the areas of molecular biology and biochemistry. Topics include gene cloning; DNA isolation, electrophoresis and restriction mapping; gene amplification using the polymerase chain reaction; the isolation and characterization of recombinants; the creation of recombinant fusion proteins and their expression in bacteria. Prerequisites: Biology 107, 108, 109, 121 and 122.

\section*{BIO 430 Advanced Animal Physiology ( 3 crs)}

Advanced electrophysiology of selected animal types with emphasis on renal, neural and cardiopulmonary physiology. Prerequisite or Corequisite: BIO 320.

\section*{BIO 434 Invertebrate Biology ( 3 crs)}

An advanced study of representatives of the invertebrate phyla. Includes morphology, physiology, life history, and systems. Prerequisite: Any 300 level biology course.

\section*{BIO 435 Plant Morphology and Physiology ( 3 crs )}

A study of the structure and function of selected types of plants. Included propagation techniques such as plant tissue culture. Prerequisite: Any 300-level BIO course.

\section*{BIO 436 Physiological Ecology (3 crs)}

The application of ecological principles to problem solving at the organismal, population and ecosystem levels. Emphasis is placed on human interactions. Topics include organismal responses to stressors, human population dynamics, ecosystem responses to disturbances and global environmental change. Prerequisites: BIO 315 and BIO 221. Co -requisite: BIO 437

\section*{BIO 437 Physiological Ecology Laboratory (1 cr)}

Field and laboratory training in the measurements of the chemical, physical and biological attributes of ecosystems. The ecosystems studied include forests, streams, lakes, wetlands and mesocosm ecosystems. One weekend field trip is required in addition to regularly scheduled outings. Students are also required to design and conduct an individual research project. Prerequisite: BIO 316.Corequisite: BIO 438.

\section*{BIO 438 Parasitology ( 3 crs )}

A survey of common human parasites from the phyla protozoa, platyhelminthes and nematoda. Important aspects of their anatomy, physiology, life cycles, epidemiology and control will be discussed. Prerequisites: Any 300 level BIO course. Corequisite: BIO 439.

\section*{BIO 439 Parasitology Laboratory (1cr)}

Laboratory identification of common human parasites that are representative of the various genera discussed in the lecture. Prerequisites: any 300 level biology course. Corequisite, BIO 438.

\section*{BIO 440 Microbiology (3 crs)}

The focus of this course in the classification and major characteristics of bacteria, viruses and microscopic eukaryotes. Emphasis will be placed upon microbes that are responsible for infectious diseases in humans. Topics include microbial metabolism and genetics, basic concepts of epidemiology and immunology. Corequisite: BIO 441. Prerequisite: Any 300-level BIO course.

\section*{BIO 441 Microbiology Laboratory (1 cr)}

A practical, hands-on course that provides training in commonly used techniques of microbe identification and microbiology research. Laboratory sessions include training in preparing sterile media, aseptic technique in the culturing of microbial cultures, the use of biochemical techniques to identify bacteria, microscopy and staining techniques, and fermentation in food and beverages. Corequisite: BIO 440. Prerequisite: Any 300 level BIO course.

\section*{BIO 444 Instructional and Research Techniques (3 crs)}

An intensive laboratory course that uses state of the art equipment and techniques commonly encountered in various disciplines of biological research. Students will also learn general laboratory maintenance, preparation of reagents and solutions, and techniques for obtaining and analyzing data. Prerequisite: Any 300-level BIO course.

\section*{BIO 455 Population Genetics (3 cr)}

The genetic analysis of population ecology. The concepts of polymorphisms, speciation, mutation, inbreeding, migration and selection are considered in light of evolutionary changes. Emphasis is placed on quantitative models and their analysis in the gene pool. Prerequisite: BIO 310.

\section*{BIO 462: Cancer Biology}

The purpose of this course is to provide the student with the underlying principles, concepts and molecular mechanisms of cancer. The theme of cancer as a genetic disease will be studied in detail. Emphasis will be placed upon an understanding of signaling mechanisms, and how aberrant signal transduction pathways affect cell architecture and function. Students are required to register as student members to the American Association of Cancer Research (student membership is free). Students must also keep a journal on a specific type of cancer of their choice. Prerequisites: BIO 107, 108, 109, and 310.

\section*{BIO 475 Student Research III: Data Analysis (1 cr)}

A continuation of the four course sequence of independent student research. Topics and activities include the completion of testing and the statistical analysis of data, the preparation of a rough draft of the entire project, a poster presentation of the student's project and seminar participation. Prerequisite: BIO 376 and senior standing in biology.

\section*{BIO 480 Literature Seminar (1 cr)}

The focus of this course is the presentation of research in a seminar format. Students will present a primary literature article related to their research project, and gain experience in evaluating and critiquing research articles. Participation is all seminars are mandatory. Prerequisite: junior or senior standing in biology.

\section*{BIO 482 Research Seminar ( 2 crs )}

This is the final course in the four-course sequence of student research. Students will present their data to the class in a seminar form and a written report, in scientific format, on their original research project. Additionally, students are required to present their project at a research symposium. Participation in all seminars is mandatory. Prerequisite: BIO 480 and senior standing in biology.

\section*{BIO 490 Neuroanatomy and Physiology ( 3 crs )}

This is an advanced course focusing on basic and applied neuroscience. It includes the basic structure of the nervous system including the structure and morphology of the neuron. Emphasis is placed on the functional significance of the central, peripheral, and autonomic nervous systems from development to disease. Prerequisite: BIO 109 or junior or senior standing as a BIO major.

\section*{Business}

\section*{Contact persons: Dr. Theodore Pauls, Ed.D.}

Consistent with the mission of Wheeling Jesuit University, the purpose of business education is to contribute to the development of people prepared for productive and socially responsible lives and for leadership in the world of business. The business curriculum consists of both a broad exposure to the arts and sciences and a comprehensive education in business.

The undergraduate and graduate business programs of Wheeling Jesuit University are accredited by the Association of Collegiate Business Schools and Programs (ACBSP). This distinction means that in addition to University-wide accreditation by the North Central Association, the business department programs have met the high standards of this professional accreditation association for business programs. We have sought and achieved this accreditation in order to insure that our curricula, faculty, facilities and internal evaluation processes meet or exceed recognized national standards.

The business program is geared to provide a basic understanding of the nature and purpose of business and its role in society and a general knowledge of the structure and processes of business. The curriculum includes courses in accounting, finance, marketing, management and economics, among others. It focuses on analytical skills and the constantly growing array of software applicable to business. It also addresses the dynamic global, social, political, economic and technical environments in which business operates. Communication, leadership and analytical skills and experience in working effectively in teams, all qualities required for success in business, are fundamental elements of the program. Instruction is provided by faculty with extensive experience in business and related fields. Instruction is enhanced by applicable technologies, internships, and other experiential exposures that are integral to the business curriculum.

The Wheeling Jesuit University Mission Statement has provided a primary foundation for the development of the Mission for the Department of Business. Students will be motivated to learn for life, and become proficient leaders in their fields; will be competent, knowledgeable and ethical. The purpose of business education is to contribute to the development of individuals prepared for productive and socially responsible lives and for leadership in the world of business.

Graduates with degrees in business will be prepared to:
- Pursue career opportunities in business.
- Contribute in all major functional areas of a business.
- Recognize and deal with issues of ethical and social responsibility in business.
- Be proficient in oral and written communication.
- Be competent in the use of computers and standard software.
- Enter graduate study in business, law and other fields.

\section*{The Business Department Major}

The business department offers a major in business, which leads to the bachelor of science degree in business and a major in accountancy, which leads to the bachelor of science degree in accountancy.

\section*{The University Core Curriculum}

All majors in business and in accountancy must complete the University core curriculum, including specifically:
\begin{tabular}{lll} 
ECO 110 & Macroeconomics & \((3 \mathrm{crs})\) \\
MAT 105 & Statistics & \((3 \mathrm{crs})\) \\
INS 111 & World Community & \((3 \mathrm{crs})\) \\
The Business Core Curriculum &
\end{tabular}

All majors in business and in accountancy must complete the business core curriculum:
ACC 123 Principles of Accounting (3 crs)
ACC 124 Principles of Accounting II (3 crs)
ECO 221 Microeconomics (3 crs)
FIN 311 Principles of Finance (3 crs)
MGT 111 Principles of Management (3 crs)
MKT \(211 \quad\) Principles of Marketing (3 crs)
BUS 221 Quantitative Business Analysis (3 crs)
BUS 313 Information Systems and Operations (3 crs)
BUS 315 Business Law (3 crs)
BUS \(410 \quad\) Strategic Business Planning* (3 crs)
BUS \(110 \quad\) Business Skills 1
(2 crs)
BUS \(310 \quad\) Business Skills \(2 \quad\) ( \(1 \mathrm{cr} . / \mathrm{yr}\) )
Note for Business and Accounting Majors:
Seniors are required to take the ETS Major Field Test for Business. The test will be administered within the BUS 410 class. There is a charge for the test.

\section*{Requirements for Major in Business Administration Bachelor of Science Degree}

In addition to completing the University core curriculum and the business core curriculum, all business majors must complete at least one concentration.

\section*{The Business Concentrations}

\section*{Concentration in Management Required Courses:}

MGT 226

MGT 315
MGT 340

MGT 436
Plus one approved elective
(3 crs)

Concentration in Marketing Required Courses:
\begin{tabular}{lll} 
MKT 316 & Consumer Behavior & \((3 \mathrm{crs})\) \\
MKT 310 & Marketing Research & \((3 \mathrm{crs})\) \\
MKT 317 & Services Marketing & \((3 \mathrm{crs})\) \\
MKT 420 & Marketing Strategies & \((3 \mathrm{crs})\) \\
Plus one approved elective
\end{tabular}

Concentration in Personal Financial Planning Required Courses:
\begin{tabular}{|l|l|l|}
\hline FIN 212 & Personal Finance \& Consumer Economics & \((3 \mathrm{crs})\) \\
\hline FIN 312 & Investment and Portfolio Management & \((3 \mathrm{crs})\) \\
\hline FIN 411 & Tax, Estate, Trust, \& Retirement Planning & \((3 \mathrm{crs})\) \\
\hline FIN 412 & Risk Management \& Insurance & \((3 \mathrm{crs})\) \\
\hline
\end{tabular}

Plus one approved elective or:
\begin{tabular}{|l|l|l|}
\hline MBA 508 & Management of Financial Resources & \((3 \mathrm{crs})\) \\
\hline
\end{tabular}
***Approved Electives include any required course for another concentration or any course from the list below:
\begin{tabular}{lll} 
ECO 316 & Economics of Sports & \((3 \mathrm{crs})\) \\
MGT 220 & Sports Management & \((3 \mathrm{crs})\)
\end{tabular}
\begin{tabular}{llr} 
MGT 311 & International Business & \((3 \mathrm{crs})\) \\
MGT 330 & Introduction to e-commerce & \((3 \mathrm{crs})\) \\
MGT 373/4 & Internship in Management & \((3 \mathrm{crs})\) \\
MKT 313 & Advertising Management & \((3 \mathrm{crs})\) \\
MKT 315 & International Marketing & \((3 \mathrm{crs})\) \\
MKT 323 & Marketing and e-commerce & \((3 \mathrm{crs})\) \\
MKT 373/4 & Internship in Marketing & \((3 \mathrm{crs})\) \\
PSY 250 & Sports Psychology & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Accountancy}

The accountancy program is designed to prepare for careers in public accounting, industry, not-for-profit organizations and government. The program provides students with sound preparation for successful graduate study in business, law and other areas. Courses represent rigorous examinations of accounting concepts, principles and applications which provide the foundation for professional accountancy careers. The University also offers a Master of Science in Accountancy (MSA) degree. The MSA program requires 30 hours. Requirements for Accountancy Major Bachelor of Science Degree In addition to completing the University core curriculum and the business core curriculum, all accountancy majors must complete the following courses:

ACC 211Intermediate Accounting
ACC 212Intermediate Accounting II
(3 crs)
ACC 223Accounting Information Systems
ACC 305Tax Accounting
ACC 311Managerial Cost Accounting
ACC 401Advanced Accounting Practice
ACC 403Accounting—Government \& Not-for-Profit Organizations
ACC 406Auditing Theory and Practice
Plus one of the following courses:

MSA 553
Controllership
*MSA 509
Law for Accountants
*ACC 373/374 Internship in Accounting
* Required for CPA exam in most states

\section*{Business Department Minors}

Students majoring in disciplines other than business and accountancy may earn a minor in business by completing the following courses:

ACC 123
Principles of Accounting I
MGT 111
Principles of Management
ECO 110
Macroeconomics

MKT 211
Principles of Marketing
FIN 311
Principles of Finance

\section*{The Minor in Accountancy for Non-Business Major}

ACC 123 Principles of Accounting I (3 crs)
ACC \(124 \quad\) Principles of Accounting II (3 crs)
ACC 211 Intermediate Accounting I (3 crs)
ACC 212 Intermediate Accounting II (3 crs)
ACC 311 Managerial Cost Accounting (3 crs)
ACC 305
Tax Accounting
* Business majors must complete ACC 223 in addition to above list

\section*{Course Descriptions:}

\section*{Accounting}

\section*{ACC 123 Principles of Accounting I (3 crs)}

An introduction to basic financial accounting theory and practice. \(\mathbf{F}\)

\section*{ACC 124 Principles of Accounting II (3 crs)}

Continuing coverage of financial accounting and introduction of cost and managerial accounting. \(\mathbf{S}\)

\section*{ACC 211 Intermediate Accounting I (3 crs)}

An extensive examination of descriptive financial accounting theory and practice. Constitutes the first accounting course at the professional level for the student majoring in accounting. Prerequisite: ACC 123. F

\section*{ACC 212 Intermediate Accounting II (3 crs)}

Continues the extensive study of descriptive financial accounting theory and practice. Prerequisite: ACC 211. S

\section*{ACC 223 Accounting Information Systems (3 crs)}

This course is a practicum in commercial accounting systems. Students will perform general ledger, accounts payable, accounts receivable, billing, purchase order, inventory, payroll and job costing functions using a commercial software package. The software will be used to design specialized reports for budgeting, financial analysis, product costing and for analyzing cost management techniques. Another package designed specifically for activity-based costing will be used to learn how this method of managing overhead can enhance a business's performance. Student learning will be developed and measured through computer intense projects, class discussion, library and field research. Systems theory and information technology topics are also discussed. Prerequisite: ACC 124 S

\section*{ACC 305 Tax Accounting (3 crs)}

This course addresses taxation of individual income. Basic tax concepts are examined along with tax rules and regulations. Tax preparation and tax research software are used extensively. Students who have successfully completed the course often work in the Wheeling Jesuit Tax Clinic for hands-on experience. Prerequisite: ACC 124 F

\section*{ACC 311 Managerial Cost Accounting ( 3 crs)}

A critical analysis of cost concepts as they relate to the administrative process. Includes the presentation of case studies and the use of electronic spreadsheets. Prerequisite: ACC 124 F

\section*{ACC 373/374 Internship in Accounting (3 crs)}

A structured learning experience during which the student will apply and expand his/her academic accounting knowledge by participating in a functioning organization. Prerequisite: Permission \(\mathbf{F}, \mathbf{S}\)

\section*{ACC 401 Advanced Accounting Practice ( 3 crs )}

An advanced study in the theory and related problems applicable to specialized topics in advanced financial accounting. Topics include: partnerships, business combinations, installment sales, consignments, foreign operations and estates and trusts. Prerequisite: ACC 212 F

\section*{ACC 403 Accounting for Government and Not-for-Profit Organizations (3 crs)}

Deals with financial accounting and reporting for federal, state and local governments and for medical, educational, religious, human services, charitable and other non business organizations. Topics include: fund accounting; financial reporting and budgetary control for not-for-profit organizations; program-planning-budgeting systems; and governmental and institutional auditing. Prerequisite: ACC 212 S

\section*{ACC 406 Auditing Theory and Practice ( 3 crs )}

Examination of the philosophy, concepts and techniques pertaining to the auditing process. Prerequisite: ACC \(212 \mathbf{S}\)

\section*{MSA 509 Law for Accountants (3 crs)}

This advanced course in business law focuses on topics of particular interest to the accounting profession. Prerequisite: BUS 315. F

\section*{MSA 553 Controllership ( 3 crs )}

Investigates and studies the controller function within the contemporary organization. The controller is typically the chief accounting officer. The course studies the different functions for which the controller has traditionally been responsible as well as the changing role of the controller in the age of information technology. Prerequisite: ACC 311. S

\section*{Business}

\section*{BUS 110 Business Skills I ( 2 crs ) (To be taken Freshman or Sophomore year) F}

\section*{BUS 310 Business Skills II ( 2 crs ) (To be taken Junior or Senior year) S}

This seminar course addresses a wide variety of activities aimed at enhancing students' business skills, including social skills, communication, computer, writing and speaking skills. Methodology will include business simulations, guest speakers, alumni contacts, research, field trips, sporting activities and networking.

\section*{BUS 221 Quantitative Business Analysis (3 crs)}

This course addresses the vital tools of business management including statistical applications, sampling, data collecting, simple linear regression, ANOVA, Chi Square, simple linear programming, networks and decision analysis. Prerequisite: MAT 105 F,S

\section*{BUS 313 Information Systems and Operations Management (3 crs)}

This course addresses systems in an operations environment, including computer hardware, software,communications, data bases, data warehousing, data mining, enterprise systems, e-commerce, IS acquisition, product/service development, process analysis, forecasting, capacity and aggregate planning, scheduling, MRP, JIT, inventory management. Prerequisites: MGT 111,ACC 124, BUS 221 F,S

\section*{BUS 315 Business Law ( 3 crs )}

Study of the bases of the law and the Uniform Commercial Code, which is most likely to be encountered in a business environment. Topics include contracts, personal property, bailments, sales, torts, government regulation, administrative agencies, corporations, partnerships, commercial paper, insurance, bankruptcy, real property, estates and trusts. F,S

\section*{BUS 355 Business Ethics ( 3 crs )}

An exploration of the relationship between the world of business and the values of the larger society in which business operates. An application of ethical principles to issues, such as hiring practices, quality of the work place, conflicts of interest, environmental and consumer issues and the social responsibility of business. Prerequisites: PHI 105 and 205.

\section*{BUS 410 Strategic Business Planning (3 crs)}

This capstone course is concerned with the development of approaches for defining, analyzing and resolving complex strategic problems of profit and not-for-profit organizations. The course should be taken in the last year of the student's program. F,S

\section*{Economics}

\section*{ECO 110 Principles of Macroeconomics ( \(\mathbf{3} \mathbf{~ c r s}\) )}

A presentation of basic macroeconomic relationships. Topics emphasized are: the determination of income and employment, monetary and fiscal policies, inflation, interest rates and economic growth. F

\section*{ECO 221 Principles of Microeconomics (3 crs)}

A presentation of basic theories of consumer behavior and of the firm. Other topics include: study of elasticity, firm and industry equilibrium under various market structures and international trade. Prerequisite: ECO \(110 \mathbf{S}\)

\section*{ECO 312 Intermediate Microeconomics (MBA 506) (3 crs)}

An examination of the economic theory of households, the theory of the firm, price determination and resource allocation. Prerequisites: ECO 221, BUS 221 D

\section*{ECO 316 Economics of Sports ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course will apply economic principles and accounting and financial tools to analyze a wide range of issues in the realm of professional sports and collegiate athletics. These include expansion and rival leagues; realignment and alternative league formats; franchise relocation and venue construction; revenues from merchandising, promotion and broadcast rights and their distribution; free agency, arbitration and salary caps; player development through amateur drafts and minor leagues;NCAA rules on scholarship and eligibility and financial aspects of collegiate athletic programs. Class discussions, short presentations and written work form the bulk of the course requirements. The final paper allows an opportunity for students to research and apply economic, accounting and financial analyses to sports topics of personal interest. D

\section*{ECO 321 History of Economic Thought (3 crs)}

Economic ideas in perspective of historic development. Prerequisite: ECO 221 SO

\section*{ECO 324 Contemporary Economic Issues (MBA 547) (3 crs)}

The relationship of economic theory and the real world. An examination of current socioeconomic problems, issues and alternative solutions. Topics include: unemployment, inflation, productivity, government regulations, national debt, health care, pollution and the use of natural resources. Prerequisite: ECO 221 D

\section*{Finance}

\section*{FIN 150 Personal Financial Planning (3crs)}

This course is designed to examine budgeting and sound financial decisions when buying homes, investments, insurance, etc. FO

\section*{FIN 311 Principles of Finance ( 3 crs )}

A basic study of organizational and financial practices and problems which arise in connection with business organizations, especially the corporation. Topics include: the time value of money, basic capital budgeting, basic long-term financing decisions and working capital policy. Prerequisites: ECO 110, ACC 123 F, S

\section*{FIN 316 Principles of Investments (3crs)}

Introduction to financial markets, security analysis and valuation, and portfolio management; primary focus from an individual investor viewpoint. Prerequisite: FIN 311 SE

FIN 361 Tax, Estate, Trust, and Retirement Planning ( 3 crs)
An examination of planning for and treatment of various estate avenues including wills and trusts, legal and taxation implications, laws of descent and distribution, etc. Prerequisite: FIN 311 FE

\section*{FIN 412 Risk Management \& Insurance (3crs)}

This course combines major risk management and insurance principles with consumer considerations. Students will study concepts of risk and insurance, basic topics in risk management, functional operations of insurers, legal principles, life and health insurance, auto insurance, property and liability insurance, employee benefits, and social insurance. Prerequisite: FIN 311 SO

\section*{Management}

\section*{MGT 111 Principles of Management (3 crs)}

Management is the process of working with and through people to obtain organizational objectives. The introductory level survey course examines the management functions of organization, controlling, leading and planning. General Systems Theory will be emphasized as an analytical tool. Supervisory behavior and skills will be key topics. \(\mathbf{S}\)

\section*{MGT 220 Sports Management (3 crs)}

This is a survey course that provides a basic understanding of professional, amateur and recreational sports. Organizational structure and the financial elements typically found in the sports industry will be studied. Students will receive an overview of the historical development of sports and how sports has become an integral part of such social institutions as the family, business, education, politics and religion. Career opportunities will be reviewed to help the students focus on what area of sports management they are most interested exploring throughout their college program. Prerequisite: MGT 111 FE

\section*{MGT 226 (PSY 226) Organizational Behavior (3 crs)}

A survey course that examines individual and group behavior in an organizational context. The underlying thesis of this course is that an increased understanding of the human system can result in an organization that is more effec-
tive at meeting both the organization's objectives and the goals of the individual employees. Major topics include: motivation, leadership, group processes and attitudes. \(\mathbf{S}\)

\section*{MGT 311 International Business (3 crs)}

This course treats various aspects of international business, with particular emphasis on the role of the multinational company, whether headquartered in the United States or in another country. After considering the international financial and trade frameworks, the student explores the functional areas of the multinational company: finance, production, marketing and personnel. Examined will be the various economic, political and social forces that shape corporate strategies and objectives in the international marketplace. Prerequisites: ACC 123 and ECO 110 or permission. D

\section*{MGT 315 Conceptual Foundations of Business (3 crs)}

This course embraces the major ideas and institutions that make up an important part of the environment within which business transactions take place. The ideas are those philosophical concepts which have helped to shape business and society. The institutions include not only business institutions but also those legal and political institutions which have a major bearing on business. \(\mathbf{F}\)

\section*{MGT 340 Organizational Leadership ( 3 crs )}

After examining the evolution of leadership theory, this course focuses on a contemporary leadership model. The student's leadership style will be determined and personal development opportunities will be provided. \(\mathbf{F}\)

\section*{MGT 373/374 Internship in Management (3 crs)}

A structured learning experience during which the student will apply and expand his/her academic business knowledge by participating in a functioning organization. Prerequisite: Permission. F, S

\section*{MGT 401 Sports Facility and Event Management (3 crs)}

This course will teach students the theory behind the planning and managing stadiums and arenas used by academic, professional and recreational organizations. The course will the review early history of sports facilities to managing an event within a modern sports facilities to include operational issues such as scheduling, security, food and souvenir concessions, ticketing, maintenance and personnel management. The role sporting facilities and events play in the local community will be explored. Prerequisite: MGT 220. FO

\section*{MGT 402 Sports Law (3 crs)}

Sports law will cover the federal and state laws and athletic association regulations impacting sports teams, players, coaches and events. Laws affecting both amateur and professional athletes and teams will be studied. Contract law, specific to sports management will be an integral part of this course. Students completing this course will understand the legal implications of dealing with athletes and athlete agents and liability issues related to sporting events. Prerequisite: BUS 315 D

\section*{MGT 436 Human Resource Management (3 crs)}

This course examines the functions performed by human resource professionals in the dynamic environment of the 21st century. Major topics include human resource planning, job analysis, recruitment, selection, compensation, benefit administration, performance evaluation and training. Special emphasis will be given to the ethical considerations and legal issues impacting on employment decisions. Prerequisite: MGT \(111 \mathbf{S}\)

\section*{Marketing}

\section*{MKT 211 Principles of Marketing (3 crs)}

An examination of the fundamental concepts of marketing activities. Takes a managerial perspective to introduce product, price, place and promotion elements of the marketing mix. F, \(\mathbf{S}\)

\section*{MKT 310 Marketing Research (3 crs)}

The methods and techniques of securing, analyzing and interpreting data for effective managerial decision-making will be explored. Focuses on the conceptual design of marketing research studies and the interpretation of data. Prerequisites: MKT 211, BUS \(221 \mathbf{F}\)

\section*{MKT 313 Advertising Management (3 crs)}

A study of the managerial and creative aspects of advertising including media planning, development of the creative platform, advertising research and communication effects. Prerequisite: MKT 211 FO

\section*{MKT 315 International Marketing (3 crs)}

Introduces the formation of marketing strategy within the context of international business. Includes the study of international institutions and agreements that affect worldwide economic activity and an analysis of the economic, cultural, political and legal environments of international marketing. Special attention is given to the area of export management. Prerequisite: MKT 211 D

\section*{MKT 316 Consumer Behavior ( \(\mathbf{3}\) crs)}

Designed to integrate theories of consumer behavior that impact upon an organization's marketing activities. Explores individual and group behavior factors. Prerequisites: MKT 211 S

\section*{MKT 317 Services Marketing ( \(\mathbf{3} \mathbf{~ c r s )}\)}

Over half of the GDP in the U.S. comes from service related businesses. Nonprofit organizations (schools, hospitals, churches, etc.) view marketing as an increasingly important function. This course applies marketing principles and techniques to the unique needs of these organizations. Prerequisite: MKT 211 F

\section*{MKT 318 Sports Marketing ( \(\mathbf{3} \mathbf{c r s}\) )}

Sports marketing is designed to provide students insight into the application of marketing techniques to the ever changing, fast paced environment of the sports world and the complex and diverse nature of sports marketing. The course will include appreciation for the growing popularity of women's sports, globalization of sports, and current research in sports marketing for areas such as sports promotion development. Prerequisite: MGT 220 S

\section*{MKT 323 Marketing and Electronic Commerce (3 crs)}

In this course, students will learn the application of marketing mix (i.e. product, price, distribution and promotion) decisions to electronic commerce. Students will also gain an insight in consumer behavior regarding the use of electronic commerce in purchase decisions. Prerequisite: MKT 211 D

\section*{MKT 373/374 Internship in Marketing (3 crs)}

A structured learning experience during which the student will apply and expand his/her academic business knowledge by participating in a functioning organization. Prerequisite: Permission \(\mathbf{F}, \mathbf{S}\)

\section*{MKT 420 Marketing Strategies (3 crs)}

The study of essential aspects of effective marketing strategy formulation and implementation. An appreciation of the complexity of managerial decision-making will be stressed. Emphasis will be on case studies to more fully demonstrate segmentation, targeting, positioning and other marketing mix strategies. Prerequisite: MKT 211; senior standing \(\mathbf{S}\)

\section*{Catholic Studies}

Contact Person: Robert Phillips, Ph.D.
The goal of this program is to deepen the awareness and understanding of Catholic Intellectual Tradition. Catholic Studies includes the contributions of Catholic reflection and practice, but extends beyond theology, church history, morality and liturgy. In particular, students will investigate the Catholic Intellectual Tradition from the distinct perspectives of art and music, literature, politics and social justice.

\section*{Requirements for Catholic Studies Minor}

A Catholic Studies minor must complete the following courses:

COM 401
CST 201

CST 301

Senior Vocational Preparation Seminar
The Catholic Vision

Classics of the Catholic Intellectual Tradition

The minor is completed by taking one course in each of the following areas:
\begin{tabular}{lr} 
Humanities & \((3 \mathrm{crs})\) \\
Social Science & \((3 \mathrm{crs})\) \\
Theology or Philosophy & \((3 \mathrm{crs})\) \\
Elective & \((3 \mathrm{crs})\)
\end{tabular}

Note: While students will be encouraged to take RST 107 (Catholicism), it is not required for the minor

\section*{Special Note on Catholic Studies Minor}

The minor in Catholic Studies requires 18 hours and is earned by completing a six-credit core and 12 hours of elective credit that reflects the interdisciplinary nature of the Catholic Intellectual Tradition.

\section*{Course Descriptions:}

\section*{CST 201 The Catholic Vision (3 crs)}

This course serves as an orientation to the minor. The course identifies what is distinctive about the Catholic vision and so will examine such fundamental issues as: the principle of sacramentality, the relationship of the person to the common good, the centrality of morality, the relationship of faith and reason, as well as a philosophy of the human person before God. This course is comprised of material drawn from the humanities, the natural and social sciences and theology. D

\section*{CST 301 Classics of the Catholic Intellectual Tradition I (3 crs)}

This course is a seminar that examines a seminal thinker and/or classic works in the Catholic Intellectual Tradition. D

\section*{Chemistry}

\section*{Contact Person: James Coffield, Ph.D.}

Chemistry is the central science linking mathematics and physics to the biological sciences. The creative insight of chemists into the substance of nature has led not only to an elegant model of the material world, but also to a valua-
ble utility in everyday life. Our goal is to introduce students to the principles of chemistry and the processes of thought which have organized these principles into a coherent body of knowledge.

The chemistry program at Wheeling Jesuit University offers two degree paths - the bachelor of science degree (BS) and the bachelor of arts degree (BA). The BS degree is designed to prepare students for careers in chemistry. The program consists of 51 hours of chemistry and prepares students for graduate school or entry-level positions in industry. The BA degree, with 31-33 hours of chemistry, is more flexible. It is designed to prepare students for careers in medicine, dentistry, physical therapy, pharmacy, forensics, environmental science and chemical education.

All chemistry majors (BS and BA) and minors must have a grade point average at or above 2.5 in required chemistry at the completion of their 200-level chemistry courses in order to take upper level (300-level and above) chemistry courses. Students who do not meet this requirement are not permitted to register for upper level chemistry courses until their grade point average in the required chemistry courses is at or above 2.5 . Additionally, in order to graduate, all chemistry majors must have a grade point average at or above 2.5 in both the required chemistry courses and the required science courses (including chemistry).

Unless otherwise noted in the course descriptions, any chemistry course receiving a grade of less than C- may not be used as a prerequisite for another chemistry course. Students must retake the prerequisite and receive a grade of Cor better before the course can be used as a prerequisite.

\section*{Requirements for Chemistry Major Bachelor of Science Degree}

Upon completion of the Chemistry program, students will be able to demonstrate the ability to:
1. Understand the principles and concepts fundamental to chemistry.
2. Apply lab techniques appropriate for an entry-level chemist.
3. Have problem-solving skills.
4. Be proficient in oral and written communication.

In addition to completing the core curriculum requirements, Chemistry majors must complete the following courses:

CHE 110, 120
General Chemistry Lecture I, II
(8 crs)
CHE 121, 122
CHE 221, 222
General Chemistry Lab I, II
Organic Chemistry Lecture I, II
Organic Chemistry Lab I, II
Quantitative Analysis
Quantitative Analysis Lab
Instrumental Analysis Lecture
Instrumental Analysis Lab
Physical Chemistry Lecture I, II
Physical Chemistry Lab I, II
CHE 314
CHE 401

Biochemistry
Inorganic Chemistry

Chemistry Option (one of the following):

CHE 318
Environmental Chemistry
CHE 405
CHE 410
CHE 415
CHE 420
Advanced Inorganic Chemistry

Required Lab or Project (one of the following):
CHE 344, 345
Biochemical Lab Projects I, II
(2 crs)
CHE 431, 432

CHE 477, 478
Other required courses:
MAT 111, 112
Calculus I, II
(8 crs)
PHY 110, 120
Physics Lecture I, II
PHY 121, 122
Physics Lab I, II
(69 crs)
Note: The program outlined above meets or slightly exceeds the requirements for certification by the American Chemical Society.

\section*{Requirements for Bachelor of Arts Degree in Chemistry}

Upon completion of the BA degree program, students will be able to demonstrate the ability to:
1. Understand the principles and concepts fundamental to science, with an emphasis in chemistry.
2. Possess laboratory experiences appropriate for a person knowledgeable in science.
3. Have problem-solving skills.
4. Be proficient in oral and written communication.

The BA chemistry major is designed to be combined with a minor or another program rather than as a stand-alone program. The flexible nature of this program allows students to take courses in biology, education, computer science, math, business, etc. to prepare them for medical, dental, pharmacy and physical therapy schools. It is also a desired degree for those entering professions in forensics, environmental science and chemical education.

In addition to completing the core curriculum requirements, BA Chemistry majors must complete the following courses:
\begin{tabular}{|c|c|c|}
\hline CHE 110, 120 & General Chemistry I and II & (8 crs) \\
\hline CHE 121,122 & General Chemistry Lab & (2 crs) \\
\hline CHE 221, 222 & Organic Chemistry I and II & (8 crs) \\
\hline CHE 231, 232 & Organic Chemistry Lab I and II & (2 crs) \\
\hline \multicolumn{3}{|l|}{Chemistry Option (one of the following three pairs of courses with labs):} \\
\hline CHE 315, 319 & Quantitative Analysis and lab & (4 crs) \\
\hline CHE 316, 317 & Instrumental Analysis and lab & (4 crs) \\
\hline CHE 321, 331 & Physical Chemistry I and lab & (5 crs) \\
\hline CHE 322, 332 & Physical Chemistry II and lab & (5 crs) \\
\hline CHE 315, 319 & Quantitative Analysis and lab & (4 crs) \\
\hline CHE 321, 331 & Physical Chemistry I and lab & (5 crs) \\
\hline Additional CHE & (300 or above) & (3 crs) \\
\hline \multicolumn{3}{|l|}{Other required courses:} \\
\hline MAT 111 & Calculus I & (4 crs) \\
\hline PHY 110, 120 & Physics I, II & (8 crs) \\
\hline PHY 121, 122 & Physics Lab I, II & (2 crs) \\
\hline BIO 108 or 109 & & (3 crs) \\
\hline (48-50 crs) & & \\
\hline
\end{tabular}

\section*{Requirements for a Minor in Chemistry}

A minor in chemistry is recommended for students majoring in biology, physics, computer science, management, marketing, pre-engineering, pre-legal studies or professional writing.

The following chemistry courses must be completed: CHE 110, CHE 120, CHE 121, CHE 122, CHE 221, CHE 222, CHE 231, CHE 232 and either CHE 315 and CHE 319 or CHE 314 and CHE 344.

