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.
# Table of Contents

## I. Introduction
- Wheeling Jesuit in Brief .................................................. 4
- Accreditation ........................................................................ 5
- Nondiscrimination Policy .................................................... 5
- NOTICE to all Students ....................................................... 5
- Association of Jesuit Colleges and Universities ................. 6

## II. Admissions
- Admission Procedures ....................................................... 8
- Admission Requirements .................................................... 8
- Special Programs ................................................................. 9
- Communications with WJU .................................................... 10

## III. Academics
- Academic Resources ......................................................... 12
- Disability Services ............................................................. 13, 127
- Additional Campus Resources ............................................ 14
- FERPA Confidentiality of Student Records ....................... 15
- The Core Curriculum .......................................................... 16
- Academic Programs ............................................................ 19
- Special Academic Programs ................................................. 20
- Graduation Requirements ................................................... 22
- Academic Integrity .............................................................. 22
- Grades ............................................................................... 22
- Academic Standing ............................................................ 24
- Additional Academic Regulations ....................................... 25
- Recognition of Student Achievement .................................. 27
- Preparation for Graduate and Professional Studies ............. 29

## IV. Programs and Courses of Instruction
- ACT Program ....................................................................... 108
- Athletic Training ................................................................. 33
- Biology ............................................................................... 36
- Business ............................................................................. 42
- Catholic Studies ................................................................. 48
- Chemistry .......................................................................... 48
- Classical Studies ................................................................. 51
- Communications ................................................................. 52
- Criminal Justice ................................................................. 59
- Engineering ........................................................................ 62
- English/Fine Arts ................................................................. 62
- Fine Arts ............................................................................ 66
- First Year Program .............................................................. 70
- General Science .................................................................. 70
- General Studies ................................................................. 71
- Health Professions ............................................................ 71
- History ............................................................................... 72
- Honors Program ................................................................. 75
- Information Sciences .......................................................... 76
- Integrated Marketing Communications .............................. 80
- International Studies ......................................................... 81
- Mathematics ...................................................................... 82
- Modern Languages ............................................................ 85
- Nuclear Medicine Technology ............................................ 88
- Nursing .............................................................................. 91
- Peace Studies ..................................................................... 94
- Philosophy .......................................................................... 94
- Philosophy, Political & Economic ....................................... 94
- Physics ............................................................................... 98
- Political Communications ................................................ 101
- Political Science ............................................................... 102
- Professional Education Department .................................. 105
- Teacher Preparation Program/ ........................................ 105
- Psychology ......................................................................... 111
- Respiratory Therapy ........................................................... 114
- Social Science .................................................................. 118
- Statistical Analysis and Data Management Certification Program ............................................... 118
- Theology and Religious Studies .......................................... 119
- Web Authoring/Web Mastering .......................................... 122
- Women’s Studies ............................................................... 123

## V. Student Development
- New Programs .................................................................... 126
- Housing & Residence Life .................................................. 127
- Career/Counseling/Health Center ....................................... 127
- Safety & Security ............................................................... 127
- Students: Disabilities/Rights .............................................. 127
- Campus Activities/Organizations ....................................... 128
- Student Government/Organizations .................................... 129
- Student Government/Publications/Dining ......................... 129
- Athletic Activities ............................................................. 129

## VI. Financial Information
- Deposits, Payments, Refunds ............................................ 131
- Financial Explanations ...................................................... 132
- Financial Aid Programs ..................................................... 133
- WJU/Federal Aid Programs ................................................ 134
- Academic/Competitive/Endowed Scholarships .................. 136
- High School Seniors ......................................................... 140

## VII. Directories
- Board of Directors .............................................................. 142
- President’s Cabinet ............................................................ 142
- Department Heads ............................................................ 142
- Faculty of the University .................................................. 144
- Index ................................................................................. 151
Introduction
Introduction

Wheeling Jesuit University in Brief

Founded: 1954

Curriculum: Four-year programs with 30 majors in liberal arts and sciences, professional health, business areas, and education.

Undergraduate Degrees granted: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Nursing

Special options: Pre-professional programs in law, medicine, physical therapy, dentistry, veterinary medicine, Laut Honors Program, Study Abroad, independent major, internships.

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

Average class size: 18 students per class; 91 percent of all course offerings have fewer than 30 students.

Student/Faculty ratio: 13.7 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: More than 91% of all students receive some form of financial assistance.

Admissions: Students urged to apply as early as possible in senior year. Acceptances on a rolling basis.

University Mascot: Cardinal

University Motto: Luceat Lux Vestra – “Let Your Light Shine”
Accreditation
Wheeling Jesuit University is accredited by the North Central Association of Colleges and Schools. Other agencies accrediting or recognizing Wheeling Jesuit University include the Association of Jesuit Colleges and Universities, the National Catholic Education Association and the Association of Collegiate Business Schools and Programs (ACBSP).

Higher Learning Commission
www.ncahighерlearningcommission.org

Commission on Collegiate Nursing Education (CCNE)
1 Dupont Circle NW, Suite 530
Washington, DC 20036-1120
Phone: 202-887-6791
www.aacn.nche.edu/Accreditation/

Wheeling Jesuit University is also a member of several different academic organizations:
Appalachian College Association
WVIAC
The Council of Independent Colleges
Association of American Colleges & Universities

Nondiscrimination Policy
Wheeling Jesuit University does not discriminate on the basis of race, creed, color, national origin, handicap, sex or marital status in the consideration of eligible students for admission, scholarships, awards and financial aid. The University has established procedures to address such issues. This includes a Neutral Third Party Committee. Details about this Committee can be reviewed in Discrimination/ Harassment sections of the Student Handbook and in the various employees’ handbooks. Questions, concerns or complaints can be directed as follows.

University employees:
Director of Human Resources
304-243-2069

Students:
Dean for Student Development
201 Swint Hall
304-243-2350

To contact a member of the Neutral Third Party, contact the secretary at either number listed above who will provide the names and phone numbers of the members.

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

NOTICE to all Students 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 Universities

Wheeling Jesuit University is a member of the Association of Jesuit Colleges and Universities in the United States.

Below 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 .................. 1831
Admissions

Admission Procedures

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.

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.

Admission Requirements

Freshmen Students
Requirements for admission to Wheeling Jesuit University include:
1. a high school diploma or its equivalent;
2. 15 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 15 units of high school courses should be distributed as follows:
- English ........................................... 4
- Mathematics ..................................... 2
- History/Social Sciences ...................... 2
- Laboratory Science ............................. 1
  (Science Major—2 recommended)
- Academic Electives ............................ 6
  (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.

Application Procedures

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

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)

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.
4. See page 17 special note 3 for further requirements.

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.

Notes
1. 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 not only that degree (and all credits), but will also waive all core requirements except philosophy and religion. All philosophy and religion courses must be met with WJU courses or equivalent transfer courses. Evaluation of credits will be made by the Registrar at the time of acceptance.

2. The University accepts credits only. The computation of a student’s grade point average (GPA) will begin with courses taken at the University.

3. 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

4. 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.

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 appropriate courses taken at other accredited institutions of higher education toward these required courses or may meet some requirements by challenge exams.

Transfer Students Graduation Requirements

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

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: a current physical examination (by a physician or nurse practitioner) within 12 months prior to start of classes, a PPD (tuberculin skin test) within 12 months prior to start of classes, official documentation of the following vaccines: Tdap (Tetanus-Diphtheria-Pertussis) with the last 5 years, 2 MMR vaccines (Measles, Mumps and Rubella), Hepatitis B (a series of 3 injections) OR signed WJU waiver, Meningococcal (bacterial meningitis) OR signed WJU waiver. Students are strongly recommended to leave the Hepatitis B and Meningitis vaccines.

Please note: if you have not received the recombinant Hepatitis B vaccine and are a health science student, your placement for clinical practice could be affected. The American College Health Association (ACHA) also recommends that all students be immunized receive the Varicella vaccine, if no previous history of chickenpox.

Please call the Health Center at (304) 243-2275, if you have questions or concerns about these requirements. Forms may also be faxed to the Health Center at (304) 243-2035 at anytime.

Special Programs

Early Admissions

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.

Advanced Placement

Wheeling Jesuit University will grant credit and advanced placement (in honors levels of introductory courses or in upper level courses) to applicants who have successfully completed college-level courses taken in high school. The applicants must take the advanced placement examination of the College Entrance Examination Board in the subject for which advanced placement is desired. The decision of the University is based on the nature of the course taken, a score of 3, 4 or 5 on the advanced placement examination and the high school grade earned for the course; please contact the Registrar’s Office for more detailed information.

CLEP Examination

Credits are awarded for successful completion of a CLEP examination with a passing grade. Each exam is evaluated for specific course requirements.
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

<table>
<thead>
<tr>
<th>Inquiries regarding:</th>
<th>Should be addressed to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Affairs</td>
<td>Chief Academic Officer</td>
</tr>
<tr>
<td></td>
<td>304-243-2321</td>
</tr>
<tr>
<td>Admissions: Undergraduate</td>
<td>Director of Admissions</td>
</tr>
<tr>
<td></td>
<td>304-243-2359; 800-624-6992</td>
</tr>
<tr>
<td>Adult Student Information</td>
<td>Office of Adult and Continuing Education</td>
</tr>
<tr>
<td></td>
<td>304-243-2250, 800-873-7665</td>
</tr>
<tr>
<td>Athletics</td>
<td>Director of Athletics</td>
</tr>
<tr>
<td></td>
<td>304-243-2365</td>
</tr>
<tr>
<td>Classroom of the Future</td>
<td>Center for Educational Technologies</td>
</tr>
<tr>
<td></td>
<td>304-243-2388</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>Director of Financial Aid</td>
</tr>
<tr>
<td></td>
<td>304-243-2304; 800-624-6992</td>
</tr>
<tr>
<td>Health Services</td>
<td>Coordinator of Health Services</td>
</tr>
<tr>
<td></td>
<td>304-243-2275</td>
</tr>
<tr>
<td>National Technology Transfer Center</td>
<td>National Technology Transfer Center</td>
</tr>
<tr>
<td></td>
<td>304-243-2455</td>
</tr>
<tr>
<td>Student Academic Records</td>
<td>Registrar</td>
</tr>
<tr>
<td></td>
<td>304-243-2238</td>
</tr>
<tr>
<td>Student Accounts</td>
<td>Student Accounts</td>
</tr>
<tr>
<td></td>
<td>304-243-2222</td>
</tr>
<tr>
<td>Student Development and Housing</td>
<td>Dean for Student Development</td>
</tr>
<tr>
<td></td>
<td>304-243-2257</td>
</tr>
</tbody>
</table>
Acadeimcs

Academic Resources

Faculty
A strong teaching faculty is the principal academic resource of Wheeling Jesuit University. All courses are taught by full-time or adjunct faculty members with advanced degrees. Most senior faculty teach introductory as well as advanced seminars. While teaching is the primary concern 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.

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, 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.

Bishop Hodges Library
The WJU Library's modern facility provides ample space for group learning projects and quiet study space. Information resources include: a web-based catalog; 71 scholarly databases providing access to over 25,733 full-text journals, online abstracts and indexes; and 112,848 e-books. Off-campus access to information resources is available to all students. Library print collections include over 148,177 volumes and 432 print and microform journal subscriptions, supplemented by an additions 132,494 microforms. Library personnel provide students with assistance on use of information resources.

The library has agreements with national and regional library consortia to provide access to resources of other college libraries. Wireless access to the internet is provided in the library via the campus network. Copy machines, microform reader/printers, wireless laptops, DVD/VCR players and group study rooms are available.
Information Technology Services
ITS computer labs are open to all Wheeling Jesuit University students. The computer labs are located in the Acker Science Center, Ignatius Hall, Kirby Hall and McHugh Hall. 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 and Blackboard are supplied by ITS. More than 12 students are employed by ITS each semester to assist in a variety of departmental needs.

Academic Resource Center (ARC)
The Academic Resource Center or ARC, located on the ground floor of Ignatius Hall, is a place where students who want to succeed can find professional and caring staff who are willing to listen to their ideas and who provide effective strategies to tackle academic tasks. Assistance is available through one-on-one tutoring instruction, study groups, or instructional computer software. The academic support services at the ARC are available to all Wheeling Jesuit University students at no charge. The ARC serves as an extension of the classroom where learning continues in a collaborative environment. However, the ARC can neither provide nor recommend academic peer tutors to anyone not currently enrolled in courses at Wheeling Jesuit University.

The ARC encourages students to take responsibility for their own academic achievement and become successful, life-long learners. Students may call the ARC at 304-243-4473 or stop in to set up an appointment with a writing tutor, math tutor, subject tutor, or individual professional staff member for assistance with study skills, time management, or strategies to deal with learning disabilities. Tutors are scheduled for a variety of core courses on a regular basis throughout the academic year. Students are invited to explore the ARC computer lab, which includes Internet access, standard computer applications, departmental course software, and self-paced instructional software. The ARC also offers a quite, comfortable, and effective study environment for students.

The ARC is open 51 hours per week during the fall and spring semesters. Visit the ARC Web site at www.wju.edu/arc to view the current schedule of operation and learn more about what the ARC has to offer. Contact the ARC via e-mail at arc@wju.edu or FAX at 304-243-4457.

Media Services
The Media Services department provides multimedia equipment and services to students, faculty and administration. Audiovisual equipment can be reserved in a multitude of ways, and will be delivered to instructional locations on campus. Currently, Donahue 128, 129 and the Acker Science Center Auditorium are theater-style classrooms that have built-in multimedia systems for computer demonstrations, video or internet presentations and document imaging.

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.

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-by-case 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. Disability Services are coordinated through the Academic Resource Center (ARC), located on the ground floor of Ignatius Hall. A learning disabilities specialist is available at the ARC 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.
Additional Campus Resources
Wheeling Jesuit University offers learning resources you won't find anywhere else in the nation. In the Robert C. Byrd National Technology Transfer Center (NTTC) and the Erma Ora Byrd Center for Educational Technologies (CET), both located on campus, 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 Rev. Clifford M. Lewis, S.J., Appalachian Institute, a center of research, action, analysis and education, focuses on contemporary Appalachian challenges and opportunities.
FERPA and the Confidentiality Of Student Records

Wheeling Jesuit University’s policy regarding the confidentiality of student records is compliant with the Federal “Family Educational Rights and Privacy Act” (FERPA). Information about students or former students will not be released without the consent of the student other than in the exceptions stated in the Federal Act. FERPA affords students certain rights with respect to their educational records.

They are:

The right to inspect and review the student’s education records within 45 days of the day the University receives a request for access. Students should submit to the Registrar or Academic Dean, a written request that identifies the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the official to whom the request was submitted, that official shall advise the student of the correct official to whom the request shall be addressed.

The right to request the amendment of the student’s education records that the student believes are inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identifying the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosures without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests.

A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including Campus Safety and Security personnel); a person or company with whom the University has contracted (such as an attorney, auditor, collection agency, or the National Student Clearinghouse); a person serving on the Board of Directors; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the University discloses educational records without consent to officials of another school in which the student seeks or intends to enroll. FERPA also allows the University to disclose directory information without the written consent of the student.

Directory information is information contained in an education record of a student which generally would not be considered harmful or an invasion of privacy if disclosed. Directory information includes the student’s full name, the fact that the student is or has been enrolled full time/part time status, local and permanent address(es), e-mail address, telephone number(s), date and place of birth, dates of attendance, division (school or college), class, major field(s) of study and/or curriculum, degrees and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, photograph, and previous educational agency or institution attended by the student.

A currently enrolled student may request any or all directory information not be released by completing and filing with the Registrar’s Office the appropriate paperwork to block the release of such directory information. Such filing of this request shall be honored for the remainder of the term in which the request is filed, except that such restriction shall not apply to directory information already published or in the process of being published.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by Wheeling Jesuit University to comply with requirements of FERPA.
The Core Curriculum

The term “core” at Wheeling Jesuit connotes the “heart” of the curriculum which is centered around 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.
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 modes of communication  
• Define problems, identify methods of approaching them and build models to resolve them  
• Use modern technology effectively in all of the above 

Concerning a VISION centered on the person  
A goal central to Jesuit education is that students develop a vision of reality that enables them 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 

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
English Composition
One of the following, to be determined by placement:
- ENG 105  Process of Composition (3 crs)
- ENG 110  Composition Seminar (3 crs)

Fine Arts - Every student must complete
- FAS 1xx  Any one FAS 100-level course (3 crs)

Mathematics - One of the following:
- ISC 108  Introduction to Structured Programming (3 crs)
- ISC 110  Computer Science I (3 crs)
- MAT 102  Mathematics in Society (3 crs)  (For nonscience majors)
- MAT 105  Introduction to Statistics I (3 crs)
- MAT 108  Pre-Calculus (3 crs)
- MAT 111  Calculus I (4 crs)

Modern Languages
Two courses in the same language or completion of 111 or one upper-level course (200+) to be determined by placement. Nursing students and Health Science majors must only complete SPA 106. (See pages 91 for details)

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)

History
First Level History:
- HIS 110  The Twentieth Century (3 crs)

Second Level History:
- HIS 120  Historical Methods (3 crs)

Science
Two courses from those listed, but the two must be from separate disciplines
- CHE 105  Introductory General Chemistry
- CHE 107  Chemistry for Non-science Majors
- CHE 110  General Chemistry I
- BIO 105  The Process of Biology
- BIO 107  Evolutionary & Ecological Biology: The Dynamic Environment
- BIO 108  The Form & Function of Biological Organisms
- BIO 109  Cells and Chromosomes
- BIO 128  Anatomy and Physiology I
- GSC 135  Science of Health
- PHY 104  Physical Science
- PHY 105  General Physics
- PHY 107  Astronomy
- PHY 108  Geology
- PHY 110  Physics I
- PHY 130  Physics for Allied Health
- PHY 131  Earth and Space Science

Social and Behavioral Sciences
One of the following courses (3 crs):
- POS 110  American Political Process
- PSY 110  General Psychology
- ECO 110  Macroeconomics

Global Perspectives
One of the following courses (3 crs):
- INS 111  World Community
- SSC 105  Social Science from a Global Perspective
- SSC 110  Anthropology

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)
- RST 106  The Religious Quest (3 crs)
- RST 107  Catholicism (3 crs)

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)

First Year Program
- FYS 101  (1 cr)

Special Notes:
1. A number of skill-strengthening, compensatory courses, intended to develop requisite proficiency, may not be used to satisfy core curriculum requirements. These include ENG 095, Writing; ENG 096, Reading; MAT 096. No more than 6 credits for courses 090-099 may be counted as electives toward graduation requirements. Courses determined by placement.
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 remedial English Language courses. Students who are not able to place into ENG 105 or ENG 110 after completion of the first remedial English course, must complete another semester of remedial courses. Failure to achieve proficiency in English after the completion of two remedial English Language courses may result in dismissal from the University.
Academic Programs

Majors
A student must fulfill the requirements of an area of major concentration. Wheeling Jesuit offers the degree of Bachelor of Arts or Bachelor of Science in these areas of concentration:

- Accountancy
- Athletic Training
- Biology
- Business Administration*
- Chemistry (B.S., B.A.)
- Communications
- Criminal Justice
- English
- French
- General Science (Physics)
- History
- Integrated Marketing Communications
- Information Sciences
- International Studies
- Liberal Studies in Elementary Education
- Mathematics
- Nuclear Medicine Technology
- Nursing
- Philosophy
- Physics
- Political and Economic Philosophy
- Political Communications
- Political Science
- Psychology
- Respiratory Therapy
- Romance Languages
- Spanish
- Theology/Religious Studies
- Web Authoring/Web Mastering

A student-designed Independent Major is available. Major requirements are explained in discipline listings.

* Concentrations for a business major include management, marketing and sports management.

Minors
In addition to completing the requirements of a major, a student may declare a minor in another academic discipline. Minor programs may be developed within the following guidelines:

1. The completion of five to seven courses (15 to 21 credit hours) excluding 100 level courses that are part of the core curriculum. 40% of these courses must be Wheeling Jesuit University credits.
2. The selected courses must be distinct from those required for the student’s primary major. Cognate courses (courses in other disciplines needed to complete major requirements) may be approved as part of the minor program.
3. Students are advised to declare a minor by the beginning of their junior year. Some minors cannot be completed in fewer than two years. Minor requirements are explained in discipline listings.

The following minor programs are available:

- Accountancy
- Biology
- Business
- Catholic Studies
- Chemistry
- Classical Studies
- Communications
- Criminal Justice
- Film Studies
- French
- History
- Information Sciences
- Integrated Marketing Communications
- International Studies
- Literature
- Mathematics
- Music
- Peace Studies
- Philosophy
- Physics
- Political Communication
- Political Science
- Psychology
- Spanish
- Theater
- Theology/Religious Studies
- Web Authoring/Web Mastering
- Women’s Studies

Double Major
Double majors are possible for some students and required for secondary preparation program students. Major requirements are specified under discipline listings elsewhere 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, the chair of the second major and the Academic Dean before the beginning of the second semester of the junior year. Double majors may require more than the normal four years for completion. Please see minor offerings for each department for an alternative approach which will accomplish similar results.

Second Bachelor’s Degree
To earn a second bachelor’s degree at Wheeling Jesuit, a student 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 the philosophy and religious studies facets of the core; however, equivalent courses taken elsewhere may be transferred in as a means of fulfilling these two areas of the core. 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 residency requirement.

Special Academic Programs

Teacher Preparation Certificate Program
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 Program 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 Teacher Preparation Program/Professional Education Department.

Honors Program
The Stephen J. Laut, S.J., Honors College, for qualifying, limited students in their first two years at the university, and the Ignatian Honors Seminar, for select cohort of qualified juniors and seniors, are intended for students with a record of exceptional academic achievement and the desire to participate in a program of greater academic challenge. The aim of the program is to give talented and motivated students the encouragement for intellectual exploration in the company of equally talented peers. See Honors Program in Programs & Courses of Instruction section for program information and requirements.

Independent Major
The independent major is a student-construction 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 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.

Independent Study
Each department provides independent study courses, numbered 172, 272, 372 and 472, so that a student can undertake an academic project which lies 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.

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 by the departmental contact person and by the Academic Dean no later than the second week. A student interested in an independent study project should first discuss the project with the faculty advisor and then contact the Registrar.

Tutorials
Any course 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 Academic Dean must be obtained in advance.

Internships and Field-Experience Courses for Academic Credit
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 by the sponsoring department in collaboration with the Career Development Office. Faculty members in the sponsoring departments provide guidance and assign grades and credits for courses, which are identified by a 373-374, 473-474 listing. 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, or visit the Career Development Office.

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.

**Credit by Examination**

Certain courses may be challenged for credit by examination. These include both introductory and upper-division courses, as designated by each academic department. Examinations may be standardized tests such as CLEP or examinations designed by the departments. Students who pass such tests, according to departmental grading standards, will be awarded University credit. No more than 30 hours of credit may be counted toward a degree at the University through such exemptions by examination.

The CLEP program is administered through the Center for Professional and Graduate Studies. It is the responsibility of the student to arrange for testing, to submit all required forms, to pay requisite fees and to prepare himself or herself for the examination. Inquiries should be directed to the Center for Professional and Graduate Studies.

**Study Abroad Programs**

Wheeling Jesuit University encourages travel and study abroad as part of the education experience. 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.

**English Language Institute**

Classes are available for students enrolled in the University, students anticipating enrollment, or individuals here only to learn English. Courses in the program count toward University credit for students enrolled full-time at WJU. For further information, contact the director.

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 U.S. institution of higher education. To offer the most effective education, class sizes tend to be small. University students in turn benefit from interactions with these students from other countries.

The English Language Institute students reside on campus and use the library, the Benedum Room and other University facilities. Some complete the English Language Institute program and enter Wheeling Jesuit University. The University and its students strive to make these students feel welcome and at ease in what to them is a very new and different environment.
Graduation Requirements
To be eligible for graduation, a student must:
1. complete the required core curriculum courses;
2. complete the requirements in a major area of concentration;
3. complete a minimum of 120 credit hours with an adjusted grade point average (GPA) of no less than 2.000;
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. complete at the University the last 30 hours required for a degree;
6. satisfy all financial obligations to the University;
7. complete assessment tests and interviews which may be required;
8. submit an application for graduation within the prescribed time frame as published by the Registrar’s Office.

Academic Integrity
A complete description on academic integrity can be found in the Student Handbook. Written or other work, including computer programs, which a student submits in a course must be the product of his/her own efforts. Students are expected to acquaint themselves with the norms for scholarly writing and research, in particular, to know the distinction between academic honesty and plagiarism. Plagiarism or cheating by a student will result in academic sanctions imposed by the instructor of the course; plagiarism or cheating makes a student liable for an “F” for the course, as well as for additional disciplinary action beyond the academic sanction. Students are cautioned against the possession of unauthorized material during any examination or quiz. Alleged incidents of cheating will be handled according to the published guidelines found in the Student Handbook.

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 x 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>Good</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>Average</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>Passing</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>Failure</td>
</tr>
<tr>
<td>Fa</td>
<td>0.0</td>
<td>Failure for excessive absences (must be removed)</td>
</tr>
<tr>
<td>I</td>
<td>0.0</td>
<td>Not computed Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>0.0</td>
<td>Not computed Approved withdrawal</td>
</tr>
<tr>
<td>WP</td>
<td>0.0</td>
<td>Not computed Approved withdrawal, passing at time of withdrawal</td>
</tr>
<tr>
<td>WF</td>
<td>0.0</td>
<td>Not computed Approved withdrawal, failing at time of withdrawal</td>
</tr>
<tr>
<td>X</td>
<td>0.0</td>
<td>Not computed Uncompleted—must reregister for course next semester</td>
</tr>
<tr>
<td>Cr</td>
<td>0.0</td>
<td>Not computed Credit for course</td>
</tr>
<tr>
<td>NCr</td>
<td>0.0</td>
<td>Not computed No credit for course</td>
</tr>
<tr>
<td>NG</td>
<td>0.0</td>
<td>Grade not reported by the instructor</td>
</tr>
</tbody>
</table>

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 (WP-WF). Incompletes may not be given simply for the purpose of improving a grade by doing additional work. 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.” A grade of “X” will be assigned in courses which by their nature normally require work to be done over the course of the entire year (e.g., Senior Seminar, independent study projects, clinical practicum). If the “X” is not removed by the end of the following semester, the “X” will remain on the student’s permanent record.
Transfer of Credit
For currently enrolled students, who wish to take courses at another accredited institution, please consult the Registrar’s office for necessary forms and procedures for students transferring into the University.

Pass/Fail (Credit/Non-credit) Option
Juniors and seniors with cumulative GPA’s of 2.5 or better may register for one course each semester on a credit/non-credit 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 pass/fail, he or she cannot, at a later date, request that the class be taken for a grade.

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 (or, with the approval of the appropriate dean, its close approximation), and must secure the written approval of the advisor before retaking the course. Students may not repeat a core course in which they receive a grade higher than a C-, or any course other than those stated in this policy, without permission of the Academic Dean. 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.

Access to Grades
Grade and academic records are released at the end of each term to students and advisors via the university’s internal academic system. 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 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.

Examinations and Tests
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. Except for seminars, a formal 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. All students whose accounts are not resolved with the Business Office two weeks prior to the start of the final examination period will NOT be permitted to take any final exams. This same policy applies to students currently enrolled with ECSI if the student’s account is considered delinquent or if an additional amount is due. Students will not receive a final grade in a course until they have completed all requirements for that course, including the final exam.
Academic Standing

Student Status
Students are classified as follows:

<table>
<thead>
<tr>
<th>Student Status</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>less than 27 semester hours</td>
</tr>
<tr>
<td>Sophomore</td>
<td>minimum of 27 semester hours</td>
</tr>
<tr>
<td>Junior</td>
<td>minimum of 60 semester hours</td>
</tr>
<tr>
<td>Senior</td>
<td>minimum of 90 semester hours</td>
</tr>
</tbody>
</table>

Every student in the University must maintain an adjusted grade point average (GPA) of 2.0 in all courses required for graduation in order to be considered in academic good standing. A student who holds a scholarship must maintain the grade point average (or higher) specified by the conditions governing that scholarship in order for it to be renewed for subsequent years. The adjusted grade point average is used for the purposes of academic probation, academic suspension and academic dismissal.

Academic Probation. Academic probation carries a serious warning to the student, for unless improvement is noted in the probationary period, academic suspension or dismissal can follow. A student whose cumulative adjusted grade point average falls below 2.0 is automatically placed on academic probation. A student whose semester grade point average falls below 2.0 may be placed on academic probation. A first term freshman, however, will not be placed on academic probation unless the average falls below 1.8. A student may remain on academic probation for more than one semester provided significant progress is made toward earning the requisite 2.0 adjusted GPA.

While on academic probation, a student:

1. may be limited to four courses (12 hours) per semester;
2. may have special restrictions placed on the program of studies by the Academic Dean;
3. may not hold office in student government, any University activity, departmental club, or class board;
4. may not serve as an editor of any student publication;
5. may not practice or participate in varsity athletics or major theatrical productions.

Activity and faculty advisors are required to enforce this policy. No student on academic probation, who is otherwise eligible for academic dismissal, may participate in an official capacity in any University-sponsored extracurricular activity without the written permission of the Academic Dean. Students should be aware that academic probation and loss of financial aid eligibility are two separate issues.

Academic Suspension. Failure to improve or meet the conditions of Academic Probation can lead to academic suspension. Academic suspension is an enforced termination of formal studies at Wheeling Jesuit University for at least one semester. Students who are suspended at the end of spring semester may not attend summer session classes here at the University. At the end of the period of suspension, the student must formally request reinstatement by writing to the Academic Dean. During the period of suspension, the student should have fulfilled the conditions specified by the Academic Dean in the letter of suspension.

Under some circumstances, the Academic Life Committee may recommend that the Academic Dean impose academic suspension upon a student who is otherwise eligible for academic dismissal.

Academic Dismissal. Academic dismissal, unlike suspension, is a permanent termination of formal studies at Wheeling Jesuit. A student can be dismissed 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: Freshman–1.6, Sophomores–1.8, Juniors–2.0;
3. there has been a failure while on academic probation to show significant improvement.
4. Two or more semesters of academic probation.

First-semester freshmen who are eligible for academic dismissal, upon the recommendation of the Academic Life Committee, may petition the Academic Dean to repeat all courses taken in the first semester, even those in which credit was earned. In effect, such students begin their university work anew. Students who have had a “wipe-out” of their first semester work will be placed on academic probation for the following semester.