\section*{Core Fulfilling Courses}

CHE 105 Intro. General, Organic and Biochemistry (3 crs) - Priority given to health science majors
CHE 107 Intro. Chemistry for Non-science majors (3 crs)
CHE 110 General Chemistry I Lecture ( 4 crs ) - CHE 121 General Chemistry I Lab is a corequisite

\section*{Course Descriptions}

CHE 105 Intro. General, Organic \& Biochemistry (3 crs)

A one-semester introduction to fundamental chemical principles necessary to describe the behavior of matter. Biochemical concepts and medical applications included as needed. Required for BSN majors. Priority given to health science majors. F, S

\section*{CHE 107 Intro. Chemistry for Non-science Majors (3 crs)}

Introductory chemistry course for the non-science major emphasizing applications of chemistry to problems involving environmental pollution, sources of energy, radioactivity and human health. D

\section*{CHE 110, 120 General Chemistry (4 crs ea)}

Modern concepts of atomic structure and chemical properties, chemical bonding, stoichiometry, chemical equilibrium and kinetics. Satisfies the general chemistry requirements for chemistry and biology majors as well as prerequisites for medical, veterinary and other health related graduate programs. For CHE 110: Placement into MAT 108 or higher required. CHE 121(or CHE 121H) is a corequisite. For CHE 120: CHE 110 and 121 (or 121H) are prerequisites. CHE 122(or CHE 122H) is a corequisite. A drop or withdrawal in the lecture must be matched by a drop or withdrawal in the corresponding laboratory course. \(110 \mathrm{~F}, 120 \mathrm{~S}\)

\section*{CHE 121, 122 General Chemistry Lab (1 cr ea)}

Qualitative and quantitative studies of chemical systems. Introduction to basic synthetic and instrumental chemical methods. For CHE 121: Placement into MAT 108 or higher required. CHE 110 is a corequisite. For CHE 122: CHE 110 and 121 (or \(121 H\) ) are prerequisites. CHE 120 is a corequisite. \(\mathbf{1 2 1} \mathbf{F}, 122 \mathbf{S}\)

\section*{CHE 121H, 122H Honors Lab (1 cr ea)}

Advanced general chemistry laboratory involving detailed examination and analysis of data, introduction of advanced instrumentation, open-ended investigations, and computer-based data analysis. This course is designed for science majors with superior high school chemistry backgrounds. Enrollment requires approval from the department chair. Priority will be given to declared chemistry majors. For CHE 121 H: Placement into MAT 108 or higher required. CHE 110 is a corequisite. For CHE 122: CHE 110 and CHE 121H both with grade of \(B\) or higher are prerequisites. CHE 120 is a corequisite. 121H F, 122H S

\section*{CHE 177, 178 Freshman Research Project I and II (1-2 crs ea)}

Directed research projects. A seminar and/or written report are integral parts of each course. Prerequisite: Freshman standing as a major. 177 F, 178 S

\section*{CHE 221, 222 Organic Chemistry Lecture (4 crs ea)}

The study of the structure and reactions of organic compounds as described by modern theories of bonding and reactivity. For CHE 221: CHE 120 and CHE 122 (or CHE 122H) are prerequisites. CHE 231 is a corequisite. For CHE 222: CHE 221 and CHE 231 are prerequisites. CHE 232 is a corequisite. 221 F, 222 S

\section*{CHE 231, 232 Organic Chemistry Lab (1 cr ea)}

The techniques necessary to synthesize and identify organic compounds by both chemical and instrumental methods. For CHE 231: CHE 120 and CHE 122 (or CHE 122H) are prerequisites. CHE 221 is a corequisite. For CHE 232: CHE 221 and CHE 231 are prerequisites. CHE 222 is a corequisite. 231 F, 232 S

\section*{CHE 277, 278 Sophomore Research Project I and II (1-2 crs ea)}

Directed research projects. A seminar and/or written report are integral parts of each course. Prerequisite: Sophomore standing as a major. 277 F, 278 S

\section*{CHE 312 Introductory Physical Chemistry (3 crs)}

A basic course which develops the principles of thermodynamics, equilibrium and kinetics. Prerequisites: CHE 120 and 222, MAT 112. D

\section*{CHE 314 Biochemistry ( 3 crs )}

A basic course which develops concepts necessary for a description of macromolecular structure, biological regulatory processes and chemical biodynamics. Prerequisite: CHE 222 D

\section*{CHE 315 Quantitative Analysis (3 crs)}

Principles of quantitative analysis with a general introduction to instrumental methods. Emphasis on development of analytic skills as currently employed. Prerequisite: CHE 120, 122, 222, 232. Corequisite: CHE 319. Fo

\section*{CHE 316 Instrumental Analysis (3 crs)}

A lecture course in the theory and application of modern instrumental methods of separation and analysis. Prerequisites: CHE 315, 319, PHY 120, PHY 122. Corequisite: CHE 317. Se

CHE 317 Instrumental Analysis Lab (1 cr)
A laboratory course in the theory and application of modern instrumental methods of separation and analysis. Prerequisites: CHE 315, 319, PHY 120, PHY 122.Corequisite: CHE 316. Se

\section*{CHE 318 Environmental Chemistry ( 3 cr )}

Basic chemistry of soils, atmosphere and natural waters. Changes resulting from pollution discharges. Chemical perspectives on environmental problems. Prerequisite: CHE 221 and 231. D

\section*{CHE 319 Quantitative Analysis Lab (1 cr)}

A laboratory course involving the principles of quantitative analysis and an introduction to instrumental methods. Prerequisites: CHE 120, 122, 222, and 232. Corequisite: CHE 315. Fo

\section*{CHE 321, 322 Physical Chemistry Lecture (4 crs ea)}

Modern concepts of molecular structure, chemical thermodynamics, equilibrium and kinetics. For CHE 321: CHE 120, 122, 222, 232, and MAT 112 are prerequisites. CHE 331 is a corequisite. For CHE 322: CHE 321 and 331are prerequisites. CHE 332 is a corequisite. 321 Fe, 322 So

\section*{CHE 331, 332 Physical-Instrumental Measurements Lab (1 cr ea)}

Experiments in physical-chemical measurements with an emphasis on instrumental methods. For CHE 331: CHE 120, 122, 222, 232, and MAT 112 are prerequisites. CHE 321 is a corequisite. For CHE 332: CHE 321 and 331are prerequisites. CHE 322 is a corequisite. \(321 \mathrm{Fe}, 322\) So

\section*{CHE 344, 345 Biochemical Lab Projects I \& II (1 cr ea)}

Directed experiments to illustrate basic testing procedures performed in hospitals and research biochemistry laboratories. Experimental test results related to actual patient case histories will provide for meaningful discussions about medical biochemistry in health and disease. Pre/Corequisite for I is CHE/BIO 314; Prerequisite for II is CHE 344. D

\section*{CHE 377, 378 Junior Research Project I and II (1-2 crs ea)}

Directed research projects. A seminar and/or written report are integral parts of each course. Prerequisite: Junior standing as a major. \(\mathbf{3 7 7} \mathbf{F}, \mathbf{3 7 8} \mathbf{S}\)

\section*{CHE 401 Inorganic Chemistry ( 3 crs )}

Modern concepts of bonding and structure in inorganic compounds, reactivity and reaction mechanisms, acid-base and solid state chemistry. Prerequisite: CHE 222. Fe

\section*{CHE 405 Advanced Inorganic Chemistry ( 3 crs )}

An advanced topics lecture course in inorganic chemistry. Prerequisites: CHE 401. D

\section*{CHE 410 Advanced Biochemistry ( 3 crs)}

An advanced topics lecture course in physical biochemistry. Prerequisite: CHE 314. D

\section*{CHE 411 Inorganic Chemistry Laboratory (1 cr)}

A laboratory course providing experience in the synthesis of significant inorganic compounds and the techniques of various experimental and spectroscopic methods. Corequisite: CHE 401. So

\section*{CHE 415 Advanced Organic Chemistry ( 3 crs )}

An advanced topics lecture course in physical-organic chemistry. Prerequisites: CHE 222. D

\section*{CHE 420 Advanced Physical Chemistry ( 3 crs )}

An advanced topics lecture course in physical chemistry. Prerequisite: CHE 322. D

\section*{CHE 431, 432 Advanced Lab Techniques I \& II (1 or 2 crs ea)}

Directed experimental projects in the synthesis of organic and inorganic compounds. Emphasis on instrumental characterization. Prerequisite: CHE 317. D

\section*{CHE 477, 478 Senior Research Project I and II (1-2 crs ea)}

Directed research projects. A seminar and the satisfactory completion of an original paper are integral parts of each course. Prerequisite: Senior standing as a major. 477 F, 478 S

\section*{CHE 450 Thesis}

Completion of senior research project resulting in an undergraduate research thesis. Prerequisites: Senior standing, permission. \(\mathbf{S}\)

\section*{CHE 480 Seminar (1 cr)}

Seminar presentations by faculty and chemists from industry and other academic institutions; student presentations on their undergraduate research and literature topics. Prerequisite: Senior standing as major or permission. Fo

\section*{Classical Studies}

Contact Person: Paula Makris, Ph.D
The Classical Studies minor at Wheeling Jesuit is designed to increase students' knowledge of the classical world. The political, economic, social, aesthetic, philosophical and religious mores of Western Civilization are ultimately traceable, in some form or another, to those of the classical age. Wheeling Jesuit promotes the understanding of these mores, as well as the passion for the intellectual and spiritual pursuit of truth expressed in the ancient authors, in its goal to develop educated women and men for others.

\section*{Requirements for the Classical Studies Minor}

Greek or Latin Language

Electives ( 9 crs . at or above the 300-level) ( 12 crs )
Classical Studies Senior Thesis (1 cr)
Total
(16 crs)

\section*{CSS 486 Classical Studies Senior Thesis (1 cr)}

A research project prepared under the supervision of the Classical Studies director or a person designated by the Classical Studies director on a topic chosen by the student with the approval of the Classical Studies director.

Listed below are potential elective courses. Others may also count toward this minor; please consult the contact person for additional information:

CSS/POS 346: Ancient Political Thought
CSS/LIT 320: Mythology
CSS/PHI 307C: Metaphysics I: Ancient
CSS/RST 301: Studies in the New Testament
CSS/HIS 216: The Ancient World - Greece and Rome
CSS/RST 201: Introduction to the New Testament
CSS/FAS 137: Cinema and the Classical World

\section*{Clinical Sciences}

\section*{Course Descriptions:}

All Health Science majors may take a CLS course in addition to the discipline specific courses.

\section*{Add the highlighted info}

\section*{CLS 121 Introduction to Hospital Science (2 crs )}

An introductory course directed towards health care majors that provides a foundation of medical terminology, used in classrooms and clinical experiences; Explores duties and responsibilities of health care related practitioners in settings in relation to patient care management. The fundamentals of nutrition are covered as well in relation to patient care management. F

\section*{PHY 109 College Physics I (3 crs)}

An algebra-based introduction to the concepts and methods of physics: I; Kinematics and Newtonian Mechanics in 1 -d, Work and Energy, Gases, Fluids, Thermodynamics, Modern Physics: II; Newtonian Mechanics in 2-d, Electricity and Magnetism, Waves, Sound and Optics. Students need to have good algebra skills and basic Trigonometry. F

\section*{CLS 215 Concepts of Microbiology \& Epidemiology (2 crs)}

The recognition of normal flora occurring on/within the human body, invasion processes, control mechanisms for the prevention of the spread of microorganisms and the effects of the infection by certain specific microbes will be covered. Principles of immunology are covered as well. HistorS

\section*{CLS 321 Intro to Research in Health Care (3 crs)}

An introduction to research methods in the healthcare field. The class offers a systematic explanation of research theory and methods, which are applied in the development of a research proposal. F,S

\section*{CLS 334 (BIO 334) Pathophysiology ( 3 crs)}

A survey of disease processes which affect tissues, organs, or the body as a whole. A system-wide approach with interactions. The evidence based treatment guidelines for each system will be studied as well. Prerequisites: BIO 128 and BIO 129 or their equivalents. \(\mathbf{F}\)

\section*{CLS 311 Introduction to Pharmacology (1 cr)}

Principles of drug actions and reactions. F

\section*{CLS 312 Emergency Life Support Techniques (1cr)}

Basic first aid along with cardiopulmonary resuscitation for healthcare providers. \(\mathbf{F}\)

\section*{CLS 320A Management Techniques - Health Sciences 2 (1 cr)}

An introduction to the principles, practices and problems of management encountered in the allied health professions. F

\section*{CLS 320B Management Practicum (1 cr)}

As well as aAn application of the principles, practices, and problems of management encountered in the health sciences. Students plan, organize and conduct an approved project followed by a report and analysis of the completed project. Collaboration with other groups or organizations is encouraged. Prerequisite: CLS 320 A or approval of instructor D

\section*{CLS 330A Principles of Instruction (2 crs)}

An introduction of educational methods, techniques and their application to a clinical setting, academic classroom or professional arena. This class offers a systematic approach to instruction, presentation, teaching and methods of practice as it relates to educational instruction or professional seminars. This course also includes a service learning project. S

\section*{CLS 330B Principles of Instruction Practicum (1 cr)}

Course provides opportunities for practical application of educational methods and techniques learned in CLS 330A. Students engage in approved service learning and other activities in a variety of venues, organizing, scheduling, and conducting presentations related to their field of study. Prerequisite: CLS 330A or approval of instructor \(\mathbf{D}\)

\section*{Communications and Composition}

Contact Person: Dr. Sara Sliter-Hays
Drawing on both the rich humanistic and Jesuit traditions of Rhetoric, the Communications and Composition Department prepares students for life, leadership, and service through instruction in Eloquentia Perfecta, the good person speaking and writing well for the public good. The Communications Major is designed to meet the needs of students who hope to pursue careers in which writing, speaking, and knowledge management are essential. The major is appropriate for students who want to work in advertising, advocacy, public relations, marketing, journalism, law, education, the media, government at all levels, and many other careers.

The Communications major stresses both analysis and production of different forms of communications. Upon completion of the major, students will demonstrate the ability to:
1. Identify, analyze, and critique communications strategies across a range of media and texts;
2. Assess the validity and ethics of arguments and rhetorical strategies;
3. Employ a variety of modes of persuasion;
4. Produce rhetorically effective texts and presentations.

\section*{Concentrations available in the Communications major are:}
- Professional Communication
- Communication Studies
- Integrated Marketing Communication
- Media Writing

Core-fulfilling Courses:
ENG 105/110

\section*{AP Placement Equivalencies}

The department grants equivalency credit for AP scores of 4 or higher on the following courses:
Language and Composition: ENG 105 or 110
These courses are taken by all Communication majors...with a slightly modified list, detailed below, for the Integrated Marketing Communication major:
\begin{tabular}{|l|l|l|}
\hline COM 103 & Principles of Communication & \((3 \mathrm{crs})\) \\
\hline COM 104 & Principles of Communication 2 (formerly Persuasion) & \((3 \mathrm{crs})\) \\
\hline COM 109 & Media and Culture & \((3 \mathrm{crs})\) \\
\hline COM 208 & Signs and Symbols (formerly Intercultural Comm) & \((3 \mathrm{crs})\) \\
\hline COM 211 & Fundamentals of Reporting & \((3 \mathrm{crs})\) \\
\hline COM 251 & Ethnography (formerly Public Opinion \& Surveys) & \((3 \mathrm{crs})\) \\
\hline COM 304 & Media Law & \((3 \mathrm{crs})\) \\
\hline SSC 327 & Research Methods & \((3 \mathrm{crs})\) \\
\hline ENG 220 & Advanced Writing Techniques & \((3 \mathrm{crs})\) \\
\hline ENG 224 & Public Speaking & \((3 \mathrm{crs})\) \\
\hline COM 401/402 & Senior Seminar & \((3 \mathrm{crs})\) \\
\hline
\end{tabular}

Electives are offered in four concentrations which apply foundational principles to specific areas, media, and professional practices:

\section*{Concentration One: Professional Communication}
(Visual Rhetoric I; Visual Rhetoric II; Organizational Communication; Mock Trial; Drawing 1 or Digital Photography)

\section*{Concentration Two: Media Studies}
(Visual Rhetoric I; Race and Gender in Media; Social Media and Society; Demagoguery; Introduction to Story)

\section*{Concentration Three: Media Writing}
[choose 4 of 6] (Public Relations; Advertising; Integrated Marketing Campaigns; Creative Fiction; Creative Nonfiction; Screenwriting; Introduction to Story)

Concentration Four: Integrated Marketing Communication
\begin{tabular}{|l|l|l|}
\hline ACC 123 & Principles of Accounting I & \((3 \mathrm{crs})\) \\
\hline ACC 124 & Principles of Accounting II & \((3 \mathrm{crs})\) \\
\hline MKT 211 & Principles of Marketing & \((3 \mathrm{crs})\) \\
\hline BUS 221 & Quantitative Business Analysis & \((3 \mathrm{crs})\) \\
\hline MKT 316 & Consumer Behavior & \((3 \mathrm{crs})\) \\
\hline MKT 310 & Marketing Research & \((3 \mathrm{crs})\) \\
\hline MKT 420 & Marketing Strategies & \((3 \mathrm{crs})\) \\
\hline COM 103 & Principles of Communication 1 & \((3 \mathrm{crs})\) \\
\hline COM 104 & Principles of Communication 2 & \((3 \mathrm{crs})\) \\
\hline COM 258 & Public Relations Writing & \((3 \mathrm{crs})\) \\
\hline COM 259 & Advertising & \((3 \mathrm{crs})\) \\
\hline COM 351 & Integrated Marketing Communication & \((3 \mathrm{crs})\) \\
\hline COM 401/2 & Senior Seminar & \((3 \mathrm{crs})\) \\
\hline FAS 142/147 & Digital Photography OR Drawing 1 & \((3 \mathrm{crs})\) \\
\hline
\end{tabular}

In addition, students must participate in a minimum of at least 4 semesters in at least two of the approved campus media project (Cardinal Connection, Cardinal Cast, etc.)

\section*{Course Descriptions}

\section*{COM 103 Principles of Communication I ( 3 crs )}

Survey of essential concepts and skills for effective communication in media, business and personal life with emphasis on learning the traditional modes of persuasion, including argument, form, and style. This course focuses on learning and building analytical skill in decoding and understanding persuasive strategies across a broad range of media, including written and oral arguments, television, movies, advertising, and images. \(\mathbf{F}\)

\section*{COM 104 Principles of Communication II (Formerly Persuasion) ( \(\mathbf{3} \mathbf{~ c r s )}\)}

Survey of mass communication strategies and modern communication, and theories of communication failure. This class builds on the practical persuasive skills learned in COM 103 but teaches students to analyze and understand persuasive discourse, broadly considered. Students will examine propaganda, twentieth-century marketing strategies, and demagoguery. Prerequisite: COM 103 S

\section*{COM 109 Media and Culture ( 3 crs )}

Using techniques from cultural studies and rhetorical studies, students will learn to critically analyze culture and its textual artifacts to understand how texts and culture shape and inform one another. The course will consider new media, print, television, movies, radio, and the Internet. F

\section*{COM 142/FAS 142 Digital Photography ( 3 crs )}

This course introduces students to the history, aesthetics, and principles of photography with an emphasis on the rhetoric of digital photography. Students will explore the history and development of photography and learn the principles of composition, lighting, exposure, and special effects. This course has no prerequisites but requires the use of a digital
camera with manual settings. (Communication majors are required to take this course as their Fine Arts Core.) F

\section*{COM 204 Mock Trial (3 crs)}

In this speech-based class, students will learn the basics of building an argument, preparing and presenting a case, advocating for their position, and conducting themselves professionally. Students will learn how to give an opening statement, present a case, cross examine witnesses, close their arguments. They will learn how to evaluate appropriate evidence. \(\mathbf{S}\)

\section*{COM 208 Signs and Symbols (formerly Intercultural Communication) ( \(\mathbf{3} \mathbf{~ c r s )}\)}

The class will look at the nuts and bolts of any kind of communication--how symbolic systems, including language, work together to create meaning for an audience, and how different audiences can derive different understandings from the same communication. The course will explore the theoretical issues grounding intercultural communications and present organizations, societies, and cultures as communicative performances. Prerequisite: COM 103 S

\section*{COM 209 Social Media and Society ( \(\mathbf{3} \mathbf{c r s}\) )}

Computer-mediated communication (CMC), including social networking sites, online forums, online games, and consumer reviews, email, and texting, is now ubiquitous in society. Citizens use this technology to find information, change people's opinions, and establish or strengthen affective bonds. This class will consider CMC from a Communication Studies standpoint, understanding how CMC creates, modifies, and structures personal and social relationships. Issues such as privacy, identity, and barriers to technology will be discussed. Prerequisites: COM 103 and COM 104 F

\section*{COM 211 Fundamentals of Reporting ( 3 crs )}

Examination of and practice in the skills of gathering information and writing news and feature stories with precision, balance and insight. Emphasis on planning and writing strategies, conducting effective interviews and developing the power of observation and research necessary for accurate and vivid description and reporting. Students will produce several stories for their portfolios. Writing intensive. F

\section*{COM 212 Copy Editing and Layout (3 crs)}

Fundamentals and techniques of editing and designing newspaper and magazine pages and online publications for clarity, accuracy and impact. Emphasis on an audience-centered approach to editing and page design that ensures that readers and viewers see and care. Students will produce several page design projects for their portfolios. (Will be offered for the final time Spring 2014.)

\section*{COM 230 Visual Rhetoric 1 ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course examines the persuasive power of visual communication. The course uses rhetorical theory to understand how different kinds of visual communication, such as signs, logos, trademarks, posters, billboards, advertisements, city design and architecture carry symbolic meaning. The course will also provide information on the history of visual design. Prerequisites: COM 103, COM 104, COM 208. F

\section*{COM 231 Introduction to Visual Design and Desktop Publishing (3 crs)}

Fundamentals and techniques of visual design, typography and page layout. Students will complete several portfolio projects useful for job applications in communications, graphics, marketing, management and training. Familiarity with computer, e-mail, word processing and the Internet is required. (Will be offered for the final time Fall 2014.)

\section*{COM 232 Visual Rhetoric 2 ( \(\mathbf{3} \mathbf{~ c r s}\) )}

In this process-based, workshop-style course, students will learn the basics of creating visual design in the areas of page layout, typography, and digital image editing. Students will learn how to use graphic elements such as geometric primitives, line, shape, texture, value, color, positive and negative space, foreshortening, and perspective. Prerequisites: COM 103, COM 104, COM 208, COM 231. S

\section*{COM 233 Illustration (3 crs)}

Fundamentals and techniques of digital illustration using software such as Adobe Illustrator. Emphasis on learning to see and analyze visual subjects and make appropriate use of graphic elements and techniques such as geometric primitives, line, shape, texture, value, color, positive and negative space, foreshortening, and perspective. Students will complete several portfolio projects useful for job applications in communications, graphics, marketing, management and training. Familiarity with computer, e-mail and the Internet required. (Will be offered for the final time Spring 2015.)

\section*{COM 241 Web Authoring ( 3 crs )}

Introduction to the principles and process of designing, writing and coding Web sites using HTML, CSS, JavaScript, and Flash. Emphasis on an audience-centered approach to planning, non-linear writing, and web design that reflects the effective integration of writing and graphics. Course will include the documented development and design of several web sites. Writing intensive. (Will be offered for the final time Spring 2014)

\section*{COM 242 Web Animation (3 crs)}

Emphasis on designing, authoring, and managing more sophisticated Web sites focusing on site architecture, navigation schemes, and appropriate interactivity. Students will make extensive use of vector graphic design and authoring 102 technologies such as Flash and Action Script. Course will include the documented development and design of several multimedia web animation products. Writing and graphic design intensive. (Will be offered for the final time Spring 2015).

\section*{COM 251 Ethnography (Formerly Public Opinion and Surveys) (3 crs)}

An introduction to qualitative communication and cultural research. Students will learn how to interview, observe, analyze data, journal their research, and construct narratives, including personal narratives. This course explores the complexity of issues and concerns to individuals or groups which influence our daily lives and how information sources, styles, and channels help to formulate public opinion on these issues. \(\mathbf{S}\)

\section*{COM 258 Public Relations ( 3 crs )}

Study and practice in the kinds of planning and writing required for effective public relations, including story pitches, news releases, brochures, public service announcements, presentations, speeches, Web sites, and media kits. Emphasis not only on the various tools available to the public relations practitioner but also the rhetorical process of deciding and justifying which tools are most effective for moving target audiences from initial ignorance to the appropriate intended action. Writing intensive. F

\section*{COM 259 Advertising ( 3 crs )}

Study and practice in advertising as a critical element of an organization's total marketing plan. Emphasis on developing consumer profiles, positioning strategies and creative work plans for advertisers as well as conducting proper research and creating effective visual designs and ad copy. Students document and produce ads for print, broadcast, outdoor and other media and also complete an advertising campaign for their portfolio. Writing intensive. FO

\section*{COM 273 Internship (2 crs)}

A structured learning experience during which the student will apply and expand his/her knowledge in Communication by participating in a functioning organization. Prerequisite: Permission.

\section*{COM 303 Race, Gender, and Class in Media (3 crs)}

This course examines representations of race, class, gender, and sexual identity in the media. Students will study how gender, race, and class are portrayed in advertisements, television, film, and print from the standpoints of audience, author, and production, and how media portrayals of gender, race, and class participate in the larger discussion of these themes in a democratic society. Students also will consider how social media and the Internet has changed the way citizens participate in discussions about social issues. Recommended but not required as prerequisites: COM 103, COM 104, COM 208 F

\section*{COM 304 Media Law (3 crs)}

Discussion of First Amendment and free expression in a democratic society; analysis of major court cases, statutes and administrative regulations affecting freedom of information, publishing, advertising, and telecommunication. Exploration of problems and issues concerning libel and slander, rights in news and advertising, contempt, copyright, and invasion of privacy. Excellent course for prelaw students. Theories of ethics will be introduced and critically applied. F

\section*{COM 311 Investigative Reporting ( 3 crs )}

Intensive study and practice of advanced news gathering, writing, and specialized reporting techniques as well as on news judgment. Writing intensive. Prerequisite: 2.0 or higher in COM 211, 212, or 213. SO

\section*{COM 358 Public Relations Campaigns ( 3 crs )}

Intensive study of the planning and writing skills necessary to put together systematic and effective public relations campaigns. Further emphasis not only on the various tools available to the public relations practitioner but also the rhetorical process of deciding and justifying which tools are most effective for moving target audiences from initial ignorance to the appropriate intended action. Students will prepare an extensive campaign project for their portfolios. Writing intensive. Prerequisite: COM 258 and MKT 211. SO

\section*{COM 359 Advertising Campaigns ( 3 crs )}

Intensive study of the planning and writing skills necessary to put together systematic and effective advertising campaigns. Further emphasis not only on the various tools available to the advertising practitioner but also the rhetorical process of deciding and justifying which tools are most effective for moving target audiences from initial ignorance to the appropriate intended action. Students will prepare an extensive ad campaign project for their portfolios. Writing intensive. Prerequisite: COM 259 and MKT 211. SE

\section*{COM 361 Special Topics in Communication ( 3 crs )}

An experimental course offered according to the special interests of the faculty or students. May be repeated when topics change.

\section*{COM 371 Demagoguery ( 3 crs )}

Demagoguery involves speech or communication that is based on fear and hate--speech that many people find offensive, upsetting, or troubling, but speech that is likewise very effective and widespread. This course will look at the principles of demagogic speech, learn how it works and why it is so effective, and study examples of it. In addition to learning about demagogic speech, students will learn how to argue and persuade without resorting to demagogic techniques. Prerequisites: COM 103, COM 104, COM 208, COM 209. S

\section*{COM 373 Junior Internship (3 crs)}

A structured learning experience during which the student will apply and expand his/her knowledge in Communication by participating in a functioning organization. Prerequisite: Permission.

\section*{COM 401-402 Senior Vocational Preparation Seminars (3 crs)}

Guided experience in an actual work environment related to the student's career goals. Minimum of 50 hours per internship. Student keeps log and submits for evaluation. Prerequisite: 2.0 or higher in coursework which prepares the student for the type of communication that the internship will involve. Prerequisite: senior standing in Professional Communication major. F,S

\section*{COM 473 Senior Internship (1 cr)}

A structured learning experience during which the student will apply and expand his/her knowledge in Communication by participating in a functioning organization. Prerequisite: Permission.

\section*{Course Descriptions: Composition}

\section*{COMP 101 College Writing (3 crs)}

Review of basic writing skills, stressing the elements of clear and effective writing. By placement; does not satisfy core curriculum requirement. \(\mathbf{F}\)

\section*{REA 101 College Reading ( \(\mathbf{3} \mathbf{~ c r s ) ~}\)}

Development of greater efficiency, comprehension, vocabulary and recall in reading college-level material. Enrollment by placement; does not satisfy core curriculum requirement. \(\mathbf{S}\)

\section*{COMP 105 Process of Composition (3 crs)}

Elements of expository and persuasive essay writing; research techniques; revising prose for accuracy, precision and effective style. Core fulfilling. By placement. F,S

\section*{COMP 110 Composition Seminar ( 3 crs )}

Advanced essay writing; exposition and persuasion; research techniques; editing and revising prose for accuracy, precision and effective style for first-level writers. Core fulfilling. By placement. F

\section*{COMP 220 Advanced Writing Techniques (3 crs)}

A hand-on, practical course on expository writing, including issues of writing for publication. Prerequisites: ENG 105/110. S

\section*{COM 224 Professional Speaking (3 crs)}

Practice in preparing and presenting instructional, informative, persuasive and public relations speeches of a professional nature. Includes use of multi-media tools. Prerequisites: ENG 105/110. S

\section*{Computer Science}

\section*{Contact Person: Patrick Plunkett}

The Computer Science major is designed to provide both breadth and depth knowledge of the various fields of computing, systems design, and Web design. Courses range from theoretical to purely practical with an emphasis on solving real-world problems using current tools and techniques. Our major is a traditional Computer Science curriculum and contains topics relating directly toward careers in networking and systems design, as well as graduate Computer Science programs.

Currently, the core computer language, Java, is emphasized in the introductory sequence of courses, but other languages and software packages are incorporated as needed by specific classes. There is also a mathematics component since we believe that the successful graduate is best served by understanding the mathematical thinking and processes that underlie all of the information sciences. Additionally, we expect the incoming freshman student to have a good mathematics background including advanced algebra and trigonometry
1. Upon completion of the Computer Science program, students will be able to demonstrate the ability to:
2. Frame and resolve ill-defined problems.
3. Write small-to-medium-scale programs using software engineering techniques and top-down structured programming.
4. Develop software in a team environment.
5. Integrate knowledge from other disciplines into solutions to real-world problems using various computer languages.
6. Recognize limitations and discover solutions to leading-edge technological issues.

\section*{Requirements for Computer Science Major-Bachelor of Science Degree}

In addition to completing the core curriculum requirements all majors in computer science must complete at least the following courses:

CSC \(110 \quad\) Structured and Object-Oriented Programming I
CSC 112 Structured and Object-Oriented Programming II
CSC 210
User Interface Design
CSC 220
Social, Professional, and Ethical Issues of Computer Science
Data Structures
CSC 305
Introduction to Networking
CSC 306
Network Security
(3 crs)
CSC 310
Analysis of Algorithms
Operating Systems
CSC 330
Database Design and Management
CSC 350
Introduction to Computer Architecture
\begin{tabular}{lll} 
CSC 382 & Junior Seminar & \((1 \mathrm{cr})\) \\
CSC 420 & Systems Administration & \((3 \mathrm{crs})\) \\
CSC 435 & Software Engineering & \((3 \mathrm{crs})\) \\
CSC 436 & Senior Project & \((1 \mathrm{cr})\) \\
CSC & Elective & \((3 \mathrm{crs})\) \\
MAT 105 & Introduction to Statistics & \((3 \mathrm{crs})\) \\
MAT 235 & Discrete Mathematics & \((4 \mathrm{crs})\) \\
COM 241 & Introduction to Web Authoring & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Special Note on Elective:}

The elective course (minimum of one) is chosen from the following: Digital Editing, Computer Graphics, Artificial Intelligence, Haptics, Parallel Processing, Gaming, Mobile Computing, or any of the special topics offered. Additionally, an 3-credit internship fulfills the requirement.

\section*{Requirements for a Minor in Computer Science}

For a minor in computer science, the following are required: CSC 110, CSC 112, CSC 220, and at least three other CSC courses at the 200 level or above. Any computer science course may be taken by a non-math or non-computer science major provided the necessary prerequisites are met. Some courses which may be attractive include: CSC \(108,110,112,210,220\), and the occasional upper level course intended for a wider audience.

\section*{Course Descriptions}

100 and 200-level courses are usually offered every year. Electives and
300 and 400-level courses are offered every two years.

\section*{CSC 108 Skills for the Information Age (3 crs)}

A computer literacy course covering topics such as: word processing, spreadsheet construction and use, presentation management, database construction, Internet search techniques, ethical issues, and elementary programming skills development. Currently, the Open Office suite of programs and the Alice programming language are the main software packages in use. No previous computer experience is expected or required and there are no prerequisites.

\section*{CSC 110 Structured and Object-Oriented Programming I (3 crs)}

An introduction to the general fields of study of Computer Science, including a discussion of different programming languages, their styles and strengths. This course emphasizes the methodology of structured programming in a high level language (currently Java),, and introduces basic data structures and elementary algorithms. An emphasis is placed on reusable software tools, good documentation and top-down design. Programming and other written assignments are included. Prerequisites: Previous programming experience is helpful. A strong mathematics background is required. Required for Computer Science major.

\section*{CSC 112 Structured and Object-Oriented Programming II (3 crs)}

This course extends the acquaintance with the general fields of study of Computer Science, visiting them in more detail and placing an emphasis on data structures, information storage and retrieval, and numerical computation. This course uses objects and object oriented programming. Other data structures such as stacks, queues and linked lists are introduced. Programming and other written assignments. Prerequisite: CSC 110. Required for Computer Science major.

\section*{CSC 210 User Interface Design (3 crs)}

This course undertakes a study and analysis of the issues that must be considered in designing an interface for any computer application, software or system. Human factors, user models, data visualization techniques, usability testing and the various components of interactive systems are considered. While the emphasis here is not on web applications, the features under discussion will apply to web design as well. The student will do some programming and interface design using an appropriate language or package. Prerequisite: CSC 112, or an intermediate level of computer programming. Required for Computer Science major (usually only offered every two years).

\section*{CSC 220 Social, Professional and Ethical Issues (3 crs)}

This course deals with the impact of rapidly expanding computer technology on society, including many ethical and professional issues which have arisen. Professional activities, organizations and publications are also explored. Although the course does not include programming assignments, the student must have experience in using computers for a variety of purposes. No specific prerequisites. Required for Computer Science major.

\section*{CSC 222 Data Structures ( 3 crs )}

This course continues the exploration of the general fields of study of Computer Science, introducing more complex data structures, and placing a special emphasis on algorithm design and analysis. Programming and written problems are assigned. Prerequisite: ISC 112. Required for Computer Science major, Systems \& Networking cognate.

\section*{CSC 305 Introduction to Networking ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course is an introduction to the general topics of computer networking, both at the theoretical and practice levels. Topics are centered on the various layers of the current network models, stressing the relationships between host computers at each level of abstraction. Additionally, students may set up a small network using laboratory machines and the Linux operating system. This course, in combination with System Administration (CSC 420) and Network Security (CSC 306) is foundational for students desiring a career in the networking field. Prerequisite: CSC 222. Required for the Systems and Networking cognate.

\section*{CSC 306 Network Security ( 3 crs )}

This course, an extension of CSC 305 (Introduction to Networking), investigates the setup and maintenance of computer networks in an environment of hostile intrusion attempts. Topics to be discussed include (but are not limited to): firewalls, packet shapers, user security measures, access policies, and encryption. This course, in combination with System Administration (CSC 420) and Introduction to Networking (CSC 305) is foundational for students desiring career in the networking field. Prerequisite: ISC 305. Required for the Systems and Networking cognate.

\section*{CSC 310 Analysis of Algorithms (3 crs)}

This course algorithm analysis, theory, and techniques. Students learn properties of both efficient and inefficient algorithms. This course teaches the skills necessary to determine the best algorithm for a given problem. Some techniques investigated include: greedy, brute force, divide and conquer, dynamic programming, and transform and conquer. NP-completeness is also a topic of discussion. Prerequisite: CSC 112. Required for Computer Science Major.

\section*{CSC 315 Introduction to Three-Tiered Web Design (3 crs)}

This course will advance the student in the field of programming for web-based applications. This programming will include advanced HTML, JavaScript, VBScript, CGI and Active Server Pages (ASP). Primary emphasis is in the use of ASP to design and create database-driven web applications. Prerequisite: COM 241. Required for Web Authoring cognate.

\section*{CSC 325 Operating Systems (3 crs)}

This course investigates the programs which control computers. Topics include: computer structure, organization of storage and processes, multi-programming and multi-processing, concurrent processing, scheduling, memory man-
agement, and virtual memory. Various operating systems are employed. Prerequisite: CSC 112. Required for the Systems and Networking cognate.

\section*{CSC 330 Database Design and Management (3 crs)}

Logical and physical database design concepts, database administration, with an emphasis on the relational model are covered in this course. A team or individual project requires the design and implementation of a relational database. Prerequisite: CSC 112. Required for Computer Science major.

\section*{CSC 336 Designing Rich Internet Applications (3 crs)}

Designing, implementing, and distributing advanced web applications using HTML, XML, scripting, and ASP. Prerequisites: COM 242 and MAT 108 or equivalent. Required for Computer Science Major, Required for Web Authoring cognate.

\section*{CSC 340 Introduction to Computer Graphics (3 crs)}

Introduction to techniques used in designing and implementing two and three-dimensional graphics displays, using a high-level programming language as a foundation. Pre-requisite: CSC 112, MAT 235, MAT 111.(MAT 240 is also helpful). Elective for Computer Science major.

\section*{CSC 350 Introduction to Computer Architecture (3 crs)}

This course introduces the student to the basics of computer hardware and organization, providing a firm foundation in general computer design issues. Topics covered include Boolean logic, gates, digital logic circuits, memory, CPU chips and buses, micro architecture and microinstructions and parallel architectures. Prerequisites: CSC 112. Required for Computer Science majors.

\section*{CSC 373 Internship (3 crs)}

Students gain practical experience in the operation and administration of a computer center, system or network by working on systems projects in the Academic Computer Center, the NTTC, the CET or with a private company. Prerequisite: Junior level status as a Information Sciences major, recommendation of the department chair.

\section*{CSC 382 Junior Seminar (1 cr)}

This course will prepares students for life after graduation by examining both job possibilities and graduate school. We will cover the job search, resume and application writing and interviewing skills for a technological field as well as investigating graduate schools. Prerequisite: Junior status in the Computer Science major. Required for Computer Science Major.

\section*{CSC 415 Artificial Intelligence ( 3 crs )}

This course includes an introduction to the methods and languages of artificial intelligence programming, including problem definition, a variety of solution methods and algorithms, knowledge representation, logical reasoning and a brief look at the techniques of expert systems, neural networks and genetic algorithms. Prerequisites: CSC 112, MAT 235. Elective for Computer Science major.

\section*{CSC 420 Systems Administration (3 crs)}

This course will acquaint the student with the setting up, managing and upgrading of a networked server platform. Issues covered include: networking fundamentals, installing network software, managing user accounts, configuring network software, security issues, installing and configuring network hardware and a variety of other topics. Prerequisite: CSC 112. Required for Systems \& Networking cognate.

\section*{CSC 435 Software Engineering ( \(\mathbf{3} \mathbf{~ c r s}\) )}

Large program specification, design, modularization, documentation, validation, performance analysis and measurement, maintenance and user interface are covered. Student teams will begin planning for a large programming project to be implemented in CSC 436. Prerequisite: Completion of CSC 112 and at least two of the 300- level Computer Science required courses. This course is required for Computer Science majors, and is normally taken only by seniors, except by special permission.

\section*{CSC 436 Senior Project (1 cr)}

A major project for a team is planned in CSC 435 during the fall semester. The team implements the project during the spring semester, working with a specific client which has initiated the project request. Clients may be on or offcampus departments, businesses or individuals. Prerequisite: ISC 435, except by special permission. This course is required for Computer Science majors and is normally only taken by seniors.

\section*{X61 Special Topics (1-3 crs)}

According to current interests of faculty and students, topic courses are offered frequently as computer science electives. Recent offerings have included Networks, Parallel Computing, Computer Forensics, Informatics and Computer Haptics

\section*{Creative Writing (Minor)}

\section*{Contact Person: John Whitehead}

The WJU creative writing program fosters the creative process and provides students with a broad and diverse grounding in the genres of written expression: Drama, Fiction, Nonfiction, Poetry, and Screenwriting. English majors may add a Concentration in Creative Writing to diversify their portfolio in preparation for teach or graduate school. Majors from any other discipline may add the Creative Writing Minor to pursue avocational interests or to diversify their portfolios for graduate school or the professional world.

\section*{Requirements for Creative Writing Minor}
\begin{tabular}{lll} 
CRE 281 & Creative Fiction Workshop & \((3 \mathrm{crs})\) \\
CRE 282 & Creative Nonfiction Workshop & \((3 \mathrm{crs})\) \\
CRE 283 & Creative Poetry & \((3 \mathrm{crs})\)
\end{tabular}

Any two of the following:
\begin{tabular}{lll} 
CRE 175 & Introduction to Story & (3 crs) \\
CRE 285 & Screenwriting & \((3 \mathrm{crs})\) \\
CRE 287 & Dramatic Writing & \((3 \mathrm{crs})\) \\
LIT 321 & Studies in Poetry & \((3 \mathrm{crs})\) \\
LIT 323 & Studies in Fiction & \((3 \mathrm{crs})\) \\
LIT 330 & Contemporary Literature & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Course Descriptions}

\section*{CRE 175 Introduction to Story (3 crs)}

This course examines the basics of story assemblage, looking at a wide variety of narrative products, from advertising to feature-length stories. Students will explore the history of story analysis, beginning with Aristotle and culminating in the theories of Joseph Campbell, Robert McKee, and others, with an emphasis on the Hero's Journey. Students will begin forming their own story ideas for analysis. Crosslisted: FAS 175, FLM 175. SO

\section*{CRE 281 Creative Fiction Workshop (3 crs)}

Stephen King argues that to write well, one must first "read a lot." This course and its requirements are divided roughly into two halves: reading exemplary works of fiction in order to learn the tools of the fiction writer's craft, and writing and revising original work in a workshop setting, where the work is discussed around a table with one's peers. There is no privileging of a particular genre of fiction; as Annie Dillard says, writers should write work they'd like to read. Prerequisite: LIT 120. FE

\section*{CRE 282 Creative Nonfiction Workshop (3 crs)}

As in Fiction Workshop, the best means for learning how to write is to study beautifully written work. The first half of this course will be spent in studying exemplary works of creative nonfiction, here defined as comprising two genres: New Journalism (or creative feature writing) and Memoir. In the second half of the course, emphasis will be placed on writing and revising original work in a workshop setting, where the work is discussed around a table with one's peers. Prerequisite: LIT 120. SE

\section*{CRE 283 Creative Poetry ( 3 crs )}

The most concentrated of all forms of creative literary expression is poetry; students will begin with an exploration of the various formal approaches the poet can take in creative composition, grounding this formal survey in the study of outstanding exemplars of the craft. Students will be required to write in several different forms as a way of experimenting with the discipline of line and meter. Ultimately, each student will compile a small portfolio (3-5 poems) of revised, polished work. Prerequisite: LIT 120. FO

\section*{CRE 285 Screenwriting ( 3 crs )}

Half a century ago, budding storytellers wanted to write The Great American Novel. While some still aspire to this lofty goal, many more wish to write (and direct) The Great American Movie. In this course, which students ideally should pair with Narrative Filmmaking, emphasis will be divided equally between two tasks: studying excellent examples of screenwriting for short and feature films in order to learn the rudiments of assembling a story for the screen, and writing a short screenplay of one's own. Prerequisite: LIT 120. Crosslisted: FLM 275. D

\section*{CRE 287 Dramatic Writing I (3 crs)}

In this course, students will be introduced to theories of playwriting in particular, and dramatic writing in general, studying excellent examples of previously produced and published. Students will explore basic structure, idea development, character and plot development. Assignments will include scenes, three-minute plays, and ten-minute oneacts. Prerequisite: LIT 120. D

\section*{CRE 486 Capstone Portfolio (2 crs)}

Under the direction of a faculty mentor, students assemble their best work produced in their workshop classes plus additional work generated specifically for the Portfolio, as agreed upon by the student and mentor. Students will create Artist's Statements for their work, and may also present their work in public reading or performance as part of the requirements of the capstone. Prerequisite: Permission of the English and Fine Arts department. D

\section*{Criminal Justice}

Contact Person: Larry Driscoll, Ph.D.
Wheeling Jesuit's Criminal Justice major prepares you for entrance to a broad range of careers that demand effective writing, speaking and critical thinking skills. This major offers a solid, rigorous course of instruction in criminal justice that will allow you to successfully compete after graduation, whether you decide to pursue graduate school, law school, or employment opportunities. Upon completion of the Criminal Justice program, students will be able to demonstrate the ability to:
1. Exhibit familiarity with basic concepts, such as justice, crime and criminality.
2. Explain the operations of the Criminal Justice System and how the various subsystems are interrelated.
3. Explain the theoretical underpinnings of crime, victimization and punishment.
4. Understand, as both consumers and producers, the intricacies of the research process, as well as being able to design and implement a research project.
5. Successfully complete a practical field experience with a Criminal Justice or related agency.