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 Academic Dean and department chairs before taking courses at another institution during the period of suspension. The permission form for taking such courses is obtained from the University Registrar. See the Student Handbook for more information about non-academic disciplinary proceedings.

Readmitted Student. Students who have been absent from the University for one semester or longer must apply for readmission through the Office of Admissions. Students who were absent from the University for less than one calendar year may continue to follow the catalog requirements that were in effect when they first entered. 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.
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 results in a grade of “FA,” (failure due to excessive absences).

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 Chief Academic Officer. Adult students follow the same procedure with the corresponding Deans handling the appeals. Final appeals – after all other steps have been taken – are the concern of the President first, and then the Board of Directors.

Students who feel they are entitled to an exception to the University’s academic regulations should petition the Academic Dean 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.

Student Access to Education Records
In accordance with the Family Educational Rights and Privacy Act of 1974, Wheeling Jesuit University students have the right to review, inspect and challenge the accuracy of information kept about them in various official University files. See Appendix A for a more detailed explanation of this policy.

Transcripts
Official transcripts are issued by the Registrar only upon receipt of written permission from the student involved. Accounts must be cleared in the Student Accounts before an official or unofficial transcript is issued. Official transcripts bear a fee per copy.

Additional Academic Regulations
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.
Course Changes and Withdrawals
Students may alter their course schedule without academic penalty by dropping or adding courses during the official drop-add period as announced in the academic calendar. Courses may not be added after the last day of the drop-add period. Forms for all course changes or withdrawals may be obtained from the Registrar's office.

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, any course may be dropped with the approval of the instructor and the faculty advisor. For withdrawals during the first 20 class days, a grade of “W” will be recorded on the transcript. After that date, a grade of “WP” will be recorded on the permanent record if the student was passing at time of withdrawal. A grade of “WF” will be recorded if the student was failing at time of withdrawal.
2. Any requests for a grade “W,” “WP,” or “WF” after the termination of the allowable withdrawal period must be submitted to the Academic Dean for approval.
3. Unauthorized withdrawals from courses will result in the student being assigned “FA” grades for the course.

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 Registrar’s Office at 304-243-2238. Non-degree students are not required to submit high school or college transcripts, however, they must file an application. 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. Transient students 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).

Audit
Audit students are not required to do course work or to 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.

Limitations on Courses

Regular Session. The normal course load for a semester is 15-17 semester hours. With the written approval of their advisor, students with a cumulative average of 3.0 or better will be allowed to register over 18 credits (maximum of 21 hours) without being billed for extra tuition charges.

Summer Session. A Wheeling Jesuit University student enrolled in the summer school may take no more than four courses (12 credit hours) per summer. No more than two courses may be taken in a single session. 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, a student must fill out the appropriate form obtained from the Registrar’s Office.

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 the appropriate administrative officers of both the Center for Professional and Graduate Studies and the Academic Dean.

Specifically:

1. Core curriculum courses required of day school students may not be taken in the Adult Education program; likewise, core curriculum courses required of evening program students may not be taken in the day school. (Only BLA and Evening BSN degree students may enroll in either day or evening courses with approval of their academic advisor.)
2. Only those courses that are cross-listed in the Master Class Schedule are open to both day and adult students without special approval.
3. Other courses offered in one division which are not cross-listed may under exceptional circumstances be taken with the approval of the Academic Dean.

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. High school juniors who meet the advanced placement standards of their high schools may enroll in summer courses. Upon successful completion of these courses, they will be awarded regular university credit.
Recognition of Student Achievement

Graduation Honors
To be eligible for degrees with distinction, there are two categories of honors.

For students having completed at least 60 graded semester hours at Wheeling Jesuit University, the three honors averages are:

- 3.850 Summa cum laude
- 3.700 Magna cum laude
- 3.500 Cum laude

For students with at least 30 but less than 60 graded semester hours, the honors average is:

- 3.500 With distinction

Computation of the average is based solely on courses completed at Wheeling Jesuit University, computed by dividing the number of hours into earned quality points. Graduation honors are bestowed at the same time the student’s degree is conferred.

Honors for Student Achievement

Commencement Awards. Each year at graduation or the graduation banquet, awards are given to seniors who have distinguished themselves. Averages are calculated through the fall term preceding May commencement.

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, the Henry F. Paul Silver Medals are awarded to the two undergraduate 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 Charles Currie 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.
Preparation for Graduate & Professional Studies

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.

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. Because of this the Communications department offers COM 377 Legal Reasoning and LSAT preparation each spring. 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.

Richard Cain, English and Communication: rcain@wju.edu
/offices/306A
Robert Phillips, Political Science: phillips@wju.edu /x2006 Bridge 112D
Dan Weimer, History: dweimer@wju.edu /x2004 Donohue 101C
Beverly Whelton, Philosophy: bwhelton@wju.edu /x2005
Donohue 126E

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, pre-pharmaceutical 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.

Physical Therapy & Pre-Physical Therapy Preparation
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.

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.org. 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.edu or 304-243-2068 with any questions.

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.”

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>WJU Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>4</td>
<td>BIO 109, BIO 121</td>
</tr>
<tr>
<td>Chemistry</td>
<td>10</td>
<td>CHE 110, 120, 121, 122</td>
</tr>
<tr>
<td>Human Anatomy &amp; Physiology</td>
<td>7</td>
<td>BIO 127, 128, 129</td>
</tr>
<tr>
<td>Physics</td>
<td>10</td>
<td>PHY 110, 120, 121, 122</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td>PSY 115, MAT 105, MAT 204</td>
</tr>
<tr>
<td>Psychology</td>
<td>9</td>
<td>PSY 110, 212 Development (in addition to PSY 115 above)</td>
</tr>
<tr>
<td>Other Core</td>
<td>39</td>
<td>Requirements in completion of Liberal Arts Core</td>
</tr>
</tbody>
</table>

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. Eighty hours of clinical observation are required. Direct observation of physical therapists working in a variety of settings is recommended.

5. Graduate Record Exam (GRE) scores are required and considered in the admission process.

6. 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.

Center for 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), and a Bachelor of Arts in Organizational Leadership and Development. 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.

The Center for Professional and Graduate Studies also offers professional certificate programs and other continuing education. For additional and more specific information consult the Professional and Graduate catalog or contact the Center for Professional and Graduate Studies, 304-243-2250 or 1-800-873-7665.

Graduate 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 Organizational Leadership (MSOL) is designed to develop the intellectual and personal skills required of managers and executives in today’s and future organizations.
Programs & 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.** Courses are equivalent to three semester hours of credit except where noted.

**Prerequisites.** A prerequisite is a course or its equivalent that normally 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.

**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 taken by upperclassmen.)
- 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 four unlisted courses, offered whenever the need arises. They are numbered in this way:
- 161, 261, 361, 461 Experimental course offering (one time only)
- 171, 271, 371, 471 Readings
- 172, 272, 372, 472 Independent Study
- 273, 274, 373, 374, 473, 474 Internships
- 473, 474 Tutorials (courses listed in the catalog but not offered in a particular semester) often can be taken by special arrangement.

**Typical Course Distribution**
The schedules printed with each major offer an idea of how courses might be distributed over four years. 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.

**Subject Symbols**
The following abbreviations are used throughout the catalog:
- ABR Abroad Study
- ACC Accountancy
- ATH Athletic Training
- BIO Biology
- BUS Business
- CHE Chemistry
- CLS Clinical Science
- COM Communications
- CRJ Criminal Justice
- CSS Classical Studies
- CST Catholic Studies
- ECO Economics
- ENG English
- FAS Fine Arts
- FIN Finance
- FRE French
- GSC General Science
- HIS History
- HON Honors
- INB International Business
- INS International Studies
- ISC Information Sciences
- LIT Literature
- MAT Mathematics
- MGT Management
- MKT Marketing
- MOL Modern Language
- NME Nuclear Medicine Technology
- NUR Nursing
- PED (TPP) Professional Education
- PEP Political and Economic Philosophy
- PHI Philosophy
- PHY Physics
- POS Political Science
- PSY Psychology
- RET Respiratory Therapy
- RST Theology/Religious Studies
- SPA Spanish
- SSC Social Science
- WST Women’s Studies
Accounting
(See description of Accounting courses in the Business section)

Athletic Training

Contact Persons:
David R. Hanna, PT, DPT, MS, ATC
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 a facility (athletic training room), ordering supplies, 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 therapist, 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 athletics. As part of the requirements for the major and national certification eligibility, the student is required to complete six semesters of clinical education experiences at athletic events under the supervision of an BOC certified athletic trainer. To fulfill this requirement the student will have the opportunity to work with WJU student-athletes and a variety of other settings in the area including high school, other colleges, clinical and professional. Accepted students are required to follow the ATEP student handbook which defines rules, regulations and standards for the student’s continued progression in the major. In addition to the University core curriculum requirements defined in this handbook, the Athletic Training major must complete the following courses listed below and maintain a cumulative GPA of 2.8 and earn a “C” grade or higher in all the courses listed below.

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105 or 110 3</td>
<td>RST 106 or 107 3</td>
<td>FAS 1XX 3</td>
<td>SPA 106 3</td>
</tr>
<tr>
<td>HIS 110 3</td>
<td>CORE* 3</td>
<td>PHI 205 3</td>
<td>CLS 221 2</td>
</tr>
<tr>
<td>PSY 110 3</td>
<td>ATH 231 3</td>
<td>ATH 311 3</td>
<td>ATH 411 3</td>
</tr>
<tr>
<td>BIO 128 3</td>
<td>ATH 211 3</td>
<td>ATH 321 3</td>
<td>ATH 431* 3</td>
</tr>
<tr>
<td>BIO 127 1</td>
<td>ATH 222 3</td>
<td>ATH 301 3</td>
<td>ATH 401 3</td>
</tr>
<tr>
<td>FYE 101 1</td>
<td>ATH 201 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLC 121 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Semester total 15</td>
<td>17</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>MAT 105 3</td>
<td>LIT 120 3</td>
<td>PSY 250 3</td>
<td>PHI 305 or RST 305 3</td>
</tr>
<tr>
<td>HIS 120 3</td>
<td>INS 111 or 551 10</td>
<td>ATH 312 3</td>
<td>ATH 412 3</td>
</tr>
<tr>
<td>PHI 105 3</td>
<td>RST 200 or RST 300 (not RST 305) 3</td>
<td>ATH 322 3</td>
<td>ATH 422 3</td>
</tr>
<tr>
<td>BIO 105** 3</td>
<td>ATH 212 3</td>
<td>ATH 332*** 3</td>
<td>ATH 432 3</td>
</tr>
<tr>
<td>BIO 129 3</td>
<td>ATH 341 3</td>
<td>ATH 302 3</td>
<td>ATH 402 3</td>
</tr>
<tr>
<td>LIT 120 3</td>
<td>ATH 202 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Semester total 18</td>
<td>17</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>**Total Credits 33</td>
<td>34</td>
<td>30</td>
<td>29 126</td>
</tr>
</tbody>
</table>

PRE-PROFESSIONAL MUST NOTE THE FOLLOWING:

*See Undergraduate Course Catalog for second science core choices. Substitute CHM 110/121 and CHM 120/122 for pre-professionals
**Substitute BIO 109/121 for pre-professionals
***ATH 332 replaces Physics 120/122 for WU Physical Therapy applicants only
◊◊ ATH 401 credited in place of Developmental Psychology for WU Physical Therapy applicants only
\(\text{◊◊ Physics 110/121 are also pre-requisites of WU Physical Therapy. It is your responsibility to schedule these around your major classes.}\)
\(\text{If you plan on applying to WU it is your responsibility to get these pre-requisites completed around your chosen major of Athletic Training. Other universities might have different required courses for Physical Therapy or other professional programs. It is your responsibility to know the requirements for your chosen field of study for post-graduate work. You should expect to take summer school to fulfill these extra courses.}\)
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.

Requirements for Athletic Training Bachelor of Science Degree

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 127,128</td>
<td>Anatomy and Physiology I &amp; Lab</td>
<td>3 crs</td>
</tr>
<tr>
<td>BIO 129</td>
<td>Anatomy and Physiology II</td>
<td>3 crs</td>
</tr>
<tr>
<td>CLS 121</td>
<td>Introduction to Hospital Science</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 312</td>
<td>Emergency Life Support Technique</td>
<td>3 crs</td>
</tr>
<tr>
<td>CLS 221</td>
<td>Introduction to Research Health Care</td>
<td>2 crs</td>
</tr>
<tr>
<td>PSY 110</td>
<td>General Psychology</td>
<td>3 crs</td>
</tr>
<tr>
<td>PSY 250</td>
<td>Sports Psychology</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 211</td>
<td>Introduction to Athletic Training</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 212</td>
<td>Therapeutic Modalities</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 222</td>
<td>Musculoskeletal Anatomy</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 311</td>
<td>Therapeutic Exercise of the Lower Extremity</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 312</td>
<td>Therapeutic Exercise for the Upper Extremity</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 321</td>
<td>Lower Extremity &amp; Trunk Orthopedics</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 322</td>
<td>Upper Extremity Head and Neck Orthopedics</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 332</td>
<td>Biomechanics</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 341</td>
<td>Exercise Physiology</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 411</td>
<td>General Medical Conditions</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 412</td>
<td>Athletic Training Capstone</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 422</td>
<td>Professional Development</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 431</td>
<td>Athletic Training PBL I</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 432</td>
<td>Athletic Training PBL II</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 201</td>
<td>Athletic Training Practicum I</td>
<td>2 crs</td>
</tr>
<tr>
<td>ATH 202</td>
<td>Athletic Training Practicum II</td>
<td>2 crs</td>
</tr>
<tr>
<td>ATH 301</td>
<td>Athletic Training Practicum III</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 302</td>
<td>Athletic Training Practicum IV</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 401</td>
<td>Athletic Training Practicum V</td>
<td>3 crs</td>
</tr>
<tr>
<td>ATH 402</td>
<td>Athletic Training Practicum VI</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

Course Descriptions

ATH 212 Therapeutic Modalities (3 crs)
This course is designed to introduce the student to the different forms of therapeutic modalities used today for rehabilitative purposes. During the course the student will become familiar with all forms of modalities and understand the mechanics behind their usage, the physiological effects incurred to the body and the rationale for choosing a specific modality for a certain injury. The student will learn specific parameters, indications, contraindications and ways to objectively measure progress or change. Students will also review the body’s healing capacities and tissue response to injury. *Prerequisites: ATH 211, ATH 222*

ATH 222 Musculoskeletal Anatomy (3 crs)
The course takes an in-depth look at the musculoskeletal system while exploring structural kinesiology, biomechanical factors and muscular analysis. By the completion of the course the student should have an in-depth knowledge of the musculoskeletal system, its components, and how they work in harmony to provide human function. *Prerequisites: Admission to the ATEP*

ATH 311 Therapeutic Exercise of the Lower Extremity (3 crs)
This course focuses on the theory and practice of therapeutic exercise and rehabilitation techniques of the lower extremity as they relate to the physically active. Lecture and labs will be used to demonstrate proper techniques typically administered to patients in the rehabilitative environment. *Prerequisites: ATH 212, ATH 341*

ATH 312 Therapeutic Exercise for the Upper Extremity (3 crs)
This course focuses on the theory and practice of therapeutic exercise and rehabilitation techniques of the upper extremity as they relate to the physically active. Lecture and labs will be used to demonstrate proper techniques typically administered to patients in the rehabilitative environment. *Prerequisites: ATH 311, ATH 321*