\section*{Requirements for Criminal Justice Major Bachelor of Arts Degree}

Criminal Justice majors must complete the following social science core, in addition to completing core curriculum requirements:
\begin{tabular}{lll} 
POS 110 & American Political Process & \((3 \mathrm{crs})\) \\
INS 111 & World Community & \((3 \mathrm{crs})\) \\
SSC 327 & Research Methods & \((3 \mathrm{crs})\) \\
SSC 415 & Statistical Analysis & \((3 \mathrm{crs})\) \\
SSC 488 & Senior Thesis & \((3 \mathrm{crs})\) \\
SSC 489 & Senior Seminar & \((3 \mathrm{crs})\)
\end{tabular}

In addition to completing the core curriculum and social science core requirements (including senior thesis and seminar and the comprehensive oral examination in SSC 488, 489), all criminal justice majors must complete the following courses:

\section*{Special Note on Elective}

The criminal justice elective must be approved by the Department Contact Person. The following are recommended: CRJ 212 Criminal Law and Procedure; CRJ 215 Law Enforcement; CRJ 312 Juvenile Justice System; CRJ 318 Occupational Crime; CRJ 321 Corrections CRJ 327 Comparative Systems of Justice and Social Control; CRJ 340 Issues in Criminal Justice; CRJ 421 Theories of Management and Administration in Criminal Justice Organizations. Other courses offered in the Social Science discipline may also satisfy this requirement including: POS 241 Public Policy, POS 242 State and Local Government, POS 329 Constitutional Law, and POS 330 Civil Rights and Civil Liberties.

\section*{Requirements for Criminal Justice Minor}

Criminal justice minors must complete a) CRJ 111 Criminology; b) CRJ 112 Introduction to the Criminal Justice System; c) and four (4) approved criminal justice electives.

\footnotetext{
Special Note on Double Majors:
}

In addition to complying with University rules regarding double majors, students completing a double major between criminal justice and political science must either write two senior theses or an enhanced senior thesis with both criminological and political science content.

\section*{Course Descriptions:}

\section*{CRJ 111 Survey of Criminology ( 3 crs )}

Looks at theoretical approaches to criminal behavior and the controversies arising from them. Modern criminal justice policies and the ideologies that lie behind them are applied to the problems of crime control and the sentencing of criminal offenders. \(\mathbf{F}\)

\section*{CRJ 112 Introduction to the Criminal Justice System (3 crs)}

Surveys patterns of crime and the processes of the American justice system. Crime, law enforcement, judicial process and corrections are examined from political, sociological and psychological perspectives. \(\mathbf{S}\)

\section*{CRJ 212 Criminal Law and Procedure ( 3 crs )}

The basic principles of substantive criminal law are illustrated through analysis of cases. Topics include the elements of crimes against persons and property, the fundamentals of criminal liability and justifications and excuses such as self-defense and insanity. Problems of advocacy at both trial and appellate levels are also explored. D

\section*{CRJ 215 Law Enforcement (3 crs)}

Provides a social science perspective on the training and socialization of police, police corruption, policecommunity relations and the pressures of police work. The fundamentals of criminal procedure are also covered, including arrest, search and seizure and the use of deadly force. Prerequisite: CRJ 111, 112. D

\section*{CRJ 220 Cyber Crime ( 3 crs )}

Cyber crime traces technological advances and the adaptation by the criminal element for illegal activities. The student will learn about the difficulties in investigating and tracking the cyber criminal, as well as the complex jurisdiction and legal issues facing the prosecution of a cyber crime. Examples will be explored of unauthorized access into a private computer or information system by hackers, crackers, business competitors and foreign agents traveling on the "Information Highway." D

\section*{CRJ 225 Crime and the Media ( 3 crs )}

This course will analyze images of crime and criminal justice as portrayed and presented by the mass media. The focus will primarily be on crime in movies, television and news/newspaper coverage; more specifically, how the media portrays society's struggle with the crime problem. A major theme of the course is whether media interpretations of crime, which are acknowledged by the public to be accurate, make it more complicated for a true explanation of crime to be understood. Prerequisite: CRJ 111, 112. D

\section*{CRJ 312 The Juvenile Justice System (3 crs)}

Analyzes theories of the causes of juvenile crime and the processes of the juvenile justice system, including a critical look at juvenile correctional policies. Prerequisite: \(C R J\) 111, 112 D

\section*{CRJ 317 Survey of Court Operation \& Organization (3 crs)}

The course begins with an examination of the structure of courts and how they are administered. Other areas of focus include pretrial procedures, the roles of the prosecutor, the defense, the judge, the sentencing process and the appeal process. D

\section*{CRJ 318 Occupational Crime ( \(\mathbf{3} \mathbf{~ c r s )}\)}

Examination of conduct in violation of the law that is committed through opportunities created in the course of a legal occupation. Methods for counting and regarding occupational crimes and criminals. Theories and explanations of these behaviors. Sanctioning and social control of occupational crime. FE

\section*{CRJ 321 Corrections (3 crs)}

Examines American correctional policies and their historical development. Provides a close look at both community -based and institutional corrections, as well as the processes of probation and parole and the legal rights of prisoners. Prerequisite: CRJ 111, 112 D

\section*{CRJ 325 Theoretical Criminology ( 3 crs )}

This course examines the meaning of criminal behavior and the different sociological and psychological explanations of criminal behavior. In addition, the student will learn how to critically evaluate theory and its relevance for policy implementation. Prerequisites: CRJ 111, 112 F

\section*{CRJ 327 Comparative Systems of Justice and Social Control ( \(\mathbf{3} \mathbf{c r s}\) )}

Introduction to the concepts of justice, law, deviance and social control. Examination of informal and formal systems of justice and social control, including traditional systems, common law, civil law, Marxist law and Islamic law. D

\section*{CRJ 330 Civil Rights \& Civil Liberties (3 crs)}

A comparison course to Constitutional Law (POS 329), this course analyzes Bill of Rights guarantees of individual freedom, due process and equal protection interpretations, as well as modern policies flowing from civil rights legislation in areas affecting employment, education and welfare benefits. SO

\section*{CRJ 340 Issues in Criminal Justice ( \(\mathbf{3} \mathbf{~ c r s}\) )}

Analysis of specific topics, depending on student interest and current importance; examples include the international war on drugs, causes and effects of domestic violence. Prerequisite: CRJ 111, 112 FO

\section*{CRJ 410 Ethical \& Philosophic Issues in Criminal Justice (3 crs)}

Examination of selected ethical and philosophic issues currently facing the field of criminology and criminal justice. Issues will be drawn from categories, such as the function of law, the development of moral behavior, individual versus societal rights, ethics and the application of the law within the justice system. Prerequisites: CRJ 111, 112. S

\section*{CRJ 421 Theories of Management and Administration in Criminal Justice Organizations ( \(\mathbf{3} \mathbf{c r s}\) )}

Focus on the complex theories and related issues of management and administration within the criminal justice system. Problems of communication, motivation, leadership, organizational effectiveness and innovation. Prerequisites: CRJ 111, 112. D

\section*{CRJ 473 Internship (variable cr)}

A field experience course in which the student is actively involved in the community under the direction of the Social Science Faculty. Enrollment requires the approval of the departmental contact person; a member meets periodically with the student during the internship to examine the relationships between the theoretical concepts found in the assigned readings and the field experience. The number of credits is negotiable. \(\mathbf{S}\)

\section*{Engineering}

\section*{Peter D. Ehni, Ph.D. (Coordinator)}

Wheeling Jesuit University engineering programs offer students the best of two worlds: liberal arts and technology. In contemporary society, engineers are expected to be professionally competent; they must also be aware of the ethical dimension of their work and its impact on the quality of human life. Moreover, those aspiring to management positions will need to be articulate and precise in spoken and written communication. The combination of a strong scientific background with a liberal arts core gives Wheeling Jesuit students and graduates a competitive edge for career advancement.

\section*{Cooperative 3/2 Engineering Programs}

Case Western Reserve University or West Virginia University. Under a combined 3-2 course plan, students spend three years at Wheeling Jesuit University, receiving a strong background in the basic physics and mathematics which underlie all of engineering. They also prepare for an engineering specialty in areas which include mechanical engineering, biomedical engineering and industrial engineering. At the same time, the student learns in the context of the liberal arts tradition and completes the Wheeling Jesuit University core curriculum. During the fourth and fifth year, he or she will complete engineering training at Case Western Reserve University or West Virginia University. The student receives a bachelor of science degree in applied science from Wheeling Jesuit University and a bachelor of science in engineering degree from Case Western Reserve University or West Virginia University.

\section*{Engineering Science}

\section*{Contact Person: Peter D. Ehni, Ph.D. (Coordinator)}

The engineering science major is structured around engineering design and mechanical engineering. The curriculum combines mathematics and sciences with fundamental engineering courses that stress analytical study with hands-on laboratory work. The program combines the liberal arts with engineering by emphasizing the technical aspects of engineering along with the societal impact of engineering solutions. The curriculum is designed to allow students to seek professional licensure while working as engineers or enter graduate study in a variety of engineering fields.

\section*{Program Educational Objectives}

The engineering science program provides a rigorous and challenging curriculum which prepares students for successful careers in engineering. Within a few years of graduation our graduates will
1. be successful professionals in diverse engineering fields or engaged in graduate study;
2. pursue lifelong learning;
3. assume increasing levels of responsibility on technical or managerial projects within their work organizations;
4. use their knowledge and skills in service to their professions and communities, drawing upon their Jesuit educational experience to serve the needs of humankind.

\section*{Student Outcomes}

Student outcomes are knowledge, skills, and/or behaviors that prepare students to attain the program educational objectives. By the time of graduation, our students will have demonstrated
(a) an ability to apply knowledge of mathematics, science, and engineering
(b) an ability to design and conduct experiments, as well as to analyze and interpret data
(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
(d) an ability to function on multidisciplinary teams
(e) an ability to identify, formulate, and solve engineering problems
(f) an understanding of professional and ethical responsibility
(g) an ability to communicate effectively
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
(i) a recognition of the need for, and an ability to engage in life-long learning
(j) a knowledge of contemporary issues
(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

\section*{Requirements for the Engineering Science Major}

\section*{Bachelor of Science in Engineering Degree}

In addition to completing the core curriculum requirements, outlined in this catalog, (plus 12 hours already included in the courses below) engineering science majors must complete the following courses:
\begin{tabular}{lll} 
CHE 110 & General Chemistry I & \((4 \mathrm{crs})\) \\
CHE 121 & General Chemistry I Lab & \((1 \mathrm{cr})\) \\
ECO 110 & Macroeconomics & \((3 \mathrm{crs})\) \\
MAT 111 & Calculus I & \((4 \mathrm{crs})\) \\
MAT 112 & Calculus II & \((4 \mathrm{crs})\) \\
MAT 211 & Calculus III & \((4 \mathrm{crs})\) \\
MAT 212 & Ordinary Differential Equations & \((4 \mathrm{crs})\) \\
MAT 204 & Scientific Statistics & \((3 \mathrm{crs})\) \\
MAT 240 & Numerical Methods & \((4 \mathrm{crs})\) \\
MAT 331 & Physics I & \((3 \mathrm{crs})\) \\
PHY 110 & Physics II & \((4 \mathrm{crs})\) \\
PHY 120 & Physics I Lab & \((4 \mathrm{crs})\) \\
PHY 121 & Physics II Lab & \((1 \mathrm{cr})\) \\
PHY 122 & Statics & \((1 \mathrm{cr})\) \\
PHY 243 & Dynamics & \((3 \mathrm{crs})\) \\
PHY 244 & PH & \((3 \mathrm{crs})\)
\end{tabular}

PHY 317
EGR 101
EGR 102

EGR 245
EGR 221
EGR 312
EGR 350
EGR 360
EGR 420
EGR 430
EGR 480
EGR ELE

EGR ELE

Thermodynamics
(4 crs)
(2 crs)
(3 crs)
(3 crs)
(1 cr)
(4 crs)
(3-4 crs)
(3-4 crs)

\section*{Course Descriptions}

\section*{EGR 101 Engineering Orientation I (2 crs)}

The first course in a two course sequence designed to orient students to the engineering profession. The first course covers 'what is engineering?' and the various engineering fields. Students learn to use spreadsheets, word processors and presentation software as they learn to solve engineering problems, write technical reports and prepare presentations. Students will practice ethical decision making while examining engineering issues. Students will learn to work in teams. \(\mathbf{F}\)

\section*{EGR 102 Engineering Orientation II (3 crs)}

The second course in a two course sequence designed to orient students to the engineering profession. Solving engineering problems using computer software is emphasized. Students will further develop their problem solving and design skills by developing algorithms and converting them into MATLAB programs. S

\section*{EGR 243 Statics (3 crs)}

Statics of particles and rigid bodies, vector operations, equivalent systems, equilibrium, centroids and center of gravity, analysis of structures, shear and moment diagrams, bending stress and shear stress in structural members, loads, strain, friction and moments of inertia. Co-requisitie: MAT 112 F

\section*{EGR 244 Dynamics (3crs)}

This course will stress engineering problems in dynamics including kinematics of particles, systems of particles, rigid bodies in translation and rotation, and mechanical vibrations. Prerequisite: PHY 243 S

\section*{EGR 245 Mechanics of Materials (3crs)}

Fundamental principles of mechanics of materials including: Stress-strain curves, deformation, and failure of solid bodies under the action of forces, Mohr's circle, and mechanical properties of materials. Course will emphasize
strength and elastic deflection of engineering materials due to loads applied axially, in torsion, in bending and in shear. S

\section*{English (Literature Program)}

\section*{Contact Person: Literature: Dr. Kathryn Voorhees}

As an integral part of the liberal arts tradition embraced by the University, the department's curricula develop students' skills in effective reading, writing, listening and speaking and awaken students' knowledge of the rich expressive and aesthetic potential of the English language.

AP Placement Equivalencies
The department grants equivalency credit for AP scores of 4 or higher for the following courses:

\section*{English Literature and Composition: LIT 120}

Core Fulfilling Courses

\section*{Literature}
I. Literature Level I: LIT 120 Literary Foundations: Methods \& Genres
II. Literature Level II: LIT 250 Literary Explorations: Conflicts \& Culture

\section*{Requirements for English Major Bachelor of Arts Degree}

In addition to completing the core curriculum requirements all English majors must complete the following courses:
Required courses:
\begin{tabular}{llr} 
COM 224 & Professional Speaking & \((3 \mathrm{crs})\) \\
LIT 286 & Introduction to Literary Studies & \((3 \mathrm{crs})\) \\
LIT 321 & Studies in Poetry & \((3 \mathrm{crs})\) \\
LIT 322 & Studies in Drama & \((3 \mathrm{crs})\) \\
LIT 323 & Studies in Fiction & \((3 \mathrm{crs})\) \\
LIT 324 & Studies in Film & \((3 \mathrm{crs})\) \\
LIT 325 & Studies in Theory & \((3 \mathrm{crs})\) \\
LIT 486 & Senior Literature Thesis & \((2 \mathrm{crs})\)
\end{tabular}

Two of the following courses:
COMP 220 Advanced Writing Techniques (3 crs)
CRE 281 Creative Fiction Workshop (3 crs)
CRE 282 Creative Nonfiction Workshop (3 crs)
CRE 283 Creative Poetry Workshop (3 crs)

English majors must also earn an additional 18 credits from literature electives at or above the 300 level, selected to fulfill the following criteria: 1 elective course from each of the following main areas: pre-16th Century, the 16th through the 18 th Century, the 19th Century; the \(20^{\text {th }} / 21\) st Century; and 2 unrestricted electives, one of which may be a CRE course. Students will still retain a significant number of credits for elective course work beyond the core and the major requirements. Majors are encouraged to seek a cognate or minor field of study outside the area, chosen in preparation for career goals, graduate school or further professional training. Some cognate areas include creative writing, psychology, political science, fine arts, history and communications.
N.B.: English majors who are also enrolled in the PED Program must begin major course work no later than the sophomore year in order to complete the major program and allow for student teaching in the senior year.

Requirements for English Minor
In addition to completion of COM 105/110 and LIT 120, a student must complete 15 credits of course work in literature at the 250 -level or higher, only one of which may be a CRE course.

\section*{Course Descriptions}

Please see CRE course descriptions under Creative Writing; please see COM course descriptions under Composition.

\section*{LIT 120 Literary Foundations: Methods \& Genres (3 crs)}

Study and development of the techniques of literary study using the genres of fiction, poetry and drama. Includes experience in the application of literary critical methods. Prerequisite: ENG 105/110; any declared English major may take ENG 105/110 and LIT 120 concurrently but not out of sequence. F,S

\section*{LIT 250 Literary Explorations: Conflicts \& Culture (3 crs)}

Examination of selected topics within literary studies, using the tools of literary analysis established in LIT 120. Course topics fit within an organizing rubric such as: Community and Discord in Literature; Ethics and Values in Literature; Past and Future in Literature. Prerequisite: ENG 105/110; LIT 120. F, S

\section*{LIT 286 Introduction to Literary Studies (3 crs)}

Intensive examination and discussion of a specific literary topic, author, or mode; research and formal writings, oral presentations on assigned topics. Prerequisite: ENG 105/110; LIT 120; sophomore standing or approval of department chair. F

\section*{LIT 310/WST 310 Women and Early Literature ( 3 crs )}

Study of women's contribution to literature from the Classical Period through the \(18^{\text {th }}\) century. Addresses major issues and themes that concern women; examines how individual female authors confronted the prevailing literary and social attitudes of their times. Prerequisite: completed literature core. D

\section*{LIT/WST 312 Women and Modern Literature (3 crs)}

Study of women's contribution to literature from Austen to the present. Addresses major issues and themes that concern women; examines how individual female authors confronted the prevailing literary and social attitudes of their times. Prerequisite: completed literature core. D

\section*{LIT 315 Children's Literature ( 3 crs )}

Historical and cultural exploration of the concepts of the child and childhood in literature written both for and about children. Survey of dominant trends in British and American literature as reflected in fairy tales, the writings of the Romantic Period, the Victorian "Golden Age" of children's literature and the multiculturalism of the twentieth century. Prerequisite: completed literature core or permission of instructor. D

\section*{LIT 320/CSS 320 Mythology (3 crs)}

An examination of the nature and function of myth in the Ancient World. Focus upon the narrative and symbolic structure of myths, the cultural contexts of myths and the influence of myth upon later literature. Texts will include Greek and Roman epic, Greek drama and myths as represented in ancient and modern art. Texts may also include non-Classical mythology, such as Celtic, Chinese, Norse, Incan or Yoruban. Prerequisite: completed literature core or permission of instructor. D

\section*{LIT 321 Studies in Poetry ( 3 crs )}

Study of significant works by a variety of writers with emphasis on methodology and development of poetry. Prerequisite: completed literature core. SO

\section*{LIT 322 Studies in Drama (3 crs)}

Study of significant plays from the early Greek to the contemporary stage, together with emphasis on tradition and innovation in dramatic technique. Prerequisite: completed literature core. FE

\section*{LIT 323 Studies in Fiction ( 3 crs )}

Study of significant works by a variety of writers, including the development of the novel/novella/short story as genres, their narrative techniques and variety. Prerequisite: completed literature core. FO

\section*{LIT 324 Studies in Film (3 crs)}

Study of significant films from the silent era through contemporary art-house and multiplex cinema, exploring the development of the medium as a commercial, artistic, and ideological phenomenon.SO

\section*{LIT 325 Studies in Theory ( 3 crs )}

Study of selected literary theories, along with a focused application of these theories to specific literary texts. Survey will range from early writings on literature by Plato and Aristotle to the proliferation of theory in the twentieth century, including psychoanalytic criticism, formalism, reader-response theory, deconstruction and new historicism. Prerequisite: completed literature core; LIT 286 or permission of instructor. SE

\section*{LIT 330 Contemporary Literature ( 3 crs )}

Study of interpretative literature produced from the 1960's to the present. In order to address the proliferation of voices and the blurring of genre lines characteristic of the contemporary period, the focus of the course on particular genres or authors will necessarily change from semester to semester. Prerequisite: completed literature core or permission of instructor. D

\section*{LIT 331 Pulp Fiction (3 crs)}

Study of genre narrative forms, including mystery, romance, science fiction, horror, historical, true crime, and the many hybrids thereof. Prerequisite: completed literature core or permission of instructor. D

\section*{LIT 354 Shakespeare ( 3 crs )}

Study of selected poems and plays, including tragedies, comedies and histories. Exploration of the dramatic, literary and cultural dimensions of Shakespeare's art. Prerequisite: completed literature core or permission of instructor. D

\section*{LIT 415 Medieval Literature (3 crs)}

Study of major works of world literature in this period, with a focus upon the emerging literary traditions of the British Isles, including an introductory consideration of the significance of Anglo-Saxon literature to later British writing. British texts will include a range of works from Beowulf to Le Morte D'Arthur, while non-British texts will
include a range of works from The Divine Comedy to The Thousand and One Nights. Prerequisite: completed literature core. D

\section*{LIT 419 Literature of the Renaissance ( 3 crs )}

Study of major works of selected literary figures from the early modern period, either in the broad context of the European Renaissance or the more focused context of the English Renaissance. Authors may include Castiglione, Machiavelli, Petrarch, Cervantes, Donne, Marlowe, Milton, More, Sidney or Spenser. Prerequisite: completed literature core. D

\section*{LIT 420 Early American Literature (3 crs)}

Study of the historical context and writers of the Colonial and Revolutionary era of American literature. Authors may include Bradford, Bradstreet, Taylor, Sewall, Rowlandson, Crevecoeur, Franklin, among others. Literary forms such as poetry, diaries, sermons and political pamphlets included. Prerequisite: completed literature core. D

\section*{LIT 421 Restoration and Eighteenth-Century Literature (3 crs)}

An examination of British literature and its contexts from the Restoration of the monarchy through the neoclassical age. Works studied will range from poetic satire to comedic theater, development of the novel to periodical journalism. Authors may include Dryden, Pepys, Behn, Congreve, Swift, Pope, Defoe, Fielding and Johnson. Prerequisite: completed core. D

\section*{LIT 423 The Romantic Movement in England (3 crs)}

Extensive coverage of the poetry and critical works of representative Romantic figures, chosen from Blake, Baillie, the Wordsworths, Coleridge, Byron, the Shelleys, Hemans, Keats and others. Attention to the historical context, major themes, verse experimentation and critical theory from the era. Prerequisite: completed literature core. D

\section*{LIT 425 Literature of the Victorian Period in England (3 crs)}

Works of some of the chief literary artists of the era (selected from Tennyson, Carlyle, the Brontes, Arnold, the Brownings, Dickens, Eliot, Newman, Ruskin, Hardy, the Rossettis, Wilde and others) set within their milieu. Lyric poetry, the novel and the essay are stressed genres. Prerequisite: completed literature core. D

\section*{LIT 435 19th Century American Romanticism (3 crs)}

Study of the literary figures and movements of the first half of the nineteenth century in America. Authors may include Irving, Poe, Hawthorne, Melville, Emerson, Thoreau and Whitman, among others. Topics will also include transcendentalism and the development of the short story in American literature. Prerequisite: completed literature core. D

\section*{LIT 436 19th Century American Realism (3 crs)}

Study of the literary figures and movements of the second half of the nineteenth century in America. Authors may include Dickinson, Chopin, Wharton, James, Dreiser and Crane, among others. Topics will also include the increasing popularity of the movement of literary naturalism. Prerequisite: completed literature core \(\mathbf{D}\)

\section*{LIT 440 Twentieth-Century Literature (3 cr)}

Study of literary movements in the period, such as modernism and postmodernism, within the context of British, American or non- Western literature of the twentieth century. Prerequisite: completed literature core. D

\section*{LIT 476 Colonial and Postcolonial Literature (3 cr)}

Study of literature that reflects and comments upon the complex relationship between the metropolitan center of the British Empire and various colonial territories, such as Australia, Canada, Jamaica, India, Ireland and South Africa.

An essential component of this study will be historical, political and theoretical context of British colonialism. Authors may include Shakespeare, Conrad, Bronte, Achebe, Salih or Rhys. Prerequisite: completed literature core. D

\section*{LIT 486 Senior Literature Thesis (2 cr)}

A major project requiring extended research and writing. The project requires a written proposal, public presentation of the project's results and an acceptable written document at the conclusion of the course. All phases will be supervised and evaluated by a member of the literature faculty. Prerequisite: LIT 286 and senior standing. F

\section*{Environment and Sustainability}

Contact Persons: Benjamin Stout III, Ph.D.,
Peter D. Ehni, Ph.D.
The Environment and Sustainability program develops next generation researchers, technicians, and technologies for implementation of green power industries applicable to the Ohio River Valley and central Appalachian region. The Bachelor of Science in Environment and Sustainability will require mastery in the basic sciences (biology, chemistry, and physics) in addition to liberal arts training. Advanced study in one of three tracts will include social, political, and infrastructure ramifications of implementing conservation strategies and transitioning from current practices toward sustainable energy sources.

Upon completion of the Environment and Sustainability program, students will be able to demonstrate the ability to:
1. Think critically and solve complex problems.
2. Apply knowledge of mathematics, science and engineering in problem solving.
3. Design and conduct experiments, as well as analyze and interpret data.
4. Communicate effectively in both oral and written forms.
5. Act professionally and ethically.

\section*{Requirements for the Environment and Sustainability Major}

\section*{Bachelor of Science Degree}

In addition to completing the core curriculum requirements, outlined on pp. 14-15 of this catalog, (plus 12 hrs already included in the courses below) environment and sustainability majors must complete the following courses:
\begin{tabular}{llr} 
BIO 107 & Evolution and Ecology & \((3 \mathrm{cr})\) \\
BIO 109 & Cells and Chromosomes & \((3 \mathrm{cr})\) \\
BIO 121, 122 & General Biology Labs & \((2 \mathrm{cr})\) \\
BIO 205, 221 & Ecology and lab & \((3+1 \mathrm{cr})\) \\
CHE 110, 120 & General Chemistry I, II & \((8 \mathrm{cr})\) \\
CHE 121, 122 & General Chemistry labs & \((2 \mathrm{cr})\) \\
PHY 110, 120 & Physics I, II & \((8 \mathrm{cr})\) \\
PHY 121, 122 I & Introductory Physics Labs & \((2 \mathrm{cr})\)
\end{tabular}
\begin{tabular}{llr} 
MAT 111 & Calculus I & \((4 \mathrm{cr})\) \\
MAT 204 & Scientific Statistics & \((3 \mathrm{cr})\) \\
ECO 110 & Macroeconomics & \((3 \mathrm{cr})\) \\
POS 110 & American Political Process & \((3 \mathrm{cr})\) \\
ENS 110 & Environmental Conservation and Energy Sustainability & \((3 \mathrm{cr})\) \\
ENS 411 & Energy Conservation and Sustainable Design & \((3 \mathrm{cr})\) \\
ENS 375 & Research and Development & \((1 \mathrm{cr})\) \\
ENS 376 & Research Methods & \((1 \mathrm{cr})\) \\
ENS 475 & Research Seminar & \((1 \mathrm{cr})\) \\
ENS 482 & Research Presentations & \((2 \mathrm{cr})\)
\end{tabular}

Plus complete one of the tracts listed below for 12 credit hours

\section*{Sustainable Biofuels}

BIO 436, 437 Physiological Ecology and Lab (4 crs
\begin{tabular}{|l|l|l|}
\hline Sustainable Biofuels & Sustainable Energy Systems & Sustainable Chemistry \\
\hline & & \\
\hline \begin{tabular}{l} 
BIO 436, 437 Physiologi- \\
cal Ecology and Lab 4 cr
\end{tabular} & \begin{tabular}{l} 
ENS 464 Alternative Energy \\
Systems 4 cr
\end{tabular} & \begin{tabular}{l} 
CHE 316, 317 Instrumental \\
Analysis and Lab 4 cr
\end{tabular} \\
\hline \begin{tabular}{l} 
BIO 440, 441 Microbiolo- \\
gy and lab 4 cr
\end{tabular} & \begin{tabular}{l} 
PHY 317 Thermodynam- \\
ics 4 cr
\end{tabular} & \begin{tabular}{l} 
CHE 315, 319 Quantitative \\
Analysis and Lab 4 cr
\end{tabular} \\
\hline \begin{tabular}{l} 
ENS 460, 460L Biofuels \\
and Biofuels Lab 4 cr
\end{tabular} & PHY 312 Electronics 4 cr & \begin{tabular}{l} 
CHE 318, 361 Environmental \\
Chemistry and Environmen- \\
tal Chemistry Laboratory 4 \\
cr
\end{tabular} \\
\hline
\end{tabular}

\section*{Course Descriptions}

\section*{ENS 110 Environmental Conservation and Energy Sustainability (3 crs)}

This course introduces students to the field of environmental sustainability. Topics covered include environmental costs of fossil fuel source energy, and the benefits of a renewable energy portfolio. Examination of renewable energy sources will include solar, wind, geothermal, biofuels, and hydropower systems. Additional topics will include alternative transportation systems, sustainable agriculture, and a smart energy grid. This course will require some outside of class field trips and seminar participation.

\section*{ENS 260 Energy Solutions Seminar (2cr)}

This interdisciplinary seminar is designed for those interested in learning more about our personal, local and national energy choices and their impacts on our present and future wellbeing. The seminar provides an overview of scientific as well as liberal arts perspectives on energy sources and their widespread impacts. The class participants will be encouraged to discover and implement resources and tools to facilitate the discernment of fact from opinion, as well as short term versus long term cost/benefit analysis of different energy choices. The class includes facilitated discussion, speaker presentations, individual and group projects, panel deliberations. Participants will be required to complete a collaborative project based upon real-world energy related issues facilitated by the instructor and community members. Individuals will be encouraged to research and share information on energy systems based upon their chosen liberal arts or science perspective and background.

\section*{ENS 411 Energy Conservation and Sustainable Design (3 cr)}

Energy usage and conservation in housing will be studied. Methods of heat transfer will be studied followed by methods of reducing heat transfer in homes. Home energy audits and calculating payback periods for energy upgrades will be discussed. Sustainable building materials will be analyzed as well as building locations to maximize solar gain and cooling. Rain water and grey water systems will be discussed.

\section*{ENS 375 Research and Development (1 cr)}

The first part of a four-part series of student directed research courses. Topics include: preparation for an independent research project, conducting a literature search, organization and development of a laboratory protocol. Students will select a project with the consent and guidance of a faculty mentor. Prerequisite: Junior standing

\section*{ENS 376 Research Methods (1 cr)}

The second part of a four-part series of student directed research courses. Topics include: modifications of protocols, methods and testing materials, data collection, and seminar participation. Prerequisite: Ens 375

\section*{ENS 460 Biofuels (3 crs)}

Biofuels have the potential to provide energy to a growing demand for carbon-neutral products. This course will examine the Domains of life for their ability to provide energy from both producer and consumer pathways. Theoretical, experimental and practical applications of biofuel culturing and collection systems will be examined. Biofuels from photosynthesis (e.g. sunlight - algae - oil production) as well as decay (e.g. coal waste - methanogens - methane production). In addition to energy Biofuels will examine the role and recycling of nutrients such as carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur in engineering balanced biofuel systems. Emphasis will be placed on theory and experimentation leading to practical biofuel applications. Prerequisites: Bio 205 \& Bio 221

\section*{ENS 460L Biofuels Laboratory (1 cr)}

Biofuels Laboratory is a practical, hands-on course that provides experimentation with both producers (i.e. photosynthesis) and consumers, primarily Archaea. Consortia in the Domain Archaea, formerly the "ancient bacteria," will be tested for their ability to digest a variety of waste products while liberating energy in the form of methane. Experiments with photosynthesizers, particularly algae, will take a mass-balance analytical approach toward developing fuel from stored oil, starches, and proteins. Emphasis will be placed on examining nutrient pathways, particularly carbon. Co requisite: Ens 460

\section*{ENS 464 Alternative Energy Systems (4 crs)}

A study of alternative energy systems and their applications. Topics include: energy usage in the US, turbomachinery, hydropower, wind energy, solar energy - active and passive applications, biomass and geothermal energy. Students will study the physical principles involved in harvesting the energy source, the amount of energy available, difficulties in utilizing the source, and the economics of the source. Prerequisite: Phy 317

\section*{ENS 475 Research Seminar (1 cr)}

The third part of a four-part series of student directed research courses. Topics include: data analysis, the preparation of a rough draft of the entire project, a poster presentation, and seminar participation. Prerequisite: Ens 376

\section*{ENS 482 Research Presentations (2 cr)}

This is the final course of a four-part series of student directed research courses. Students will present their original research to the class in a seminar format and in a written report, in scientific format. Prerequisite: Ens 475

\section*{Film Studies (Minor)}

\section*{Contact Person: John Whitehead}

In compliment to a liberal-arts core curriculum course of study, the WJU film studies program examines classic and contemporary films as models of cinematic art and exploring various modes of cinematic rhetoric, as well as introduces students to all aspects of the filmmaking process (development, pre-production, production, post-production, and distribution), emphasizing the centrality of story and storytelling to human experience and to successful films.

\section*{Requirements for Film Studies Minor}

FLM 170 Introduction to Film Language
Two FLM electives
or One FLM elective and PSY262 Psychology in Film
LIT 250 Literary Explorations: Fiction Into Film
LIT 324 Studies in Film

\section*{Course Descriptions}

\section*{FLM 131 Film History ( 3 crs )}

Movies are a distinctly American art form - invented here and developed by Hollywood into a multi-billion-dollar global industry, one of our country's leading exports. Yet other nations, particularly in Western Europe, have been just as innovative in the emergence of cinema as entertainment and as art. Students will explore cinema classics from the silent era through the digital age, observing the delicate balancing act between aesthetic and commercial impulses. Cross listed: FAS 131. FE

\section*{FLM 132 The Reel World (3 crs)}

When we think about movies, we typically think of Hollywood product - what's playing at the multiplex. But there's a wide world of other cinematic traditions out there, often either influenced by and/or reacting against Hollywood methodology. In turn, American films often gather fresh inspiration from their international counterparts. Students will study classic and contemporary international filmmakers, exploring the ways in which culture influences art - and vice versa. Cross listed: FAS 132. D

\section*{FLM 135 Cinema Genres ( \(\mathbf{3} \mathbf{~ c r s )}\)}

Movie narratives come in many tidy packages, called genre forms - comedy, romance, western, crime, horror, and many more. These narrative forms provide orientation for an audience: we know what to expect and how to understand stories based in an innate acculturation to the arc of these narratives. Students will become familiar with several of the generic formulas of film and study one genre in greater depth, focusing on how film language helps to solidify (or subversively undercut, for thematic reasons) our consumption of narratives. Cross listed: FAS 135. SE

\section*{FLM 137 Cinema and the Classical World (3 crs)}

Like the rest of the culture, filmmakers in Hollywood and beyond have maintained a fascination for the ancient worlds of Greece and Rome. Through a study of significant film traditions and masterpieces from the silent era to the Golden-Age epics through modern blockbusters of classical history and mythology, students will explore source materials for these narratives and examine the modern motives for telling (or sometimes drastically re-telling) these stories. Cross listed: FAS 137, CSS 137. D

\section*{FLM 139 Contemporary Film (3 crs)}

This course explores significant films made in and beyond Hollywood since 1995, including blockbusters, independent cinema, and international films. Films with the potential to have a lasting influence or impact upon the business or art of movie-making will receive particular attention. Cross listed: FAS 139. D

\section*{FLM 170 Introduction to Film Language (3 crs)}

How a film is shot and assembled is integral to its ability to move and persuade an audience. This course will introduce students to the appropriate terms and concepts for understanding basic cinematography, including lighting, composition, and movement, and the strategic rhetorical effects beyond simple continuity in editing, including pacing for tone, cutting for comparison and cause/effect, and the uses of diegetic and non-diegetic sound. Cross listed: FAS 170. FO

\section*{FLM 175 Introduction to Story ( \(\mathbf{3} \mathbf{~ c r s )}\)}

This course examines the basics of story assemblage, looking at a wide variety of narrative products, from advertising to feature-length stories. Students will explore the history of story analysis, beginning with Aristotle and culminating in the theories of Joseph Campbell, Robert McKee, and others, with an emphasis on the Hero's Journey. Students will begin forming their own story ideas for analysis. Cross listed: CRE 175, FAS 175. SO

\section*{FLM 238 Hitchcock and His Heirs (3 crs)}

Alfred Hitchcock, the medium of cinema, and the Twentieth Century were born within a few years of one another, and together they grew up. Hitchcock is in many ways the classic correspondent of that rich and troubled century. He mastered the use of what he called "pure cinema," and from film noir and the great European cinema traditions, he invented the modern suspense and horror film genres. This course will study several of his masterpieces, then explore his influence on two subsequent generations of filmmakers. Prerequisite: FLM 176. D

\section*{FLM 250 Literary Explorations: Fiction Into Film (3 crs)}

No artistic process is more collaborative than the filmmaking process, where artists of various talents and expertise, including the dramatic (screenwriter), visual (art director, cinematographer, editor), and the auditory and musical (score composer, sound designer) come together to help realize (and shape) the director's vision of the finished film. Via theories of intertextuality, students will explore the relationship of pre-existing stories as the multiple languages of cinema transform original literary texts. Prerequisite: LIT 120. Cross listed to certain section of LIT 250. S

\section*{FLM 275 Screenwriting (3 crs)}

Half a century ago, budding storytellers wanted to write The Great American Novel. While some still aspire to this lofty goal, many more wish to write (and direct) The Great American Movie. In this course, emphasis will divide between two tasks: studying excellent examples of screenwriting for short and feature films in order to learn the rudiments of assembling a story for the screen, and writing a short screenplay of one's own. Prerequisite: LIT 120, FLM 175, or permission of instructor. Cross listed: CRE 285. D

\section*{FLM 486 Capstone Project ( 2 crs )}

This course, offered on demand, is intended for fine and performing arts students to learn more about their chosen medium by undertaking an in-depth project or series of projects with the consent and under the direction of an ap-
propriate faculty member in that medium. Completion of the requirements may include, as appropriate, readings and discussion, production of original creative or scholarly work, and additional evaluative reflection. Prerequisite: Permission of the English and Fine Arts department. D

\section*{Fine Arts}

\section*{Contact Person: John Whitehead, Chair}

Systematic study of the Fine Arts programs at WJU promotes enhanced critical thinking and communication skills and fosters independent and collaborative creativity, qualities that are valuable across a wide range of employers' disciplines and impressive to a wide range of employers and graduate school acceptance committees. Upon completion of a Fine Arts course students will be able to: demonstrate an understanding of and appreciation for the expressive language of the art; recognize and articulate in discussion and in writing the formal characteristics and functional intentions of the art; recognize and articulate in discussion and in writing the formal characteristics and functional intentions of the art; and, in Studio or Workshop courses, create excellent original work within the formal discipline of the art.

All courses listed below with the acronym FAS are approved courses to fulfill the WJU core requirement for Fine Arts (FAS), and none of these courses has a prerequisite except for the FAS 127-129, "Ensemble I-III," which students may take as a sequence of three one-credit courses to complete the FAS core, with the permission of a WJU ensemble director and the chair of Fine Arts.

For course descriptions and requirements for specific programs of study, please see the sections for Art (ART), Creative Writing (CRE), and Film Studies (FLM), please see the individual sections for Art, Creative Writing, and Film Studies listed above.

\section*{Course Descriptions}

\section*{FAS 110 Introduction to Theater (3 crs)}

Through an examination of the role of theater in society and an in-depth study of theatrical works to understand the various elements that combine to make the theatrical experience, this interactive course provides an understanding of the creative process and develops skills in creativity and critical analysis. Heightened perceptual abilities are developed through field visits to arts events, as well as through class projects. D

\section*{FAS 115 Acting I (3 crs)}

This is a beginning Acting class and will introduce the non-theater student to a specific, systematic technique for acting through the rehearsal and performance of two or three scenes. These presentations are approached through careful script analysis, attention to detail and acting and directing selections. Much attention is paid to guiding and highlighting the student's innate creative sensibilities through games and improvisation. D

\section*{FAS 120 Introduction to Music (3 crs)}

This course is designed to introduce students to the basic principles of music via theory, form, and history. Students will have their musical horizons broadened through introduction to a stimulating variety of world music in high and low cultural forms of musical expression. The object will be to develop students' curiosities about human communication through music, engaging them in creative and academic activities. D

\section*{FAS 125 Ensemble ( 3 crs )}

Student musicians may opt, with permission of the director of appropriate vocal or instrumental ensembles, to earn course credit for dedicated participation and performance. Additionally, with permission of the chair of Fine Arts, students may opt, upon successful completion of the three-semester sequence for Ensemble (please see FAS 2** and FAS \(3^{* *}\) ), to substitute these credits for their FAS core requirement. Prerequisite: permission of ensemble director and the Fine Arts department. D

\section*{FAS 131 Film History ( \(\mathbf{3}\) crs)}

Movies are a distinctly American art form - invented here and developed by Hollywood into a multi-billion-dollar global industry, one of our country's leading exports. Yet other nations, particularly in Western Europe, have been just as innovative in the emergence of cinema as entertainment and as art. Students will explore cinema classics from the silent era through the digital age, observing the delicate balancing act between aesthetic and commercial impulses. Crosslisted: FLM 131. FE

\section*{FAS 132 The Reel World (3 crs)}

When we think about movies, we typically think of Hollywood product - what's playing at the multiplex. But there's a wide world of other cinematic traditions out there, often either influenced by and/or reacting against Hollywood methodology. In turn, American films often gather fresh inspiration from their international counterparts. Students will study classic and contemporary international filmmakers, exploring the ways in which culture influences art - and vice versa. Crosslisted: FLM 132. D

\section*{FAS 135 Cinema Genres ( \(\mathbf{3} \mathbf{~ c r s )}\)}

Movie narratives come in many tidy packages, called genre forms - comedy, romance, western, crime, horror, and many more. These narrative forms provide orientation for an audience: we know what to expect and how to understand stories based in an innate acculturation to the arc of these narratives. Students will become familiar with several of the generic formulas of film and study one genre in greater depth, focusing on how film language helps to solidify (or subversively undercut, for thematic reasons) our consumption of narratives. Crosslisted: FLM 135. SE

\section*{FAS 137 Cinema and the Classical World (3 crs)}

Students will explore the history and development of photography and learn the principles of composition, lighting, exposure, and special effects. This course has no prerequisites but requires the use of a camera with manual settings. Crosslisted: COM 142. F

\section*{FAS 143 Image Editing (3 crs)}

This course examines the fundamentals and techniques of digital photography, scanning, and digital image editing using software such as Adobe Photoshop, with emphasis on color theory and preparation of digital images for a variety of uses. Students will complete several portfolio projects useful for job applications in communications, graphics, marketing, management and training. Familiarity with computer, email and the Internet required. Crosslisted: COM 232. S

\section*{FAS 144 Studies in World Art and Archaeology ( 3 crs)}

Visual art and architecture is shaped by its source in particular geographical areas, periods, and cultural beliefs. Using a chronological and thematic approach, this course examines the various influences that shape visual art and architecture within particular cultures, also looking at subsequent influence on other cultures (including our own). Geographical areas of study vary, including the Americas (indigenous peoples), Western and Central Asia, India and Southeast Asia, China, Japan, Korea, the Pacific, and Africa. Titles and content may change from semester to semester, so students are encouraged to repeat the course. Crosslisted: ART 151; may also, according to specific topic of study, be offered as CSS 144. D

\section*{FAS 145 Women and Art ( 3 crs )}

This course will examine the socio-political, psychological, and economic issues that affected women's participation in the visual arts. We will examine women artists ranging from prehistory to the "old master" era through the proliferation of female-produced art in the \(20^{\text {th }}\) century and contemporary art world. Artists covered may include Artemisia Gentileschi, Mary Cassatt, Frida Kahlo, Georgia O'Keefe, Judy Chicago, and Cindy Sherman. Crosslisted: ART 152. SE

\section*{FAS 146 2-D Design (Mixed Media) (3 crs)}

The focus of this course is to develop the fundamentals of two-dimensional design using a variety of mixed media, such as contact paper, collage, tape, and string. Emphasis will be placed on experimentation with various materials and compositional structures. Such two-dimensional design concepts as figure/ground, positive/negative space, balance, pattern and rhythm will be explored. Crosslisted: ART 120. D

\section*{FAS 147 Drawing I (3 crs)}

The focus of this introductory course in drawing is to develop the relationship of inner-vision (what the mind sees) and creation (what the artist's hand produces). Students work on assigned problems in rendering form and exploring various drawing media as a visual process and as an art form. Study of the human figure may be included. Class work, critiques, and discussions will be used to expand to the student's preconceived ideas about art. Crosslisted: ART 121 F

\section*{FAS 148 Watercolor I (3 crs)}

While acquiring basic skills and techniques of transparent and opaque watercolor, students will also investigate texture, color, and color theory, design principles, and meaning of subject matter. Both traditional and experimental methods of painting and subject matter will be explored. Crosslisted: ART 122. F

\section*{FAS 151 3-D Design (Object Making) (3 crs)}

This is an introductory course of three-dimensional art forms. The basic design elements of form, space, volume, mass, and planes will be explored through various class exercises and projects. A variety of materials, such as paper, wire, found materials (natural or manufactured), clay, and fabric will be used. While the focus of the course is on making functional and nonfunctional art objects, we will spend some time examining the key concepts of threedimensional design, such as proportion, scale, balance, movement, rhythm/repetition, and emphasis/ dominance. Crosslisted: ART 130. SE

\section*{FAS 170 Introduction to Film Language (3 crs)}

How a film is shot and assembled is integral to its ability to move and persuade an audience. This course will introduce students to the appropriate terms and concepts for understanding basic cinematography, including lighting, composition, and movement, and the strategic rhetorical effects beyond simple continuity in editing, including pacing for tone, cutting for comparison and cause/effect, and the uses of diegetic and non-diegetic sound. Crosslisted: FLM 170. FO

\section*{FAS 175 Introduction to Story (3 crs)}

This course examines the basics of story assemblage, looking at a wide variety of narrative products, from advertising to feature-length stories. Students will explore the history of story analysis, beginning with Aristotle and culminating in the theories of Joseph Campbell, Robert McKee, and others, with an emphasis on the Hero's Journey. Students will begin forming their own story ideas for analysis. Crosslisted: CRE 175, FLM 175. SO

\section*{FAS 225 Ensemble (3 crs)}

Please see FAS 125. Prerequisite: FAS 125 and permission of ensemble director and the Fine Arts department. D
FAS 325 Ensemble ( \(\mathbf{3} \mathbf{~ c r s )}\)
Please see FAS 125. Prerequisite: FAS 225 and permission of ensemble director and the Fine Arts department. D

\section*{General Science}

Contact Person: Jeremy Vittek Ed.D., Ph.D.

General science courses are designed around themes that integrate the natural sciences. They show how scientists tackle problems and how science works. Of the general science courses which are designated as core fulfilling, only one may be used to satisfy the science core requirement, see core curriculum pp. 14-15.

\section*{Course Descriptions:}

\section*{GSC 110 Integrated Sciences I ( 3 crs )}

An integrated science and math course for the non-science major. The course investigates science and the scientific method through selected topics in the traditional fields of biology, chemistry, physics and earth and space science. Math topics are integrated as appropriate. Topics fit the more traditional areas of physics, chemistry and biology. A hands-on, student centered approach is taken. Lab and lecture are integrated with the course meeting for 90 minutes three times in a week. F

\section*{GSC 120 Integrated Sciences II (3 cr)}

An integrated science and math course for the non-science major. The course investigates science and the scientific method through selected topics in the traditional fields of biology, chemistry, physics and earth and space science. Math topics are integrated as appropriate. Topics include sound and waves, electricity, astronomy and geology. A hands-on, student centered approach is taken. Lab and lecture are integrated with the course meeting for 90 minutes three times a week. S

\section*{GSC 135 The Science of Health (3 cr)}

A core-fulfilling science course intended for non-science majors. It uses scientific principles to discover the effects of lifestyle on long-term health outcomes. The science of nutrition, exercise, chronic diseases, naturalistic healing and aging are explored. Instructional strategies are used that involve the student in learning as a co-inquirer with the instructor. The effects of personal life choices will be incorporated into the learning environment whenever possible. FS

\section*{General Studies}

\section*{Course Descriptions:}

\section*{GST 101 Strategies for Success}

\section*{Career \& Professional Development (1 cr)}

This course is designed to introduce students to the fundamentals of planning and organizing job search strategies. Emphasis is placed on development of job search credentials (i.e. resume, cover letter, thank you letter, portfolio, etc.), employment search tools (i.e. networking, mock interviews, etc.), and management of career pathways (i.e. success during the first year on the job,continued professional development). This course will also explore future educational opportunities in graduate/professional studies. \(\mathbf{S}\)

\section*{GST 102 Career and Life Transitions: Choosing A College Major (1 cr)}

This course is intended for freshmen and sophomores who have not identified a college major or are thinking about changing their major. The purpose of the course is to facilitate the development of self-knowledge regarding interests, values, skills, and personality, and to show how such self-knowledge influences the choice of a college major and career. Students will also learn about the career decision-making process and how their own thinking patterns can help or hinder their career development. Various majors and career will be specifically discussed. \(\mathbf{S}\)

\section*{GST 103 Life After College (1 cr)}

This one-credit course is designed to introduce students to and to prepare students for transitions and issues commonly faced by new college graduates, including managing finances, housing / relocating logistics, relationships, and creating a meaningful life. D

\section*{GST 315 Intercultural Service Learning (1-3 cr)}

This course is designed to immerse students in a short-term service learning experience in a different culture or subculture. Students will work side-by-side with people of designated area, and in so doing, will learn about the area's culture, politics, religion, history, and economics. The course is designed to integrate service and academics using a multi-disciplinary approach. In addition, students will assess and reflect on their own talkings, how their discipline relates to their work, and how they can improve their leadership skills. S

\section*{History}

Contact Persons: Leslie Liedel, Ph.D.
Jeff Rutherford, Ph.D
Donna Simpson, Ph.D.
Daniel Weimer, Ph.D.
Joseph Laker, Ph.D., Emeritus
The individual who neglects the study of history is trapped in the "prison of the present," unable to understand how humankind has arrived at its present condition and often uncertain of the changes which the future may bring. For this reason, a knowledge of history has long been one of the hallmarks of an educated person. Students are encouraged to approach their studies from a comprehensive background of materials, avoiding narrow interpretations.

Thus, a major or minor in history is excellent preparation for a student who seeks to work in such fields as law, foreign service, journalism, international business, or government at all levels, as well as those who seek such professional areas as education, museum management, or archival work. Our courses stress systematic research and considerable reading and writing. Upon completion of the history program, students will be able to demonstrate the ability to:
1. Analyze contemporary events and problems in historical perspective.
2. Demonstrate knowledge of major events, trends and personalities of the western tradition.
3. Search effectively for information on current and past topics using contemporary research tools.
4. Write factually accurate and insightful explanations of historical events.
5. Communicate factual information and research findings in a concise and articulate oral manner.

\section*{Requirements for a History Major Bachelor of Arts Degree}

HIS 110 The Twentieth Century (3 crs)
HIS 120 Historical Methods (3 crs)
HIS 211, 212 History of the American People
(only offered every other year)
HIS 351, 352 The Western Tradition ( 6 crs )
(only offered every other year)
HIS 386 Junior Seminar (3 crs)
HIS 486 Senior Seminar (3 crs)
Two non-western/comparative history courses
(Non-western HIS 120 courses)
Three or four free history electives

\section*{Concentrations within the History Major}

\section*{Concentrations in History and History-Related Fields}

The history department sponsors several Concentrations for students who are interested in studying particular fields of history. The department also works closely with other departments to offer Concentrations that include specific history courses combined with other appropriate classes. All Concentrations are twelve credit hours.

\section*{Concentration in American History:}

HIS 211

HIS 212
Two American history electives OR one American history elective and a local internship.

\section*{Concentration in European History:}

HIS 351
HIS 352
Two electives in European history
Concentration in American Studies:
Two courses in American history
One course in American Politics chosen from the following: POS 241, POS 242, POS 329, POS 330, POS 340,

POS 305, POS 306.
One course in American literature chosen from the following: LIT 420, LIT 426, LIT 440 - American

\section*{Concentration in Medieval Studies:}

Two courses in Medieval history chosen from the following: HIS 324, HIS 340, HIS 351, and HIS 372
Two courses chosen from the following: PHI 308, PHI/POS 347, LIT 415
The following courses are only offered every other year and should therefore be taken in the sophomore or junior year: HIS 211, HIS 212, HIS 351, and HIS 352. Otherwise, students may encounter difficulties in scheduling student teaching or other senior requirements.

\section*{Requirements for a History Minor}

Minors must complete seven courses including HIS 110 and the history pro seminar HIS 120, one elective in each of the three areas of European, American and Non-western and two history electives.

\section*{Core Fulfilling Courses}

The core requirement in history may be fulfilled by taking the following courses:
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HIS 110 The Twentieth Century

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HIS \(120 \quad\) Historical Methods

\section*{Course Descriptions:}

\section*{HIS 110 The Twentieth Century ( 3 crs)}

This course begins with an examination of Europe's position of political, economic and military dominance in the world in the decades before World War I. After a thorough treatment of the causes and effects of the Great War and the rise of Japan to great power status, our emphasis shifts to the international economic and political problems of the interwar era. We analyze the rise of authoritarian regimes of the right and left in Europe, the civil war in China and the imperialist powers' weakening grip on their colonies in Africa and Asia. World War II and the Holocaust figure prominently in the second half of the course, as do the decolonization process, the Cold War between the U.S. and the Soviet Union and post-Cold War issues such as ethnic conflict and responses to globalization. F

\section*{HIS 120 Historical Methods (3 crs)}

The content of these courses (in terms of both geographic area and historical period) varies from instructor to instructor. All are designed to familiarize students with the methods and procedures used by historians in researching and writing about important historical trends and events. Course activities include using primary and secondary sources; developing a sense of interpretation grounded in creative, but responsible scholarship; improving writing skills in analytical, response and research papers; and giving oral presentations. \(\mathbf{S}\)

\section*{American}

\section*{HIS 211 History of the American People I (3 crs)}

This course is an introduction to selected topics in American civilization from the colonial period to 1877. The objective of the course is to provide the student with a general but comprehensive understanding of American exploration, colonization, the Independence movement, the birth of American democracy, political party development, industrialization, reform movements, sectionalism, and reconstruction. FE

\section*{HIS 212 History of the American People II (3 crs)}

This course explores the social, cultural, political, intellectual, and economic development of the United States after the Civil War. Specific topics include, but are not limited to: Reconstruction, Industrialization, Immigration, the Labor Movement, the Great Depression, World War II, the Cold War, Civil Rights, the Vietnam War era, and the Conservative Revival of the 1970s and 1980s. SO

\section*{HIS 213 The Indian in North America (3 crs)}

Natice presence in North Ameica is surveyed from earliest times to the present. Focus is on major events within this history alogn with individuals who were part of those events. Special attenetion is given legal decisions that make the American Indian population a distinct and separates part of the American population. D

\section*{HIS 214 History of Appalachia (3 crs)}

An introduction to the history of the institutions and people of the Appalachian mountain region from the earliest years of exploration to the present. \(\mathbf{F}\)

\section*{HIS 301 Catholicism in American History (3 crs)}

This course examines American Catholic history and culture from the colonial period until the Second Vatican Council in 1962. Through lectures, readings and discussions, students will explore the social and cultural development of American Catholicism in an historical context. D

\section*{HIS 302 African-American History \& Culture (3 crs)}

This course examines the experience of African Americans from the colonial period in American history to the beginning of the modern Civil Rights movement in 1954. The course addresses the perspectives and attitudes of the African American experience and the broader realities of the racial sentiments embedded in American culture at large. D

\section*{HIS 305 Social Movements of the 1960s ( 3 crs )}

This course focuses on a variety of American social movements that evolved during the second half of the twentieth century. Students will analyze the Civil Rights Movement, the New Left, modern feminism, the homophile movement as well as efforts to advance Native American rights. D

\section*{HIS 314 Contemporary America ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course examines the major political, social and cultural issues in U.S., history since 1945 and seeks to identify the major influences that have shaped contemporary America. Topics covered include the domestic impact of the Cold War, the Civil Rights movement and its legacy, the social and cultural revolution of the 1960s, Vietnam,Watergate and the emergence of the New Right. D

\section*{HIS 316 United States Foreign Relations Since 1900 (3 crs)}

This course examines the emergence of the U.S. as a world power in the first half of the 20th century, its conduct as one of the world's two superpowers during the Cold War and its role in international affairs as the world's dominant power since the collapse of the Soviet Union in 1991. D

\section*{HIS 320 Immigration, Ethnicity and the American Experience ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course is an exploration of immigration, ethnicity and the American experience. Students will investigate topics ranging from ethnic group relations, economic and demographic trends, the significance of politics and religion, public policy and nativism. D

\section*{HIS 371-374 History Through Films (3 crs)}

This semester-length history seminar will use feature films on historical topics as focal points for discussion and lecture in various areas of history. The area chosen will depend on the instructor. D

HIS 371: American History
HIS 372: Early European History
HIS 373: Modern European History
HIS 374: Non-Western History

\section*{European}

\section*{HIS 216 The Ancient World: Greece and Rome (3 crs)}

A survey of the most important aspects of Western culture from the time of Heroic Greece to the fall of the western half of the Roman empire in the 5th century A.D. D

\section*{HIS 317 History of the Holocaust ( \(\mathbf{3} \mathbf{~ c r s}\) )}

An examination of Hitler's policy of genocide against the Jews of Europe. Includes related phenomena such as the roots of anti- Semitism, fascist ideology, and non-Jewish victims of the Nazis. D

\section*{HIS 220 (WST 220) Women in History (3 crs)}

A study of women in Western society from antiquity to the present. The course will examine principal events, trends and ideas affecting women in selected periods, including the Icelandic Society, the Troubadour civilization, the 17th century salon ladies and the feminist and suffrage movements of the 19th and 20th centuries. Prerequisite: completed history core. D

\section*{HIS 324 The Medieval World (3 crs)}

This course examines the social, political, religious, intellectual and artistic development of Medieval Civilization from the fall of Rome to the fifteenth century. D

\section*{HIS 331 Modern Russia ( 3 crs)}

A survey of the social, political and military challenges facing Russia as a great power from 1850 to the present. Topics include serfdom, industrialization, the Bolshevik Revolution, the Stalinist terror and the glasnost and perestroika of Gorbachev. Concludes with analysis of the prospects of Yeltsin's post-communist Russia. D

\section*{HIS 340 History of England I (3 crs)}

This course surveys the political, cultural, religious, and social developments in the history of England from the coming of the Anglo-Saxons to the end of the Wars of the Roses in 1485. D

\section*{HIS 341 History of England II (3 crs)}

This course examines the emergence of Modern England from the Age of the Tudors to the present with emphasis on political, religious, social, and cultural developments. D

\section*{HIS 345 Modern France (3 crs)}

This course explores the development of Modern France from the Revolution of 1789 to the present. It examines the principal political economic, intellectual and cultural developments of the period. D

\section*{HIS 351 TheWestern Tradition: Antiquity To Religious Reformation (3 crs)}

This course is a broad survey of Europe's political, social, economic and cultural traditions with a stress on selected problems viewed from conflicting historical interpretations. Students will make use of both primary and secondary literature and make oral and written reports on the problems they have studied. (only offered every other year) FO

\section*{HIS 352 The Western Tradition from 1650 to the Present ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course is a broad survey of European political, social, economic and cultural traditions and how those traditions have been spread throughout the world. Stress will be placed on selected problems viewed from conflicting historical interpretations. Students will use primary and secondary sources and make oral and written presentations on the problems they have studied. (only offered every other year) SE

\section*{HIS 368 Twentieth Century Germany ( 3 crs )}

This class investigates the development of the most dynamic European state of the twentieth century. Topics include the political and social stability of the Imperial German state, the First World War and the effects of total war on German society, the breakdown of the Weimar Republic and the radicalization of politics culminating in Hitler's ascension to power, the Second World War and Holocaust, the fragmentation of the German state into a democratic west and communist east, and the reunification of the state in 1990. D

\section*{Non-Western/Comparative}

\section*{HIS 219 East Asia: The Great Tradition (3 crs)}

This course treats the origins and development of East Asia until 1800, focusing on the religious and philosophical systems of Buddhism, Confucianism, Taoism and Shintoism. Consideration also of political traditions and social and cultural development. D

\section*{HIS 221 Japan Since 1800 ( 3 crs)}

Surveys Japan's native traditions, assimilation of Chinese and Western culture and transformation into an Asian political and economic power. D

\section*{HIS 222 China Since 1800 ( 3 crs )}

Covers China's development from the 19th century with emphasis on traditional institutions and beliefs and their transformation under Western influence. D

\section*{HIS 223 India and South Asia (Pakistan, Sri Lanka, Bangladesh, Nepal) (3 crs)}

A survey of the traditional cultures and institutions and the rise, development and consequences of Western imperialism in South Asia. D

\section*{HIS 224 Southeast Asia (3 crs)}

This course concentrates on the nature of traditional Southeast Asian societies arrayed between China and India before 1870 , the seizure of these lands by Western imperialist nations from the 1870's into the mid-twentieth century when nationalists regained their independence and finally how well each country has done since independence. Forty percent of the course focuses on Vietnam. D

\section*{HIS 228 Latin America in 20th Century (3 crs)}

Chronological survey of Latin America from 1890 to the present. Stress will be on the development of Latin American nations, their problems and their relationships with the United States. D

\section*{HIS 308 Comparative Ethnic Cleansing and Genocide (3 crs)}

This course examines the development of ethnic-cleansing and genocide in the modern period from the perspective of both the perpetrator and the victim. Topics to be covered include settler policies in North America and Australia, the breakdown of the Ottoman Empire and the rise of nation-states in Southeastern Europe, the era of the Second World War and its legacy, and the various outbreaks of mass violence in post-colonial Africa and Asia. D

\section*{HIS 337 The World on Drugs: 1700-present ( 3 crs)}

Drugs, as commodities and as cultural phenomena, have played integral roles in human societies throughout time. This class sets aside contemporary American attitudes about drugs and examines psychoactive substances from an historical perspective in order to more fully and rationally understand how and why certain drugs have taken hold in societies in Latin America, Asia, and the United States. The course explores a host of drugs and seeks to understand: why certain drugs became commonly used, why particular drugs attained legal or illegal status, the evolution of drug trafficking in the 20th century, and how and why concepts of addiction change according to time and place. D

\section*{Seminars}

\section*{HIS 384 Readings Seminars (3 crs)}

A combination of assigned readings, lectures and discussions; titles and content may change from semester to semester since they are designed by faculty members for the areas of their special interests. D

\section*{HIS 386 The Historian's Craft (3 crs)}

This course is mandatory for all history majors. It is a prerequisite for HIS 486. Admission to the course derives from a student's status as a junior or from permission of the chair. This seminar involves a combination of historiography, philosophy of history, and advanced methodology along with field work in local history and public history \(\mathbf{S}\)

\section*{HIS 486 Senior Seminar ( 3 crs )}

Participants read on a common seminar topic, write and orally defend their research papers on an aspect of the topic. F

\section*{International Studies}

Director: John Poffenbarger, Ph.D.
The International Studies major is both interdisciplinary and cross-cultural. The flexible nature of the program allows students to concentrate in one of two areas: the humanities or social sciences. The flexibility of this major allows students to pursue a second major (see p. 16 of the catalog for information on double majors). Upon completion of the International Studies program, students will:
1. Have a better understanding of contemporary global issues (e.g., environment, development, conflict, population, global economy).
2. Have an awareness of the cultural diversity within the world community.
3. Have a clear understanding of the political and economic relations among the countries of the world.
4. Place current global issues into proper historical context.
5. Have solid foundation in a foreign language of their choice.

\section*{Requirements for International Studies Major Bachelor of Arts Degree}

INS 111 World Community
COM 261 Cross cultural communication
SSC 415 Statistical Analysis (3 crs)
ECO 110 Macroeconomics
POS 212 Global Politics
RST 203 World Religions
MOL Two languages in addition to core (6 crs)
SSC 488 Senior Thesis

Students majoring in international studies must concentrate on either humanities or the social sciences. In addition to the core, students must take five courses ( 15 crs ) from their fields of concentration and two courses ( 6 crs ) from the other. The courses selected must meet the approval of the director. In order for courses to qualify as an elective, they must be of a contemporary nature, and focus on at least one of the following three :
1) another culture,
2) relations among countries,
3) a global issue(s).

A non-exhaustive list of such electives follows.

\section*{Humanities}
ENG 252 Border Crossings

FRE 210 Readings
FRE \(220 \quad\) Culture Through Communications
FRE 230 Conversation I/Conversation II
FRE \(320 \quad\) French Civilization and Culture
HIS 217 History of the Holocaust
HIS 221 Japan since 1800
HIS \(222 \quad\) China since 1800
HIS 223 India and South Asia
HIS 224 Southeast Asia
HIS 250 Revolution and Ideology
HIS \(300 \quad\) Modern Ireland
HIS \(310 \quad\) Eastern Europe Since Napoleon
HIS 316 The Rise of the US as a World Power
HIS 331 Modern Russia
HIS 336
HIS 341 History of England II
HIS 345 Modern France
INS 210 Mexico Experience
PHI 225 Eastern Patterns of Thought
POS 228 Latin America in the 20th Century
COM 261 Cross cultural Communication

SPA 210 Readings
SPA \(220 \quad\) Culture Through Communications
SPA 230 Conversation I/Conversation II
SPA \(320 \quad\) Hispanic Civilization and Culture
SPA 321 Survey of Peninsular Spanish Literature
SPA 322 Survey of Spanish American Literature
SPA 330 Advanced Conversation
SPA \(350 \quad\) Special Topics
Social Sciences
CRJ 327 Comparative Systems of Justice and Social Control
ECO 318 International Economics
MGT 311 International Business
MKT 315 International Marketing
POS 211 Comparative Politics
POS 228 Latin America in the 20th Century
POS \(250 \quad\) Revolution and Ideology
POS 311 War and Peace: Philosophical and Political Issues
POS \(333 \quad\) Global Political Economy
POS 334 International Organization
POS \(341 \quad\) Global Issues
POS 350 Environmental Law and Politics
PSY 235 Human Sexuality in a Diverse World
PSY \(425 \quad\) Psychology of Gender
Special Note: The international studies faculty believe that the study abroad experience is extremely beneficial. Therefore, those majoring in international studies are strongly encouraged to study abroad. Rationale: In an increasingly global world, this minor is designed to give students the opportunity to incorporate international studies into their coursework.

\section*{Requirements for International Studies Minor Bachelor of Arts Degree}

INS 111
World Community
(3 crs)
POS 212
Global Politics
(3 crs)
In addition to the International Studies core, students minoring in international studies must take five additional courses ( 15 crs ) which meet with the approval of the director.

\section*{Course Descriptions:}

\section*{INS 111 World Community ( 3 crs )}

An introduction to the global environment. Topics include world geography, comparative cultures, international conflict and economic interdependence. FS

\section*{INS 210 The Mexican Experience ( 3 crs )}

An immersion-intensive course that explores the politics, economics, history and rich cultural traditions of Mexico. Focused mainly in the Yucatan Peninsula, topics include Mayan history and architecture, the effects of globalization on indigenous societies, the effects of colonialism, environmental issues, and the formal and informal economics. Students will visit museums, architectural sites, and markets. D

\section*{Study Abroad and Washington Policy}

The following criteria apply to all students who wish to study abroad* or participate in one of the Washington D. C., programs:
1. Students must register through Wheeling Jesuit University.
2. Students will pay the cost of the host program. Payment will be made through Wheeling Jesuit University.
3. Students must consult with Wheeling Jesuit financial aid officers concerning the cost of the program well in advance of the semester in which they plan to study overseas or in Washington.
4. Students must consult with their advisor or department chair concerning their proposed course of study at the host institution.
5. Students must pay a \(\$ 500\) administrative fee to Wheeling Jesuit University (this will be calculated in the student's financial aid package).
*This policy does not apply to the Jesuit Program in Beijing, China.

\section*{Justice, Gender, \& Diversity Studies}

Contact Person: Jessica Wrobleski, Department of Religious Studies and Theology
The Justice, Gender, and Diversity Studies program offers an interdisciplinary minor which analyzes theories of justice in light of the significance of gender and other forms of difference (including ethnicity, race, sexual orientation, socioeconomic class, nationality, age, and physical/mental abilities) in a wide variety of human contexts. Students will Particular attention will be paid to the voices and experiences of those who have traditionally been disenfranchised as a result of their difference from a dominant social identity.

Working in collaboration with their major adviser, students will tailor the JGD minor to apply to their own interests and professional goals. Students will be encouraged to develop critical thinking skills and theoretical frameworks to deepen understanding and facilitate a constructive response to challenges of diversity in their chosen major field of study.

\section*{Requirements for JGD Minor}
\begin{tabular}{lll} 
JGD/FAS 149 & Women in Art \\
JGD/HIS 220 & Women in History & \\
JGD/LIT 310 or 312 & Women in Literature & \((3 \mathrm{cr})\) \\
JGD/PHI 295 & Women in Philosophy \\
JGD/RST 261 & The Divine Feminine & \((3 \mathrm{cr})\) \\
\hline
\end{tabular}
and at least four elective courses (12cr total) from among the following courses, OR three elective courses (9cr) and a senior thesis in GDS.

Possible JGD elective courses (non-exhaustive):
\begin{tabular}{|c|c|}
\hline CRJ 230 & Women and the Criminal Justice System \\
\hline CRJ/POS 330 & Civil Rights \& Civil Liberties \\
\hline CRJ 327 & Comparative Systems of Justice and Social Control \\
\hline LIT 250 & Literary Explorations: Conflicts \& Culture (selected sections) \\
\hline LIT 310/312 & Women in Literature \\
\hline LIT 330 & Contemporary Literature (selected sections) \\
\hline LIT 476 & Colonial and Postcolonial Literature \\
\hline FAS 123 & Jazz \\
\hline FAS 149 & Women in Art \\
\hline HIS 213 & The Indian in North America \\
\hline HIS 214 & History of Appalachia \\
\hline HIS 220 & Women in History \\
\hline HIS 305 & African-American History \& Culture \\
\hline HIS 305 & Social Movements of the 1960s \\
\hline HIS 305 & Comparative Ethnic Cleansing and Genocide \\
\hline HIS 320 & Immigration, Ethnicity, and the American Experience \\
\hline SPA 320 & Hispanic Civilization and Culture \\
\hline NUR 319D & Acute Care Nursing I \\
\hline NUR 320D & Acute Care Nursing II \\
\hline NUR 405D & Multisystem Care Nursing \\
\hline PHI 240 & Philosophy of Peace and Justice \\
\hline PHI 295 & Women in Philosophy \\
\hline POS 212 & Global Politics \\
\hline
\end{tabular}
\begin{tabular}{ll} 
POS 333 & Global Political Economy \\
POS 340 & Issues in American Politics (selected sections) \\
PED 320 & The Special Education Process \\
PED 333 & Exceptionality and Diversity in the Classroom \\
PED 423 & Special Education: Assessment \& Methods \\
PSY 218 & Adulthood and Aging \\
PSY 235 & Human Sexuality in a Diverse World \\
PSY 300 & Directed Research (selected sections) \\
PSY 340 & Topics in Gender \\
PSY 425 & Sexual Ethics \\
RST 209 & Catholic Social Thought \\
RST 230 & The Divine Feminine \\
RST 261 & Religious Traditions of Native North America \\
RST 314 & Contemporary Theological Trends and Issues (selected sections) \\
RST 401 & Introductory Anthropology \\
SSC 110 &
\end{tabular}

\section*{Law and Society (Minor)}

Contact Person: John Poffenbarger, Ph.D.
The Law \& Society minor will provide students with an introduction to law as both a profession and a field of study. In both its curricular and co-curricular components, this minor will encourage the students to consider how the mission of Wheeling Jesuit University, in particular our commitment to life-long education, leadership and service might be applied to the study and practice of law. In doing so, the minor will help prepare students for a future education in law or a career in the legal profession.

A Law \& Society minor requires the completion of the following requirements:
1. Eighteen hours of coursework distributed in the following manner:

Required:
PHI 254 Philosophy of Law
And one of the following:
PHI 250 Philosophy of Jesuit Education
PHI \(240 \quad\) Philosophy of Peace and Justice
Electives:

Law (Six credit hours from two separate departments)
BUS 315 Business Law
COM 277 Introduction to Legal Writing
COM 304 Communication Law
CRJ 212 Criminal Law \& Procedure
CRJ 421 Theories of Management and Administration in Criminal Justice Organizations
POS 329 Constitutional Law
POS \(330 \quad\) Civil Rights and Liberties
Society (Six credit hours from two separate departments)
COM 204 Argumentation and Evidence
COM 276 Social Analysis and Advocacy Communication
HIS 211 History of the American People
HIS 212 History of the American People
HIS 305 Social Movements of the 1960s
HIS 320 Immigration, Ethnicity and the American Experience
RST 230 Introduction to Catholic Social Thought
RST \(310 \quad\) Catholicism and Modernity: Church \& State
2. The completion of a capstone project which addresses at least one of the issues raised in the Law \& Society program. This could be a project within a student's major, e.g., a senior thesis or a significant paper written for one of the minor classes. The project must receive the prior approval of the Law \& Society program director.
3. The completion of a co-curricular project.

This could be fulfilled through an internship, the completion of a course with a significant service learning component or an immersion trip coordinated by a WJU department. All co-curricular projects must receive the prior approval of the Law \& Society program director.

Note: Completion of the Law \& Society minor meets one of the requirements for early admission to Duquesne University School of Law. For further information about the about the Early Admission Agreement between Wheeling Jesuit University and Duquesne University School of Law, please contact Dr. Robert J. Phillips.

\section*{Mathematics}

Contact Persons: Marc Brodie, Ph.D.
The essence of orderliness, form and elegance, mathematics is a basic tool for many disciplines and careers. The mathematics curriculum is designed to provide the student with a strong mathematics background enhanced by technological tools, such as the graphing calculator and symbolic algebra software. It also is flexible enough to accommodate the diverse interests of mathematics majors, including those preparing for graduate work, those preparing to
become an actuary and those seeking to teach on the elementary or secondary level. Upon completion of the Mathematics program, students will be able to:
1. Comprehend and simplify mathematical expressions.
2. Build or solve mathematical models.
3. Prove or disprove a theory with logical steps.
4. Understand and use modern technology in mathematics.
5. Pursue high-level mathematical theory.

Core Fulfilling Mathematics courses ( 1 course required):
CSC 110 Computer Science I ( 3 crs )
MAT 102 Math in Society ( 3 crs )
MAT 105 Introduction to Statistics I (3 crs)
MAT 108 Pre-Calculus ( 3 crs )
MAT 111 Calculus I (4 crs)
(A student with advanced placement may substitute a higher level MAT or CSC course to fulfill the core requirement.)

\section*{Requirements for Bachelor of Science Degree in Mathematics}

In fulfilling the core curriculum requirements, Mathematics majors will take MAT 111 to fulfill the mathematics core and take PHY 110 to fulfill one of the science core courses. In addition to completing the core curriculum requirements, Mathematics majors must complete the following courses:

PHY 110 Physics I
MAT 111 Calculus I
MAT 112 Calculus I
MAT 211 Calculus III
MAT 212 Differential Equations
MAT 235 Discrete Math
MAT 240 Linear Algebra
MAT 382 Junior Seminar
(4 crs)
(4 crs)
(4 crs)
(4 crs)
(4 crs)
(4 crs)
(4 crs)
(2 crs)
Upper-Level Requirements:
Three courses from MAT 351,MAT 352, MAT 411, MAT 413
(9 crs)
Upper-Level Electives:
An additional four courses from MAT 204 and MAT 300 and above (one may be taken from CSC or PHY) ( 12 crs )
MAT 482 Senior Seminar
(2 crs)

\section*{Requirements for Certification in Math Education}

The student wishing to pursue certification for teaching mathematics in the intermediate and/or secondary schools should consult the director of the Professional Education Department for specific requirements. Generally, the student completes the mathematics major as described above with two upper-level electives being specified as MAT 424 and either MAT 335 or MAT 204. PSY 110 should be taken as early as possible.