ATH 321 Lower Extremity & Trunk Orthopedics (3 crs)
This course discusses the proper assessment and management of injuries to the low back, pelvis, hip, thigh, knee, lower leg, ankle, and foot. The student will learn how to recognize and evaluate common injuries of the physically active to these areas of the body in the classroom setting. Additionally, competencies and psychomotor skills taught in the course will be reinforced through structured laboratory/practical experiences. *Prerequisites: ATH 212, ATH 341*

ATH 322 Upper Extremity Head and Neck Orthopedics (3 crs)
This course discusses the proper assessment and management of injuries to the head, neck, shoulder, elbow, forearm, wrist, hand, and fingers. The student will learn how to recognize and evaluate common injuries of the physically active to these areas of the body in the classroom setting. Additionally, competencies and psychomotor skills taught in the course will be reinforced through structured laboratory/practical experiences. *Prerequisites: ATH 311, ATH 321*
ATH 332 Biomechanics (3 crs)
This course is designed to introduce students to the mechanical analysis of soft tissues of the body as it relates to athletic activity. The course covers the makeup and structure of important collagenous soft tissues including skin, fascia, ligaments, and muscles and tendons. The reactions of these tissues to mechanical stress are discussed regarding the underlying structures so that the students understand how the basic biological building blocks contribute to mechanical response and function. Students then learn to analyze systems made up of these components. **Prerequisites:** ATH 311, ATH 321

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

ATH 411 General Medical Conditions (3 crs)
Athletic Training is not just the caring of injuries to the physically active. A variety of scenarios or questions asked by an athlete may have nothing to do with an orthopedic injury. This course is designed to discuss the common general medical concerns that may be encountered in the field of Athletic Training. Advanced evaluation techniques will be demonstrated and practiced in the assessment of common injuries and conditions to the eye, ear, nose, throat, thorax, lungs, and heart. **Prerequisites:** ATH 322, ATH 332, ATH 312

ATH 412 Athletic Training Capstone (3 crs)
This class is intended to prepare the student for the next level of development in the profession of athletic training. They will undergo final preparation for their national board exam to be taken upon graduation. Relevant information testing sites, protocols, and test information will be provided. Students should complete the class feeling confident in their development as an athletic training student, knowing they are adequately prepared to sit for the exam, and possessing a broad spectrum of knowledge pertaining to athletic training and the profession. **Prerequisites:** ATH 411, ATH 431

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, ATH 431

ATH 431 Athletic Training PBL I (3 crs)
The course is intended to enhance the understanding of previously learned material by presenting the student with real-life scenarios.

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 scenario. They will be responsible for meeting specific objectives related to the scenario 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. **Prerequisites:** ATH 312, ATH 322, ATH 332

ATH 432 Athletic Training PBL II (3 crs)
This course continues the theme of ATH 431 and is intended to enhance the understanding of previously learned material by presenting the student with real-life scenarios. 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 scenario. They will be responsible for meeting specific objectives related to the scenario 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. **Prerequisites:** ATH 411, ATH 431

ATH 201 Athletic Training Practicum I (2 crs)
The sophomore year is a time of learning basic athletic training room skills and philosophies and starting to apply these concepts. Supporting classes include ATH 211 (Principles of Athletic Training I) and CLS 312 (Emergency Life Support). Students will be expected to spend at minimum 50 hours during the semester in the athletic training room through scheduled hours, clinical rotations, and assisting at home athletic events. You will be given learning opportunities with a variety of sports and with various Approved Clinical Instructors. Students will also have the opportunity to work with and be mentored by junior and senior level students. **Prerequisite:** Admission into the ATEP

ATH 202 Athletic Training Practicum II (2 crs)
Continuing with the theme of ATH 201, students now are utilizing their basic athletic training room skills and philosophies learned during the prior semester. Students are required to satisfy psychomotor skills and clinical proficiencies that directly relate to ATH 211 and CLS 312. Students will be expected to spend at minimum 50 hours during the semester in the athletic training room through scheduled hours, clinical rotations, and assisting at home athletic events. The student will be given learning opportunities with a variety of sports and various Approved Clinical Instructors. Students will also have the opportunity to work with and be mentored by junior and senior level students. **Prerequisite:** ATH 201

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. \textit{Prerequisite: ATH 202.}

**ATH 302 Athletic Training Practicum IV (3 crs)**

Continuing with the theme of ATH 301, students continue to grow and mature with their athletic training knowledge and skills in a variety of settings. Students will be assigned to specific clinical sites where they can utilize their previously learned knowledge and skills 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 being a mentor themselves to sophomore students. Students will be required to satisfy psychomotor skills and clinical proficiencies that directly relate to ATH 311 and ATH 321. \textit{Prerequisite: ATH 301.}

**ATH 401 Athletic Training Practicum V (3 crs)**

Senior level practicum courses in the Athletic Training Education Program allow a greater level of independence with the student’s knowledge and skills. Students will be assigned to specific clinical sites where they can utilize their previously learned knowledge and skills 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 act as a mentor to junior and sophomore level students. Students will be required to satisfy psychomotor skills and clinical proficiencies that directly relate to ATH 312 and ATH 322. \textit{Prerequisite: ATH 301.}

**ATH 402 Athletic Training Practicum VI (3 crs)**

Senior level practicum courses in the Athletic Training Education Program allow a greater level of independence with the student’s knowledge and skills. Students will be assigned to specific clinical sites where they can utilize their previously learned knowledge and skills 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 act as a mentor to junior and sophomore level students. Students will be required to satisfy psychomotor skills and clinical proficiencies that directly relate to ATH 411. \textit{Prerequisite: ATH 401.}

---

### Biology

Elizabeth Chalovich, Ph. D  
Andy Cook, Ph.D  
Jonathan Lief, Ph. D.  
Kenneth Rastall, Ph.D.  
Donald Serva, S.J.  
Robert Shurina, Ph.D.  
Benjamin Stout III, Ph.D.

**Core Fulfilling Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105</td>
<td>The Process of Biology</td>
</tr>
<tr>
<td>BIO 107</td>
<td>Evolution and Ecology</td>
</tr>
<tr>
<td>BIO 108</td>
<td>Form and Function</td>
</tr>
<tr>
<td>BIO 109</td>
<td>Cells and Chromosomes</td>
</tr>
<tr>
<td>BIO 128</td>
<td>Human Anatomy and Physiology I</td>
</tr>
</tbody>
</table>

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 a grade point average in biology at or above 2.0 to graduate with a B.S. degree in biology. 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 200-level courses in order to take upper level (300-level and above) courses in biology. Note: 400 level elective courses may have laboratory requirements (1 credit). This is then required and may not be audited or pass/fail.

### 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

In addition to completing the core curriculum requirements, biology majors must complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 107</td>
<td>Evolution and Ecology</td>
<td>3 crs</td>
</tr>
<tr>
<td>BIO 108</td>
<td>Form and Function</td>
<td>3 crs</td>
</tr>
<tr>
<td>BIO 109</td>
<td>Cells and Chromosomes</td>
<td>3 crs</td>
</tr>
<tr>
<td>BIO 121, 122</td>
<td>General Biology Labs</td>
<td>1 cr ea</td>
</tr>
<tr>
<td>BIO 205, 221</td>
<td>Ecology and Lab</td>
<td>3 and 1 crs</td>
</tr>
<tr>
<td>BIO 210, 222</td>
<td>Genetics and Lab</td>
<td>3 and 1 crs</td>
</tr>
<tr>
<td>BIO 320, 321</td>
<td>Vertebrate Biology and Lab</td>
<td>3 and 1 crs</td>
</tr>
<tr>
<td>BIO 330, 331</td>
<td>Developmental Biology and Lab</td>
<td>3 and 1 crs</td>
</tr>
</tbody>
</table>
The Biology Department will accept a limited number of transfer credits from other institutions toward a BS degree in Biology. Students wishing to transfer credits must do so in writing and submit the request to the Biology Chair. The request must include the following information: The name and number of the course; the year that the course was taken; the school at which the course was taken; the grade issued for the course, including an official transcript; a complete syllabus of the course, the textbook used for the course; and the name and number of the Biology course that the transfer is intended to replace. The Biology Chair will decide, in consultation with the instructor who normally teaches the course that is to be replaced with the transfer credit, whether the transfer course fulfills the requirements of Wheeling Jesuit’s Biology curriculum. If the transfer credit is deemed acceptable, then the Biology Chair will notify the Registrar that a particular course is waived in lieu of a transfer. If the course is not deemed as acceptable, then the student must enroll in the course at Wheeling Jesuit. No upper-level (300-level and above) biology courses may be transferred from a community college or other two-year institution. The Wheeling Jesuit General Biology curriculum contains eleven credits (BIO 107, 108, 109, 121 and 122). Students who have not taken eleven credits of general biology must enroll in one or more of these courses to complete their general biology requirement. If a transferred course is a prerequisite for an upper-level course, then students must receive confirmation of transfer from the Biology Chair 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 Chair of Biology. Students may not transfer more than sixteen credits of biology, regardless of the institution from which those credits were earned, and receive a BS degree in Biology.

No transferred course may replace more than one biology course, unless the transferred course contains an embedded laboratory. In this case, the student must include the following additional information in their transfer request: Separate grades obtained in the lecture laboratory sections of the course; separate syllabi of the laboratory and lecture sections of the course, and a signed statement form the laboratory and lecture instructors stating that the student has received passing grades in each section. If both sections are deemed acceptable by the Biology Chair, then students may be permitted to transfer in the lecture and laboratory for credit. If one or more sections are not deemed as acceptable, or if the student has not passed both sections, then students must enroll in the section(s) that s/he has not passed or that is (are) deemed unacceptable.

A student who believes that s/he has sufficient mastery of course material to be exempt from a particular course may elect to place out of the course under the following circumstances:

The student must notify the Department Chair and his/her advisor in writing that s/he wishes to place out of the course. The notification must include the name and number of the course, and an explanation of why the student believes that s/he should place out of the course. The request must be signed and dated by the student.

The student must furnish written proof that the material was covered at the appropriate level in some course(s) in which the student was enrolled at another institution. This proof must include a syllabus, grade issued and official transcripts.

No high school course or AP course can be used to place out of a biology course at or above 200-level. If the student wishes to use a
high school or AP course as an exemption, for a 100-level course, then that request must be made in the freshman year.

After submitting the request to the Department Chair, the Department Chair will consult the appropriate faculty members to decide whether the student has met the necessary proficiencies to be permitted to take the final exam. If so, then the student will be notified that their request has been accepted. The student must then pass a final exam for the course within one week of being notified by the Department Chair. If the student does not take the final exam within one week after receiving approval for any reason, then the request to place out of a course is rejected, and the student must enroll in the course. If the student does not pass a final examination of the course, then the request is rejected and the student must enroll in the course. If the student passes the final examination, then the Biology Chair will notify the Registrar that the course has been waived.

A request to be exempt from a course will be rejected under the following circumstances:

- 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 official transcript.
- The student has not taken the final examination for the course within one week after receiving notification.
- The student was unable to pass the final examination.
- The student has previously attempted to place out of the course.

If the course for which the student seeks exemption is a prerequisite for an upper-level biology course, then the student is not permitted to register for the upper-level course until they have successfully completed the course exemption, or has enrolled in and passed the course at Wheeling Jesuit.

Requirements for a Minor in Biology

Biology minors must complete the following courses:

- BIO 107 Evolution and Ecology 3 crs
- BIO 108 Form and Function 3 crs
- BIO 109 Cells and Chromosomes 3 crs
- BIO 121, 122 General Biology Labs 1 cr ea
- BIO 205, 221 Ecology and Lab 3 and 1 crs
- BIO 210, 222 Genetics and Lab 3 and 1 crs
- BIO 320, 321 Vertebrate Biology & Lab 3 and 1 crs
- BIO 330 Developmental Biology 3 crs
- BIO 340, 341 Cell & Molecular Biology and Lab 3 and 1 crs
- CHE 110, 120 General Chemistry 4 crs ea
- CHE 221, 222 Organic Chemistry 4 crs ea
- MAT 108 Precalculus 3 crs

Course Descriptions

**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.

**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.)

**BIO 108 The Form & Function of Biological Organisms (3 crs)**
An overview of the anatomy and physiology of plants and animals, with an emphasis on human structures. The inter-relationships 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.)

**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. Prerequisite: one semester of college-level chemistry. (Students should have had a successful experience in chemistry at the college level prior to taking BIO 109. BIO 107, 108 and 109 are required for Biology majors, and may be completed in any order.)

**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.

**BIO 121 The Methods of Biology (1 cr)**
(Should be taken by 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.
A survey of the disease processes which affect the tissues, organs and the body as a whole. Special emphasis is placed on infectious diseases, their causes, prevention and treatment. Prerequisites: BIO 128 and BIO 129.

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.

BIO 320 Vertebrate Biology (3 crs)
An in-depth study of the comparative anatomy and systematic physiology of the vertebrate organisms, with emphasis on evolutionary relatedness. Prerequisite: Any 200-level biology course.

BIO 321 Vertebrate Biology Laboratory (1 cr)
Experimental, observational and comparative studies of the structure and function of organ systems in vertebrates. Corequisite: BIO 320.

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: Any 200-level biology course.

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 320.

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, CHE 222.

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.

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.

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.

BIO 414 Biochemistry (3 cr)
An intermediate-level course in the description of macromolecular structure and function. Topics include an in-depth 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: CHE 222.

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.

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.

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. Prerequisite or Corequisite: BIO 341. 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.

BIO 432 Histology (3 crs)
Microscopic anatomy of vertebrate tissues and structure/function relationships, with an emphasis placed on the tissues of mammals. Prerequisite: BIO 320

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 205 and BIO 221.

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 221.

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 200 level BIO course. Corequisite: BIO 439.

BIO 439 Parasitology Laboratory (1 cr)
Laboratory identification of common human parasites that are representative of the various genera discussed in the lecture. Prerequisite: Any 200-level BIO course. Corequisite: BIO 438

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 200-level BIO course.

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 200-level BIO course.

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 200-level BIO course.

BIO 450 Molecular Genetics (3 crs)
The gene as a biochemical entity is examined with regard to its composition and action. Recent evidence from viruses, bacteria and eukaryotes is studied and interpreted to provide an understanding of the genetic regulation of life’s processes. Prerequisite: BIO 340.