\section*{Requirements for Mathematics Minor}

Mathematics minors must complete a minimum of 15 credit hours in mathematics beyond MAT 111.

\section*{Course Descriptions}

\section*{MAT 101 Algebra Review (3 crs)}

A review of topics from elementary and intermediate algebra, including first order equations, exponents and radicals, polynomials, quadratic expressions, quadratic equations, rational expressions, linear and nonlinear systems of equations, inequalities and the binomial theorem. This course is preparatory and will not satisfy the University's core curriculum requirement in mathematics.

\section*{MAT 102 Math in Society (3 crs) (core)}

This course is designed to meet the needs of students who do not have a specific course needed for support of their major. The fundamental properties of numbers, geometry and statistics are covered through the collection of modern and useful applications of mathematics. The course contains a collection of topics of modern society: Social Choice, Management Science, Growth and Symmetry and Statistics. Prerequisite: MAT 101 or equivalent.

\section*{MAT 105 Introduction to Statistics (3 crs) (core)}

Descriptive statistics including measures of central tendency and variability, graphic representation, probability, the binomial, normal and T distributions, hypothesis testing and linear regression. Prerequisite: MAT 101 or equivalent.

\section*{MAT 108 Pre-Calculus (3 crs) (core)}

A thorough preparation for calculus with analytic geometry, including conic sections, and the transcendental functions: logarithmic, exponential and trigonometric functions. Prerequisite: MAT 101 or equivalent.

\section*{MAT 111 Calculus I (4 crs) (core)}

A theoretical introduction to differential calculus including limits, continuity, the basic rules for derivatives and applications including optimization problems. A brief introduction to integration leading to the Fundamental Theorem of Calculus completes this course. Prerequisite: MAT 108 or equivalent.

\section*{MAT 112 Calculus II (4 crs)}

Transcendental functions, applications of integrals, volumes of revolution, surface areas; techniques of integration, including powers of trigonometric functions, integration by parts and by partial fractions, improper integrals, infinite series, Taylor's expansion and indeterminate forms. Prerequisite: MAT 111.

\section*{MAT 204 Scientific Statistics (3 crs)}

An introduction to scientific statistics with emphasis on experimental design methods such as random assignment, block design, factorial crossings and repeated measures. Various statistics analyses, such as analysis of variance and analysis of covariance are applied to the appropriate design. Offered every spring semester. Prerequisite: MAT 111.

\section*{MAT 211 Calculus III (4 crs)}

Vectors and vector valued functions, extrema of multivariate functions and the method of Lagrange multipliers, surfaces in three dimensions, line and surface integrals; multiple integration and Stokes' Theorem. Prerequisite: MAT 112.

MAT 212 Ordinary Differential Equations (4 crs)
ODEs of first order: linear, homogeneous, separable and exact, with applications; orthogonal trajectories; those of second order: reducible to first order, general and particular solutions by the methods of undetermined coefficients, variation of parameters and power series; and an introduction to numerical methods and Laplace Transforms. Prerequisite: MAT 112.

\section*{MAT 235 Discrete Mathematics (4 crs)}

Sets and relations, logic and truth tables, Boolean algebra, logic gates, graph theory, combinatorics, algorithms, matrix algebra and determinants. Prerequisites: MAT 111 or equivalent.

\section*{MAT 240 Linear Algebra (4 crs)}

Solution spaces for systems of linear equations, elementary row operations, vector spaces, linear independence, linear transformations, change of bases, inner products, projections, the Gram-Schmidt process, eigenvalues and eigenvectors. Prerequisite: MAT 211 or MAT 235.

\section*{MAT 300 Advanced Topics in Mathematics (3 crs)}

Topics will be selected by the instructor. Offered spring semester of even years. Permission of the instructor is required.

\section*{MAT 310 History of Mathematics ( \(\mathbf{3} \mathbf{~ c r s}\) )}

History of the development of mathematical concepts in algebra, geometry, number theory, analytical geometry and calculus from ancient times through modern times. Theorems with historical significance will be studied as they relate to the development of modern mathematics. Prerequisite: MAT 112 or MAT 235. Offered spring semester of even years to alternate with MAT 300.

\section*{MAT 331 Numerical Analysis (3 crs)}

Numerical solution of linear systems and of non-linear equations; interpolation, approximation and numerical differentiation and integration (computer methods and programming will be utilized.) Prerequisite: MAT 112. Offered fall semester of odd years.

\section*{MAT 335 Applied Probability and Statistics (3 crs)}

Introduction to Probability: discrete and continuous random variables (binomial, geometric, hypergeometric, Poisson, normal, exponential, Chi-square, gamma), sampling distributions (including CLT), multivariate distributions, stochastic processes. Prerequisite: MAT 112. Offered fall semester of even years.

\section*{MAT 336 Applied Probability and Statistics II}

Introduction to mathematical statistics: estimation and inferences for means (confidence intervals and tests of significance ), differences of two means, proportions, differences of two proportions and variances; linear models (simple and multi-variable), non-parametric methods. Prerequisite: MAT 335

\section*{MAT 351 Introduction to Abstract Algebra: Rings (3 crs)}

Introduction to rings, integral domains; ideals and factor rings; homomorphisms and isomorphisms; polynomial rings, unique factorization, irreducible polynomials; extension fields, algebraic extensions, finite fields; geometric constructability. Prerequisite: MAT 240. Offered fall semester of odd years.

\section*{MAT 352 Introduction to Abstract Algebra: Groups (3 crs)}

Introduction to groups: finite groups and subgroups, cyclic groups, permutation groups, homomorphisms and isomorphisms, cosets and Lagrange's theorem, direct products. Prerequisite: MAT 240. Offered fall semester of even years.

\section*{MAT 382 Junior Seminar (2 crs)}

An introduction to research in mathematics with emphasis on acquiring and practicing skills needed for the senior research project to be completed in MAT 482. Topics include literature searches and software use for generating and presenting mathematical research. Required of all mathematics majors in their sophomore or junior year.

\section*{MAT 411 Real Analysis (3 crs)}

Least Upper Bound Property of the set of all real numbers. Uniform continuity and properties of continuous functions, differentiation, integration, sequences of functions, uniform convergence and limit theorems. Offered spring semester of odd years.

\section*{MAT 413 Introduction to Complex Variables (3 crs)}

Analytic functions; power series; complex integration and Cauchy's theorem; entire functions; analytic continuation. Prerequisite: MAT 211, 212. Offered spring semester of even years.

\section*{MAT 424 Geometry ( \(\mathbf{3} \mathbf{~ c r s}\) )}

Euclid's Axioms, the parallel postulate, leading to non-Euclidean geometries, and an introduction to projective and affine geometries. Offered spring semester of even years.

\section*{MAT 429 Combinatorics}

An introduction to sophisticated counting techniques. Permutations, combinations, binomial and multinomial coefficients; the principle of inclusion/exclusion; generating functions; Fibonacci, Stirling and Catalan numbers; recurrence relations; Burnside's Lemma and Polya's Pattern inventory. Offered spring semester of odd years.

\section*{MAT 482 Senior Seminar (2 crs)}

Independent study of topics not usually covered in the MAT curriculum leading to a presentation of an elementary research or survey paper by the student under the direction of a professor. Required for all mathematics majors in their junior or senior year. Prerequisite: MAT 382.

\section*{Modern Languages}

Contact Persons: John Poffenbarger, Ph.D.
The Modern Language curriculum seeks to develop the ability to understand, speak, read and write a foreign language; to help students better understand the structure of language; and to expose them to the cultural patterns of other people.

We seek to educate students to become more effective participants in the global community of the twenty-first century by promoting linguistic competence and fostering awareness of other languages and cultures.

In the Jesuit tradition, the Modern Language curriculum has both humanistic and practical dimensions.
The goals of the Modern Languages and Cultures Department:
1. Offer an in-depth program of study for majors in French and Spanish with an emphasis on language structure, global literature and international cultures.
2. Offer a Romance Language major which combines the study of French and Spanish in order to enhance practical language skills for specific career purposes.
3. Offer a three semester core sequence in French, and Spanish which lays the groundwork for fluency and fulfills the curriculum requirements.
4. Offer a minor program to assist all students in using the foreign language in business, professions, graduate school or travel.
5. Provide learning experiences and educational resources to enable students to understand world cultures and language communities.

\section*{Career Orientation}

Recognizing the demands placed upon graduates in today's world, the faculty recommends that majors develop expertise in a specialty in addition to Modern Languages. This can be accomplished in one of several ways: a double major, a minor in another academic discipline, or an interdisciplinary major. Some which would complement a Modern Languages major include, but are not limited to: International Business, International Studies, History, Political Science, Political and Economic Philosophy, Professional Writing, English, Marketing, Technology Development, Respiratory Therapy and Teacher Preparation. Upon completion of the Modern Language programs, students will acquire the following competencies:
a) listening: understanding main ideas and most details of connected discourse on a variety of topics
b) speaking: discussing familiar topics in the context of common social situations
c) reading: skimming and scanning cultural texts for global and specific information
d) writing: joining sentences in simple discourse in paragraph length on familiar topics
e) cultural awareness: understanding behavioral patterns and demonstrating knowledge of the achievements of the culture
f) critical thinking: synthesizing language patterns and rules in order to create meaning in the target language

\section*{Requirements for Romance Language Major Bachelor of Arts Degree}

The Romance Language Major combines the study of Spanish and French. To earn a bachelor of arts degree in Romance Languages, the student must:
a) satisfy the core requirements, outlined on pp. 14-15 this catalog,
b) complete a minimum of 24 credits of Spanish and French courses beyond the core, with at least 15 credits in the primary language and at least 9 credits in the secondary language,
c) complete two cognate courses from among the offerings in international studies, English and history or two MOL electives,
d) complete a senior seminar and pass a comprehensive exam.
e) maintain a GPA of 2.8 in the major and earn a "C" grade or higher in all language courses.

Romance Language majors are strongly encouraged to study abroad for a summer or for a semester, or to perform an internship either at home or abroad in order to develop communicative competence in the languages studied.

\section*{Requirements for Spanish or French Major Bachelor of Arts Degree}

To earn a B.A. with a major in Spanish or French, the student must:
a) satisfy the core requirements, outlined on pp. 14-15 of this catalog,
b) complete a minimum of 27 credits beyond the core in the major language, with at least 15 credits (including senior seminar) taken at Wheeling Jesuit.
c) complete a senior seminar and pass a comprehensive exam.
d) maintain a GPA of 2.8 in the major and earn a " \(C\) " grade or higher in all language courses.

Language majors are strongly encouraged to study abroad for a semester or summer in order to develop communicative competence in the language studied.

To ensure transfer of credits, the student should obtain departmental approval before beginning a program of study abroad.

\section*{Requirements for a Minor in Spanish or French}

To earn a minor in Spanish or French, the student must:
a) satisfy the core requirements,
b) complete a minimum number of 15 credits ( 5 courses) beyond the core in the language.
c) Maintain a GPA of 2.8 in the minor and earn a " C " grade or higher in all language courses.

\section*{Study Abroad and International Internships}

It is highly recommended that students who wish to develop an in-depth understanding of another language, culture and customs participate in a semester of study abroad, a service learning experience or an international internship. Through the Council on International Educational Exchange (CIEE), students may undertake an international internship. Students should contact the faculty in Modern Languages and the Study Abroad Coordinator early in the process in order to ensure proper transfer of credits. Normally, students receive 12-15 credits for one academic semester abroad.

\section*{Core Requirements}

Based on placement results, students will fulfill Modern Language Core by completing the appropriate requirements as outlined below:

\section*{For students who place in the 101 level:}

Two courses in the same language:
FRE 101 and FRE 102 or
SPA 101 and SPA 102 or

\section*{For students who place in the \(\mathbf{1 0 2}\) level:}

Two courses in the same language:
FRE 102 and FRE 111 or SPA 102 and SPA 111
For students who place in the \(\mathbf{1 1 1}\) level:

One course: FRE 111 or SPA 111 or an upper-level course (200+)

\section*{For students who place beyond the 111 level:}

Students in Spanish must take SPA 205. French students must take any 200-level course.

\section*{For Nursing, Nuclear Medicine, Respiratory Therapy, and Athletic Training majors:}

One Course: SPA 106 Medical Spanish I OR Completion of core sequence based on placement results: French, or Spanish 101 and 102, 102 and 111, 111 or upper.

\section*{Placement}

Placement for all students will be determined by a placement exam. Students placing in level 102 of a language must complete through the 111 level. ONLY those students placing in 101 will be permitted to complete the core with the 102 level. Students placing in 102 may opt to begin their language study with 101 ; in these cases the credits earned for the 101 course will be considered as electives and not core credits. If English is a foreign language, there will be no requirement to study a language other than English. (See Notes, under Admission)

\section*{Core Fulfilling Courses}

Core courses are offered in French and Spanish. The core sequence consists of three 3-credit courses: 101 (Intro 1), 102 (Intro 2) and 111 (Core Skills Development). The student enters the sequence on the basis of prior study and/or a placement exam. Courses 101 and 102 introduce basic pronunciation, vocabulary, grammar and syntax. Course 111 emphasizes conversational skills in the context of familiar material and introduces new cultural readings. SPA 106, Medical Spanish I (grammar and vocabulary for medical personnel) serves as an alternative core fulfilling course for NUR, RET and NME majors only. SPA 106 will not satisfy the core for those students who subsequently change their major from Nursing, Respiratory Therapy or Nuclear Medicine.

\section*{Course Descriptions:}

\section*{French Course Descriptions}

\section*{FRE 101 Introduction to French I (3 crs)}

This is the first in a series of three introductory-level French language classes. The focus will be on the development of listening, speaking, reading, writing, and culture. It is intended primarily for students who have not studied the language or have had only one year of foreign language instruction. \(\mathbf{F}, \mathbf{S}\)

\section*{FRE 102 Introduction to French II (3 crs)}

This is the second in a series of three introductory-level French classes. The focus will be on the continuation of the development of listening, speaking, reading, writing and culture. It is intended for those students who have had two years of study in high school or those who have completed the first introductory course. Prerequisite: FRE 101 or placement \(\mathbf{F}, \mathbf{S}\)

\section*{FRE 111 Core Skills Development (3 crs)}

This is the third in a series of three introductory-level French classes. The focus will be on the development of conversational skills within culturally significant contexts. It is intended for those who have completed the second introductory class or those who have had more than two years of foreign language instruction in high school. Prerequisite: FRE 102 or placement \(\mathbf{F}, \mathbf{S}\)

FRE 205 Grammar Review ( 3 crs )
Review of difficult grammatical topics; four skills enhancement. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 210 Readings ( \(\mathbf{3} \mathrm{crs}\) )}

Emphasis on reading French texts, both literary and nonliterary, with discussion and composition. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 220 Culture Through Communication ( \(\mathbf{3} \mathrm{crs}\) )}

Examination of the culture of the Francophone world through written and oral communication. Study of beliefs, lifestyles, attitudes, habits. Reading of periodicals, correspondence, role-playing, films and other activities to enable students to make cross-cultural comparisons. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 230 Conversation (3 crs)}

Emphasis on communicative skills in the context of everyday experiences in a Francophone environment; basic phonetics. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 240 Composition ( \(\mathbf{3} \mathbf{~ c r s ) ~}\)}

Development of basic composition skills; grammar and syntax; reading for models. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 320 French Civilization and Culture ( \(\mathbf{3} \mathrm{crs}\) )}

Four-skills enhancement through an examination of the foundation and the highlights of French culture. Prerequisite: Core Completion or instructor's permission. D

FRE 321 Survey of French Literature I (3 crs)
Medieval through 18th Century. Prerequisite: Core Completion or instructor's permission. D
FRE 322 Survey of French Literature II (3 crs)
19th and 20th Century. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 330 Advanced Conversation (3 crs)}

Discussion of topics related to Francophone world advanced phonetics. Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 340 Advanced Composition (Stylistics) (3 crs)}

Prerequisite: Core Completion or instructor's permission. D

\section*{FRE 350 Special Topics ( 3 crs )}

Period, genre, or author studies; may be repeated when topics change. Core completion or instructor's permission. D

\section*{FRE 484 Senior Seminar ( 3 crs )}

An individualized capstone course, to synthesize the historical and artistic achievements of the culture; one component will be a comprehensive exam (which may be repeated once if necessary) to evaluate the content of the student's program of studies as well as skills development. Another component may be a research project. D

\section*{MOL 250 Modern Language Methods (3 crs)}

Introduction to foreign language methodology and assessment tools for teachers. The course is taught in English. Prerequisites: core completion or instructor's permission. D

\section*{Course Descriptions}

\section*{SPA 101 Introduction to Spanish I (3 crs)}

This is the first in a series of three introductory-level Spanish language classes. The focus will be on the development of listening, speaking, reading, writing, and culture. It is intended primarily for students who have not studied the language or have had only one year of foreign language instruction. F,S

\section*{SPA 102 Introduction to Spanish II (3 crs)}

This is the second in a series of three introductory-level Spanish classes. The focus will be on the continuation of the development of listening, speaking, reading, writing and culture. It is intended for those students who have had two years of study in high school or those who have completed the first introductory course. Prerequisite: SPA 101 or placement \(\mathbf{F}, \mathbf{S}\)

\section*{SPA 203 Core Skills (3 crs)}

This is the third in a series of three introductory-level Spanish classes. The focus will be on the development of conversational skills within culturally significant contexts. It is intended for those who have completed the second introductory class or those who have had more than two years of foreign language instruction in high
school. Prerequisite: SPA 102 or placement \(\mathbf{F}\),S

\section*{SPA 205 Intermediate Spanish II (3 crs)}

This is the second in a series of two intermediate-level Spanish classes. The focus will be on the development of communicative proficiencies within culturally significant contexts. Prerequisite: SPA 203 or placement. F,S

\section*{SPA 210 Readings (3 crs)}

Reading selected Spanish texts, both literary and nonliterary, with discussion and composition. Prerequisite: SPA 205 or instructor's permission. SO

\section*{SPA 220 Culture Through Communication (3 crs)}

Examination of the culture of the Hispanic world through written and oral communication. Study of beliefs, lifestyles, attitudes, habits. Readings of periodicals, correspondence, role-playing, films and other activities to enable students to make cross-cultural comparisons. Prerequisite: SPA 205 or instructor's permission. SE

\section*{SPA 222 Medical Spanish II (3 crs)}
(Designed as a follow up to SPA 106)
Skills enhancement and vocabulary building in the medical area. Prerequisite: SPA 106 or instructor's permission. D

\section*{SPA 224 Business Spanish (3 crs)}

Skills enhancement and vocabulary building in the business area. Prerequisite: SPA 111 or instructor's permission. D

\section*{SPA 230 Conversation (3 crs)}

Emphasis on communicative skills in the context of everyday experiences in a Hispanic environment; basic phonetics. Prerequisite: SPA 205 or instructor's permission. SO

\section*{SPA 240 Composition ( \(\mathbf{3} \mathbf{c r s}\) )}

Development of basic composition skills; grammar and syntax; reading for models. Prerequisite: SPA 205 or instructor's permission. FO

\section*{SPA 305 Advanced Spanish (3 crs)}

This is a proficiency-oriented course focusing on speaking, writing, listening comprehension, and reading at ACTL's Advanced Mid level. This course is the last in a series of skill development courses. F,S

\section*{SPA 320 Hispanic Civilization and Culture (3 crs)}

Four-skills enhancement through an examination of the foundation and the highlights of Hispanic and HispanoAmerican culture. Prerequisite: SPA 220 or instructor's permission. FE

SPA 321 Survey of Peninsular Spanish Literature (3 crs)
Prerequisite: SPA 210 or instructor's permission. D
SPA 322 Survey of Spanish American Literature (3 crs)
Prerequisite: SPA 210 or instructor's permission. D

\section*{SPA 330 Advanced Conversation (3 crs)}

Discussion of topics related to the Hispanic world advanced phonetics. Prerequisite: SPA 230 or instructor's permission. FO

\section*{SPA 340 Advanced Composition (3 crs)}

Prerequisite: SPA 240 or instructor's permission. SE

\section*{SPA 350 Special Topics (3 crs)}

Period, genre, or author studies; may be repeated when topics change. Instructor's permission. D

\section*{SPA 484 Senior Seminar ( 3 crs )}

An individualized capstone course taken after the successful completion of courses for the major with a "C" grade or higher, to synthesize the historical and artistic achievements of the culture; one component will be a comprehensive exam (which may be repeated once if necessary) to evaluate the content of the student's program of studies as well as skills development. D

\section*{Nuclear Medicine Technology}

Contact Person: Deborah Wilkinson, MS, CNMT,Clinical Assistant Professor of Nuclear MedicineTechnology Program
**Note: The Nuclear Medicine program is no longer accepting new students and will be discontinued at the conclusion of the 2015-2016 academic year.

\section*{Requirements for Nuclear Medicine Technology Concentration Bachelor of Science Degree}

Upon completion of the Nuclear Medicine program, students will be able to:
1. Work in nuclear medicine department in a hospital, outpatient facility or mobile (traveling) unit.
2. Easily train and work in a PET (Positron Emission Tomography), radiopharmacy or secure a sales position.
3. Supervise or teach nuclear medicine in a hospital, university program or clinical facility.
4. Take classes that would allow the student to be eligible to enter medical, dental or chiropractic school.
5. Pursue advanced degrees.

Students will be given a handbook that defines rules, regulations, and standards for the student's continued progression in the major. In addition to completing the University core curriculum requirements, outlined on pp. 44 of this catalog, the Nuclear Medicine Technology major must complete the following didactic and clinical courses with a grade of "C" or higher.
\begin{tabular}{|c|c|c|}
\hline BIO 109 & General Biology & (3 crs) \\
\hline BIO 121 & Methods of Biology & (1 cr) \\
\hline BIO 127 & Anatomy and Physiology Lab & (1 cr) \\
\hline BIO 128 & Anatomy and Physiology I & (3 crs) \\
\hline BIO 129 & Anatomy and Physiology II & (3 crs) \\
\hline CHE 110 & Chemistry & (4 crs) \\
\hline CHE 121 & Chemistry Lab & (1 cr) \\
\hline CLS 121 & Introduction to Hospital Science & (1 cr) \\
\hline CLS 215 & Epidemiology & (2 crs) \\
\hline CLS 234 & Pathophysiology & (3 crs) \\
\hline CLS 311A & Introduction to Pharmacology & (1 cr) \\
\hline CLS 312 & Emergency Life Support Technique & (1 cr) \\
\hline CLS 320A & Management Techniques for Health Sci & (1 cr) \\
\hline CLS 320B & Management Practicum & (1 cr) \\
\hline CLS 321 & Intro to Research in Health care & (3 crs) \\
\hline CLS 330A & Principles of Instruction & (1 cr) \\
\hline CLS 330B & Instruction Practicum & (1 cr) \\
\hline MAT 108 & Pre-Calculus & (3 crs) \\
\hline NME 225 & Nuclear Radiation Physics & (2 crs) \\
\hline NME 225L & Nuclear Radiation Physics Lab & (1 cr) \\
\hline NME 226 & Radiation Biology and Protection & (3 crs) \\
\hline NME 320 & Radiopharmacy & (2 crs) \\
\hline NME 320A & Radiopharmacy Lab & (1 cr) \\
\hline NME 332 & Lab Skills for Nuclear Medicine & ( 2 cr ) \\
\hline NME 340 & Essentials of Nuclear Medicine & (3 cr) \\
\hline NME 342 & Human Cross Sectional Anatomy & (3 cr) \\
\hline
\end{tabular}

NME 345
NME 362B
NME 363
NME 365
NME 367
NME 368
NME 330
NME 401
NME 402
NME 403
NME 410
NME 411
NME 420
NME 430
NME 440
NME 464
NME 465
NME 467
NME 468
NME 469
NME 470
NME 477
PHY 130

PET CT Physics
Instrumentation and Quality Control II
Clinical Radiopharmacy
In Vivo Studies I
Nuclear Cardiology I
Nuclear Cardiology II
Clinical Essentials I
Clinical Practicum I
Clinicial Practicum II
Clinical Practicum III
Clinical Essentials II
Clinical Essentials III
Registry Review
Research Capstone
Special Topics for Nuclear Medicine
In Vivo Studies II
In Vivo Studies IV
Clinical Computer Applications
Departmental Administration
In Vitro Studies
Advanced Clinical Experience
Clinical Computer Applications II
Physics for Allied Health
(3 cr)
(1 cr)
(3 crs)
(3 crs)
( 2 crs )
(2 crs)
(1 cr)
(3 crs)
(3 crs)
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(1 cr)
(1 cr)
(3 crs)
(3 crs)
(3 crs)
(2 cr)
(1 cr)
(3 crs)
( \(1-3 \mathrm{crs}\) )
(2cr)
(3 crs)

\section*{Course Descriptions:}

\section*{NME 225 Nuclear Radiation Physics (3 crs)}

This course will develop the student's understanding of the physics of nuclear medicine as it is applied daily by the technologist. The student will also develop an understanding of the concepts as related to instrumentation, quality control, imaging techniques, and radiation doses. Su, F

\section*{NME 225L Nuclear Radiation Physics Lab (1 cr)}

Course provides time for students to explore the concepts of nuclear radiation physics, including nuclear medicine mathematics and statistics. Prerequisite: Concurrent with NME 225 Su, F

\section*{NME 226 Radiation Biology and Protection (3 crs)}

This course combines radiation biology and radiation safety principles and concepts covering the interactions of ionizing radiation with human tissue, its potential effects, and dosimetry as well as the ALARA philosophy, and individual regulations and practices in content areas such as radiopharmacy, instrumentation, and radionuclide therapy. F

\section*{NME 320 Radiopharmacy ( 2 crs )}

Detailed course that covers the theory and practice of radiopharmacy, including the methods of production, formulation of radiopharmaceuticals, and performance of quality control procedures. This includes biochemical and physiological properties of radiopharmaceuticals and mechanisms of localization and bio-routing. \(\mathbf{S}\)

\section*{NME 320A Radiopharmacy Lab (1 cr)}

Lab-directed class which will encompass practical applications of a radiopharmacy lab. S

\section*{NME 332 Lab Skills for Nuclear Medicine (2 crs)}

Class focuses on the interaction of nuclear medicine technologist students in medical informatics, ethics and law, and patient care. \(\mathbf{S}\)

\section*{NME 340 Essentials of Nuclear Medicine Imaging ( 3 crs )}

Introduction to diagnostic procedures, including anatomy and physiology, pathophysiology, and protocols for routine and non-routine nuclear medicine procedures. \(\mathbf{S}\)

\section*{NME 342 Human Cross Sectional Anatomy (3 crs)}

The purpose of this course is to provide each student with knowledge of human cross sectional anatomy. Students will examine diagnostic studies done using magnetic resonance and computed tomography, learning to identify both the structures and relative positions of each structure to others in the body. \(\mathbf{S}\)

\section*{NME 345 PET CT Physics (3 crs)}

The purpose of this course is to provide each student with an understanding of the principles of Positron Emission Tomography and Transmission Computed Tomography and how the two modalities are integrated to create diagnostic images. \(\mathbf{S}\)

\section*{NME 362B Instrumentation \& Quality Control II (1 cr)}

The course exposes the student to a clinical environment where the applied theory of instrumentation and quality control is utilized and assessed. Prerequisite: Completion of pre-practicum courses.

\section*{NME 363 Clinical Radiopharmacy ( 2 crs )}

Practical application of the theory and practice of radiopharmacy, including preparation and calculation of the dose to be administered, quality control, radiation safety, and applicable regulations. The routes of administration, biodistribution mechanisms, interfering agents, contraindications, and adverse effects of administered materials are addressed along with non-interventional drugs and contrast media used as part of nuclear medicine procedures. Prerequisite: Completion of pre-practicum courses.

\section*{NME 367 Nuclear Cardiology I (2 crs)}

Diagnostic cardiac evaluation utilizing both camera and computer, e.g., Thallium-201, first pass, gated wall motion, shunt and other procedures as software is available. Prerequisite: Completion of pre-practicum courses. Su

NME 368 Nuclear Cardiology II (2 crs)

Course is a continuation of NME 367 but also includes current information regarding the field of nuclear cardiology as a specialty area in nuclear medicine. Prerequisite: NME 367 F

\section*{NME 420 Registry Review (1 cr)}

A comprehensive review of nuclear medicine theory, practice, policies, and procedures in preparation to complete the national certification exams. \(\mathbf{S}\)

\section*{NME 430 Research Capstone (1 cr)}

This is a capstone course in which the student will develop a research proposal, conduct the proposed research, and write a publishable article. Student must apply previously-learned research skills and knowledge. Prerequisite: CLS 221 or instructor approval S

\section*{NME 440 Special Topics for Nuclear Medicine ( 3 crs)}

Course requirements include development of a nuclear medicine-related case study, which will be presented both in writing and orally at the end of the senior year. \(\mathbf{S}\)

\section*{NME 467 Clinical Computer Application (2 crs)}

Demonstrate understanding of configuration, function, and application of computers and networks in nuclear medicine. Students will show extensive experience performing data acquisition, manipulation, and processing. Prerequisite: Completion of pre-practicum courses. \(\mathbf{F}\)

\section*{NME 477 Clinical Computer Applications II (2 crs)}

The second of two clinical computer courses in which students review and apply the learned principles of nuclear medicine technology software applications, processing and display in their advanced clinical rotation experience. \(\mathbf{S}\)

\section*{NME 330 Clinical Essentials I (1 cr)}

The first of three clinical (didactic) courses in which students review and challenge the learned priciples of nuclear medicine technology from their clinical setting. Includes review and integration of patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and clinical protocols and procedures. \(\mathbf{F}, \mathbf{S}\), SU

\section*{NME 401 Clinical Practicum I (3 crs)}

The first of three clinical practicums in which students apply the principles of nuclear medicine technology in a clinical setting. Includes patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and demonstration of clinical competency in performing nuclear medicine procedures. \(\mathbf{F}, \mathbf{S U}\)

\section*{NME 402 Clinical Practicum II (3 cr.)}

The second of three clinical practicum in which students apply the principles of nuclear medicine technology in a clinical setting. Includes patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and demonstration of clinical competency in performing nuclear medicine procedures. \(\mathbf{F}, \mathbf{S U}\)

\section*{NME 403 Clinical Practicum III (3 cr.)}

The third of three clinical practicum in which students apply the principles of nuclear medicine technology in a clinical setting. Includes patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and demonstration of clinical competency in performing nuclear medicine procedures. \(\mathbf{F}, \mathbf{S U}\)

\section*{NME 410 Clinical Essentials II (3 crs)}

The second of three clinical (didactic) courses in which students review and challenge the learned principles of nuclear medicine technology in their intermediate clinical rotation experience. Includes review and integration of patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and clinical protocols and procedures. \(\mathbf{F}, \mathbf{S U}\)

\section*{NME 411 Clinical Essentials III (3 cr.)}

The third of three clinical (didactic) courses in which students review and challenge the learned principles of nuclear medicine technology in their advanced clinical rotation experience. Includes review and integration of patient care and recordkeeping, radiation safety techniques, radiopharmacy, quality control procedures, and clinical protocols and procedures. \(\mathbf{F}, \mathbf{S U}\)

\section*{NME 470 Advanced Clinical Experience (1-3 crs)}

Elective course in a specialized clinical area, directed by a technologist, therapist, or physician, and resulting in a summary paper. Prerequisite: Completion of pre-practicum courses. D

\section*{Nursing}

Denise Lucas, B.S., M.S.N., Ph.D.;Department Chair:
Vera Barton-Caro, PhD, RN, FNP-BC
Janet Bischof, PhD, RN
Sunni Burnett, MSN, RN
Maryanne Capp, MSN, RN
Regina Demasi, MSN, RN, FNP-BC
Cheryl Doyle, MSN, RN, FNP-BC
Karen Fahey, \(\quad M S N, R N, C N M, F N P-B C\)
Helen Faso, PhD, RN
Laurie Jones, MSN, RN, FNP-BC
Angela Thompson, \(D N P, R N, F N P-B C, W H N P B C\)
Ashley Tucholski, MSN, RN
The nursing program provides an integrated curriculum of liberal arts and nursing courses for the personal and professional development of the student as a servant leader in professional practice. Graduates are prepared to assume generalist roles within complex health care settings, such as: acute care hospitals, long-term care facilities, nursing homes, clinics, schools, health centers and community agencies. Upon successful completion of the program, the graduate is awarded a bachelor of science in nursing degree, and is eligible to apply to a state board of nursing for the licensure examination to become a registered nurse. Graduates of the BSN nursing program will demonstrate the following program outcomes:
1. Synthesize knowledge from the sciences and the humanities as a basis for theory and practice in nursing within a systems framework.
2. Synthesize knowledge and skills in applying the nursing process for patient-centered care with patients in various stages of health-wellness.
3. Assume accountability for evidence-based nursing practice consistent with professional standards and ethical codes.
4. Communicate effectively with patients and with members of the interprofessional team in the promotion of health/wellness.
5. Provide leadership for decision making related to safe, quality care.
6. Integrate knowledge of multidimensional care into evidence-based practice.
7. Integrate information management and patient care technologies into the delivery of safe, quality care.
8. Assume responsibility for personal and professional development.
9. Synthesize altruism, autonomy, human dignity, integrity and social justice in nursing practice.

\section*{Requirements for Nursing Major Bachelor of Science in Nursing Degree}

In addition to completing the core curriculum requirements, nursing majors must complete the following courses:
\begin{tabular}{lll} 
CLS 215 & Introduction to Epidemiology & \((2 \mathrm{crs})\) \\
BIO 129 & Anatomy and Physiology II & \((3 \mathrm{crs})\) \\
NUR 203 & Health Assessment & \((1 \mathrm{cr})\) \\
NUR 227 & Clinical Nutrition & \((1 \mathrm{cr})\) \\
NUR 230C & Basic Care Clinical & \((2 \mathrm{crs})\) \\
NUR 230D & Basic Care & \((3 \mathrm{crs})\) \\
NUR 309C & Introduction to Nursing Clinical & \((6 \mathrm{crs})\) \\
NUR 309D & Introduction to Nursing Care & \((4 \mathrm{crs})\) \\
NUR 319C & Acute Care Nursing I Clinical & \((3 \mathrm{crs})\) \\
NUR 319D & Acute Care Nursing I & \((4 \mathrm{crs})\) \\
NUR 320C & Acute Care II Clinical & \((3 \mathrm{crs})\) \\
NUR 320D & Acute Care Nursing II & \((3 \mathrm{crs})\) \\
NUR 323 & Introduction to Pathophysiology & \((2 \mathrm{crs})\) \\
NUR 326 & Psychopathology & \((2 \mathrm{crs})\) \\
NUR 327 & Elements of Research in Nursing & \((2 \mathrm{crs})\) \\
NUR 329 & Pharmacology & \((2 \mathrm{crs})\) \\
NUR 335 & Systems Concepts & \((1 \mathrm{cr})\) \\
NUR 405C & Multisystem Care I Clinical & \((5 \mathrm{crs})\)
\end{tabular}
\begin{tabular}{lll} 
NUR 405D & Multisystem Care Nursing I & \((3 \mathrm{crs})\) \\
NUR 406C & Multisystem II Clinical & \((3 \mathrm{crs})\) \\
NUR 406D & Multisystem Care Nursing II & \((3 \mathrm{crs})\) \\
NUR 421 & Pathophysiology & \((2 \mathrm{crs})\) \\
NUR 422C & Complex Cares Nursing I Clinical & \((3 \mathrm{crs})\) \\
NUR 422D & Complex Cares Nursing I & \((3 \mathrm{crs})\) \\
NUR 423C & Complex Care II Clinical & \((5 \mathrm{crs})\) \\
NUR 423D & Complex Nursing II Care & \((2 \mathrm{crs})\) \\
NUR 426 & Nursing Trends and Issues & \((2 \mathrm{crs})\) \\
NUR 480 & Senior Seminar I & \((1 \mathrm{cr})\) \\
NUR 481 & Senior Seminar II & \((1 \mathrm{cr})\) \\
PSY 212 & Developmental Psychology & \((3 \mathrm{crs})\)
\end{tabular}

\section*{Special Notes on Major Requirements:}
1. Nursing majors meet their core curriculum science requirements by completing CHE 105 , Introductory Chemistry and BIO 128 Human Anatomy\& Physiology I.
2. All nursing majors must take MAT 105, Introduction to Statistics I; this course will satisfy the core curriculum math requirement.
3. Nursing majors may satisfy the Modern Language core requirement by completing one, three credit course, Medical Spanish (SPA 106) or by fulfilling the regular requirement.
4. The social and behavioral sciences core is satisfied by completing PSY 110, General Psychology.
5. Nursing majors must provide their own transportation to clinical sites and are billed for liability insurance for clinical experiences.
6. In order to enter the second semester sophomore year courses, NUR 230 and NUR 203, students must complete a background check and drug screen with clean results and have an overall grade point average of 3.0, achieve an advanced score on the TEAS test, and have successfully completed the prerequisites: CHE 105, PSY 110, BIO 128, NUR 227 and be enrolled in the concurrent: BIO 129, BIO 215 and PSY 212.
7. Nursing students must receive a grade of "C+" or higher in all science and nursing courses in order to progress.
8. Nursing majors will receive a separate handbook which outlines specific policies for them, including the progression policies of the major. The nursing faculty also reserves the right to exclude or remove from the clinical setting any student who, in the opinion of the instructor, has demonstrated behavior or attitudes incompatible with safe, ethical, or professional development and which, therefore, could jeopardize the welfare of patients.
9. Nursing courses including a clinical experience have a "C" following the course number. Each clinical credit is equivalent to 2 hours a week of clinical experience.

\section*{Course Descriptions}

\section*{NUR 203 Health Assessment (1 cr)}

This course introduces the concept of physical assessment throughout the life span. Prerequisites: NUR 227, PSY 110, BIO 128. Concurrent: NUR 230, BIO 129, CLS 215.

\section*{NUR 227 Clinical Nutrition (1 cr)}

Study of clinical nutrition as related to the nurse's role in promoting health. Concurrent: PSY 110, BIO 128.

\section*{NUR 230D Basic Care (3 crs)}

A study and practice of basic patient care. Prerequisites: BIO 128, PSY 110, NUR 227. Concurrent: PSY 212, BIO 129, CLS 215, NUR 203, NUR 230C NUR 230C Basic Care Clinical (2 crs ) This is the clinical component of NUR 230D.

\section*{NUR 309D Introduction to Nursing Care (4 crs)}

This course examines the foundational principles of the delivery of nursing care. Health care issues are explored and students are introduced to basic nursing concepts. Prerequisites: Same as NUR 335. Concurrent: NUR 335, 329, 327, NUR 309C.

\section*{NUR 309C Introduction to Nursing Care Clinical (6 crs)}

This is the clinical component of NUR309D. Concurrent: NUR309D

\section*{NUR 319D Acute Care Nursing I (4 crs)}

This course focuses on the care of clients with acute health care needs as well as clients who require adaptation across the life span with special emphasis on the maternal, child and psychiatric client. Prerequisites: NUR 335, 329, 327. Concurrent: NUR 319C, 323, 326, 320C/D.

\section*{NUR 319C Acute Care Nursing I Clinical (3 crs)}

This is the clinical component of NUR 319 D. Concurrent NUR319D

\section*{NUR 320D Acute Care Nursing II (3 crs)}

This course focuses on the care of clients with acute health care needs as well as clients who require adaptation across the life span with special emphasis on the adult client. Prerequisites: NUR 335, 329, 309C/D, 327. Concurrent: NUR 319C/D, 320C, 323, 326.