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 210.**

**BIO 473 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 200-level BIO course.**

**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.**

**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 in all seminars are mandatory. **Prerequisite: junior or senior standing.**

**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.**

**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.**

**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.

**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.

### BIOLOGY - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 107 or 108 3</td>
<td>BIO 109 3</td>
<td>BIO 330 &amp; 331 4</td>
<td>RST 2xx/3xx 3</td>
</tr>
<tr>
<td>BIO 121 1</td>
<td>BIO 205 &amp; 221 4</td>
<td>LIT 250 3</td>
<td>BIO 475 1</td>
</tr>
<tr>
<td>MAT 108 or 111 3</td>
<td>CHE 221 &amp; 231 5</td>
<td>PHY 110 &amp; 121 5</td>
<td>MOL 111 3</td>
</tr>
<tr>
<td>FYS 101 1</td>
<td>ENG 105 or 110 3</td>
<td>BIO 375 1</td>
<td>BIO 480 1</td>
</tr>
<tr>
<td>HIS 110 3</td>
<td>FAS 1xx 3</td>
<td>RST 106/107 3</td>
<td>BIO 424 1</td>
</tr>
<tr>
<td>CHE 110 &amp; 121 5</td>
<td></td>
<td>BIO 426</td>
<td>BIO elective 3 or 4</td>
</tr>
<tr>
<td>Semester total 16</td>
<td>18</td>
<td>16</td>
<td>15-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th>FALL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 107 or 108 3</td>
<td>BIO 210 &amp; 222 4</td>
<td>BIO 340 and 341 4</td>
<td>BIO 482 2</td>
</tr>
<tr>
<td>CHE 120 &amp; 122 5</td>
<td>CHE 222 &amp; 232 5</td>
<td>MOL 102 3</td>
<td>RST/PHI 305 3</td>
</tr>
<tr>
<td>BIO 122 1</td>
<td>LIT 120 3</td>
<td>PHY 120 &amp; 122 5</td>
<td>INS/SSC 3</td>
</tr>
<tr>
<td>HIS 120 3</td>
<td>BIO 320 &amp; 321 4</td>
<td>MAT 204 3</td>
<td>BIO elective 3 or 4</td>
</tr>
<tr>
<td>PHI 105 3</td>
<td></td>
<td>BIO 376 1</td>
<td>POS/PSY/ECo 110 3</td>
</tr>
<tr>
<td>Semester total 15</td>
<td>16</td>
<td>16</td>
<td>15-16</td>
</tr>
</tbody>
</table>

| Total Credits | 31 | 34 | 32 | 30-32 127-129 |
## Business

**Contact Persons:** Mr. Theodore Pauls  
Ms. Kathleen Solovan  
Dr. Homayoun Hajiran  
Mr. Charles Millick  
Dr. Edward Younkins

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.

### The Business Department Majors

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

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101</td>
<td>1  ECO 110</td>
<td>3  Science or Elective</td>
<td>3  RST 2xx/3xx</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3  BUS 221 or PHI 10</td>
<td>3  PHI 205</td>
<td>3  Elective or CON xxx</td>
</tr>
<tr>
<td>ACC 123</td>
<td>3  MKT 211 or CON xxx</td>
<td>3  BUS 315</td>
<td>3  CON xxx or BUS 410</td>
</tr>
<tr>
<td>MAT 105</td>
<td>3  Elective or Science</td>
<td>3  CON xxx</td>
<td>3  Science or LIT 250</td>
</tr>
<tr>
<td>BUS 100</td>
<td>2  MOL 102</td>
<td>3  FIN 311 or BUS 313</td>
<td>3  Elective</td>
</tr>
<tr>
<td>MOL 102</td>
<td>3  BUS 200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

| SPRING | | | |
|--------| | | |
| LIT 120 | 3  ECO 221 | 3  LIT 250 or Science | 3  RST/PHI 305 |
| ACC 124 | 3  BUS 221 or PHI 105 | 3  PHI 205 | 3  BUS 410 or CON xxx |
| MGT 111 | 3  MKT 211 or CON xxx | 3  CON xxx | 3  CON xxx |
| HIS 120 | 3  FAS 1xx | 3  FIN311 or BUS 313 | 3  Elective |
| INS 111 | 3  MOL 111 | 3  RST 106/107 | 3  BUS 400 |
| Semester total | 15 | 16 (16) | 16 (17) | 13 |

| Total Credits | 30 | 32 | 31 | 28 | 121 |

CON - Concentration Course
accountancy, which leads to the bachelor of science degree in accountancy.

The University Core Curriculum
All majors in business and in accountancy must complete the University core curriculum, including specifically:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 110</td>
<td>Macroeconomics</td>
<td>3 crs</td>
</tr>
<tr>
<td>MAT 105</td>
<td>Statistics</td>
<td>3 crs</td>
</tr>
<tr>
<td>INS 111</td>
<td>World Community</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

The Business Core Curriculum
All majors in business and in accountancy must complete the business core curriculum:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 123</td>
<td>Principles of Accounting I</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 124</td>
<td>Principles of Accounting II</td>
<td>3 crs</td>
</tr>
<tr>
<td>ECO 221</td>
<td>Microeconomics</td>
<td>3 crs</td>
</tr>
<tr>
<td>FIN 311</td>
<td>Principles of Finance</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 111</td>
<td>Principles of Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 211</td>
<td>Principles of Marketing</td>
<td>3 crs</td>
</tr>
<tr>
<td>BUS 221</td>
<td>Quantitative Business Analysis</td>
<td>4 crs</td>
</tr>
<tr>
<td>BUS 313</td>
<td>Information Systems and Operations</td>
<td>3 crs</td>
</tr>
<tr>
<td>BUS 315</td>
<td>Business Law</td>
<td>3 crs</td>
</tr>
<tr>
<td>BUS 410</td>
<td>Strategic Business Planning*</td>
<td>3 crs</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Business Skills 1</td>
<td>2 crs</td>
</tr>
<tr>
<td>200, 300, 400</td>
<td>Business Skills (1 cr./yr.)</td>
<td></td>
</tr>
</tbody>
</table>

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 400 class. There is a charge for the test.

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.

The Business Concentrations
Concentration in Management Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 226</td>
<td>Organizational Behavior</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 315</td>
<td>Conceptual Foundations of Business</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 340</td>
<td>Organizational Leadership</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 436</td>
<td>Human Resources Management</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

Plus one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 220</td>
<td>Sports Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 311</td>
<td>International Business</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 330</td>
<td>Introduction to e-Commerce</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 373/4</td>
<td>Internship in Management</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

*** Other Approved Elective | 3 crs |

Concentration in Marketing Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 316</td>
<td>Consumer Behavior</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 310</td>
<td>Marketing Research</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 317</td>
<td>Services Marketing</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 420</td>
<td>Marketing Strategies</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

Plus one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKT 313</td>
<td>Advertising Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 315</td>
<td>International Marketing</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 318</td>
<td>Sports Marketing</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 323</td>
<td>Marketing and e-Commerce</td>
<td>3 crs</td>
</tr>
<tr>
<td>MKT 373/4</td>
<td>Internship in Marketing</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

*** Other Approved Elective | 3 crs |

Concentration in Sports Management Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT 220</td>
<td>Sports Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 401</td>
<td>Sports Facility and Event Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 402</td>
<td>Sports Law</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 318</td>
<td>Sports Marketing</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

Plus one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 316</td>
<td>Economics of Sports</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 436</td>
<td>Human Resources Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>PSY 250</td>
<td>Sports Psychology</td>
<td>3 crs</td>
</tr>
<tr>
<td>MGT 373/374</td>
<td>Internship</td>
<td>3 crs</td>
</tr>
</tbody>
</table>

*** Other Approved Elective | 3 crs |

The Major in 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211</td>
<td>Intermediate Accounting I</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 212</td>
<td>Intermediate Accounting II</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 223</td>
<td>Accounting Information Systems</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 305</td>
<td>Tax Accounting</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 311</td>
<td>Managerial Cost Accounting</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 401</td>
<td>Advanced Accounting Practice</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 403</td>
<td>Accounting for Government and Not-for-Profit Organizations</td>
<td>3 crs</td>
</tr>
<tr>
<td>ACC 406</td>
<td>Auditing Theory and Practice</td>
<td>3 crs</td>
</tr>
</tbody>
</table>
Plus one of the following courses:

- MSA 553 Controllership (3 crs)
- *MSA 509 Law for Accountants (3 crs)
- ACC 373/374 Internship in Accounting (3 crs)

* Required for CPA exam in most states

Business Department Minors

The Minor in Business

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 (3 crs)
- MGT 111 Principles of Management (3 crs)
- ECO 110 Macroeconomics (3 crs)
- MKT 211 Principles of Marketing (3 crs)
- FIN 311 Principles of Finance (3 crs)

The Minor in Accountancy

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

- ACC 123 Principles of Accounting I (3 crs)
- ACC 124 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 (3 crs)

Course Descriptions

ACCOUNTING

ACC 123 Principles of Accounting I (3 crs)
An introduction to basic financial accounting theory and practice.

ACC 124 Principles of Accounting II (3 crs)
Continuing coverage of financial accounting and introduction of cost and managerial accounting.

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.

ACC 212 Intermediate Accounting II (3 crs)
Continues the extensive study of descriptive financial accounting theory and practice. Prerequisite: ACC 211.

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 intensive projects, class discussion, library and field research. Systems theory and information technology topics are also discussed. Prerequisites: ACC 124.

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>ACC 211</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>PHI 105 or BUS 221</td>
<td>3 (4)</td>
</tr>
<tr>
<td>ACC 123</td>
<td>3</td>
<td>RST 106/107</td>
<td>3</td>
</tr>
<tr>
<td>MAT 105</td>
<td>3</td>
<td>ECO 110</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100</td>
<td>2</td>
<td>MOL 102</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>BUS 200</td>
<td>1</td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>16 (17)</td>
<td></td>
</tr>
<tr>
<td>SPRING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>ACC 212</td>
<td>3</td>
</tr>
<tr>
<td>ACC 124</td>
<td>3</td>
<td>ECO 221</td>
<td>3</td>
</tr>
<tr>
<td>MGT 111</td>
<td>3</td>
<td>MOL 111</td>
<td>3</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>MKT 211</td>
<td>3</td>
</tr>
<tr>
<td>INS 111</td>
<td>3</td>
<td>BUS 221 or PHI 105</td>
<td>4 (3)</td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>15 (16)</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
<td>32</td>
<td>31</td>
</tr>
</tbody>
</table>
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.

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.

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.

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.

ACC 403 Accounting for Government and Not-for-Profit Organizations
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.

ACC 406 Auditing Theory and Practice (3 crs)
Examination of the philosophy, concepts and techniques pertaining to the auditing process. Prerequisite: ACC 212.

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.

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.

BUSINESS
BUS 100 (2 crs), 200, 300, 400 Business Skills II-IV (1 cr/year)
This seminar course addresses a wide variety of activities aimed at enhancing students' business skills, including social, communication, computer, writing and speaking skills. Methodology will include business simulations, guest speakers, alumni contacts, research, field trips, sporting activities and networking.

BUS 221 Quantitative Business Analysis (4 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.

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.

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.

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.

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.

ECONOMICS
ECO 110 Principles of Macroeconomics (3 crs)
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.

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.
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.

ECO 316 Economics of Sports (3 crs)
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.

ECO 321 History of Economic Thought (3 crs)
Economic ideas in perspective of historic development. Prerequisite: ECO 221.

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.

FINANCE
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.

MANAGEMENT
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.

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.

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 effective at meeting both the organization's objectives and the goals of the individual employees. Major topics include: motivation, leadership, group processes and attitudes.

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.

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.

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.

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.

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.
MKT 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.

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.

MARKETING

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.

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.

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.

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.

MKT 316 Consumer Behavior (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.

MKT 317 Services Marketing (3 crs)
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.

MKT 318 Sports Marketing (3 crs)
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.

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.

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.

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.

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.

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.
Catholic Studies

Contact Person: Robert J. 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.

Requirements for Catholic Studies Minor

A Catholic Studies minor must complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CST 201</td>
<td>The Catholic Vision</td>
<td>3 crs</td>
</tr>
<tr>
<td>CST 301</td>
<td>Classics of the Catholic Intellectual Tradition</td>
<td>6 crs</td>
</tr>
</tbody>
</table>

The minor is completed by taking one course in each of the following areas:

- Humanities (3 crs)
- Social Science (3 crs)
- Theology or Philosophy (3 crs)
- Elective (12 crs)

Note: While students will be encouraged to take RST 107 (Catholicism), it is not required for the minor.

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.

Course Descriptions

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.

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.

Chemistry

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 valuable 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 50-52 hours of chemistry and prepares students for graduate school or entry-level positions in industry. The BA degree, with 30-31 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.

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 110, 120</td>
<td>General Chemistry Lecture I, II</td>
<td>8 crs</td>
</tr>
<tr>
<td>CHE 121, 122</td>
<td>General Chemistry Lab I, II</td>
<td>2 crs</td>
</tr>
<tr>
<td>CHE 221, 222</td>
<td>Organic Chemistry Lecture I, II</td>
<td>8 crs</td>
</tr>
<tr>
<td>CHE 231, 232</td>
<td>Organic Chemistry Lab I, II</td>
<td>2 crs</td>
</tr>
<tr>
<td>CHE 315</td>
<td>Quantitative Analysis</td>
<td>3 crs</td>
</tr>
<tr>
<td>CHE 319</td>
<td>Quantitative Analysis Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHE 316</td>
<td>Instrumental Analysis Lecture</td>
<td>3 crs</td>
</tr>
<tr>
<td>CHE 317</td>
<td>Instrumental Analysis Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHE 321, 322</td>
<td>Physical Chemistry Lecture I, II</td>
<td>8 crs</td>
</tr>
<tr>
<td>CHE 331, 332</td>
<td>Physical Chemistry Lab I, II</td>
<td>2 crs</td>
</tr>
<tr>
<td>CHE 314</td>
<td>Biochemistry</td>
<td>3 crs</td>
</tr>
<tr>
<td>CHE 401</td>
<td>Inorganic Chemistry</td>
<td>3 crs</td>
</tr>
<tr>
<td>CHE 411</td>
<td>Inorganic Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CHE 480</td>
<td>Seminar</td>
<td>1 cr</td>
</tr>
<tr>
<td>Chemistry Option (one of the following):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 318</td>
<td>Environmental Chemistry</td>
<td>3 crs</td>
</tr>
<tr>
<td>CHE 405</td>
<td>Advanced Inorganic Chemistry</td>
<td>3 crs</td>
</tr>
</tbody>
</table>
CHE 410  Advanced Biochemistry  (3 crs)
CHE 415  Advanced Organic Chemistry  (3 crs)
CHE 420  Advanced Physical Chemistry  (3 crs)

Required Lab or Project (one of the following):
CHE 344, 345  Biochemical Lab Projects I, II  (2 crs)
CHE 431, 432  Advanced Laboratory Techniques I, II  (4 crs)
CHE 477, 478  Senior Research Project I, II  (4 crs)

Other required courses:
MAT 111, 112  Calculus I, II  (8 crs)
PHY 110, 120  Physics Lecture I, II  (8 crs)
PHY 121, 122  Physics Lab I, II  (2 crs)
(68-70 crs)

Note: The program outlined above meets or slightly exceeds the requirements for certification by the American Chemical Society.

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:
CHE 110, 120  General Chemistry I and II  (8 crs)
CHE 121, 122  General Chemistry Lab  (2 crs)
CHE 221, 222  Organic Chemistry I and II  (8 crs)
CHE 231, 232  Organic Chemistry Lab I and II  (2 crs)
CHE 315  Quantitative Analysis  (3 crs)
CHE 319  Quantitative Analysis Lab  (1 cr)
CHE 321 or  Physical Chemistry I  (4 crs)
CHE 316, 317  Instrumental and labs  (4 crs)

Other required courses:
MAT 111  Calculus I  (4 crs)
PHY 110, 120  Physics I, II  (8 crs)
PHY 121, 122  Physics Lab I, II  (2 crs)
CHE  Elective  (3 crs)
BIO 108 or 109  (3 crs)
(48 crs)

Requirements for a Minor in Chemistry

A minor in chemistry is recommended for students majoring in biology, physics, computer science, management, marketing, pre-engineered, 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.

---

### BS in CHEMISTRY - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>CHE 221</td>
<td>4</td>
</tr>
<tr>
<td>CHE 110</td>
<td>4</td>
<td>CHE 231</td>
<td>1</td>
</tr>
<tr>
<td>CHE 121</td>
<td>1</td>
<td>PHY 110</td>
<td>4</td>
</tr>
<tr>
<td>MAT 111</td>
<td>4</td>
<td>PHY 121</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>MOL</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester total</strong></td>
<td><strong>16</strong></td>
<td><strong>16</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>SPRING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 120</td>
<td>4</td>
<td>CHE 222</td>
<td>4</td>
</tr>
<tr>
<td>CHE 122</td>
<td>1</td>
<td>CHE 232</td>
<td>1</td>
</tr>
<tr>
<td>MAT 112</td>
<td>4</td>
<td>PHY 120</td>
<td>4</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>PHY 122</td>
<td>1</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>MOL</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester total</strong></td>
<td><strong>15</strong></td>
<td><strong>16</strong></td>
<td><strong>16-18</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>31</strong></td>
<td><strong>32</strong></td>
<td><strong>33-35</strong></td>
</tr>
</tbody>
</table>

* offered in alternate year blocks: [321, 331, 401] or [315, 319, 480, elective]
** offered in alternate year blocks: [322, 332, 411] or [316, 317, elective]
Core Fulfilling Courses

CHE 105  Intro. General, Organic and Biochemistry  (3 crs)
CHE 107  Intro. Chemistry for Non-science majors  (3 crs)
CHE 110  General Chemistry Lecture  (4 crs)

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.

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.

CHE 110, 120 General Chemistry (4 crs ea)
Modern concepts of atomic structure and chemical properties, chemical bonding, stoichiometry, chemical equilibrium and kinetics. For CHE 120, CHE 110 is a prerequisite.

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 122, CHE 120 is a corequisite.

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, computer-based simulators, and involvement in a mentored research project. This course is designed for science majors with superior high school chemistry backgrounds. Priority will be given to declared chemistry majors.

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. Prerequisite: CHE 110 and 120 or equivalent.

CHE 231, 232 Organic Chemistry Lab (1 cr ea)
The techniques necessary to synthesize and identify organic compounds by both chemical and instrumental methods. Prerequisite: CHE 122 or equivalent. For CHE 231, CHE 221 is a corequisite. For CHE 232, CHE 222 is a corequisite.

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, PHY 120.

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.

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 and 122

Programs & Courses of Instruction

BA in CHEMISTRY - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>CHE 221</td>
<td>4</td>
</tr>
<tr>
<td>CHE 110</td>
<td>4</td>
<td>CHE 231</td>
<td>1</td>
</tr>
<tr>
<td>CHE 121</td>
<td>1</td>
<td>PHY 110</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>PHY 121</td>
<td>1</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>POS/PSY/ECO 110</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>MAT 111</td>
<td>4</td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>SPRING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE 120</td>
<td>4</td>
<td>CHE 222</td>
<td>4</td>
</tr>
<tr>
<td>CHE 122</td>
<td>1</td>
<td>CHE 232</td>
<td>1</td>
</tr>
<tr>
<td>BIO 108 or 109</td>
<td>3</td>
<td>PHY 120</td>
<td>4</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>PHY 122</td>
<td>1</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>INS/SSC</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>14</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Total Credits</td>
<td>29</td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

* offered in alternate year blocks: [CHE 321] or [CHE 315, 319]
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, PHY 120, PHY 122.

CHE 317 Instrumental Analysis Lab (1 cr)
A laboratory course in the theory and application of modern instrumental methods of separation and analysis. Corequisite: CHE 316.

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 120 and 122.

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 and 122. Corequisite: CHE 315.

CHE 321, 322 Physical Chemistry Lecture (4 crs ea)
Modern concepts of molecular structure, chemical thermodynamics, equilibrium and kinetics. Prerequisites: CHE 120/222, MAT 112, PHY 120

CHE 331, 332 Physical-Instrumental Measurements Lab (1 cr ea)
Experiments in physical-chemical measurements with an emphasis on instrumental methods. Prerequisites: CHE 122, CHE 232, PHY 122.

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.

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.

CHE 405 Advanced Inorganic Chemistry (3 crs)
An advanced topics lecture course in inorganic chemistry. Prerequisites: CHE 401.

CHE 410 Advanced Biochemistry (3 crs)
An advanced topics lecture course in physical biochemistry. Prerequisite: CHE 314.

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.

CHE 415 Advanced Organic Chemistry (3 crs)
An advanced topics lecture course in physical-organic chemistry. Prerequisites: CHE 222.

CHE 420 Advanced Physical Chemistry (3 crs)
An advanced topics lecture course in physical chemistry. Prerequisite: CHE 322.

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.

CHE 477, 478 Senior Research Project I and II (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.

CHE 450 Thesis
Completion of senior research project resulting in an undergraduate research thesis. Prerequisites: Senior standing, permission.

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.

NOTE: Without passing grades in prerequisites, 400-level chemistry courses may be taken only on a credit/no-credit basis.

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.

Requirements for the Classical Studies Minor

Greek or Latin Language (6 crs)
Electives (3 crs. above the 100-level) (9 crs)
400-level Capstone Course (3 crs)

Listed below are potential Elective Courses. Others may also count toward this minor; please consult the contact person for additional information:

HIS 216: The Ancient World – Greece and Rome
LIT 320: Mythology
POS 346: Ancient Political Thought
RST 201: Introduction to the New Testament
Communications

Contact Person: Richard Cain

In support of the overall mission of Wheeling Jesuit University, the Professional Communication Program provides courses in journalism, broadcasting, graphic design, web authoring, public relations, advertising, health and biomedical communication, science, energy and environmental communication, political and advocacy communication, legal writing and pre-law, creative writing, and filmmaking.

The program offers majors and/or minors in the following fields:
- Professional Communications (major and minor—13 different tracks)
- Journalism
- Broadcast and Video Production
- Graphic Design
- Web Authoring/Web Mastering
- Public Relations
- Advertising
- Integrated Marketing Communication
- Health and Biomedical Communication
- Science, Energy, and Environmental Communication
- Political Communication
- Social Advocacy
- Legal Writing and Pre-Law
- Creative Writing
- Filmmaking

Core Fulfilling Courses

FAS/COM 142  Digital Photography
FAS 143/COM 232  Image Editing with Photoshop

The professional communications major is designed to meet the needs of students who hope to pursue careers in which writing, speaking and knowledge of the emerging communications technologies are essential. It is appropriate for students who want to work in journalism, public relations, advertising, multimedia, marketing, law, teaching, advocacy, technical communication, and other careers.

Upon completion of the Professional Communications major, students will demonstrate the ability to:
1. Identify and apply reasoned and effective communications strategies across a range of topics;
2. Make an effective oral presentation.

Requirements for Professional Communications Major Bachelor of Arts Degree

In addition to completing the core curriculum requirements, all professional communications majors must complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 101-102</td>
<td>Freshman Seminar (1 cr. each semester)</td>
<td></td>
</tr>
<tr>
<td>COM 201-202</td>
<td>Sophomore Seminar/Internships (1 cr each semester)</td>
<td></td>
</tr>
<tr>
<td>COM 301-302</td>
<td>Junior Seminar/Internships (1 cr each semester)</td>
<td></td>
</tr>
<tr>
<td>COM 401-402</td>
<td>Senior Seminar/Internships (3 cr each semester)</td>
<td></td>
</tr>
<tr>
<td>COM 103</td>
<td>Principles of Communication (3 crs)</td>
<td></td>
</tr>
<tr>
<td>COM 104</td>
<td>Persuasion (3 crs)</td>
<td></td>
</tr>
<tr>
<td>COM 203</td>
<td>Intercultural &amp; Organizational Communication (3 crs)</td>
<td></td>
</tr>
<tr>
<td>COM 204</td>
<td>Argumentation &amp; Evidence (3 crs)</td>
<td></td>
</tr>
<tr>
<td>COM 303</td>
<td>Communication Ethics (3 cr)</td>
<td></td>
</tr>
<tr>
<td>COM 304</td>
<td>Communication Law (3 cr)</td>
<td></td>
</tr>
<tr>
<td>COM Electives</td>
<td>Choose a minimum of 6 communication elective courses</td>
<td></td>
</tr>
</tbody>
</table>

Total: (30 crs)

COM 301 or COM 302 Internship (optional) (1 cr)

And choose any other five Communication courses:

Total: (18 crs)

Professional Communications Minor

COM 103 or COM 104 or COM 203 or COM 204
Principles of Communication (3 crs)

Course Descriptions:

COM 103 Principles of Communication (3 crs)
Survey of essential concepts and skills for effective communication in media, business and personal life with emphasis on communicating with the new digital and computer technologies in ways that foster fuller development of the human person. This course assumes knowledge of computers and word processing. Required for English and Professional Communications majors and recommended for all who want to improve their computer literacy, word processing, interpersonal communication and Internet skills. No prerequisite.

COM 104 Persuasion (3 crs)
Persuasion is the heart of communication. No one aspiring to leadership or effectiveness in professional or personal life will be effective without becoming at good at persuasion. This course is
designed to teach you about influence. We'll explore this subject from multiple perspectives using a variety of methods—rhetorical, psychological, and philosophical. You'll learn basic, effective persuasion tactics that are effective in changing knowledge, behaviors, and attitudes in a variety of situations. Then, we'll go on to examine applied techniques used by masters of communication in small groups, business, social action, and politics. Required for all Professional Communication majors and minors. No prerequisite.

COM 105 Backpacking and Communication (small group dynamics lab) (3 crs)

This course serves as a communications laboratory where students with a common interest in challenge, self-discovery, leadership, and a common love of outdoor wilderness adventure can explore how these interests coincide. In this course you will learn how to travel safely on wilderness trips in a variety of terrains, how backpacking equipment and principles work, and how to plan, conduct, and process adventure experiences ranging from a few hours to a few weeks. No prerequisite.

COM 106 White water Kayaking and Communication (small group dynamics lab) (3 crs)

This course serves as a communications laboratory where students with a common interest in challenge, self-discovery, leadership, and a common love of outdoor water adventure can explore how these interests coincide. In this course you will learn how to travel over water safely in a sea kayak, how sea kayaking equipment and principles work, and how to plan, conduct, and process adventure experiences ranging from flat water to Class I-IV white water. No prerequisite.

COM 107 Rock Climbing and Communication (small group dynamics lab) (3 crs)

This course serves as a communications laboratory where students with a common interest in challenge, self-discovery, leadership, and a common love of climbing adventure can explore how these interests coincide. In this course you will learn how to climb safely using a variety of techniques, how climbing equipment and principles work, and how to plan, conduct, and process adventure experiences ranging from bouldering and top roping to single and multi-pitch lead climbs. No prerequisite.

COM 108 Winter Adventure and Communication (small group dynamics lab) (3 crs)

This course serves as a communications laboratory where students with a common interest in challenge, self-discovery, leadership, and a common love of winter adventure can explore how these interests coincide. In this course you will learn how to travel over snow safely. How snow travel equipment and principles work, and how to plan, conduct, and process winter adventure experiences snowshoeing, winter survival, mountaineering, and alpine and Nordic skiing ranging from a few hours to a few weeks. No prerequisite.

COM 109 Sea Kayaking and Communication (small group dynamics lab) (3 crs)

This course serves as a communications laboratory where students with a common interest in challenge, self-discovery, leadership, and a common love of outdoor water adventure can explore how these interests coincide. In this course you will learn how to travel over water safely in a sea kayak, how sea kayaking equipment and principles work, and how to plan, conduct, and process adventure experiences ranging from a few hours to a few weeks. No prerequisite.

COM 203 Intercultural and Organizational Communication (3 crs)

This course provides an overview of the art of communicating across cultures and organizations. The course will explore the theoretical issues grounding intercultural communications and present organizations, societies, and cultures as communicative performances. But the primary emphasis is on experiencing what it is like to communicate across cultures and on developing a strong repertoire of practical skills to communicate with strangers in your own culture and in others. The course is writing intensive and involves role-playing, simulations, film, and social activities designed to give a broad experience in communication and sensitivity to others. Required for all Professional Communication majors. No prerequisite.

COM 204 Argumentation and Evidence (3 crs)

Argument and evidence give power to persuasion. No one aspiring to leadership or effectiveness in professional or personal life will be effective without becoming at good at persuasion—good at giving reasons to back up claims. This course is designed to teach you about justifying your claims. We'll explore this subject from multiple perspectives using a variety of methods—rhetorical, psychological, and philosophical. You'll learn how to critique the arguments and evidence others give as well as how to construct arguments and select evidence in ways that are effective in changing knowledge, behaviors, and attitudes in a variety of situations. Required for all Professional Communication majors and minors. No prerequisite.

COM 303 Communication Ethics (3 crs)

Examination of the moral issues facing communicators in a professional world characterized by complex and rapidly changing technologies and social conditions. Emphasis on identifying enduring personal virtues necessary to communicate in ways that respect human dignity, human ends, common goods, and social justice. No prerequisite.

COM 304 Media Law (3 crs)

Discussion of the Anglo-American concept of freedom of speech and press and its relationship to democracy, citizenship, and the common good; 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 pre-law students. No prerequisite.

**Professional Communication Vocational Preparation**

One of the unique strengths of Wheeling Jesuit University’s Professional Communication Program is the close and ongoing relationship students develop with professionals in the field. Each semester in their seminar courses students to develop their professional contacts through job shadowing, networking, resume preparation, internships, practicums, interviews, and professional juries. At the same time, they receive individual mentoring and career development advice from faculty and professionals.

**COM 101-102 Freshman Vocational Preparation Seminars (1 cr each semester)**
Practical experience in job shadowing, and job networking and professional communication research. No prerequisite.

**COM 201-202 Sophomore Vocational Preparation Seminars (1 cr each semester)**
Practical experience in job networking and professional communication project work. No prerequisite.

**COM 301-302 Junior Vocational Preparation Seminars (1 cr each semester)**
Guided experience in an actual work environment related to your professional communication career. No prerequisite.

**COM 401-402 Senior Vocational Preparation Seminars (3 cr each semester)**
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.

**PROFESSIONAL COMMUNICATION ELECTIVE COURSES**

**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.)

**COM 211 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. No prerequisite.

**COM 212 Copy editing and Layout (3 crs)**
Fundamentals and techniques of editing and designing newspaper

---

**COMMUNICATIONS - Recommended Course Sequence**

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 1</td>
<td>COM 203/103 3</td>
<td>COM 301 1</td>
<td>COM 401 3</td>
</tr>
<tr>
<td>HIS 110 3</td>
<td>COM 201 1</td>
<td>COM Elective 3</td>
<td>LIT 300+ 3</td>
</tr>
<tr>
<td>ENG 105/110 3</td>
<td>COM Elective 3</td>
<td>COM Elective 3</td>
<td>Electives 6</td>
</tr>
<tr>
<td>COM 103 OR 203** 3</td>
<td>LIT 250 3</td>
<td>POS/PSY/ECO 110 3</td>
<td></td>
</tr>
<tr>
<td>COM 101 1</td>
<td>PHI 105 3</td>
<td>Science Core 3</td>
<td></td>
</tr>
<tr>
<td>INS 111 3</td>
<td>MOL 101 or 102 3</td>
<td>RST 305 or PHI 305 3</td>
<td></td>
</tr>
<tr>
<td>FAS 142 3</td>
<td>Semester total 17 16 16 12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th>FALL</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 120 3</td>
<td>COM 204/104 3</td>
<td>COM 302 1</td>
<td>COM 402 3</td>
</tr>
<tr>
<td>LIT 120 3</td>
<td>COM 202 1</td>
<td>COM 303 or 304 3</td>
<td>COM 304 or 303 3</td>
</tr>
<tr>
<td>RST 106 or 107 3</td>
<td>COM Elective 3</td>
<td>COM Elective 3</td>
<td>Electives 6</td>
</tr>
<tr>
<td>COM 104/204** 3</td>
<td>PHI 205 3</td>
<td>COM Elective 3</td>
<td></td>
</tr>
<tr>
<td>COM 102 3</td>
<td>MOL 102 or 111 3</td>
<td>Science Core 3</td>
<td></td>
</tr>
<tr>
<td>MAT Core 3</td>
<td>ENG 224 3</td>
<td>RST 2xx or 3xx 3</td>
<td></td>
</tr>
<tr>
<td>Semester total 16 16 16 12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits 33 32 32 24 121</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student may take Intro to Video Production, Web Authoring, Reporting, Backpacking and Communication, or one of the other available COM elective courses if interested.**
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. No prerequisite.