\section*{NUR 320C Acute Care Nursing II Clinical (3 crs)}

This is the clinical component of NUR 320D. Concurrent NUR320D

\section*{NUR 323 Introduction to Pathophysiology (2 crs)}

Examines disruptions of normal physiology and related signs, symptoms, physical and laboratory findings. Correlates with NUR 320 and provides underpinning for that course. Prerequisites: NUR 329, 327, 309C/D. Concurrent: NUR 326, 320C/D, 319C/D.

NUR 326 Psychopathology ( 2 crs )
Major emphasis placed on pathology of mental health problems. Prerequisite: NUR 329, 335, 309C/D, 327.

\section*{NUR 327 Elements of Research in Nursing ( 2 crs )}

Critical review and analysis of research in nursing. Specific guided reviews of research reports are conducted. Prerequisites: MAT 105, NUR 203, 230C/D.

\section*{NUR 329 Pharmacology ( 2 crs )}

Study of the principles of pharmacology as related to the nurse's role in monitoring the client's status and promoting health. Prerequisites: NUR 227, 230C/D, BIO 129, CHE 105.

\section*{NUR 335 Systems Concepts (1 cr)}

This course examines the interaction of the nurse with various systems, including the family, community and the profession. Prerequisites: PSY 212, CHE 105, CLS 215, BIO 128/129, NUR 227/230C/D, 203.

\section*{NUR 405D Multisystem Care Nursing I (3 crs)}

This course examines the care of patients with multisystem needs throughout the lifespan. The primary focus is on the needs of adult clients. Lifelong care and prevention of complications are emphasized. Prerequisites: NUR 323, 326, 320C/D, 319C/D. Concurrent: NUR 421, 480, 406C/D, and 405C.

\section*{NUR 405C Multisystem Care Nursing I Clinical (5 crs)}

This is the clinical component of NUR 405D. Concurrent NUR405D

\section*{NUR 406D Multisystem Care Nursing II (3 crs)}

This course examines the care of patients with multisystem needs throughout the lifespan. The primary focus is on the needs of clients within the pediatric and psychiatric populations. Lifelong care and prevention of complications are emphasized. Prerequisites: NUR 323, 326, 320C/D and 319C/D. Concurrent: NUR 421, 480, 405C/D and 406C.

\section*{NUR 406C Multisystem Care Nursing II Clinical (3 crs)}

This is the clinical component of NUR 406 D. Concurrent NUR406D

\section*{NUR 421 Pathophysiology (2 crs)}

Continuation of the study of disrupted physiology and related signs, symptoms and findings. Correlates with NUR 405D and provides underpinning for that course. Prerequisites: NUR 323, 326, 320C/D.

\section*{NUR 422D Complex Nursing Care I (3 crs)}

This course examines care of the client with complex needs. Emphasis is placed on setting priorities in acute crisis as well as long term health to prioritize and make decisions while delivering complex care in varied settings. Prerequisites: NUR 421, 405C/D and 406C/D. Concurrent: 426, 481, 412 and 423C/D.

\section*{NUR 422C Complex Nursing Care I Clinical (3 crs)}

This is the clinical component of NUR 422D.

\section*{NUR 423D Complex Nursing Care II (2 crs)}

This course examines care of the client with complex needs. Emphasis is placed on decision making in complex situations and on making the transition from student to practitioner of nursing. Prerequisites: NUR 421, 405C/D, and 406C/D. Concurrent: 426, 481, 412, 422C/D and 423C.

\section*{NUR 423C Complex Nursing Care II Clinical (5 crs)}

This is the clinical component of NUR 423D.

\section*{NUR 426 Nursing Trends and Issues ( 2 crs )}

Analysis of the evolution and significance of current trends and issues in nursing. Prerequisite: Senior standing or permission of faculty.

\section*{NUR 480 Senior Seminar I (1 cr)}

Beginning synthesis of nursing knowledge for the NCLEX-RN exam. Test-taking strategies are refined and specific content areas are emphasized. Prerequisite: Senior standing.

\section*{NUR 481 Senior Seminar II (1 cr)}

Continuing synthesis of nursing knowledge for the NCLEX-RN exam. Emphasis on decision-making in specific areas of nursing. Prerequisite: Senior standing.

\section*{Philosophy}

Contact Persons: Beverly J.B. Whelton, Ph.D.
Darin S. McGinnis, Ph.D.
James H. Stover, Th.M., Ph.D. (c)
The Jesuit tradition of education always has championed the importance of philosophy, both for training the mind and for cultivating a love of truth and an integrity in its pursuit. Philosophy invites a student into dialogue with the significant truth-seekers of past and present. Thus it hopes to develop within the student a respect for great ideas and great minds, and a life-long commitment to the search for truth, wisdom and justice.

\section*{Requirements for Bachelor of Arts Degree in Philosophy}

In addition to completing the core curriculum requirements, philosophy majors must complete 30 credits in philosophy, which includes PHI 305: Ethics and two of the three courses in the history of philosophy (PHI 307, 308 and 309), all three history of philosophy courses are recommended. The combined GPA for all philosophy courses taken towards the major must be at least 2.25. Senior majors must also register for and pass PHI 486 Senior Seminar the Spring semester of their senior year.

\section*{Minor in Philosophy}

A student may minor in philosophy, by taking, with the approval of the department, four courses beyond PHI 205, at least one of which is to be a 300/400 level course.

\section*{Political and Economic Philosophy}

Coordinator: John Poffenbarger, Ph.D.
A trans-disciplinary major that integrates the knowledge gained by the study of economics, political science and philosophy. Students will be encouraged and guided in an exploration of each of these disciplines to understand how their connections affect ethics, law and public policy. This major is especially well-suited for pre-law students.

\section*{Requirements for Bachelor of Arts Degree in Political \& Economic Philosophy}

\section*{Core-Fulfilling Political \& Economic Philosophy Courses (all six courses required)}

PHI \(105 \quad\) Logic and Knowledge
\begin{tabular}{ll} 
PHI 205 & Philosophy of the Human Person \\
PHI 305 & Ethics \\
POS 110 & American Political Process \\
ECO 110 & Principles of Macroeconomics \\
ECO 221 & Principles of Microeconomics
\end{tabular}

\section*{Major Requirements}
(1) The student will take 4 courses from each of the following three areas:
a) philosophy
(12 crs)
b) political science (12 crs)
c) economics
(12 crs)
(2) PHI 485 Seminar in Political and Economic Philosophy (3 crs)
( 39 crs total)
Philosophy
Required (1 course):
PHI 254 Philosophy of Law
Electives (Choose any three non-core philosophy courses, one of which must be at the 300 level)
Political Science
Required (2 courses):
POS 346 Ancient Political Thought
POS 348 Modern Political Thought
Electives (Choose two from the following):
\begin{tabular}{ll} 
POS 211 & Comparative Politics \\
POS 212 & Global Politics \\
POS 310 & Church and State \\
POS 329 & Constitutional Law \\
POS 330 & Civil Rights and Liberties \\
POS 333 & Global Economy
\end{tabular}

Economics Required (2 courses):
ECO 321 History of Economic Thought
MGT 315 Conceptual Foundations of Business

Electives (Choose two from the following):
\begin{tabular}{ll} 
BUS 315 & Business Law \\
BUS 489 & Global Economic Development \\
ECO 311 & The Market Economy \\
ECO 318 & International Economics \\
ECO 324 & Contemporary Economic Problems \\
MGT 311 & International Business \\
MGT 316 & Business and Society \\
PHI 355 & Business Ethics \\
Required: &
\end{tabular}

PHI 485 Senior Seminar in Political and Economic Philosophy

\section*{Course Descriptions}

\section*{Core-Fulfilling Courses}

For cultivation of critical reasoning and discernment of good arguments, Wheeling Jesuit University recommends the student take Logic and Knowledge (PHI 105) early in the student's academic career. Building on this, the student explores the meaning of being human and gains philosophical perspectives in Philosophy of the Human Person (PHI 205). The core requirement then turns to questions of how we ought to be as persons in the world. Recognizing the need for both reason and faith, the student is able to fulfill the ethics requirement in either PHI 305 or RST 305.

\section*{PHI 105 Logic and Knowledge (3 crs)}

Introduction to the fundamentals of critical reasoning (e.g.: the structure of deductive and inductive arguments; fallacies; the square of opposition and categorical syllogisms) and the ways in which critical reasoning integrates with the basic questions and positions in the philosophy of knowledge.

\section*{PHI 205 Philosophy of the Human Person (3 crs)}

A philosophical study of the human person as a being who, while embodied in nature, is capable of rationally knowing, freely choosing and creatively acting as a unique individual open to communion with others and with the Transcendent. Prerequisite: PHI 105.

\section*{PHI 305 Ethics (3 crs)}

How ought human beings live in society? Study of the nature, types and criteria of values, with an in-depth study of ethical principles and their applications to certain contemporary moral problems, e.g., abortion, euthanasia, capital punishment, war and peace. Prerequisites: PHI 105, PHI 205 and junior status or permission of the department chair.

\section*{Thematic and Historical Philosophy Courses}

\section*{PHI 213 Aesthetics (3 crs)}

Philosophical analysis of the aesthetic, its foundation in human experience, its role in works of art, its relation to imagination and conceptual thought as explicated in major philosophies of art.

\section*{PHI 214 Philosophy of Religion (3 crs)}

A philosophical investigation of religion, its language and concepts, especially as it has developed historically in the West, and has been confronted by the phenomenon of contemporary atheism.

\section*{PHI 240 Philosophy of Peace and Justice ( 3 crs )}

An introduction to the study of peace and justice in an age of conflict and widespread inequities. The course draws upon the enduring wisdom of philosophical reflection, the rich tradition of Jesuit education and the developing insights of contemporary thought to uncover the roots of peace, justice and their opposites.

\section*{PHI 250 Philosophy of Jesuit Education (3 crs)}

An historical and philosophical overview of the Jesuit system of education; includes consideration of developmental and cultural influences in the lives of young people today, the characteristics and principles of the Ignatian world vision as applied to the academic process, and a review of the Ignatian vision in Wheeling Jesuit University practice.

\section*{PHI 254 Philosophy of Law (3 crs)}

This course examines the meanings, bases, purposes, sources, implications and types of law. Questions addressed include: What is legal positivism and mere penalism? Are law and morality related? Are civil laws necessarily just? Can civil disobedience ever be justified? How are law and authority connected? Upon what conditions does the legislative process depend? Should judges make laws? FE

\section*{PHI 295 Women and Philosophy (3 crs)}

A philosophical exploration of the historical and contemporary meaning of being women with an emphasis on the inherent dignity of women. It will also consider the contributions of selected women to philosophical scholarship along the traditional themes of beauty, truth, goodness and justice.

\section*{PHI 301 Person and Inquiry ( \(\mathbf{3} \mathbf{~ c r s}\) )}

A CORE fulfilling philosophical study of the human person and human inquiry. Humans are perceived to be embodied in nature and capable of rationally knowing, freely choosing, and creatively acting as a unique individual open to communion with others and with the Transcendent. Students increase their abilities in reason and argumentation through logical reasoning and a study of modes of testing arguments. Prerequisites: AD, or permission of instructor and \(A V P\).

\section*{PHI 307-309 History of Philosophy Sequence}

Examinations of the development and consequences of some fundamental concepts in metaphysics, epistemology, and ethics in the context of their relevant historical periods. Special emphasis is placed on the close reading of primary texts.

\section*{PHI 307 Ancient Philosophy ( 3 crs)}

Examinations of the development and consequences of some fundamental concepts in metaphysics, epistemology, and ethics in the context of the origin and development of Greek thinking, which provides the underpinnings for subsequent Western thought. Special emphasis is placed on the close reading of primary texts. Authors to be considered include the Pre-Socratics, Plato, and Aristotle. Prerequisites: PHI 105 and 205. SE

\section*{PHI 308 Medieval Philosophy ( 3 crs)}

Examinations of the development and consequences of some fundamental concepts in metaphysics, epistemology, and ethics in the context of the development of philosophy in the Middle Ages, largely through the lens of the Scholastic philosopher and theologians. Special emphasis is placed on the close reading of primary texts. Authors to be considered include Plotinus, Augustine, Aquinas, and Bonaventure. Prerequisites: PHI 105 and 205. FE

\section*{PHI 309 Modern Philosophy ( 3 crs)}

Examinations of the development and consequences of some fundamental concepts in metaphysics, epistemology, and ethics in the context of the post-Renaissance developments in European philosophy coinciding with the rise of modern scientific thought. Special emphasis is placed on the close reading of primary texts. Authors to be considered include Descartes, Hume, and Kant. Prerequisites: PHI 105 and 205. SO

\section*{PHI 311 Epistemology (3 crs)}

A critical examination of classical and contemporary theories and problems of knowledge, such as the possibility, origin, foundation, limits and validity of knowledge. Prerequisites: PHI 105 and 205.

\section*{PHI 315 Philosophy of Science (3 crs)}

A study of the historical and contemporary ontologies, epistemologies and axiologies of the physical, social and mathematical sciences. Prerequisites: PHI 105 and 205.

\section*{PHI 318 Symbolic Logic ( \(\mathbf{3} \mathbf{~ c r s ) ~}\)}

A study of the formal systems of deductive proofs of validity and the relationship between ordinary and symbolic languages. Prerequisites: PHI 105 and 205.

\section*{PHI 320 Bioethics ( \(\mathbf{3} \mathbf{~ c r s}\) )}

Philosophical study of the moral implications of situations, decisions and procedures that directly deal with human life in terms of its propagation, its health, its duration, its modification and its termination, as precipitated by the contemporary advances of biomedical technology. Prerequisites: PHI 105 and 205.

\section*{PHI 321 History of Economic Thought ( 3 crs )}

A study of the development of economic theories from classical to contemporary times with emphasis on examining their philosophical bases and implications. Prerequisites: PHI 105 and 205.

\section*{PHI 325 Asian Philosophy ( 3 crs)}

A study of the doctrines, ideals, and practices advanced by diverse traditions of Asian philosophical thought such as Hinduism, Buddhism, Confucianism, and Taoism. Prerequisites: PHI 105 and 205 or permission of instructor.

\section*{PHI 337 19th Century European Thought (3 crs)}

A study of the developing themes in European philosophy during the 19th century, with consideration of thinkers such as Fichte, Schelling, Hegel, Marx, Kierkegaard and Nietzsche. Prerequisites: PHI 105 and 205.

\section*{PHI 338 Contemporary Continental Philosophy ( 3 crs )}

A study of the developing themes in European philosophy during the 20th century, with consideration of thinkers such as Husserl, Heidegger, Camus, Sartre and Marcel. Prerequisites: PHI 105 and 205.

\section*{PHI 345 American Philosophy (3 crs)}

A study of the developing themes in American philosophy during the 19th and 20th centuries, with consideration of thinkers such as Emerson, Peirce, Royce, James, Dewey and Whitehead. Prerequisites: PHI 105 and 205.

\section*{PHI 355 Business Ethics ( 3 crs )}

An exploration of the relationship between the world of business and the values of the larger society in which business operates. An application of ethical principles to issues, such as hiring practices, quality of the work place, con-
flicts of interest, environmental and consumer issues and the social responsibility of business. Prerequisites: PHI 105 and 205.

\section*{PHI 360 Great Thinkers in Philosophy ( 3 crs )}

A close and critical textual examination of a major philosopher, (e.g., Aristotle, Plato, Kant, Heidegger, Marcel, etc.). Prerequisites: PHI 105 and 205.

\section*{PHI 365 Great Themes in Philosophy ( 3 crs )}

A close and critical examination of a major and continuing theme in philosophy, (e.g., Philosophy of Time, Philosophy and Literature, Philosophy of Freedom, etc.). Prerequisites: PHI 105 and 205.

\section*{PHI 485 Senior Seminar in Political and Economic Philosophy ( 3 crs )}

This is a capstone course in Political and Economic Philosophy. Interdisciplinary, with faculty from each area participating. Prerequisites: Senior status or permission of the department chair. \(\mathbf{F}\)

\section*{PHI 486 Senior Seminar in Philosophy ( 3 crs )}

This is the capstone course in Philosophy. This course is mandatory for all philosophy majors. Admission to the course derives from a student's status as a senior or from permission of the department chair. Participants are expected to critically read within thematic seminar topics, and write and orally defend a research paper that considers a relevant topic with significant integration and depth. Prerequisites: Senior status or permission of the department chair. \(\mathbf{S}\)

\section*{Physics}

Contact Persons: Joseph R. Busche, Ph.D.
Peter D. Ehni, Ph.D.
John J. Lynch, Ph.D.
Physics is the science of matter, motion and energy. The physics offerings are designed to provide students with basic scientific knowledge, as well as prepare them for varied goals, including graduate study, industry, teaching and engineering school. Upon completion of the Physics program, students will be able to demonstrate the ability to:
1. Think critically and solve multi-step problems.
2. Learn new physical principles through self-guided study.
3. Communicate both orally and in written form in a style appropriate for a physicist.
4. Integrate physics into their lives with specific emphasis on moral standards and social consciousness.

Physics offers the following major programs:
1. Physics
2. General Science (Physics)
3. Applied Science (Engineering 3/2)

Core Fulfilling Courses
PHY \(104 \quad\) Physical Science

PHY 105
PHY 107
PHY 108
PHY 110
PHY 130
PHY 131

General Physics
Astronomy
Geology
Physics I (4 crs)
Physics for Allied Health
Earth and Space Science

\section*{Requirements for Physics Major Bachelor of Science Degree}

In fulfilling the core curriculum requirements, outlined in this catalog, the Physics majors will take MAT 111 to fulfill the mathematics core and take PHY 110 to fulfill one of the science core courses. In addition to completing the core curriculum requirements, Physics majors must complete the following courses:
\begin{tabular}{lll} 
MAT 111, 112 & Calculus I, II & \((8 \mathrm{crs})\) \\
MAT 211 & Calculus III & \((4 \mathrm{crs})\) \\
MAT 212 & Ordinary Differential Equations & \((4 \mathrm{crs})\) \\
or MAT 204 & Scientific Statistics & \((3 \mathrm{crs})\) \\
PHY 110, 120 & Physics I, II & \((8 \mathrm{crs})\) \\
PHY 121, 122 & Introductory Physics Labs I, II & \((2 \mathrm{crs})\) \\
PHY 311 & Modern Physics & \((4 \mathrm{crs})\) \\
PHY 321 & Modern Physics Lab & \((1 \mathrm{cr})\) \\
PHY 221 & Statics & \((3 \mathrm{crs})\) \\
or PHY 243 & Mechanics I, II & \((3 \mathrm{crs})\) \\
PHY 331, 432 & Electromagnetic Theory I, II & \((6 \mathrm{crs})\) \\
PHY 341, 442 & Advanced Lab & \((4 \mathrm{crs})\) \\
PHY 435 A, B, C, D & Approved electives & \((13-16 \mathrm{crs})\) \\
PHY & &
\end{tabular}

Special Notes for Physics Major:
1. In specific cases, physics requirements can be modified with faculty approval.
2. Physics majors preparing for graduate study are urged to elect CHE 110, 120, General Chemistry, and CHE 121, 122, General Chemistry Lab, and further advanced MAT courses.

\section*{Requirements for Physics Minor}

Physics minors must complete four upper-division (300 or 400 level) PHY courses approved by the contact person for a minimum of 15 credits.

\section*{Requirements for General Science (Physics) Major Degree of Bachelor of Science}

This major provides a background in the physical sciences with an emphasis on Physics. In conjunction with the Teacher Preparation Program, the program offers training for a career in K-12 teaching. It also serves as an excellent course of study for those students aspiring to enter the graduate program in physical therapy. In fulfilling the core curriculum requirements, outlined in this catalog, the General Science Physics major will take MAT 111 to fulfill the mathematics core and take PHY 110 and CHE 110 to fulfill the science core. In addition to completing the core curriculum requirements, General Science Physics majors must complete the following courses:
\begin{tabular}{lll} 
BIO & Approved Electives & \((8 \mathrm{crs})\) \\
CHE 110, 120 & General Chemistry I, II & \((8 \mathrm{crs})\) \\
CHE 121, 122 & General Chemistry Lab I, II & \((2 \mathrm{crs})\) \\
MAT 111 & Calculus I & \((4 \mathrm{crs})\) \\
MAT & Approved Elective & \((4 \mathrm{crs})\) \\
CSC & Approved Elective & \((3 \mathrm{crs})\) \\
PHY 110, 120 & Physics I, II & \((8 \mathrm{crs})\) \\
PHY 121, 122 & Introductory Physics Lab I, II & \((2 \mathrm{crs})\) \\
PHY 311 & Modern Physics & \((4 \mathrm{crs})\) \\
PHY & Approved Electives & \((17 \mathrm{crs})\)
\end{tabular}

\section*{Course Descriptions:}

\section*{PHY 104 Physical Science (3 crs)}

The goal of this course is scientific literacy in the physical sciences for the nonscience major. The basic principles of Physics and Chemistry are studied. These principles are then applied to the fields of Geology,Astronomy and Meteorology.

\section*{PHY 105 General Physics (3 crs)}

A one-semester physics course for technology majors. The course is quantitative requiring algebra and trigonometry.

\section*{PHY 107 Astronomy (3 crs)}

Introduction to and historical outline of astronomy and development of physical laws used to describe the solar system, space, stars, galaxies, the universe and some observational techniques.

\section*{PHY 108 Geology ( 3 crs )}

Introduction to physical geology, internal structures of the earth, dynamical features, plate tectonics, crust and lithosphere production, balance and movement, oceans, seashore, continents, inland water and ice sheets.

\section*{PHY 110, 120 Physics I, II (8 crs)}

A calculus-based introduction to the concepts and methods of physics: I; Newtonian mechanics, relativity, conservation laws, harmonic motion, fluids and elasticity, II; thermodynamics, electricity and magnetism, circuits, wave motion, sound and optics. Calculus is taught as needed in this course. Prerequisite: MAT 108 or equivalent. \(\mathbf{F}, \mathbf{S}\)

\section*{PHY 121, 122 Introductory Physics Labs I, II (2 crs)}

To be taken concurrently with PHY 110-120. Experiments designed to supplement the lecture course and to provide proficiency in the methods of measurements, the analysis and presentation of data and the interpretation of results. F,S

\section*{PHY 130 Physics for Allied Health (3 crs)}

General physics principles with special emphasis on gas laws, flow principles, fluidics, the use of formulae and how they apply to nuclear medicine technology and respiratory therapy. F

\section*{PHY 131 Earth and Space Science (3 crs)}

A course designed for students who are interested in teaching biology, chemistry, physics, or general science at the intermediate or secondary school level. Topics covered will lead to an understanding of the physical factors that effect the environment, the earth atmosphere and the solar system.

\section*{PHY 151, 152, 153, 154, 155, 156 Engineering Orientation (1 cr)}

A sequence of six one-credit courses, as career orientation in both engineering and physics. Treatment of such topics as problem analysis, computer programming and surveying using Excel and MAT lab.

\section*{PHY 221 Mathematical Physics (3 crs)}

Supplements the mathematics background of the physics major. Topics to be covered include power series, Taylor series, Fourier series, determinants and matrix theory, systems of linear equations, Eigenvalue-Eigenvectors, power series solution of differential equations, Legendre polynomials and Bessel functions. Prerequisite: PHY 120 and MAT 112.

\section*{PHY 241, 242 Engineering Physics I, II (8 crs)}

Vector operations, forces, moments, centroids, structures, friction, moments of inertia, kinetics of particles and rigid bodies in both translation and rotation, mechanical vibrations, electric charge, electric field, Gauss' law, electrical potential, capacitors and dielectrics, current, magnetic field,Ampere's law, Faraday's law.

\section*{PHY 243 Statics (3 crs)}

Statics of particles and rigid bodies, vector operations, equivalent systems, equilibrium, centroids and center of gravity, analysis of structures, shear and moment diagrams, bending stress and shear stress in structural members, loads, strain, friction and moments of inertia. Co-requisitie: MAT 112 F

\section*{PHY 311 Modern Physics (4 crs)}

Intermediate treatment, includes: theory of relativity, wave-particle duality, atomic theory, quantum theory of the hydrogen atom, properties of matter, decay and nuclear reactions and elementary particles. \(\mathbf{S}\)

\section*{PHY 312 Electronics (4 crs)}

Digital and analog electronics. Topics covered include: Boolean algebra, basic gates, flip-flops, counters, Kirchoff's equations, Thevenin's theorem, Mesh loop method, voltage divider, RC, RL and RLC circuits, diodes and power supplies, transistor circuits, op-amp circuits, 555 timer circuits, D/A and A/D converters. Two hours of lecture and four hours of lab per week. Offered every other year. Prerequisite: MAT 112. SE

\section*{PHY 313 Computational Physics (4 crs)}

Introduces the use of a computer in numerically solving problems of scientific interest. Topics to be covered include integration, differentiation, roots, interpolation and extrapolation, systems of linearequations, differential equations
and fast fourier transforms. A solid background in calculus and introductory physics is assumed. Prerequisite: PHY 110 and MAT 112. SE

\section*{PHY 315 Introduction to Medical Physics (3 crs)}

Introduction to the field of medical physics. Topics to be covered include: radiation monitoring and safety, particle accelerators and their uses in medicine, radiation use in the treatment of cancer. This course is taught in a clinical setting and involves contact with patients. Course generally meets twice weekly for three hours at a time. Prerequisite: PHY 311.

\section*{PHY 316 Optics (4 crs)}

The electromagnetic theory of light. Interference, diffraction, resolving power of instruments, polarimetry, dispersion, absorption, scattering and reflection and an introduction to the theory of quantum radiation. SO

\section*{PHY 317 Thermodynamics (4 crs)}

An intermediate treatment of thermodynamics: thermodynamic systems, work, equations of state, the first and second laws of thermodynamics, phase changes, entropy and thermodynamic potentials. FE

\section*{PHY 318 Hydrodynamics ( \(\mathbf{3} \mathbf{c r s}\) )}

An introductory course in hydrodynamics including: laminar flow, Reynolds number, flow patterns, continuity equations, the Navier- Stokes equation, vorticity and viscous flow. Prerequisite: MAT 211, PHY 244.

\section*{PHY 319 Statistical Mechanics (2 crs)}

The kinetic theory of gases, transport phenomena, various statistics and distribution functions, the partition function and applications to systems.

\section*{PHY 320 Methods of Medical Physics and Dosimetry ( \(\mathbf{3}\) crs)}

This course will provide detailed instruction regarding treatment planning (with emphasis on prostate cancer) and calibration of treatment equipment. Topics will include: Treatment options for prostate cancer, simulation including patient immobilization techniques, treatment planning ( 3 dimensional conformal and intensity modulated), hand calculations, brachytherapy preplanning and post-operative dosimetric analysis. Calibration of linear accelerators and strength verification of radioactive isotopes. This will be mostly a lecture but will include five lab sessions. Prerequisites: PHY 311 or permission of instructor.

\section*{PHY 321 Modern Physics Lab (1 cr)}

An introduction to the experiments which shaped 20th century physics. Experiments include electron defraction, h/e, interferometry, x-ray defraction, H spectroscopy and radioactive decay experiments. This lab is meant to be taken concurrently with PHY 311. Both written and oral reports will be required. S

\section*{PHY 331 Mechanics I (3 crs)}

Newtonian mechanics, motion of a particle in one, two and three dimensions, the motion of a system of particles, oscillations, gravitation, moving coordinate systems and Lagrange's equations of motion. FO

\section*{PHY 341 Electromagnetic Theory I ( 3 crs )}

Electrostatics, electric fields in matter, magnetic fields and Maxwell's equations. FE

\section*{PHY 421, 422 Mathematical Physics I, II (8 crs)}

Supplements the mathematics background of the physics major. I: Taylor series, Fourier series, Fourier integrals, determinants, matrix theory, Lagrange's equations, Hamilton's principle, partial differentiation, calculus of varia-
tions and the gamma, beta and error functions. II: Bessel functions, Legendre polynomials and introduction to tensor analysis, solutions of the wave equation and elements of the theory of complex variables.

\section*{PHY 432 Mechanics II (3 crs)}

Continuation of PHY 331. Hamilton's equations of motion, approximations, central forces, rigid bodies and waves. Prerequisite: PHY 331. SE

\section*{PHY 435 A, B, C, D Advanced Lab (1 cr)}

A four semester sequence of advanced physics labs for junior and senior physics majors. Lab topics include nuclear physics, x-rays, crystallography, vacuum techniques, thin film deposition, classical mechanics and the classic modern physics experiments. Both written and oral reports will be required. FS

\section*{PHY 442 Electromagnetic Theory II ( 3 crs )}

Continuation of PHY 341. Electrodynamics, electromagnetic waves, radiation, elastic media, elastic waves in three dimensions and heat flow. Prerequisite: PHY 341. SO

\section*{PHY 451, 452 Quantum Mechanics I, II (8 crs)}

Heisenberg uncertainty relation, deBroglie's postulate, wave function, time dependent and independent Schrodinger equation, tunneling effect, linear harmonic oscillator, commutators, transition probabilities, Schrodinger and Dirac representations. II: Particle in a central potential, one and multi-electron atoms, spin, addition of angular momenta, approximation methods, fine and hyperfine structure of hydrogen atom and scattering theory.

\section*{PHY 486-489 Thesis (variable)}

A research topic requiring a detailed report and oral defense. Prerequisite: Senior standing.

\section*{Political Science}

Contact Person: John Poffenbarger, Ph.D.

\section*{Requirements for Political Science Major Bachelor of Arts Degree}

Upon completion of the Political Science program, students will be able to demonstrate the ability to:
1. Display familiarity with the basic concepts of government and politics.
2. Show a general knowledge of the structure and functions of all levels of government.
3. Explain the philosophical underpinnings of various forms of government, as well as an ability to understand
relations among states.
4. View and evaluate the output of the current American political process through a conscious paradigm.
5. Employ a variety of tools to participate at all levels in American politics as opposed to remaining passive
observers.
Political Science Majors must complete the following social science core, in addition to completing core curriculum requirements:
\begin{tabular}{lll} 
POS 110 & American Political Process & \((3 \mathrm{crs})\) \\
INS 111 & World Community & \((3 \mathrm{crs})\) \\
SSC 327 & Research Methods & \((3 \mathrm{crs})\) \\
SSC 415 & Statistical Analysis & \((3 \mathrm{crs})\) \\
SSC 488 & Senior Thesis & \((3 \mathrm{crs})\) \\
SSC 489 & Senior Seminar & \((3 \mathrm{crs})\)
\end{tabular}

In addition to completing the core curriculum and social science core requirements (including senior thesis and seminar and the comprehensive oral examination in SSC 488, 489), all political science majors must complete the following courses:

POS 211Comparative Politics(3 crs)
POS 212Global Politics(3 crs)
POS 346 or 348Ancient or Modern Political Thought( 3 crs )
Five (5)Approved POS Electives(15 crs)

One course must be taken from each of the following areas:
American Politics: POS 241, POS 242, POS 329, POS 330, POS 340, POS 305, POS 306, POS 473.
International Relations: POS 228, POS 311, POS 316, POS 327, POS 333, POS 334, POS 341.
Political Theory: POS 250, POS 311, POS 346.

\section*{Requirements for Political Science Minor}

Minors in political science must complete POS 110, INS 111 and five upper-division courses (numbered 200 or above).

\section*{Special Note on Double Majors:}

In addition to complying with University rules regarding double majors (see p. 16 of this catalog), students completing a double major between criminal justice and political science must write two senior theses.

\section*{Special Note on Elective:}

The department's contact person must approve the political science elective. The following courses from other disciplines may also satisfy the requirement: CRJ 327 (Comparative Systems of Justice and Social Control), HIS 228 (Latin America in the 20th Century), HIS 250 (Revolution and Ideology), HIS 316 (Rise of the United States as a World Power), HIS 331 (Modern Russia), PHI 347 (Medieval Political Thought), PHI 349 (Contemporary Political Thought), RST 310 (Catholicism and Modernity) and WST 355.

\section*{Course Descriptions:}

\section*{POS 110 American Political Process (3 crs)}

Operations of the American government and their consequences for the population. Policies on management of the economy, defense and foreign policy, poverty, race relations. Roles of the Presidency, bureaucracy, Congress, courts. Nature of elite and mass political ideas and opinions. F,S

\section*{POS 211 Comparative Politics (3 crs)}

An introduction to comparative politics as an approach and as a body of knowledge. Several aspects of various selected foreign systems will be compared (such as governments, political parties, interest groups, political culture, etc.). SE

\section*{POS 212 Global Politics (3 crs)}

This course serves as an introduction to the study of global politics. Different approaches of studying the relations between countries; the forces that motivate countries (nationalism, ideology, etc.); and the instruments available to them (power, international law, etc.) will be discussed. The politics of global issues such as human rights, the environment, population growth and free trade will also be considered. It is recommended that this course be taken prior to other 300-level international relation courses. SO

\section*{POS 228 Latin America in the 20th Century ( 3 crs)}

An examination of Latin America from 1880 to the present. The focus will be on the problems that Latin American countries have encountered in their struggle for economic and political development. Social and cultural aspects of the region will also be examined. Several countries will be selected for in-depth analysis.] D

\section*{POS 241 Public Policy (3 crs)}

This course will explore the policy making process in the United States. It will examine how the agendas of policy makers are set, how the policy is formulated and how it is implemented. It will also question who benefits from the policy making process. Topical issues of national policy will be used to illustrate the process. Prerequisite: POS 110. D

\section*{POS 242 State and Local Government (3 crs)}

This course will examine the structure and functions of government at the state and local level. It will compare and contrast the various types of governments that exist across the United States. It will also examine the intergovernmental relationships between the localities, the states and the national government. Prerequisite: POS 110. D

\section*{POS 305 The American Presidency ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course will examine the highest political office in the United States of America. Is the President the most powerful person in the world, or is he relatively powerless, depending on other branches of the government to voluntarily do as he wishes? How does a President affect policy? What type of individual makes a good President? The course will focus on six major areas of concern: 1) Presidential Selection; 2) Presidential Power; 3) Presidential Accountability; 4) Presidential Decision-Making; 5) Presidential Character; and 6) Presidential Leadership. Prerequisite: POS 110. D

\section*{POS 306 The American Congress ( 3 crs)}

This course will examine the development and contemporary workings of the US Congress. It will dissect Congress, looking at its component parts (party leadership, committees, staff), and its internal decision-making process. It will explore Congressional relations with other actors in the policy-making process (interest groups, constituents, the President, executive agencies). It will examine how the structure of the institution, and the incentives provided to its members, greatly impact on how government affects our daily lives. Prerequisite: POS 110. D

\section*{POS 311 War \& Peace: Philosophical \& Political Issues (3 crs)}

An examination of various issues related to war and peace. The focus will be on three general issues: the causes of war; theories of war-avoidance; and various moral questions (i.e., just war, nonviolent strategies, etc.). D

\section*{POS 329 Constitutional Law ( 3 crs )}

Examines the evolution of American national government through the development and interpretation of the U.S. Constitution. Judicial review, separation of powers, commerce power, contracts, taxing, the power to make war and due process are among the topics studied. Prerequisite: POS 110. FO

\section*{POS 330 Civil Rights and Civil Liberties ( 3 crs )}

A companion course to Constitutional Law (POS 329), this course analysis Bill of Rights guarantees of individual freedom, due process and equal protection interpretations, as well as modern policies flowing from civil rights legislation in areas affecting employment, education and welfare benefits. SE

\section*{POS 333 Global Political Economy (3 crs)}

This course focuses on the intersection between politics and economics. Different schools of thought (liberalism, marxism, mercantilism) will be examined in detail. Additional attention is given to free trade and its critics, the global political economy of the environment, food, the newly industrialized countries and North-South relations. Recommended prerequisite: POS 212. D

\section*{POS 334 International Organization (3 crs)}

The historical development of international organizations, their organizational structure and the inherent political processes will be examined. The impact of international organizations on global issues such as conflict, economics, human rights, global resources, population will also be considered. Special attention is given to the United Nations. Recommended prerequisite: POS 212. D

\section*{POS 340 Issues in American Politics ( 3 crs )}

Analysis of specific topics, depending on student interest and current importance. Prerequisite: POS 110. D

\section*{POS 341 Global Issues ( \(\mathbf{3} \mathbf{~ c r s}\) )D}

This is a special topics course dealing with one or more current topics, e.g., hunger,Third World development, international environment politics, U.S.-Latin American relations. Prerequisite: POS 212.

\section*{POS 346 Ancient Political Philosophy (3 crs)}

Selections from, e.g., Plato,Aristotle, Xenophon,Thucydides and Aristophanes, will be examined in the course. Special emphasis will be placed upon the relationship between politics and philosophy. SE

\section*{POS 348 Modern Political Philosophy (3 crs)}

Selections from modern political thinkers, e.g., Machiavelli, Hobbes, Locke,Tocqueville, Rousseau, Nietsche, will be examined in the course. Special emphasis will be placed upon the development of the modern idea of rights, the relationship between politics and philosophy and the role and responsibilities of government in the modern world. SO

\section*{POS 350 Environmental Law and Policy ( 3 crs )}

This course provides an understanding of the political and social dimensions of environmental policy and law in the United States and internationally. Specific subjects of study include the policy process, how various interest groups influence the structure and content of legislation and the types of enforcement used to induce compliance. The
course is a forum for in-depth analysis of important environmental movements, legislation and issues including the Clean Water Act, global warming and preservation of the rainforests. D

\section*{POS 473 Internship (variable credit)}

A field experience course in which the student is involved actively in the community under the direction of the Social Science Department. Enrollment requires the approval of the department; a member meets periodically with the student during the internship to examine the relationships between the theoretical concepts found in the assigned readings and the field experience. The number of credits is negotiable. D

\section*{Professional Education Department - Teacher Preparation Program}

\section*{Contact Persons:}

Jeremy Vittek, Ed.D.
Bonnie Ritz, Ed.D.
Jane Neuenschwander, M.A.
Kristina Kramer, M.A.
James Tecca, M.A.
Lawrence Jones, Ed.D.
The Professional Education Department (PED) teacher-preparation program is designed for students who wish to pursue certification leading to licensure in Elementary Education (K-6 Multi-Subjects), Secondary Education (5Adult Content Specialization), and/or Special Education and General Science as add-on endorsements.

Early and extensive field experiences in local schools complement content-rich University course work, leading successful candidates to initial certification in West Virginia with reciprocity to most other states.

The program is aligned with the West Virginia Professional Teaching Standards (WVPTS), the International Society for Technology in Education (ISTE) Standards, the Interstate Teacher Assessment and Support Consortium (InTASC) Principles, the elements of the Principles of Learning and Teaching (PLT) Praxis examination, national content-area standards, and professional standards for speaking and listening.

\section*{General Requirements}

Teacher-preparation students complete course work in three areas: (1) core curriculum, (2) the professional education component, and (3) the content major. Those who wish to pursue certification in Elementary Education will major in Liberal Studies in Elementary Education (LSEE). Those who wish to pursue certification in Secondary Education (Grades 5-Adult) will complete a full major in the content area in addition to the professional education component. Some Secondary licensure programs may require additional content course work that is not currently requirements of the major.

All students in the teacher-preparation program should seek scheduling advice early in their first year. Students should plan to maintain a course load of 16-18 hours per semester beginning in the freshman year.