COM 213 Feature Writing (3 crs)
Examination of and practice in methods of feature writing for newspapers, magazines, and multimedia. Emphasis on effective descriptive and narrative writing techniques that engage all the senses to make the reader see and care. Discussion of freelancing issues, developing ideas, working with editors and how to get published. Students will complete several portfolio projects. Writing intensive. No prerequisite.

COM 221 Introduction to Video Production (3 crs)
An introduction to the fundamentals of video and audio production. This course offers an intensive, hands-on experience with digital video production tools and the techniques of studio and field camera operations, lighting, audio principles, video signals and recordings, editing, scripting, graphics, and directing. Students will also be introduced to the rhetorical issues involved in video script writing and production. No prerequisite.

COM 222 Intermediate Video Production (3 crs)
Further experience in the principles and techniques of video writing and production. Emphasis on narrative design, effective production planning and teamwork, working with various formats, and digital editing and effects. Students will focus on the rhetorical issues that guide the various decisions made in script writing, production, and editing as they complete a substantial video project for a professional client. Prerequisite: 2.0 or higher in COM 221 or permission of the instructor.

COM 223 Cardinal TV Practicum (3 crs)
This course is designed for the student that wants to develop communication programs and program content for WJU’s Cardinal TV on Campus Channel and Cardinal Cast, WJU’s web casting channel. Students learn the entire process of television program development, program variety, creating effective concepts, through practical experience. Students will learn behind, or in front of the camera skills, event pre productions, live and taped production, to post production. Students will build graphics, produce interviews, announcing, produce features for these broadcasts, and produce programming for Cardinal TV Channel. The class covers scripting, location production, crewing, production setup, broadcasting technology and methodology in both radio and video broadcasting. There will be lectures, demonstrations, hands on experiences, afternoon and some evening class events are required. No prerequisites.

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.

COM 232/FAS 143 Image Editing (3 crs)
Fundamentals and techniques of digital photography, scanning, and digital image editing using software such as Adobe Photoshop. 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, e-mail and the Internet required. No prerequisite.

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. Prerequisites: none.

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. No prerequisite.

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 technologies such as Flash and ActionScript. Course will include the documented development and design of several multimedia web animation products. Writing and graphic design intensive. No prerequisites.

COM 257 Grantmanship: Writing Successful Grant Proposals (3 crs)
Introduction to the process of identifying promising grant prospects, researching and preparing effective grant proposals, and properly evaluating responses. Emphasis on learning how to present one’s vision and needs and calibrate the story of one’s institution to fit the
criteria of grant prospects. Students will prepare grant proposals for real prospects and obtain criticism and advice from a jury of philanthropic judges. No prerequisites although excellent command of grammar and usage and strong writing skills are necessary to write successful grant proposals. No prerequisite.

**COM 258 Public Relations Writing (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. No prerequisite.

**COM 259: Writing for 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. No prerequisite.

**COM 275 Political Communication (3 crs)**
This course is designed to introduce you to the processes, and institutions that connect citizens and our government through communication. Political communication encompasses the way citizens communicate with each other and with their government as well as the way political professionals (media actors, government employees, elected officials and campaign professionals) communicate with each other and with the public. We will consider the politics that generate the news we use, the way political professionals attempt to control the content and timing of news, the effect of this news on what we know and how we think about public affairs, the processes that take place when citizens communicate with each other, and the effect mass media have on the shape of the policies that govern us. This course will deepen your understanding of the essential role communication plays in a modern democracy, the issues that surrounding the communication of political information and solutions for these problems. Ultimately, the course is intended to encourage you to think about your own role as a citizen in processes of political communication. No prerequisite.

**COM 276 Social Analysis and Advocacy Communication (3 crs)**
Want to change the world by first changing your community? Social analysis is any effort to understand the causes for social problems such as crime, poverty, racism, discrimination, breakdown of family life, or lack of good educational or job opportunities for those willing and able to learn and work. Advocacy is organized, collective action, within civil society, with the goal of improving the quality of life for members of society. It is taken as a given that prevention and resolution of the many social problems facing society depend, to a significant degree, upon effective social analysis and advocacy. The key question you will explore in this course is “How can social action and advocacy become more insightful and effective?” The ultimate goal of this course is to develop the skills, knowledge, and networks necessary for effective social analysis and action. The course provides a critical survey of approaches to analysis and advocacy – from global to local – emphasizing strengths and weaknesses. It combines theoretical and experiential learning, through guest lectures, readings, and student projects with social advocacy organizations. No prerequisite.

**COM 277 Introduction to Legal Writing (3 crs)**
Introduces the basic tools of legal research and writing—the case method, court structure within with precedent and stare decisis operate, criminal and civil procedure terminology, practice at reading and dissecting cases and an introduction to analyzing a closed universe legal problem (one not requiring legal research). Using the format of a basic office memorandum. Emphasis on clear, objective, and accurate use of language in the kinds of documents required of law students and those whose careers require frequent interpretation of legal language and formats. Students will produce several portfolio examples of legal documents. Writing intensive. No prerequisite. Students are encouraged either to have taken or be concurrently enrolled in POS 330 Constitutional Law.

**COM 279 Speech Writing (3 crs)**
The best way to make something happen is to become a catalyst for change—to become a leader. The purpose of this course is to provide you with a sound understanding of your leadership skills and potential and how to most effectively put it to use in the political arena—particularly through effective speech writing. By identifying and understand your strengths, you can then effectively communicate those qualities to others and more easily move along your political path as an effective leader. No prerequisite.

**COM 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.

**COM 282 Creative Non-Fiction 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. These works may as likely appear in Dave Eggers’ magazine The Believer, on NPR’s This American Life, or in The New York Times Magazine. 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.

COM 285 Narrative 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.

COM 285 Narrative Filmmaking (3 crs)
Part of “feeling” the reality of a screenplay – a far less finished work than a short story or novel – is to take the practical steps necessary to transfer the script to the screen. Students are strongly encouraged to take Narrative Screenwriting prior to this course. The course will roughly divide into thirds, analogous to the filmmaking process: Pre-Production, including casting, location-scouting, and story boarding; Production, including shot set-up and recording; and Post-Production, including shot- and sound-sequencing. Prerequisite: LIT 120.

COM 291 Introduction to Health and Biomedical Communication (3 crs)
Explore the role of communication in establishing effective relationships between health care consumers and providers (both formal and informal providers) as well as between biomedical technology and service providers, health care professionals, and the public. In this course will examine the role of communication in biomedical technology production and marketing, health care diagnosis, treatment decision making, informed consent, social support, health education, disease prevention, risk communication, and in the promotion of personal and psycho-social well being. The course will cut across multiple levels of communication and the use of various communication channels and communication technologies. While you will discuss many health issues in this class, you will use cancer care as a primary application area for examining consumer/provider communication, recognizing the many complex health and treatment issues affecting those confronting cancer. No prerequisite.

COM 292 Introduction to Science, Energy, and Environmental Communication (3 crs)
Are you interested in sustainable approaches to energy and natural resources? Would you like to know how to explain complex and important issues clearly and powerful to many different audiences? In this course, you will learn how to harness the power of media to communicate environmental and science information to the public. You will also learn principles for an ecologically and economically sustainable future and how these principles can be effectively and persuasively communicated to people. No prerequisite.

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.

COM 312 Writing Opinion Columns and Editorials (3 crs)
Learn how to state your viewpoint in print, broadcast, and web formats. Discover how to express yourself in compelling commentaries for opinion pages of newspapers, magazines, and blogs. Emphasis is on learning by doing; each session combines ideas with practice. Discuss the importance of proper research; discover how to grab the reader right away; and find out how to properly document your work. Writing assignments are given on current hot-button subjects. You are asked to use knowledgeable sources to bolster your conclusions. A convincing student-enterprise commentary is assigned as the final editorial project. No prerequisite but students are encouraged to have taken COM 204.

COM/ISC 315 Advanced Web Programming (3 crs)
This course will advance the student in the field of programming for web-based applications. This programming will include advanced HTML, JavaScript, CGI and Active Server Pages (ASP). Primary emphasis is in the use of ASP to design and create database-driven web applications. Prerequisites: ISC 108 or 110 and COM 241 or instructor permission.

COM 321 Advanced Video Production (3 crs)
Further development of principles and techniques of digital video preproduction, production, and postproduction. Students will explore advanced techniques such as non-linear editing for complexity as well as continuity with emphasis on the rhetorical issues of effective digital video communication. Students will complete a major project for their portfolios. Writing and graphic design intensive. Prerequisite: 2.0 or higher in COM 221 and 222 or permission of the instructor.

COM 322 Sportscasting (3 crs)
The ability to create a professional, finished, documented sporting event requires a rounded knowledge of multiple aspects of multimedia production for web casting and future broadcasting. This course is for the emerging video, multimedia, and sports-minded student that wants to explore and acquire a working knowledge in sports casting, both web and broadcast, radio and visual media forms. On-camera talent development as well as behind the scene talent skills are the focus. Students will learn behind and in front of
the camera skills to take a sporting event from preproduction, live production, to post production. Students will build graphics, produce interviews, announcing, produce features for these broadcasts, and produce live sporting events. The class covers scripting, location production, crewing, production setup, web casting technology and methodology in both radio and video web casting. There will be lectures, demonstrations, hands on experiences, afternoon and some evening class events are required. No prerequisite although students are encouraged to have taken COM 221.

**COM 331 Advanced Publication Design (3 crs)**
Focus on integrating sophisticated typographical and visual design elements in large projects. Students will produce several major publication projects that demonstrate an integrated mastery of visual design concepts, typography, and the rhetoric of visual design. Detailed exploration of advanced desktop publishing technologies such as QuarkXPress or Adobe InDesign. Prerequisites: COM 231 or COM 232 or COM 233 or permission of instructor.

**COM 332 Advanced Graphic Design (3 crs)**
Learn how to carry your Photoshop and Illustrator projects to a higher professional level. This course focuses on complex graphic design projects that enhance your competency in research, production, and presentation. Projects will be determined by your graphic design areas of strength and interest in order to build a professional presentation portfolio. A formal, professional-level critique of all work is an integral component of this course. No prerequisites but a formal entrance application is required where you present your graphic design work as well as a personal plan for how you will use this course to further your graphic design objectives.

**COM 341 Advanced Web Design (3 crs)**
Thorough grounding in the principles and practice of advanced web standards design with an emphasis on cascading style sheets (CSS), meaningful syntactic markup, well-structured code, modularity, and how the CSS layout model works. This course is designed to help students become leaders in web design who want to understand the rhetoric of web authoring and anticipate future trends in the field. Prerequisites: 2.0 in COM 241 or permission of the instructor.

**COM 343 Intermediate Web Applications (3 crs)**
Further development of concepts and skills needed to design, author and manage the development of advanced data-driven Web sites with an emphasis on using rich Internet Application technologies such as MXML, ActionScript, XML, and Flash Builder. Students will form a web authoring team and produce several major real-world projects for their portfolios. This course is particularly helpful for those interested in learning how to design e-commerce Web sites. Writing intensive. Prerequisite: 2.0 or higher in COM 241 and COM 242 or permission of the instructor.

**COM 351 Topics in Integrated Marketing Communication (3 crs)**
Focus on specific topics within the broad field of IMC. Potential topics include: Communicating Brands and Brand Management, Global Market Communications Planning, Publicity Communication, and Viral Marketing. Projects will be determined by your IMC areas of strength and interest in order to build a professional presentation portfolio. A formal, professional-level critique of all project work is an integral component of this course. Prerequisites: COM 258, COM 259, MKT 211, and permission of the instructor.

**COM 358 Advanced Public Relations (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.

**COM 359 Advanced Advertising (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.

**COM 371 Topics in Political and Advocacy Communication (3 crs)**
Focus on specific topics within the broad field of Political Communication. Potential topics include: Crisis Management in Political Communication, Political Campaigns, Environmental Advocacy, and Viral Political Communication. Projects will be determined by your Political Communication areas of strength and interest in order to build a professional presentation portfolio. A formal, professional-level critique of all project work is an integral component of this course. Prerequisites: COM 275, COM 276 and permission of the instructor.

**COM 375 Political Campaign Communication (3 crs)**
Ever wondered what it is like to design and run an effective political campaign? This course will explore the skills and process of campaigning in American politics. You will study key moments in the history of winning and disastrous political campaigns. You will also have an opportunity to develop your own campaign tools and to work on an actual political campaign. No prerequisite.

**COM 376 Legal Research and Advanced Legal Writing (3 crs)**
Further development of rhetorical and visual design principles necessary for communicating legal concepts and information to
various legal audiences. Focus on open universe litigation documents such as trial and appellate briefs. Emphasis on legal research methods and the clear, concise, complete, and effective presentation of the law. Students will produce several portfolio examples of legal documents. Writing intensive. **Prerequisite:** 2.0 or better in **PWR 347**; students are encouraged either to have taken or be concurrently enrolled in **POS 331 Civil Rights and Liberties Law**.

**COM 377 Legal Reasoning and LSAT Preparation (3 crs)**
Thinking of law school? Your LSAT score may be the most important factor in the law school application process. This course focuses on helping you discern whether law school is a good option for you at this time in your life. It will also help you score higher on the LSAT by giving you an overview of legal thinking and a practical set of test preparation and test taking strategies. **No prerequisite.**

**COM 378/RST 460 Theology of Social Communications (3 crs)**
Study of the philosophy and theology of social communications and its application to contemporary communicative practice. Emphasis both on communication as a functional specialization within theological method and also on communication as an object of theological reflection. Highlights include an analogical understanding of divine and human communication, the central role of communication in the economy of salvation, and the development of a theology of social communications within the Church’s growing body of social teaching. Students will use philosophical and theological concepts to critically evaluate the effect of communications technologies on individuals and groups and of current trends both in the communications of religious organizations and in the reporting of religion by the news media. Writing intensive. **Prerequisites:** 2.0 or better in the completed English and theology core courses or permission of instructor.