Students begin their Professional Education course work in the sophomore year. Applicants must possess and subsequently maintain a minimum grade-point average (GPA) of 2.5 overall. Once admitted to the Professional Education Department, students must maintain an average of a 3.0 GPA in the major, as well as in PED and Psychology courses.

In order to obtain teacher certification, students must successfully complete all required national Praxis examinations through the Educational Testing Service (ETS). At a minimum, these include the Core Academic Skills for

Educators (CORE) in Reading, Writing, and Math; the Principles of Learning and Teaching exam; and the Praxis II content-area exam. Students must attain the cut-off score established for West Virginia or the state in which they wish to be certified.

Real-world field experiences are a critical component of high-quality teacher-preparation programs. When scheduling classes with a required field, and during student teaching, students should allocate an appropriate amount of time to this important field work.

\section*{Major/Licensure Offerings}

Biology (9-Adult)
Chemistry (9-Adult)
English/Language Arts (5-Adult)
French (Pre-K-Adult and 5-Adult)
General Science (5-Adult) add-on to undergrad degree
History/Social Studies (5-Adult)
Liberal Studies Elementary Education (K-6, Multi-Subjects)
Mathematics (5-Adult)
Physics (9-Adult)
Spanish (Pre-K-Adult and 5-Adult)
Special Education - Multi-Categorical (K-6 or 5-Adult) add-on to undergrad content license major
Note 1: Theology majors are welcome to complete the Professional Education Department, however, no state licensure is available for Theology majors.

Note 2: Adding a Special Education or General Science endorsement may require extended time to complete the coursework; therefore, students should plan their schedules carefully. Students seeking the Special Education endorsement should keep in mind that one of the two required student-teaching placements is to be in a specialeducation setting.

Note 3: Students should apply for student teaching two semesters in advance to allow time to obtain the WVDErequired Student Teaching Permit and for appropriate placements to be obtained.

Note 4: A background check is required prior to Field work in the early part of the program. The formal fingerprinting process is required to obtain the Student Teaching Permit and again to obtain the teaching license.

\section*{Suggested Sequence of Courses - Elementary Education}

\section*{Freshman}

PSY 110
POS 110
MAT 101 or above

\section*{Sophomore}

PED 210
PED 231 C \& F
PED 232 C \& F
PSY 214
MAT \(\qquad\)
HIS 211 or 212
GSC 110 and GSC 120
HIS 214
Junior
PSY 220
PED 223
PED 316
PED 333 C \& Fields I, II, \& III
PED 322 C \& F
PED 324
PED 341
MAT \(\qquad\)

\section*{Senior}

PED 323
PED 325
PED 327
PED 334 C \& F
PED 441 C \& F
PED 473
PED 475
PED 476
PED 481* Student Teaching

\section*{Suggested Sequence of Courses - Secondary Education}

Freshman

PSY 110
Core and Content Courses

\section*{Sophomore}

PED 210
PED 231 C \& F

PED 232 C \& F
PSY 216
Core and Content Courses

\section*{Junior}

PSY 220
PED 310, 311, or 312
PED 316
PED 333 C \& Fields I, II, \& III
Core and Content Courses

\section*{Senior}

PED 334 C \& F
Core and Content Coursese
PED 475
PED 476-Student Teaching Seminar
PED 481* Student Teaching
*PED 481 is Student Teaching. During this experience, students will enroll in PED 475, Student Teaching Seminar. Also commonly taken during this semester are PED 473 (for Elementary Education majors) and PED
476. Student Teaching is a full-time experience. Additional courses, participation in extra-curricular activities, and employment are strongly discouraged during this semester.

\section*{Special Education Endorsement}

In addition to other requirements in the Elementary and Secondary Education programs, the courses required for an endorsement to teach Special Education are:

\section*{Elementary:}
\begin{tabular}{ll} 
PED 320 & PED 422 C \& F \\
PSY 315** & PED 423 C \& F
\end{tabular}

\section*{Secondary:}

PED 320 PED 422 C \& F
PED 325 PED 423 C \& F
PSY 315** PED 441 C \& F
**PSY 476 is cross-listed with PSY 315.

\section*{Course Descriptions}

\section*{PSY 110 General Psychology ( 3 crs)}

A survey of contemporary psychology, including the topics of conditioning and learning, sensation and perception, psychophysiology, motivation and emotion, memory and cognition, development, social behavior, psychological testing, personality, psychopathology, and psychotherapy. D

\section*{PSY 214 Child Psychology ( 3 crs)}

A study of the physiological, intellectual, social, and emotional factors in child development. Prerequisite: PSY 110. Required for K-6 Multi-Subject licensure. D

\section*{PSY 216 Adolescent Psychology ( \(\mathbf{3}\) crs)}

A study of basic research and theories concerning development in the adolescent years. Prerequisite: PSY
110. Required for 5-12 content specialization licensure. D

PSY 220 Educational Psychology ( \(\mathbf{3} \mathbf{~ c r s )}\)
A study of the cognitive and affective dimensions of student behavior with an emphasis on the theoretical conceptions of learning which underlie education methods. Professional Education students should register for the section designated for them. Prerequisite PSY 110. FS

\section*{GSC 110 Integrated Sciences I (3 crs)}

An integrated science and math course for the non-science major. The course investigates science and the scientific method through selected topics in the traditional fields of biology, chemistry, physics, and earth and space science. Math topics are integrated as appropriate. A hands-on, student-centered approach is taken. Lab and lecture are integrated with the course meeting for 90 minutes three times per week. (Required for Elementary Education majors.) (GSC 110 OR 120 may be core fulfilling.) \(\mathbf{F}\)

\section*{GSC 120 Integrated Sciences II (3crs)}

An integrated science and math course for the non-science major. The course investigates science and the scientific method through selected topics in the traditional fields of biology, chemistry, physics, and earth and space science. Math topics are integrated as appropriate. Topics include sound and waves, electricity, astronomy, and geology. A hands-on, student-centered approach is taken. Lab and lecture are integrated with the course meeting for 90 minutes three times a week. (Required for Elementary Education majors.) (GSC 110 OR 120 may be core fulfilling.) \(\mathbf{S}\)

\section*{PED 210 Educational Technology ( 3 crs )}

Experiences in teaching in technology, with technology, and through technology by incorporating hands-on work with computers and associated peripherals, the Internet, and content software. Strategies for effective integration of technology and the security and ethical issues associated with technology are included. FS

\section*{PED 223 Curriculum Development \& Methods: Physical Education, Health, and Safety (2 crs)}

Experiential examination of physical and emotional fitness, contemporary health issues, and the integration of physical education, health, and safety in multi-subject, K-6 classrooms. S

\section*{PED 231 C (1 cr) and PED 231 F (1 cr) Professional Education I: Schools and Communities (2 crs)}

Introduction to teaching as a profession with an emphasis on exploring various perspectives on education through dialogue and activities related to current issues relevant to today's classroom teachers. Topics include teacher dispositions, challenges teachers and schools face, influence of the law on education, standards and assessment, and the global educational context. The field component involves tutoring and/or leading learning activities with children. Co-requisites: PED \(231 C\) and F. FS

\section*{PED 232 C ( 2 crs ) and PED 232 F ( 1 cr ) Professional Education II: Classroom and Teacher Roles ( \(\mathbf{3} \mathrm{crs}\) )}

Study of teaching, focusing on classroom pedagogical and management strategies, development of objectives, and lesson planning, as well as discussion of the various roles of a teacher. The field component involves observation and teaching experience under the guidance of a K-12 mentor teacher. There is a focus on reflections related to planning, pacing, and teaching strategies. Co-requisites: PED 232 C and F. Prerequisite: PED 231. FS

\section*{PED 310 Curriculum Development \& Methods: Secondary English/Language Arts (3 crs)}

Study of English/Language Arts curriculum, incorporating specific methods to prepare students to teach secondary English/Language Arts. FS

PED 311 Curriculum Development \& Methods: Secondary Mathematics \& Science (3 crs)
Study of mathematics and science curriculum, incorporating specific methods to prepare students to teach secondary math and science. FS

\section*{PED 312 Curriculum Development \& Methods: Secondary Social Studies (3 crs)}

Study of Social Studies curriculum incorporating specific methods to prepare students to teach secondary Social Studies. FS

\section*{PED 316 Grammar (2 crs)}

Study of grammar and instructional strategies for teaching the conventions of language. Focus is on integrating the teaching of grammar in the context of writing activities. Students will analyze their own writing and develop instructional strategies for incorporating grammar into the K-6 curriculum. Required of all Elementary Education and secondary English majors \(\mathbf{F}\).

\section*{PED 320 The Special Education Process (2 crs)}

Study of the history of special education incorporating significant legislation, litigation, and trends. Important practices, including the referral process, functional behavior assessments, transition plans, 504 plans, IEPs, and the continuum of classroom services. FS

\section*{PED 322 C ( 3 crs ) \& PED 322 F (1 cr) Teaching Reading \& Phonics in the Elementary School (4 crs)}

Theories and strategies of the teaching of reading grounded in field experiences with emphasis on techniques for thematic teaching of reading/language arts. The course includes the assessment and instruction process through construction, administration, and interpretation of authentic reading and written language assessments. Diagnostic and corrective reading techniques are integrated into the instructional process. Field experience includes observation and teaching experience under the guidance of a mentor teacher and University supervisor with a focus on teaching practice in reading and language arts. Co-requisites: PED 322 C and PED 322 F. F

\section*{PED 323 Curriculum Development \& Methods: Art Through Children's Literature (2 crs)}

Integrated theoretical and hands-on experience designed to prepare a student to work in a multi-subject, K-6 classroom. The course provides application of visual art by drawing examples from and parallels to children's literature and the theories of each. Projects integrate visual arts into all content areas. This course is core fulfilling for Elementary Education majors. \(\mathbf{S}\)

\section*{PED 324 C ( 3 crs ) \& PED 324 F (1 cr) Curriculum Development and Methods: Mathematics and Science (total 4 crs )}

Theories and strategies of the teaching of mathematics grounded in field experiences with emphasis on techniques for thematic teaching of integrated Math and Science. The course includes the diagnostic and corrective assessment and instruction process and error analysis. Field experience includes observation and teaching experience under the guidance of the master teacher and University supervisor with a focus on teaching practice in Mathematics and Science. Co-requisites: PED 324 C and 324 F. F

\section*{PED 325 Diagnosis and Correction: Mathematics (2 crs)}

Advanced strategies to support teaching to foster K-6 students' mastery of mathematical concepts and skills through multiple representations of concepts, remediation to correct misconceptions or gaps in knowledge and error analysis. S

\section*{PED 327 Curriculum Development and Methods: Music for Elementary Teachers (2 crs)}

Integrated, hands-on study of music and theory with parallels to the arts through a diverse selection of cultures designed to prepare the student to work in a multi-subject, K-6 classroom. This course is core fulfilling for Elementary Education majors. F

\section*{PED 333 C ( 3 crs ) \& PED 333 F ( 3 crs ) Exceptionality and Diversity in the Classroom (total 6 crs )}

Overview of the characteristics and needs of exceptional and diverse learners. This course focuses on the curricular and instructional alternatives that address these needs. Emphasis will be on accommodations and modifications, data collection, assistive technology, and collaboration. S

\section*{PED 334 C ( 2 crs ) \& PED 334 F (1 cr) Reading in Content Areas (total 3 crs)}

Systematic introduction to current theory, research, and practice in the integration of literacy activities across content areas. Student work in cooperative groups to design, publish, and present a group unit using literacy strategies to address and assess content standards and objectives. The course involves simulated teaching, discussion, position papers, reflective papers, and peer response. Co-requisites: PED 334 C and PED 334 F. F

\section*{PED 341 C ( 2 crs ) \& PED 341 F ( 1 cr ) Curriculum Development \& Methods: Language Arts and Social Studies (total 3 crs )}

Study of Language Arts and Social Studies curriculum incorporating specific methods to prepare students to integrate Language Arts into K-6 content areas. Field experience includes observation and teaching experience under the guidance of the master teacher and University supervisor with a focus on teaching practice in Language Arts and Social Studies. Co-requisites: PED 341 C and PED 341 F. S

\section*{PED 361 C (2 crs) \& PED 361 F (1 cr) Overview of Autism Spectrum Disorders (total 3 crs)}

This course provides an overview of Autism Spectrum Disorders with an emphasis on instructional and behavioral strategies and practical theories for classroom management. An emphasis will be placed on current research. A field component provides experiential learning. SU

\section*{PED 375 Special Projects (Variable 1-3 crs)}

Development of a student-selected and instructor-approved project directly related to the teaching process, which may incorporate field and University activities. This may include a course with specific content in public school governance FS.

\section*{PED 422 C ( 2 crs ) \& PED 422 F (1 cr) Special Education: Assessment \& Methods - I (total 3 crs)}

Intensive study of assessment and instructional methods targeting behavior, reading, and spelling. Content will focus on these strategies that facilitate the use of the clinical teaching model with students with mild handicaps. Field experience is in a special-education classroom, focusing on the development, implementation, and monitoring of behavior interventions and reading and spelling strategies. Co-requisites: PED 422 C and PED 422 F. Prerequisite: PED 320. F

\section*{PED 423 C (2 crs) \& PED 423 F (1 cr) Special Education: Assessment \& Methods - II (total 3 crs)}

Continued study of assessment and instruction of students with mild disabilities/learning disabilities. Content will focus on written language, mathematics, social skills, functional behavior assessments, life skills, curriculum, and general content strategies. Field experience is in a special-education classroom, focusing on the development, implementation, and monitoring of strategies for increasing written language, mathematical, and social skills, as well as the evaluation of a variety of life-skills curricula. Co-requisites: PED 423 C and PED 423 F. Pre-
requisite: PED 422. S

\section*{PED 441 C (1 cr) \& PED 441 F (1 cr) Diagnosis and Correction: Reading and Language Arts (2 crs)}

Lab-based extension of the assessment and instruction process through construction, administration, and interpretation of authentic reading and written language assessments; planning, teaching, and evaluating lessons that incorporate the instructional strategies acquired and practiced during class time. Co-requisites: PED 441 C and PED 441 F. Pre-requisite: PED 322. S

\section*{PED 461 C (2 crs) \& PED 461 F (1 cr) Curriculum Development and Methods: Autism Spectrum Disorders (total 3 crs )}

This course emphasizes specific instructional strategies, methods, curricula, and classroom management for teaching students with Autism Spectrum Disorder. Students will study procedures for specialization, modification and/or adaptation of materials and curriculum for these students, as well as learn how to develop and teach programs for individualized instruction. Knowledge of theory and practical experience will be applied through the required field component. Co-requisites: PED 461 C and PED 461 F. Pre-requisite: PED 361 C and PED 361 F. SU

\section*{PED 473 Elementary Internship: Action Research (2 crs)}

Capstone activity in which students work with elementary-aged children in an instructional setting, develop actionresearch projects. They will prepare and present a summary of research-related activities and their results. FS

\section*{PED 475 Student-Teaching Seminar (1 cr)}

Further development of knowledge and skills vital to successful teaching, examination of contemporary issues in education and development of a professional portfolio. This class is taken in conjunction with student teaching. Corequisites: PED 475 and PED 481. FS

\section*{PED 476 Evaluation (2 crs)}

Continuation of the development of the knowledge and skills needed to assess various aspects of teaching and achievement by all learners, the appropriate role of reflection and self-evaluation, the examination of research on assessment, and current reform movements. Also presented will be classroom, program, individual, formative, summative, traditional, and alternative assessment models. Prerequisite: Senior standing. This course is cross-listed with the 3-credit course PSY 315, which is required for the Special Education endorsement. Those students taking the course as PSY 315 will have additional requirements. FS

\section*{PED 481 Student Teaching (Variable 3 [ACT] - 11 crs)}

A full semester ( 14 weeks) of teaching experience in specific and assigned classes in a K-12 school in the licensure content and programmatic area(s) under the direct supervision of a cooperating teacher selected by University faculty. Prerequisite: Department approval. FS

Note 5: Wheeling Jesuit University's Professional Education Department teacher-preparation program is accredited by the West Virginia Department of Education (WVDE), the national Teacher Education Accreditation Council, and the Higher Learning Commission. Because it functions with the WVDE approval, course descriptions, credit hours, or requirements may be revised based on state requirements for candidate licensure. Successful completion of the program leads to licensure in West Virginia with reciprocity to most other states. A candidate seeking licensure in another state is responsible for learning of and complying with the requirements for licensure in that state.

\section*{Accelerated Certification for Teaching (ACT) Program}

ACT is an online certificate program designed for individuals who hold a bachelor's degree and seek to qualify for state teacher certification, primarily in secondary content areas. Wheeling Jesuit University's teacher preparation program is designed to meet the "highly qualified" requirements of the federal Elementary and Secondary Education Act (formerly No Child Left Behind). The teacher-preparation course work has national accreditation from the Teacher Education Accreditation Council (TEAC) and the West Virginia Department of Education.

The online ACT program is aimed at individual qualification for a West Virginia teaching certificate with reciprocity to most other states. Through reciprocity agreements among the states, a West Virginia teaching certificate may be converted to the equivalent teaching certificate in another state. Please note that it is the responsibility of teacher candidates to seek out and meet the criteria for another state's licensure requirements. If your state of interest is not West Virginia, you may want to contact that state's Department of Education for more information.

ACT provides an accelerated path to teacher certification for both those transitioning into a second career, as well as those who already serve in the classroom as temporary, emergency, or substitute teachers who need to earn a formal teaching credential or add an additional endorsement. In most cases, the online ACT program offers you the flexibility to remain in your present place of employment or your classroom while you prepare to fully enter the teaching profession. In the final semester, full-time participation will be required as you fulfill the student-teaching requirement. Those who are currently in the classroom can use part of their experiences toward this important part of the certification process.

\section*{Certification Timeline}

A personalized Academic Action Plan (AAP) will be devised just for you. Your plan will be based on an analysis of your college/university transcript(s), the Praxis I basic skills assessment, and the national Praxis II competency evaluation for your chosen teaching subject/concentration. Typically the ACT program can be completed in as little as 18 months, including student teaching. Completion may take longer for participants who need additional course work in their chosen teaching subject/concentration.

ACT allows you to complete only the requirements you need—not an entire additional bachelor's degree.

\section*{Program Features}

The ACT program delivers at least two courses of educator training per semester for 5 terms over an 18-month period. This includes student teaching.
- Each course is content rich and related to \(5^{\text {th }}\)-grade through adult learning needs.

No direct, face-to-face campus visits are required, allowing students the flexibility to remain living and working in their local communities.

You will be supported during your student teaching with training by a cooperating teacher and through your online peer community of professionals learning to be educators.

\section*{Secondary ( \(5^{\text {th }} \mathbf{- 1 2}{ }^{\text {th }}\) grade and Adult) Certification Areas Available}


Note 6: Students should apply for student teaching two semesters in advance to allow time to obtain the WVDErequired Student Teaching Permit and for appropriate placements to be obtained.

Note 7: A background check is required prior to Field work in the early part of the program. The formal fingerprinting process is required to obtain the Student Teaching Permit and again to obtain the teaching license.

\section*{Admission Requirements}

Must hold a Bachelor's Degree from an accredited college or university, preferably with a concentration in one of the secondary certification areas available in the ACT program.
- GPA of 3.0 in content course work.
- Passing scores on the Praxis I/PPST Exam, unless the candidate meets the exemption requirements (ACT [American College Testing] score of 26 or SAT [Scholastic Assessment Test] score of 1125, or if the candidate has a master's degree. Courses may be taken while a student is working to schedule this exam or waiting for exam results.

Note 8: In order to be hired in any state school system, employees must pass a criminal background check. This step is included in the West Virginia Teacher's Certification process. In addition to supplying a fingerprint card, participants will also be asked to complete a section of the WV Teacher Certification Application that asks questions on misdemeanors, certification in other states, prior indictments, and other information.

\section*{Tuition and Fees}

Up-to-date information on tuition and fees for the ACT program is available online or from the Office of Professional and Graduate Studies. Candidates are responsible for the fees incurred for their criminal background checks, as well as their teacher license application fee as they conclude their student teaching.

\section*{Financial Aid}

There is financial aid for those who are enrolled in at least 6 credit hours, have filed the FAFSA (www.fafsa.ed.go), and have not reached their aggregate loan limits for the Federal Stafford Loans. Those who do not qualify for federal aid can apply for a variety of educational loans through private lenders. For more information on loans available, you may call the WJU Financial Aid Office at 800-624-6992.

As a Service Opportunity College, Wheeling Jesuit University welcomes adult students from the military who are making use of military aid or the Montgomery G.I. Bill and other benefits to cover their education costs.

If you are an enlisted military service member or a veteran, you may be eligible for educational benefits. Additional resources can be found on our Web site: www.online.wju.edu/AC or by speaking with the WJU Financial Aid Office.

\section*{What is My Next Step?}

Contact the Admissions Office at 800-624-6992 or 304-243-2642 or by email to dangalich@wju.edu to receive an ACT application for an initial transcript analysis.

Mailing Address:
Wheeling Jesuit University

\section*{ACT Program}

Professional Education Department
Center for Educational Technologies
316 Washington Avenue
Wheeling, WV 26003
Note 9: Course descriptions for the ACT program may be found under the Professional Education Department Teacher Preparation Program section of this catalog.

Note 10: Wheeling Jesuit University's Professional Education Department Teacher-Preparation Program functions under approval provided by the West Virginia Department of Education. Course descriptions, credit hours, or requirements may be revised based upon state requirements for candidate licensure. Successful completion of this program leads to licensure in West Virginia. Although West Virginia has reciprocity with most other states, a candidate seeking licensure in another state is responsible for learning of and complying with the requirements for licensure in that state.

\section*{Psychology}

\section*{Contact Persons:}

Bryan Raudenbush, Ph.D., L.Pharm., Department Chair
Debra Hull, Ph.D.
Michael Kirkpatrick, Ph.D.
Julie Osland, Ph.D.
The goals of the Psychology Department at Wheeling Jesuit University are to provide a strong curriculum that helps students learn the most current and empirically sound principles of behavior; to equip students for success in a variety of graduate programs and employment settings; to offer opportunities for experience in human service, research, and other psychology-related internships; and to help students realize the many ways through which psychology can
address human social/ethical concerns. We seek to accomplish our goals through the curriculum, the directed research and internship programs, the honor society and student club, and through informal mentoring by the faculty (both within the department and in the University at large). All of our efforts are grounded in the Ignatian tradition of the pursuit of excellence in the context of service to and with others.

\section*{Requirements for Psychology Major Bachelor of Science Degree}

In addition to completing the core curriculum requirements, psychology majors must complete the following courses:
*PSY \(110 \quad\) General Psychology (C+ or better)
PSY 115 Statistics for the Behavioral Sciences (C or better) (3 crs)
PSY 211 Experimental Psychology (C or better) (4 crs)
PSY \(420 \quad\) History \& Systems of Psychology (4 crs)
PSY 388 Junior Seminar ( 1 crs )
PSY 488 Senior Seminar ( 1 crs )
PSY Research Electives (2) (8 crs)
PSY Psychology Electives (6) (18 crs)
BIO any human biology course (3 crs)
(45 crs)
*Core fulfilling
Special Notes on Major Requirements:
1. Psychology research electives are designated in course descriptions as such. Remaining non-required psychology courses are psychology electives.
2. Senior psychology majors must take the ETS Major Field Exam in psychology and score in the top \(15^{\text {th }}\) percentile or higher nationally, or must pass a comprehensive oral examination.
3. To major in psychology, a grade of C+ or higher must be earned in PSY 110 and a grade of C or higher must be earned in PSY 115 and PSY 211.
4. Students may take a maximum of 6 credits of Directed Research (PSY 300); the course may be taken for 1, 2 or 3 credits per semester. A maximum of 3 credits may be used as the equivalent of a Psychology Elective (additional credits will count toward the total needed for graduation). For those students wishing to complete a Thesis (PSY 486), a minimum of 1 credit of PSY 300 is a prerequisite. PSY 486 may be counted as a Psychology Elective.
5. Students may take a maximum of 6 credits of Internship (PSY 374 and 474). A maximum of 3 credits may be used as the equivalent of a Psychology Elective (additional credits will count toward the total needed for graduation). Permission to enroll in this course must be granted by the instructor
6. PSY 212 (Developmental Psychology) is designed for non-psychology majors. Psychology majors interested in developmental psychology should take courses within the developmental sequence (PSY 214, 216, 218).

\section*{Concentration and Certificate Programs}

In addition to pursuing a Bachelor of Science degree in psychology, you may take coursework in specialty areas within the department. Students may transfer no more than 9 credit hours from other universities to count towards a psychology concentration or certificate program.

These areas of concentration include:
Mental Health Sciences - Enhances readiness for graduate study in several fields, such as medicine, counseling, nursing, social services, pharmacology, psychiatry and special education. Students will be prepared for immediate employment in a number of human service agencies. Mental Health Sciences concentration course requirements: PSY \(110(\mathrm{C}+)\), PSY 115 (C), PSY 211 (C), PSY 374 OR PSY 375; PSY 340 OR PSY 222; and three from: PSY 261, 222, 238, 315, 330, 335, 340, 350, 374, 474.

Behavioral Psychopharmacology - Enhances eligibility for employment or further study in fields such as pharmacy, medicine, biology, nursing, psychiatry, physical therapy, sports medicine, athletic training and other healthrelated industries or occupations. Behavioral Psychopharmacology concentration course requirements: PSY 110 (C+), PSY 115 (C), PSY 211 (C), PSY 238, PSY 320, BIO 105; Elective Courses - select four courses from: PSY 212, PSY 222, PSY 315, PSY 330, PSY 335, PSY 340, PSY 350, PSY 374/474.

Cognitive Neuroscience - This concentration reflects the field's inherently interdisciplinary nature by combining strengths from several academic departments, such as psychology, biology, chemistry and philosophy. Enhances readiness for graduate study in several fields, such as medicine, biology, philosophy, nursing, pharmacology, law , psychiatry, criminal justice, biochemistry, special education and physical therapy. Cognitive Neuroscience concentration course requirements: PSY 110 (C+), PSY 115 (C), PSY 211 (C), PSY 311, PSY 317, BIO 105; Elective Courses - select three courses, comprising at least two discipline areas, from: BIO 128, BIO 210, PHI 320, PSY 130, PSY 222, PSY 238, PSY 315, PSY 335, PSY 340, PSY 350.

Advanced Statistics and Data Management - Offered in conjunction with IBM, Inc., this certificate provides students with an integrated academic and practical background in statistical analysis and data management. Advanced Statistics and Data Management course requirements include: PSY 115 (C), PSY 211 (C), and PSY 410.

Please note: A minimum GPA of 2.7 (B-) must be maintained in the combined courses used to satisfy each concentration program, and a minimum grade for specific courses is noted in parentheses. Students are encouraged to meet with the Coordinator of the concentration of interest for advising early in one's college career. Careful planning is required since courses in some concentrations have additional prerequisites.

\section*{Requirements for Minor}

Students minoring in Psychology must complete PSY 110 general psychology ( 3 crs ), with a minimum grade of C+, plus 15 additional credits of psychology coursework, approved by the department, for a total of 18 credits. The combined GPA for all psychology courses taken towards the minor must be at least 2.0. Courses which require a particular pre-requisite for the major will be the same as those required for the minor. Students may transfer no more than 9 credit hours from other universities to count towards the psychology minor.

\section*{Core Fulfilling Courses}

PSY 110 General Psychology (Serves as a social/behavioral science core.)

\section*{Course Descriptions:}

\section*{PSY 110 General Psychology ( 3 crs )}

A survey of contemporary psychology, including the topics of conditioning and learning, sensation and perception, psychophysiology, motivation and emotion, memory and cognition, development, social behavior, psychological testing, personality, psychopathology and psychotherapy. Participation in research projects or an alternative exercise is required. FS

\section*{PSY 115 Statistics for the Behavioral Sciences (3 crs)}

Students will learn to analyze and interpret data using descriptive and inferential statistics. Measures of central tendency, variability and hypothesis testing using parametric and non-parametric tests will be discussed. Correlation, ttests, regression, \(z\)-scores, chi square and analysis of variance will be presented. The course will make significant use of the SPSS computer analysis program. Prerequisite: PSY 110 with grade of C+ or better. S

\section*{PSY-116 Arousal Regulation and Relaxation Seminar (1 cr)}

An introduction into methods of arousal regulation and relaxation. This is an experiential learning seminar in which students will be expected to develop and maintain a regular self-regulation routine in order to attain mastery of at least one arousal regulation skill.

\section*{PSY-118 Behaviorism Seminar (1 cr)}

An introduction to the philosophy of behaviorism as articulated by the most prominent figure in American behavioral psychology, B. F. Skinner. The basic problems and principles of psychology will be addressed from a behavioral perspective.

\section*{PSY 211 Experimental Psychology (4 crs)}

An introduction to the principles and methods of experimental psychology, with laboratory investigation. Prerequisite: PSY 115 with a grade of C or better. \(\mathbf{F}\)

PSY 212 Developmental Psychology ( 3 crs)
An analysis of development throughout the life-span, with a special emphasis on various theoretical approaches to development. Designed for non-psychology majors. Students taking this course should not take PSY 214, 216, or 218. Prerequisite: PSY 110. S

\section*{PSY 214 Child Psychology ( 3 crs)}

A study of the physiological, intellectual, social and emotional factors in child development. The course will emphasize contextual factors that influence child development outcomes. F Students taking this course should not take PSY 212. Prerequisite: PSY 110.

\section*{PSY 216 Adolescent Psychology (3 crs)}

A study of basic research and theories concerning development in the adolescent years. Students taking this course should not take PSY 212. Prerequisite: PSY 110. F

\section*{PSY 218 Adulthood and Aging (3 crs)}

A study of adulthood and aging from an interactionist perspective with an emphasis on the psychological development of the individual during the latter part of the life span. Students taking this course should not take PSY 212. Prerequisite: PSY 110. S

\section*{PSY 220 Educational Psychology (3 crs)}

A study of the cognitive and affective dimensions of student behavior, with emphasis on the theoretical conceptions of learning which underlie educational methods. This course should not be taken by Professional Education majors. Prerequisite: PSY 110. S

\section*{PSY-221 Behavior Modification (3 crs)}

This course is about the ways in which environmental contingencies modify behavior in individuals. The conceptual framework, broadly called "applied behavior analysis" (ABA), is a set of principles for describing and testing environment/behavior relationships using single-subject research methods.

\section*{PSY 222 Child Psychopathology (3 crs)}

A study of the central issues in childhood psychopathology including theoretical and methodological issues, descriptions of disorders, clinical and research data and social, familial and ethical concerns. We will emphasize the integration of the processes of normal development with the occurrence of problem behaviors and learn about the neurobiological, genetic, psychological, family, peer, cultural and gender influences on the cause and treatment of childhood disorders. As part of their coursework, students will become certified in the Child and Adolescent Needs and Strengths (CANS) assessment procedure. SE

\section*{PSY 226 (MGT 226) Organizational Behavior (3 crs)}

A survey course that examines individual and group behavior in an organizational context. The underlying thesis of this course is that an increased understanding of the human system can result in an organization that is more effective at meeting both the organization's objectives and the goals and needs of the individual employees. Major topics include: motivation, leadership, decision-making and organizational change. Prerequisite: PSY 110. S

\section*{PSY 230 States of Consciousness ( \(\mathbf{3} \mathbf{~ c r s}\) )}

A seminar examining theoretical and empirical bases of human consciousness, noting physiological correlates. Topics include sleep, dreaming, hypnosis, meditation, biofeedback, sensory deprivation, drug-induced states and death, as well as the cultural shaping of ordinary consciousness. Prerequisite: PSY 110. SE

\section*{PSY 235 (WST 235) (INS 235) Human Sexuality in a Diverse World (3 crs)}

A data based study of biological, religious/historical, cultural and individual determinants of intimate human behavior. Prerequisite: PSY 110. FS

\section*{PSY 238 Psychopharmacology ( 3 crs )}

Examination of how drugs affect our behaviors, thoughts and emotions. The course will address the impact of psychopharmacological use and abuse in society, how drugs can alter neuronal information processing, pharmacodynamics, analysis of pharmacological agents with particular attention given to the psychological effects of these drugs and the applicability of pharmacological agents to the treatment of psychopathologies. Prerequisite: PSY 110. FE

\section*{PSY 240 Foundations of Social Work (3 crs)}

Foundations of Social Work is a seminar and experiential-learning course designed to explore an overview of the Social Work field. The primary goal is for students to understand what social work entails and how it is implemented by professionals. The course explores the theoretical, ethical, economic, political, cultural, and justice forces that impact the field on a macro level. With that foundation, students work through the stages of the helping profession: engagement, assessment, intervention, and termination at a micro level. This course delves into the marginalized and vulnerable populations of our society to prepare students to be empathetic, knowledgeable professionals. SO

\section*{PSY 250 Sport Psychology ( 3 crs)}

An examination of sports from an empirical point of view with emphasis on behavioral/learning principles as they apply to the influence of sports on athletes and spectators. Prerequisite: PSY 110. S

\section*{PSY 262 Psychology in Film (3 crs)}

The course will take a problem-based pedagogical approach. Each week students will be shown a film, and specific questions will be presented for them to address in a written commentary. To do this effectively, the student will need to reflect upon and apply psychological theories, hunt down additional information concerning each film, competently analyze a variety of film character/writer/director aspects (behaviors, motivations, social influences, etc.) and provide personal beliefs and interpretations. FO

\section*{PSY 300 Directed Research (1, 2, or 3 crs)}

Under the direction of a faculty member, students design and carry out empirical research in psychology. Prerequisite: PSY 211 with grade of C or higher and permission of the instructor. FS

\section*{PSY 311 Physiological Psychology (4 crs)}

A study of the physiological correlates of human behavior, especially the relationship between brain and behavior; Research Elective. Prerequisites: BIO 105 or BIO 120, PSY 211. SE

\section*{PSY 312 (MGT 312) Industrial Psychology (3 crs)}

A survey of the field of Industrial/Organizational Psychology with particular emphasis on the classical Industrial Psychology domain of selection. The course, as in the case with the field of Industrial/ Organizational Psychology, is somewhat quantitative. Prerequisite: PSY 110. D

\section*{PSY 313 Motivation and Emotion (4 crs)}

A study of motivational and emotional processes from physiological, individual and social standpoints; data based theories of motivation and emotion evaluated. Research Elective. Prerequisite: PSY 211 with grade of C or higher. FO

\section*{PSY 314 Social Psychology (4 crs)}

A study of the effects of the group on individual behavior, including the topics of aggression, persuasion, attitudes, compliance, obedience, attraction, and person perception. Research elective. Prerequisite: PSY 211 with grade of C or higher. S

\section*{PSY 315 Tests and Measurements (4 crs)}

An analysis of psychological tests and measurements, including tests of intellectual level, specific aptitude and personality; test construction, reliability, validity, norming procedures and ethical issues emphasized. Research elective. Prerequisite: PSY 211 with grade of C or higher. S

\section*{PSY 317 Cognitive Psychology (4 crs)}

An introduction to the higher mental processes from an experimental point of view, including the topics of memory and attention, thinking, creativity, language behavior and cognitive development. Research Elective. Prerequisite: PSY 211 with grade of C or higher. FO

\section*{PSY 319 Sensation and Perception (4 crs)}

A study of the reception and interpretation of sensory information, including study of how sensory receptors function and factors which affect perceptual organization; Research Elective. Prerequisite: PSY 211 with grade of C or higher. SO

\section*{PSY 320 Learning (4 crs)}

An introduction to the basic theoretical, experimental and applied concepts in learning, with particular emphasis on operant and classical conditioning. Research Elective. Prerequisite: PSY 211 with grade of C or higher. F

\section*{PSY 330 Personality ( 3 crs )}

A survey of the various theories of personality, including psychoanalytic, behavioral, phenomenological and dispositional, and the study of various methods for assessing personality. Prerequisite: PSY 110. SO

\section*{PSY 335 Psychotherapy ( 3 crs)}

A discussion of assessment techniques, empirically-based treatments, strategies for prevention of mental illness and ethical issues in therapy. Prerequisite: PSY 110. SE

\section*{PSY 340 Abnormal Psychology ( 3 crs)}

A study of the major predisposing and precipitating factors in the development of abnormal behavior, with emphasis on the biological, social and cultural factors involved. Prerequisite: PSY 110. SO

\section*{PSY 350 Health Psychology (3 crs)}

An investigation of factors that promote health, as well as those contributing to illness and behaviors related to illness. Research methods of gathering data within this developing field are stressed. Prerequisite: PSY 110. F

\section*{PSY 374 Internship I (3 crs)}

Students gain firsthand experience in the practice of psychology by working under supervision in various agencies in the Ohio Valley. Prerequisite: PSY 110, junior level status as a psychology major; permission of instructor. FS

\section*{PSY 388 Junior Seminar (1 cr)}

This course will provide students with an opportunity to assess their educational progress to date and to make plans for future study and career endeavors. Please note that we will assess not only academic preparation, but also students' interests, emotional development, and life goals. Successful completion of the course should enable students to move easily into their senior year with confidence and clear goals. Prerequisite: PSY 110 and junior standing. SO

\section*{PSY 410 Advanced Statistics and Data Management (1 cr)}

Seminar course designed to introduce the student to advanced statistical analysis and data management techniques, which will be further emphasized in a graduate-level setting. The course begins with a brief review of basic statistics and SPSS computing procedures. Topics then include non-parametric statistical procedures, qualitative data analysis, partial correlation, analysis of covariance, multivariate analysis of variance, multivariate analysis of covariance, multiple linear regression, factor analysis, discriminate analysis, cluster analysis, path analysis, logit modeling and trend analysis. Data management issues concern determining the appropriate statistical analysis to use for a given data set, interpretation and evaluation of published research and discussion of issues related to missing, outlying and improperly coded data. Prerequisite: PSY 211 with grade of C or higher and permission of instructor. SO

\section*{PSY 420 History and Systems of Psychology (4 crs)}

An overview of the roots of scientific psychology in philosophy and experimental physiology, and a detailed examination of the systems of structuralism, functionalism, behaviorism, humanism, Gestalt psychology and psychoanalysis. Prerequisite: PSY 110, junior level status. S

\section*{PSY 425 (WST 425) (INS 425) Topics in Gender (3 crs)}

An exploration of current research findings on the interaction of gender and society, how men and women behave differently and how gender is represented in culture. Prerequisite: PSY 110. D

\section*{PSY 474 Internship II (3 crs)}

A second internship, completed after taking PSY 374. May not be counted as one of the upper division electives required of psychology majors. Prerequisite: PSY 110, PSY 374, senior level status as a psychology major; permission of instructor. FS

\section*{PSY 486 Thesis ( \(\mathbf{3}\) crs)}

Completion of the senior thesis project. May require some work in the summer prior to senior year. Prerequisite: PSY 300, senior level status and permission of the department. FS

PSY 488 Senior Seminar (1 cr)
This course will provide students with a capstone for the Psychology major. Successful completion of the course should enable students to move easily into graduate school or employment settings. F

\section*{Respiratory Care Practitioner}

Contact Person:
Marybeth Emmerth, M.S., RRT, CPFT, Associate Professor and Program Director
The curriculum is designed to provide a thorough grounding in the basic sciences, underlying allied health technologies, clinical training emphasizing the application of fundamental principles and a liberal arts foundation which allows the student to explore the human and ethical aspects of health care practice. The Student Handbook outlines the specific requirements for successful completion of the Bachelor of Science degree. Course sequence may be slightly altered. Upon completion of the Respiratory Care Practitioner program, students will be able to demonstrate the ability to:
1. Comprehend, apply and evaluate information relevant to their role as a Respiratory Care Practitioner (Cognitive).
2. Possess personal behaviors consistent with professional and employer expectations (Affective).
3. Be technically proficient in all the skills necessary to fulfill the role of a Respiratory Care Practitioner (Psychomotor).

\section*{Requirements for Respiratory Care Practitioner Bachelor of Science Degree}

In addition to completing the core curriculum requirements, the respiratory practitioner major must complete the following courses with a letter grade of "C" or better and must maintain a 2.75 GPA in all math and science courses to enter clinical practicum.
\begin{tabular}{lll} 
BIO 242 & Cardiopulmonary Physiology & \((3 \mathrm{crs})\) \\
BIO 109 & Cells \& Chromosomes & \((3 \mathrm{crs})\) \\
BIO 121 & Cells \& Chromosomes Lab & \((1 \mathrm{cr})\) \\
BIO 127 & Anatomy \& Physiology I & \((3 \mathrm{crs})\) \\
BIO 128 & Anatomy \& Physiology Lab & \((1 \mathrm{cr})\) \\
BIO 129 & Anatomy \& Physiology II & \((3 \mathrm{crs})\) \\
*CHE 105/110 & General Chemistry & \((3 / 4 \mathrm{crs})\) \\
PHY 109 & College Physics I & \((3 \mathrm{crs})\) \\
CLS 215 & Concepts of Microbiology and Epidemiology & \((2 \mathrm{crs})\) \\
CLS 321 & Intro. To Research In Health Care & \((3 \mathrm{crs})\)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline CLS 334 & Pathophysiology & (3 crs) \\
\hline CLS 311 & Introduction to Pharmacology & (1 cr) \\
\hline CLS 312 & CPR and Basic First Aid for Health Care Practitioners & (1 cr) \\
\hline CLS 320 & Management Techniques for the Health Sciences & (2 cr) \\
\hline CLS 330 & Principles of Instruction for the Health Sciences & (2 cr) \\
\hline RET 212 & Intro. to Respiratory Therapy Equipment and Procedures & (3 crs) \\
\hline RET 320 & Respiratory Pharmacology & (1 cr) \\
\hline RET 325 & Adult Respiratory Therapy Equipment and Procedures & (3 crs) \\
\hline RET 330 & Pulmonary Functions, ABG , hemodynamics and Rehabilitation & ogy, and Rehabilitation (3 crs) \\
\hline RET 340 & Advanced Ventilation and Adjunctive Therapy & (3 crs) \\
\hline RET 342 & Arterial Blood Gases, Hemodynamics and Cardiac Physiology & (3 crs) \\
\hline RET 345 & Neonatal and Pediatric Respiratory Care & (3 crs) \\
\hline RET 482 & Special Project Capstone & (1 cr) \\
\hline \multicolumn{3}{|l|}{Clinical Practicum including:} \\
\hline RET 262 & Intro. to Clinical Principles & (2 crs) \\
\hline RET 362 & Clinical Orientation & (2 crs) \\
\hline RET 363 & Principles of General Care I & (3 crs) \\
\hline RET 365 & Introduction to Anesthesia & (1 cr) \\
\hline RET 366 & Principles of Critical Care I & (5 crs) \\
\hline RET 464 & Pulmonary Functions & (1 cr) \\
\hline RET 465 & Principles of General Care II & (4 crs) \\
\hline RET 466 & Principles of Critical Care II & (4 crs) \\
\hline RET 467 & Rehab. and Home Care & (2 crs) \\
\hline RET 468 & Clinics & (1 cr) \\
\hline RET 469 & Emergency Medicine & (1 cr) \\
\hline NUR/RET 412 & Critical Thinking SkillsDepartment Administration & (1 cr) \\
\hline RET 420 & Registry Review for Respiratory Therapy & (1 cr) \\
\hline \multirow[t]{2}{*}{NUR/RET 430} & EKG Interpretation & (1 cr) \\
\hline & Electives (Not Required) & \\
\hline
\end{tabular}

\section*{Requirements for Bachelor of Science Degree in Respiratory Care with a concentration in Neonatal and Pediatric Care}

The primary goal of Wheeling Jesuit University’s Bachelor of Science in Respiratory Care with a concentration in Neonatal and Pediatric Care curriculum is to better prepare students who plan to specialize in neonatal and pediatric respiratory care. The following organizations provided advice during the development of the concentration: University of Cincinnati Children's Hospital, University of West Virginia Children's Hospital, UPMC-Children's Hospital, University of Virginia Health System and Wheeling Hospital.

The core respiratory therapy program remains unchanged. Concentration completion requires several elective classes and requirements. The electives are only available after successful completion of the junior year and with the approval of both the Director of Clinical Education and Program Director. In addition, the prospective student must obtain at least a B in the program-required RET-340 Neonatal and Pediatric Respiratory Care course. All prior course prerequisites remain unchanged.

Required courses for concentration completion:
RET 345Neonatal and Pediatric Respiratory Care ( 3 crs )
RET 485Advanced Neonatal and Pediatric Procedure and Assessment(2 crs)
RET 486Advanced Neonatal Pharmacology and Pathophysiology(2 crs)
RET 487Clinical Practicum for the Neonatal/Pediatric Concentration(1 cr)

\section*{Course Descriptions}

\section*{RET 212 Introduction to Respiratory Therapy Equipment and Procedures ( \(\mathbf{3} \mathbf{~ c r s )}\)}

This introductory course serves as the entry point for all traditional respiratory therapy students. Students begin the course with a directed review of basic cardiopulmonary anatomy and physiology. The course proceeds with the development of the student's patient assessment skills. Students start with basic assessment of vital signs and cardiopulmonary symptoms and progress to various forms of advanced clinical mastery of both hypoxemia and arterial blood gas interpretation (ABG's). As the semester progresses, students will be exposed to concepts related to medical gas therapy, aerosol therapy, basic clinical lab values, nutrition and various RT math skills. Prerequisite: Application and official acceptance into the professional phase of the respiratory practitioner program. \(\mathbf{S}\)

\section*{RET 262 Introduction to Clinical Principles ( 2 cr )(a clinical practicum)}

This course is the student's first exposure to clinical. Throughout this course, students will bring the topics of RET212 to life by participating in a hands-on environment. This allows them to practice techniques before he or she goes to clinical sites, and allows the student to gain confidence in their knowledge and skills. The course material is designed to follow the course sequence of RET-212, and allows the students to further the theories and techniques within the laboratory setting. Students will also have the opportunity for observation via field trips to the local hospitals. Prerequisite: Application and official acceptance into the professional phase of the respiratory practitioner pro-gram,Co-requisite: RET-212. S

\section*{RET 320 Respiratory Pharmacology (1 cr)}

A study of the application, uses and effects of pharmacological agents administered by respiratory care practitioners, and those affecting the cardiovascular system. Prerequisite: HSC 311. F

\section*{RET 325 Adult Respiratory Therapy Equipment and Procedures ( \(\mathbf{3} \mathbf{c r s}\) )}

This course for the respiratory practitioner program exposes the student to respiratory therapeutics. Material learned from RET-212 is applied and furthered by the addition of patient therapy based on assessment findings. Topics discussed include: basic operating principles, humidity and aerosol therapy, bronchial hygiene techniques, suctioning, airways and maintenance, patient monitoring devices, lung expansion techniques, NIPPV, CPAP, BIPAP, basic ventilation (pressure versus volume), foundation ventilator modes (such as A/C, SIMV, and PSV), and ventilator equipment. Prerequisite: Successful completion of RET 212 with a grade of \(C\) or higher. \(\mathbf{F}\)

\section*{RET 330 Pulmonary Functions Pulmonary Rehabilitation (3 crs)}

Introduction of the student to bronchoscopes, stress testing and pulmonary rehabilitation principles as well as advanced physiology of the pulmonary system, breathing regulation, respiratory insufficiency, basic Pulmonary Function Testing procedures, equipment and interpretation. Prerequisites: RET 212, RET 325. S

Advanced blood gas analysis, and hemodynamics monitoring and its application to Respiratory care.

\section*{RET 340 Advanced Ventilation and Adjunctive Therapies ( \(\mathbf{3} \mathbf{~ c r s}\) )}

This course is designed to allow the student to master ventilation techniques, and learn about advanced cardiopulmonary care procedures and assessment. Students will be exposed to advanced modes of ventilation, current ventilation protocols, ventilator weaning theory and advance cardiopulmonary assessment as how it relates to respiration and positive pressure ventilation. All advanced respiration education is directed towards providing the student with the knowledge and ability to adequately provide patient and pathology specific mechanical ventilation. Adjunctive therapies and diagnostics including items such as: medical gas therapies (NO, HE/OX, etc.), chest x-ray interpretation, HFOV, chest tubes, arterial monitoring, VCO2 and ETCO2 monitoring, IV/IM skills are also includ-
ed. Prerequisites: Successful completion of RET 212, RET 262, and RET 325 with a grade of C or higher. Students with a C- or less in CLS 334 (Pathophysiology) need permission from the Program Director and the Director of Clinical Education to proceed. S

\section*{RET 342 Arterial Blood Gases, Hemodynamics, and Cardiac Physiology ( 3 crs)}

Advanced physiology of the cardiovascular system. Topics included are connective tissues of the heart, ECG technique and interpretation, blood, heart and body pressure regulation, gas exchange and transport, advanced blood gas analysis , technique, arterial and hemodynamic monitoring and its application to the practice of respiratory care. \(\mathbf{S}\)

\section*{RET 345 Neonatal and Pediatric Respiratory Care (3 crs)}

Students will master concepts relating to: fetal growth and development, fetal gas exchange and circulation, the process of neonatal delivery, and common neonatal and pediatric pulmonary disease processes. Material learned from CLS 334 - Pathophysiology - is also applied and furthered (congenital cardiac defects, asthma, hypersensitivity reactions, aspiration, drowning, sepsis, thoracic trauma and shock and anaphylaxis). This course will also help students to identify and master the following skills: Antenatal assessment and high-risk delivery, neonatal and pediatric patient, invasive blood gas analysis and cardiovascular monitoring, noninvasive monitoring in neonatal and pediatric care, airway management, medical gas, and aerosol administration, CPAP, all forms of mechanical ventilation, ECMO and surfactant replacement therapy. S

\section*{RET 362 Clinical Orientation ( 2 crs ) (a clinical practicum)}

This junior level clinical practicum is designed to allow the student to experience enhanced application of theories learned in the co-enrolled RET- 325 course. This course is designed to orient the student to the various environments in which respiratory practitioners work. Students are exposed to basic patient therapeutic procedures in both oncampus laboratory and hospital settings. Competence in basic respiratory therapy administration within the general care (floor) areas of the hospital is the ultimate student educational goal. Prerequisite: Junior status in good standing, completion of student physical, successful completion of RET-212 and RET 262 with a grade of C or higher. \(\mathbf{F}\)

\section*{RET 363 Principles of General Care I ( \(\mathbf{3} \mathbf{~ c r s ) ~ ( a ~ c l i n i c a l ~ p r a c t i c u m ) ~}\)}

This junior level clinical practicum is designed to complement the material presented in RET-340, RET-345, RET330, and RET-342. Clinical rotations are combined with respiratory lab time. Clinical rotations will allow the student to apply classroom theory in the real world. Students will be exposed to principles of nursing, advanced patient care, mechanical ventilation, advanced patient assessment, and other various aspects of cardiopulmonary care. Clinical rotations may vary, but generally include work in areas such as intensive care units, LTACH, pulmonary function testing labs, and pulmonary rehabilitation areas. The respiratory lab provides time for competency check-offs and clinical preparation. Prerequisites: Junior status in good standing, completion of student physical, successful completion of RET-362 and RET-325 with a grade of C or higher. \(\mathbf{S}\)

\section*{RET 365 Introduction to Anesthesia (1 cr) (a clinical practicum)}

This course is designed to familiarize the student with surgical procedures, sterile technique, intubation, airway maintenance and principles of anesthesia. Prerequisite: Completion of pre-practicum course, student physical, a criminal background check and child abuse check. Su

\section*{RET 366 Principles of Critical Care I (4 crs) (a clinical practicum)}

This course will familiarize the student with all aspects of ventilator management, airway maintenance and principles of respiratory management of the critically ill patient. Prerequisite: Completion of pre-practicum courses. Su

\section*{RET 412 Department Administration (NUR 412) Critical Thinking Skills (1 cr)}

Critical thinking and problem solving skills are applied to patient situations involving complications.Disaster management and triage, as well as professional issues like interviewing, resume, hospice care, organ procurement and other professional skills are covered. \(\mathbf{S}\)

\section*{RET 420 Registry Review for Respiratory Therapy (1 cr)}

Designed to review necessary information for passing the national licensure examination for respiratory care. Prerequisite: Completion of the pre-practicum and all clinical practicum courses. \(\mathbf{S}\)

\section*{RET 424/NUR 424 (ACLS) Advanced Cardiac Life Support (1 cr) (Elective)}

This course is designed to prepare the student for the ACLS certification exam. Through the use of critical thinking, the student will develop an understanding of the treatment of a client in an arrest state. \(\mathbf{S}\)

\section*{RET 430/NUR 430 Basic ECG (1 cr)}

This course focuses on the identification of cardiac dysrhythmias, benign and lethal, including causes and symptoms accompanying each dysrhythmia. Through the use of practice telemetry strips, students will then apply interpretation skills in a clinical setting. F

\section*{RET 464 Pulmonary Function (1 cr) (a clinical practicum)}

The student will perform pulmonary function tests, the drawing of arterial blood gases, analysis of samples, interpretation of results; and observation and assistance with fiber optic bronchoscopes and exercise stress testing. Prerequisite: Completion of pre-practicum courses.

\section*{RET 465 Principles of General Care II (4 crs) (a clinical practicum)}

This course is designed for the student to administer therapy in the general care area with clinical supervision. The student will apply and refine skills presented in RET 363, Principles of General Care I, and become skilled in 12 lead EKG and other monitoring techniques. Prerequisite: Completion of pre-practicum courses. F

\section*{RET 466 Principles of Critical Care II (4 crs) (a clinical practicum)}

This course will give the student more direct responsibility for the patient-ventilator system in the neonatal, adult and pediatric intensive care areas. The student will apply and refine skills presented in RET 366, Principles of Critical Care I, and spend 1 week with pulmonary physician as well as the integration of didactic and clinical investigation of case studies. Prerequisite: Completion of pre-practicum courses. F

\section*{RET 467 Rehabilitation and Home Care ( 2 crs ) (a clinical practicum)}

This course places the student in hospital rehabilitation centers and home health care services. The student will be exposed to principles of outpatient management and rehabilitative medicine. Prerequisite: Completion of prepracticum courses. \(\mathbf{F}\)

\section*{RET 468 Clinics (1 cr) (a clinical practicum)}

The student will be placed in various clinics to observe the screening, diagnostic process and management of patients. Exposure to specific disease management, X-ray evaluation, angiography and heart lung bypass techniques are included. Prerequisite: Completion of pre-practicum courses. F

\section*{RET 469 Emergency Medicine (1 cr) (a clinical practicum)}

Placement in the emergency room, intensive care settings and on the cardiac arrest team for an orientation to triage and emergency intervention. Prerequisite: Completion of pre-practicum courses. F

\section*{RET 480 Advanced Clinical Experience (1-2 crs) (elective or required)}

This course has been designed with two tracks, elective or required credit. Students who do not receive a passing score on their final mock credentialing exams, are required to take this course for credit prior to graduation. During the required course, students will work to enhance their decision making skills and to individually strengthen their foundation of knowledge thru various in-class and/or clinical projects. Students utilizing this course for elective credit, have the opportunity to work with the instructor to develop clinical experiences in specialized clinical areas. These clinical experiences may include internships or additional clinical experiences \(\mathbf{S}\)

\section*{RET 482 Research Capstone (1 cr)}

Completion of a research project with poster presentation and final paper is required. \(\mathbf{S}\)

\section*{RET 485 Advanced Neonatal and Pediatric Procedure and Assessment (2 crs)}

Advanced Neonatal and Pediatric Procedure and Assessment builds upon the knowledge gained in RET 340. This class is required for the Neonatal and Pediatric Respiratory Care concentration and for those interested in working with children. Topics such as the STABLE program, transport, bronchoscopy, PFT testing and education within the neonatal and pediatric patient population. Prerequisites: "B " or better in RET 345

\section*{RET 486 Advanced Neonatal Pharmacology and Pathophysiology (2 crs)}

Advanced Neonatal Pharmacology and Pathophysiology builds off the knowledge gained in CLS 334 and RET 345. This class explores more infrequent pathologies seen in the neonatal and pediatric populations. The more frequent pathologies are also explored again in more detail. Evidence-based pharmacological treatment is studied with each disease. Prerequisites: CLS 334 and a " \(B\) " or better in RET 345

\section*{RET 487 Clinical Practicum for the Neonatal/Pediatric Concentration (1 cr)}

This concentration-level clinical practicum is designed to follow the senior practicum. An educational 64-hours of hands-on neonatal and pediatric care further enhance the student's clinical skills in preparation for the career in neonatal and pediatric respiratory care. Prerequisite: " \(B\) " or better in RET 345, RET 366, and RET 467

\section*{Social Science}

Contact Person: John Poffenbarger, Ph.D.
Social Science is a curriculum that helps students develop the knowledge and skills needed to analyze societal structures and problems, and not only to plan, but also implement programs aimed at alleviating the latter.

\section*{Course Descriptions:}

\section*{SSC 105 Social Science from a Global Perspective (3 crs)}

An introduction to the study of human group behavior from both a sociological and global perspective. This includes a brief survey of the origins, development and modes of inquiry of social science. Key concepts and distinctive approaches of major disciplines will be presented including anthropology, economics, geography, political science, psychology and sociology. D

\section*{SSC 110 Introductory Anthropology (3 crs)}

Physical and cultural anthropology. Brief discussion of origins, perspectives and research methods of the discipline. Consideration of evolutionary and non evolutionary theories. Examination of human beings as social and culturecreating entities in the linguistic, marital, educational, economic, political and religious spheres. \(\mathbf{S}\)

\section*{SSC 327 Research Methods (3 crs)}

A multi-faceted approach to problems of research design, data collection, data analysis. The course is intended to provide majors in social science fields an opportunity to explore and develop a topic for the senior thesis. It is, however, open to students in all fields who seek a fundamental introduction to doing research. Prerequisites: junior standing. S

\section*{SSC 415 Statistical Analysis (3 crs)}

A study of the different techniques used in the social sciences to analyze, interpret and evaluate data. The course is intended to provide students conducting a senior thesis, in social science, the necessary skills to organize and summarize their data using descriptive and inferential statistics. Prerequisites: senior standing, MAT 105, SSC 327. S

\section*{SSC 488 Senior Thesis ( 3 crs )}

This course is designed to allow students to develop and conduct research in their area of study/interest. Students will formulate a thesis question and utilize various research methodologies to collect data in support of their hypotheses, as well as conduct a thorough review of the literature regarding their topic. Upon completion of the project, a formal presentation/defense will be made in front of the other members of the class and the entire faculty of the department. Prerequisites: senior standing, MAT 105, SSC 327. F

\section*{SSC 489 Senior Seminar ( 3 crs )}

Students participate in an integrative seminar designed to enable them to identify significant issues which arise in the serious study of society, and to relate their personal philosophies and Judeo-Christian perspectives to alternative courses of action. The seminar also includes a comprehensive oral examination which each student must pass in order to graduate. Prerequisites: senior standing, SSC 488. S

\section*{Statistical Analysis and Data Management Certification Program}

\author{
Contact Person: Dr. Bryan Raudenbush, Ph.D
}

This program's primary goal is to provide students with an integrated academic and practical background in statistical analysis and data management. It is designed to enhance student eligibility for employment or further study in any field.

\section*{Requirements}

The Statistical Analysis and Data Management Certificate Program consist of required courses. The core requirements provide and introduction to statistics, statistical and analytic methods of research, and advanced statistic and data management study. Upon completion of the required courses, students will be awarded a certificate from the SPSS Corporation noting their accomplishment.

Required Courses
PSY 110
General Psychology \({ }^{1}\)
PSY \(115 \quad\) Behavioral Statistics \({ }^{2}\)
PSY 211 Experimental; Psychology \({ }^{3}\)
PSY \(410 \quad\) Advanced Statistics and Data Management \({ }^{4}\)

\section*{Additional Information}

Students are encouraged to meet with Dr. Bryan Raudenbush, Coordinator of the Statistical Analysis and Data Management Certificate Program, for advising early in their college career. Careful planning is required since some courses in the concentration have prerequisites.

A minimum GPA of 2.5 must be maintained in the collective courses used to satisfy the concentration.
\({ }^{1}\) Core fulfilling course
\({ }^{2}\) Prerequisite PSY 110 (C+ or greater)
\({ }^{3}\) Prerequisite PSY 115 (C or greater)
\({ }^{4}\) Prerequisite PSY 211 (C or greater) A course grade of C or greater

\section*{Theology and Religious Studies}

Contact Persons:
Daniel M. O'Hare, Ph.D
Michael F. Steltenkamp, S.J., Ph.D.
Jessica Wrobleski, Ph.D.
Theology and Religious Studies are academic disciplines and essential branches of knowledge in a liberal education. They provide an opportunity for one to explore religious commitment, the relationship between faith and reason, and religion and culture. Wheeling Jesuit also offers a minor in Catholic Studies that majors are encouraged to consider pursuing.

Graduates will be able to:
1. Show how religion fills a vital role in the way people view their world.
2. Recognize the ethical implications of religion.
3. Use critical skills for the interpretation of texts, rituals, religious art and other forms of religious experience.
4. Foster spiritual growth and care for human life that such growth includes.

Requirements for Theology and Religious Studies Major
In order to earn a major in theology/religious studies, students must:
A. Complete the following in Theology and Religious Studies:
\begin{tabular}{lll} 
RST 106 & The Religious Quest or & \\
RST 107 & Catholicism & \((3 \mathrm{crs})\) \\
RST 203 & World Religions or & \\
RST 303 & Studies in Living Religious Traditions or & \\
RST 313 & Religious Traditions of Native North America or & \\
RST 315 & Judaism & \((3 \mathrm{crs})\) \\
RST 200 & Introduction to the Hebrew Bible/ Old Testament & \((3 \mathrm{crs})\) \\
RST 204 & Jesus the Christ & \((3 \mathrm{crs})\) \\
RST 305 & Theological Ethics & \((3 \mathrm{crs})\)
\end{tabular}
B. Take ONE course from each of the following groups:
\begin{tabular}{lll} 
a) & RST 206 & The Church in the Modern World \\
RST 207 & Christian Marriage & \((3 \mathrm{crs})\) \\
RST 304 & The Quest for God & \((3 \mathrm{crs})\) \\
RST 306 & Christian Ritual and Worship & \((3 \mathrm{crs})\) \\
RST 307 & Studies in Church History & \((3 \mathrm{crs})\) \\
b) & RST 201 & Introduction to the New Testament \\
& RST 202 & The Gospels \\
& RST 300 & Studies in the Old Testament \\
RST 301 & Studies in the New Testament & \((3 \mathrm{crs})\) \\
RST 302 & Paul's Letters & \((3 \mathrm{crs})\) \\
RST 208 & A Theology of War and Peace & \((3 \mathrm{crs})\) \\
c) & \((3 \mathrm{crs})\) \\
RST 209 & Issues in Sexual Morality & \((3 \mathrm{crs})\) \\
RST 230 & Catholic Social Thought & \((3 \mathrm{crs})\)
\end{tabular}

RST 308 Issues in Bioethics
(3 crs)
RST 309 Christianity and Capitalism (3 crs)
RST 401 Contemporary TheologicalTrends and Issues (3 crs)
RST 402 Action and Contemplation in Christian Life (3 crs)
RST 403 Great Theologians: Past \& Present
RST 404 Religion and Science
C. Complete SIX other theology electives.
* Additional courses are listed under the Catholic Studies Minor.

\section*{Special Notes on Major Requirements:}
1. All majors will complete 42 credits in theology, 9 of which simultaneously fulfill the core requirements.
2. If approved by the department, senior theology majors may elect to write a thesis under the guidance of a faculty member from Theology/Religious Studies and defend the thesis orally.
3. French or German is recommended for majors.

\section*{Requirements for Minor}

To earn a minor in Theology and Religious Studies, students must:
A. Complete the following courses:

RST 106 The Religious Quest or
RST 107 Catholicism
RST 303 Studies in Living Religious Traditions or
RST 313 Religious Traditions of Native North America or
RST 315 Judaism
RST 305 Theological Ethics
B. Complete THREE other theology electives.

Core Fulfilling Courses
1. RST 106 or RST 107 (prerequisite for all other RST courses)
2. All other courses except RST 484.*
3. RST 305 Theological Ethics (juniors and seniors only)
*Note: Courses numbered 400 are advanced and require of non-majors permission of the instructor for admission.

\section*{Course Descriptions:}

\section*{RST 106 The Religious Quest (3 crs)}

An introduction to how people address such "religious" issues as faith, doubt, deity, good, evil, community, salvation and worship. Particular attention is given to ways of interpreting the Bible, and how this sacred literature addresses the lives of its many readers.

\section*{RST 107 Catholicism (3 crs)}

An introduction to the great religious questions within the context of Catholicism. Ecumenism and Catholicism's relation to other religions will be a component. This course is recommended for Catholic students.

\section*{RST 200 Introduction to the Hebrew Bible/ Old Testament (3 crs)}

A sounding of the different kinds of literature represented in the Hebrew Bible and the Christian Old Testament, with emphasis on their diverse theologies, literary features, cultural and historical contexts and influences, ethical concerns, and continued relevance.

\section*{RST 201 Introduction to the New Testament (3 crs)}

An exploration of the types of New Testament literature with special attention to their different portraits of Jesus, their literary features, cultural and historical contexts and influences, understanding of the Old Testament, ethics, and ongoing influence.

\section*{RST 202 The Gospels ( 3 crs )}

A sustained inquiry into the nature of the Gospels and how they compare with one another, their relationship to Jesus of Nazareth, their literary and theological features, conceptions of Jesus, historical and cultural contexts, and understanding of the Old Testament.

\section*{RST 203 World Religions (3 crs)}

A study of the origins, history and beliefs of the major Western and Eastern religions: Hinduism, Buddhism, Judaism, Christianity and Islam, with an emphasis on interreligious understanding.

\section*{RST 204 Jesus the Christ ( \(\mathbf{3} \mathbf{~ c r s )}\)}

A study of the person and meaning of Jesus as presented in scripture and as understood throughout the Christian tradition.

\section*{RST 206 The Church in the Modern World (3 crs)}

A presentation of the Church's understanding of itself, its membership, ministry and mission to the world, with emphasis on the teachings of the Second Vatican Council.

\section*{RST 207 Christian Marriage and Sexual Morality ( 3 crs)}

An examination of moral issues pertaining to marriage, family, and sexuality in light of both Christian theology and trends in contemporary society. Possible topics include gender roles, premarital sexuality, homosexuality, divorce and remarriage, contraception, pornography, and the influence of communications media on sexuality and marriage.

\section*{RST 208 Theologies of War and Peace (3 crs)}

A comparative study of the teachings of Christianity and other traditions (Islam, Buddhism, international law) on war and peace and their impact on significant contemporary conflicts and issues such as humanitarian intervention, terrorism, and the use of nuclear weapons. Attention will also be given to emerging strategies for international cooperation and peace building.

\section*{RST 209 Issues in Sexual Morality ( \(\mathbf{3} \mathbf{~ c r s}\) )}

A critical study of current efforts to reexamine the Christian tradition's views on sexual morality; a detailed analysis of select topics such as premarital sexuality, homosexuality, pornography and gender roles in today's world.

\section*{RST 210 Religion and Literature ( 3 crs )}

An examination of significant religious issues as they are reflected in literature. Topics treated might include spiritual awakening, decision- making, suffering and death, prayer.

\section*{RST 230 Catholic Social Thought (3 crs)}

An introduction to basic principles of Catholic Social Thought (e.g., the sacredness of human life, the common good, preferential option for the poor, subsidarity) with a particular focus on the economic, social, political, and ecological issues raised by globalization in the early twenty-first century.

\section*{RST 300 Studies in the Hebrew Bible/ Old Testament ( \(\mathbf{3}\) crs)}

A focused analysis of a particular body of literature in the Hebrew Bible/ Old Testament (Torah, prophets, writings), a theological movement (apocalypticism), a historical time period (pre-exilic Israel), or a theological theme (repentance, suffering).

\section*{RST 301 Studies in the New Testament ( 3 crs )}

A targeted study of a specific genre or body of literature in the New Testament (Luke-Acts, Catholic Epistles), a theological issue (the relationship of believers to government), or a historical question (women in the early Christian communities).

\section*{RST 302 Paul's Letters (3 crs)}

An investigation of the letters associated with the Apostle Paul, exploring their developing theology, their literary and rhetorical features, the historical and cultural contexts in Paul's life in which they were written, the authorship of the disputed letters, and their continued relevance.

\section*{RST 303 Studies in Living Religious Traditions (3 crs)}

An introduction to the historical, cultural and theological aspects of one of several religious traditions other than Catholic Christianity (e.g. Protestant or Orthodox Christianity, Judaism, Islam, American Indian) An examination of its history, its beliefs and practices and its lived-reality today.

\section*{RST 304 The Quest for God (3 crs)}

An exploration of questions about the existence and nature of God as they have been treated in Christian history and shaped by 20th century concerns: a Christian Trinitarian understanding of God contrasted to the concept of divinity in other religious traditions.

\section*{RST 305 Theological Ethics ( 3 crs )}

A study of the foundations of moral theology, including methodological and anthropological questions as well as attention to decision-making in the context of specific social and political issues that students are likely to encounter in the contemporary world.

\section*{RST 306 Christian Ritual and Worship (3 crs)}

A study of the ritual responses of human beings to divinity, with specific focus on the Christian ritual response; an analysis of the Christian Eucharistic liturgy, festal celebrations, special liturgies like weddings and funerals, sacred time and space, and popular religious practices.

\section*{RST 307 Studies in Church History ( \(\mathbf{3} \mathbf{~ c r s}\) )}

A study of the history of the Christian Church focusing either on a comprehensive overview of its history or on a particular period or theme in its development.

\section*{RST/POS 310 Catholicism and Modernity ( 3 crs )}

An exploration of the interaction between Catholicism and modern political philosophy, focusing upon the major issue of the relationship between church and state.

\section*{RST 308 Issues in Bioethics ( \(\mathbf{3}\) crs)}

An analysis of contemporary issues in bioethics and medical ethics (e.g., the ethics of medical research and experimentation, the distribution and cost of health care, end-of-life issues, and reproductive technologies) in light of the Christian vision of human life.

\section*{RST 309 Christian Economic Ethics (3 crs)}

An analysis and evaluation of economic systems and theories in light of Biblical and theological perspectives on wealth and economic activity. The course will also address economic questions that have arisen with particular force at the end of the twentieth and first decade of the twenty-first centuries, including the nature of the banking industry, the globalization of commerce, the role of government intervention in markets, and economic inequality.

\section*{RST 312 Religion and Film ( 3 crs )}

An examination of select films which present religious issues in a way that stimulates the religious imagination and theological reflection. The films may be organized around a theme (e.g., suffering, death and hope; the sacramentality of everyday life; the quest for God; religious commitment and moral decision-making) or around a selection of filmmakers whose films reveal various religious interests.

\section*{RST 213 Religious Traditions of Native North America (3 crs)}

In considering how historians, anthropologists and Indians understand the peopling of North America, this course will look at the variety of sacred stories which tell of the Native genesis. Classes will focus on American Indian religion as it has been passed down through the generations before and after 1492. Special focus will be upon traditions which arose during the historical period which remain vital today within different communities (e.g., sacred stories, pipe usage, the sweatlodge ceremony, peyotism, etc). The reasons for, and content of, "revitalization movements" which have arisen over the past three hundred years also will be included. Finally, the spirituality associated with contemporary Indian people will be addressed by examining "New Age" and "ecology" themes.

\section*{RST 315 Judaism (3 crs)}

An introduction to the history, sacred teachings, contemporary issues, and attitudes of the Jewish people. The goal of the course is to gain a knowledge and an appreciation for the Jewish Tradition that invites students of disparate backgrounds to reconsider the beliefs and practices of their own religious heritage in comparison with those of this ancient but still vital community.

\section*{RST 401 Contemporary Theological Trends \& Issues (3 crs)}

Intensive study of new developments and current issues in theology and church life with a view to understanding their origins and implications. (Permission of instructor required.)

\section*{RST 402 Action and Contemplation in Christian Life (3 cr.)}

Reflections on the understanding of ministry and vocation in contemporary Christian life; the role of the laity in the Church; a survey of different spiritualities that undergird these ministries.
(Permission of the instructor required.)

\section*{RST 403 Great Theologians: Past and Present (3 crs)}

Intensive study of major theological figures, their development, influence and significance for the Church and intellectual history (e.g., St. Augustine, Thomas Aquinas, Luther, St. Teresa of Avila, Ignatius of Loyola, Martin Buber, Karl Rahner). (Permission of instructor required.)

\section*{RST 404 Religion and Science ( 3 crs )}

An examination of the numerous issues raised by the relationship between religion and science with special attention devoted to the writings of major theologians and scientists who have dealt with these issues. (Permission of instructor required.)

\section*{RST 460 Theology of Communication ( 3 crs )}

Study of the theology of social communication and its application to communication concepts, skills and communication work - including a critical evaluation of current trends in the reporting of religion and other religious communication. Writing intensive. Prerequisites: 2.0 or better in the completed English and theology cores or permission of instructor.

\section*{RST 480 Pastoral Practicum (3 crs)}

A "service learning" course designed primarily for persons planning a career in professions that "minister" to the public, e.g., theology majors, social science majors, health professions. Students do weekly "pastoral" work in places like the Catholic Neighborhood Center, campus ministry, and Wheeling area outreach centers that value Wheeling Jesuit interns. Readings in pastoral ministry and spirituality supplement one-on-one meetings with the instructor focused on the student's volunteer experience.

\section*{RST 484 Senior Thesis ( 3 crs )}

Independent research and preparation of a thesis written under the supervision of a department member or person designated by the department on a topic chosen by the student with the approval of the department.

\section*{Writing Minor}

\section*{Contact Person: Sara Sliter-Hays, Department of Communications and Composition}

\section*{Advisory Committee: Pending}

The writing minor offers an interdisciplinary minor which provides students with hands-on, intensive training in writing skills that are both specific to their majors and transferable to other contexts. Students will learn audience awareness, how to craft texts to specific writing contexts and goals, and how to produce clean, persuasive, and informative texts. Students will take classes that are based in rhetorical and communication theories as well as upperlevel electives that provide students specific instruction in their discipline or another discipline of their choice. The writing minor provides a credential that graduates can use to show future employers that they are dedicated and skilled writers.

\section*{Requirements for Writing Minor}

COMP 220
CRE 281
or CRE 282
COM 211
or COM 258

Advanced Writing Techniques
Creative Fiction Workshop
Creative Nonfiction Workshop
Fundamentals of Reporting
Public Relations

\section*{or COM 259}

Advertising
(3 crs)
Three upper-level writing intensive courses (9 cr)
One semester writing for a student publication at WJU, including Jewelweed or The Cardinal Connection.

\section*{Directories}

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Director of the Academic Resource Center

\section*{Christine L. Tomezyk}

Director of Student Financial Planning

Registrar

\section*{Center for Educational Technologies}

Charles A. Wood, Ph.D.
Director of CET
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    B.S., Canisius College
    M.A., University of Detroit
    M.S., Ph.D., Case Institute of Technology
    Joseph A. Laker (1974)
    Professor Emeritus of History
B.A., Marian College
M.A., Ph.D., Indiana University
Charles J. Loner (1963)
Professor Emeritus of Chemistry
B.S., Loyola University (Chicago)
Ph.D., Northwestern University
John Mansuy (1988)
Professor Emeritus of Management and Quantitative Business
B.S., The Ohio State University
M.S.E, Ph.D., West Virginia University
Maureen H. McKenna (1999)
Professor Emerita of Physical Therapy
M.C.S.P., Middlesex Hospital,
London, England
M.A., Ph.D., Pacifica Graduate Institute
Barbara A. Miller (1964)
Librarian Emerita
B.S., M.S.L.S., Marywood College
M.L.S., University of Pittsburgh
Charles A. Millick (2005)
Professor Emeritus of Management
B.A., U.S. Military Academy
M.B.A., Xavier University
Mary M. Moore (1978)
Librarian Emerita
B.A.,Wheeling Jesuit College
M.L.S., University of Pittsburgh
Richard P. Mullin (1974)
Professor Emeritus of Philosophy
B.A., St. Vincent College
M.A.,West Virginia University
M.A., Ph.D., Duquesne University

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\section*{Challenger Learning Center}

Jackie A. Shia
Assistant Director

\title{
National Technology Transfer Center
}

\author{
Alan Sherwin \\ Interim Director, Washington Operations
}

\section*{The Faculty}

The date of first appointment to the University appears in parentheses at the end of each person's name.

\section*{Professors Emeriti}

\author{
George P. Alexander (1961) \\ Professor Emeritus of Modern Languages \\ Diploma, University of Tuebingen \\ M.A., The Johns Hopkins University \\ Ph.D., University of Pittsburgh \\ Eileen R. Carpino (1955) \\ Librarian Emerita \\ B.S., Spalding College \\ B.S.L.S., The Catholic University \\ Norman V. Duffy (1996) \\ Professor Emeritus of Chemistry \\ B.S., Ph.D., Georgetown University \\ Sr. Mona C. Farthing, S.S.J. (1984) \\ Professor Emerita of Nursing \\ B.S.N., M.S.N., The Catholic University of America \\ Margaret S. Geroch (1979) \\ Professor Emerita of Computer Science \\ B.A., The College of Wooster \\ M.A., University of Pittsburgh \\ M.S., West Virginia University \\ C. James Goodwin (1973) \\ Professor Emeritus of Psychology \\ A.B., College of the Holy Cross \\ M.A., Ph.D., Florida State University \\ Thomas G. Knorr (1965) \\ Professor Emeritus of Physics
}

\footnotetext{
Paul A. Orr (1956)
Professor Emeritus of English
B.A., Loyola College (Montreal)
M.A., McGill University

Ph.D., University of Notre Dame

Onkar N. Pandit (1978)
Professor Emeritus of Mathematics
B.A., University of Jammu and Kashmir
M.A., University of Delhi
M.S., University of Illinois at Urbana-Champaign

Normand J. Paulhus (1976)
Professor of Theology; Dean Emeritus
B.A., Assumption College
S.T.L., University of Saint Thomas (Rome)
S.S.L., Pontifical Biblical Institute

Ph.D., Boston College/Andover-Newton Theological School

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M.S., Ph.D., Ohio University

Joseph P. Sanders, S.J. (1965)
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M.A., Saint Louis University

Ph.D., Boston College

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M.P.A., West Virginia University

Betty F. Thacker (1967)
Professor Emerita of Biology
B.S., M.A., University of North Carolina

Ph.D., University of Delaware

John T. Wack (1961)
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