**COM 381 Topics in Creative Writing (3 crs)**
A collegial, collaborative atmosphere for learning to read, write, and talk about fiction and poetry. Extensive reading to develop a sense of technique, especially effective use of figurative language, narrative structure, and characterization. Journal-keeping, drafting exercises and consistent peer-aided revision of student work. **Prerequisites:** **LIT 321 and/or 323 recommended or permission of instructor. Formal entrance application required.**

**COM 385 Narrative and Documentary Filmmaking (3 crs)**
Discussion of issues such as concept, narrative and target audience and how to create a basic structure for your documentary film concept so that it is appropriate to both the content and the target audience. We will discuss research methods; primary research and secondary sources. We will then address practical pre-production issues and the basic requirements for the shoot and the use of storyboards in documentary filmmaking. You will work as part of a small group and contribute your ideas to an agreed group project. You will be setting up and shooting interviews using a variety of techniques. Your final piece will be a short documentary film of about 3 minutes in length. You will spend much time watching and discussing the work of other documentary filmmakers, formulating criteria for evaluating your own and others’ work, and building up a vocabulary for discussing the history and future progression of the medium. **Prerequisites:** **COM 221 and COM 222.**

**COM 391 Topics in Health and Biomedical Communication (3 crs)**
Learn how to carry your health and biomedical communication skills to a higher professional level. This course focuses on specific topics within the broad fields of health communication and biomedical communication. Potential topics include: Medical Disaster Communication, Health Care Public Policy Communication, Handling Controversial Biological Research Communication Issues, and Developing a Community-Based Wellness Communication Program. Projects will be determined by your areas of strength and interest in order to build a professional presentation portfolio. A formal, professional-level critique of all project work is an integral component of this course. **No prerequisite.**

**COM 392 Topics in Science, Energy, and Environmental Communication (3 crs)**
Focus on specific topics within the broad fields of science communication, energy communication, and environment communication. Potential topics include: Energy Policy Communication, Public Awareness Campaigns to Promote Environmental Sustainability, Turning Science into Compelling Stories, and Communicating Quantitative Theoretical Constructs to Non-Scientific Audiences. Projects will be determined by your areas of strength and interest in order to build a professional presentation portfolio. A formal, professional-level critique of all project work is an integral component of this course. **No prerequisite.**

**COM/ISC 420 Networking and Advanced 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:** **ISC 222.**

**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.

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:

- POS 110  American Political Process  (3 crs)
- INS 111  World Community  (3 crs)
- SSC 327  Research Methods  (3 crs)
- SSC 415  Statistical Analysis  (3 crs)
- SSC 488  Senior Thesis  (3 crs)
- SSC 489  Senior Seminar  (3 crs)

(18 crs)

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:

- CRJ 111  Survey of Criminology  (3 crs)
- CRJ 112  Introduction to the Criminal Justice System  (3 crs)
- CRJ 325  Theoretical Criminology  (3 crs)
- CRJ 410  Ethical and Philosophic Issues in Criminal Justice  (3 crs)
- CRJ 473  Internship  (3 crs)
- Five (5)  Approved Electives  (15 crs)

(30 crs)

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.

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.

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.

Course Descriptions

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.

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.

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.

CRJ 215 Law Enforcement (3 crs)

Provides a social science perspective on the training and socialization of police, police corruption, police-community 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.

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.”

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
programs & courses of instruction

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.

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: CRJ 111, 112.

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.

CRJ 318 Occupational Crime (3 crs)
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.

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.

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.

CRJ 327 Comparative Systems of Justice and Social Control (3 crs)
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.

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.

CRJ 340 Issues in Criminal Justice (3 crs)
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.

CRJ 410 Ethical & Philosophic Issues in Criminal Justice Organizations (3 crs)
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.

CRJ 473 Internship (variable cr)
A field experience course in which the student is actively involved

---

**Criminal Justice - Recommended Course Sequence**

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101</td>
<td>RST 106/107</td>
<td>RST 2xx/3xx</td>
<td>SSC 415, 488</td>
</tr>
<tr>
<td>MOL Core</td>
<td>POS 110</td>
<td>SCI Core</td>
<td>CRJ 473</td>
</tr>
<tr>
<td>CRJ 111</td>
<td>CRJ Elective</td>
<td>CRJ 325</td>
<td>CRJ 410</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>PHI 105</td>
<td>PHI 205</td>
<td>Elective</td>
</tr>
<tr>
<td>MAT 105</td>
<td>LIT 250</td>
<td>CRJ Elective</td>
<td>CRJ Elective</td>
</tr>
<tr>
<td>HIS 110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 120</td>
<td>CRJ Elective</td>
<td>SCI Core</td>
<td>Electives</td>
</tr>
<tr>
<td>MOL Core</td>
<td>FAS 1xx</td>
<td>RST/PHI 305</td>
<td>CRJ Elective</td>
</tr>
<tr>
<td>CRJ 112</td>
<td>Electives</td>
<td>SSC 327</td>
<td>SSC 489</td>
</tr>
<tr>
<td>LIT 120</td>
<td></td>
<td>CRJ Electives</td>
<td>Elective</td>
</tr>
<tr>
<td>INS 111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>SPRING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>31</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
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.

**Engineering**

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 students and graduates a competitive edge for career advancement.

**Cooperative 3/2 Engineering Programs**

*Peter D. Ehni, Ph.D. (Coordinator)*

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.

**English and Fine Arts**

*Contact Person: English - Dr. Kathryn Voorhees  
Fine Arts - John Whitehead*

In support of the overall mission of Wheeling Jesuit University, the Department of English, Communications and Fine Arts provides courses in composition, literature, communications and the fine arts, as well as advanced electives for both majors and nonmajors. 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.

English and Communications offers major and minor programs in the following fields:

1. English (Literature)
2. Communications
3. Integrated Marketing Communications
4. Political Communication
5. Web Authoring/Web Mastering

**AP Placement Equivalencies**

The department grants credit for AP scores of 3 or above with the following conditions:

Language & Composition: If the student with an AP score of 3 or

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY 110</td>
<td>4</td>
<td>PHY 311</td>
<td>4</td>
</tr>
<tr>
<td>PHY 121</td>
<td>1</td>
<td>PHY 321</td>
<td>1</td>
</tr>
<tr>
<td>MAT 111</td>
<td>4</td>
<td>MAT 211</td>
<td>4</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>CHE 110</td>
<td>4</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>CHE 121</td>
<td>1</td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>LIT 250</td>
<td>3</td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>17</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SPRING</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 120</td>
<td>4</td>
<td>PHY 221</td>
<td>3</td>
</tr>
<tr>
<td>PHY 122</td>
<td>1</td>
<td>MAT 212</td>
<td>4</td>
</tr>
<tr>
<td>MAT 112</td>
<td>4</td>
<td>CHE 120</td>
<td>4</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>CHE 122</td>
<td>1</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>PHI 205</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>3</td>
<td>RST 106 or 107</td>
<td>3</td>
</tr>
<tr>
<td>Semester total</td>
<td>18</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

Total Credits | 34 | 35 | 30 | 129
above is placed into ENG 110 Composition Seminar (Advanced Composition placement) that student receives equivalency credit for the composition requirement of the core curriculum. If the student with an AP score of 3 or above is placed into ENG 105 Process of Composition, the student has two options: (1) the student may submit to the department chairperson a portfolio of previous written work that displays the student’s writing abilities. Based upon the department’s assessment of the portfolio, the student may be awarded equivalency credit for the composition requirement of the core curriculum; (2) if the student has submitted a portfolio that does not merit equivalency credit, the student will receive 3 elective credits but must still complete the composition requirement.

English Literature and Composition: The student who receives a score of 3 or above must sit for the department’s literary genre exam, given every October. If the student passes the exam, he or she receives equivalency credit for LIT 120 Literary Foundations:

Methods & Genres, the first level of the literature core curriculum. If the student does not pass the exam, he or she receives 3 elective credits toward graduation but must still complete Literary Foundations.

Core Fulfiling Courses

Composition and Literature

Note: Students whose entering skill levels result in placement in ENG 095 (College Writing) and/or ENG 096 (College Reading) should enroll in those classes immediately. Each class is a prerequisite for further courses within the English core: ENG 095 must be completed prior to enrollment in ENG 105 (Process of Composition) and ENG 096 must be completed prior to enrollment in LIT 120 Literary Foundations: Methods & Genres.

ENGLISH - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>LIT 286</td>
<td>3</td>
</tr>
<tr>
<td>COM 103</td>
<td>3</td>
<td>LIT Elective</td>
<td>3</td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>POS/PSY/ECO 110</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>RST 2xx/3xx</td>
<td>3</td>
</tr>
<tr>
<td>MOL</td>
<td>3</td>
<td>MAT Core</td>
<td>3</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 250</td>
</tr>
<tr>
<td>HIS 120</td>
</tr>
<tr>
<td>MOL</td>
</tr>
<tr>
<td>RST 106/107</td>
</tr>
<tr>
<td>PHI 105</td>
</tr>
<tr>
<td>Semester total</td>
</tr>
</tbody>
</table>

Total Credits 31 30 30 29 120

Fine Arts

The Fine Arts core curriculum program is built around three fine arts credits that a student must complete before graduation. Any FAS 100-level course will satisfy the Fine Arts core requirement.

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:

ENG 224 Professional Speaking (3 crs)
LIT 286 Introduction to Literary Studies (3 crs)
LIT 321 Studies in Poetry (3 crs)
LIT 322 Studies in Drama (3 crs)
LIT 323 Studies in Fiction (3 crs)
LIT 325 Studies in Theory (3 crs)
LIT 486 Senior Literature Thesis (2 crs)

One of the following four courses:
COM 103 Principles of Communications (3 crs)
COM 104 Persuasion
COM 203 Intercultural and Organ Communication (3 crs)
COM 204 Argumentation and Evidence (3 crs)
COM xxx any other COM elective (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 18th Century, the 19th Century; the 20th Century; 1 unrestricted elective; 1 cross cultural elective. 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 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 the University’s core curriculum requirements in this discipline, a student must complete any 18 credits of course work in literature at or above the 300 level. LIT 286: Introduction to Literary Studies is strongly recommended.

Course Descriptions

ENGLISH

The English major is designed to introduce students to works of the British, American and World literary imaginations, to develop skills in analytical perception and to foster clear thinking and accurate communication of ideas. Students are thus prepared for a wide range of careers in private and public sectors as well as for further study in graduate school, law school or in other professional programs. Upon completion of the literature major, students will be able to:

1. demonstrate accurate and effective reading, writing and critical thinking skills;
2. recognize and interpret metaphorical thought as well as an aesthetic use of language;
3. pursue a life-long passion for reading and the expressive arts

ENG 095 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.

ENG 096 College Reading (3 crs)
Development of greater efficiency, comprehension, vocabulary and recall in reading college-level material. Lab work required. Enrollment by placement; does not satisfy core curriculum requirement.

ENG 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.

ENG 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.

ENG 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; sophomore standing.

LITERATURE

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 095 & 096 if student was placed in these courses.

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.

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: completed university literature core; sophomore standing or approval of department chair.

LIT/WST 312 Women and Literature (3 crs)
Study of women’s contribution to literature. 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.

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.

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.
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.

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.

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.

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 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.

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.

LIT 405 Sacred Writings (3 crs)
Examination of literary and cultural elements of selected texts, such as the Bible and the Koran, along with a study of later world literature that demonstrates the literary influence of these religious writings. Authors may include Milton, Blake, Kazantzakis, Morrison and Rushdie. Prerequisite: completed literature core.

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.

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.

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.

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, Pepsy, Behn, Congreve, Swift, Pope, Defoe, Fielding and Johnson. Prerequisite: completed core.

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.

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.

LIT 426 Nineteenth-Century American Literature (3 crs)
Study of the literary figures and movements from the romanticism of Poe, Hawthorne and Melville through the realism and naturalism of Dickinson, Twain, Gilman, James, Wharton, Crane and Drieser. Prerequisite: completed literature core.

LIT 440 Twentieth-Century Literature (3 crs)
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.

LIT 476 Colonial and Postcolonial Literature (3 crs)
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.
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.

Fine Arts

Contact Person: John Whitehead, Director of Fine Arts

The Fine Arts program, and in particular its three minors (in film studies, music, and theater) are at the heart of a liberally educated student’s experience. Beyond the fulfillment of a core requirement, students who have matriculated at WJU to prepare for a particular vocational track in a major program will find an outlet for exploring other facets of their personalities and sensibilities in the Fine Arts minor programs and studio offerings. Systematic study of the fine arts promotes enhanced critical thinking and communication skills and fosters independent and collaborative creativity, qualities that are valuable across a wide range of disciplines and impressive to a wide range of employers and graduate school acceptance committees.

Upon completion of a Fine Arts minor, 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 thematic intentions of the art; create original work, at a basic level, within the formal discipline of the art.

The Fine Arts program also offers significant study in visual art (see course listed below) and creative writing (see courses in COM 281-286). Students are invited to explore independent minors in consultation with the Fine Arts director and relevant instructors. Recently approved independent minors include Studio Art and Creating Writing: Narrative.

Requirements for Film Studies Minor:
FAS 130 Film: The Creative Process (3 crs)
FAS 131 Film History (3 crs)
Two of the following:
FAS 132 The Reel World (3 crs)
FAS 133 New Hollywood and Independent Cinema (3 crs)
FAS 134 The Art of Documentary (PWR) (3 crs)
FAS 135 Cinema Genres (3 crs)
FAS 136 Religion and Film (RST 312) (3 crs)
FAS 137 Cinema and the Classical World (3 crs)
FAS 138 Hitchcock and His Heirs (3 crs)
FAS 139 Contemporary Film (3 crs)
FAS 142 Photography (COM 142) (3 crs)
FAS 251 Film Studies Seminar (3 crs)
FAS 255 Narrative Filmmaking (COM 285) (3 crs)
18 credits

Requirements for the Music Minor:
FAS 120 Introduction to Music (3 crs)
One of the following:
FAS 122 Survey of Western Music (3 crs)
FAS 123 Jazz (3 crs)
FAS 124 Liturgical Music (3 crs)
FAS 241 Music Theory I (3 crs)
FAS 242 Music Theory II (3 crs)
FAS 243 Voice (2 crs)
FAS 244 Applied Music (1 credit x 2) (2 crs)
FAS 245 Building Musical Skills (3 crs)
19 credits

Requirements for the Theater Minor:
FAS 110 Introduction to Theater (3 crs)
FAS 111 Theater History (3 crs)
FAS 112 Children’s Theater (3 crs)
FAS 232 Practicum: Stagecraft (2 credits x 2) (4 crs)
One of the following:
FAS 233 Practicum: Acting (2 crs)
FAS 234 Practicum: Directing (2 crs)
FAS 235 Practicum: Play writing (2 crs)
FAS 322 Studies in Drama (LIT 322) (3 crs)
18 credits

Course Descriptions

Courses in Theater:

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.

FAS 111 Theater History (3 crs)
After exploring the elements of theater, students will study the major developments of dramatic theater, beginning in the classical world and traveling straight through our contemporary era. The course will give particular attention to characteristics of the Greek and Roman stage, the evolution through Christian religious sensibilities in the medieval era and into the humanism of the Renaissance and modern periods. Students will explore the relation of theater to society and historical formation.

FAS 112 Children’s Theater (3 crs)
This course covers the theory and application of creative dramatics and children’s theater activities in education and performance, based in a grounding in the elements of theater. The members of
the class will, over the course of the semester, engage in the creation of a children’s drama and attend and analyze the annual campus children’s production.

**FAS 232 Practicum: Stagecraft (2 crs)**
Supervised lab practice in design and execution of the mise-enscène elements of theater, including scenery, lighting, costumes, and properties; sound design; and production and stage management. Operating under the assumption that, in theater, experience is one of the best teachers, students will create a curricular design with FAS faculty. All designs must be pre-approved. Students seeking a theater minor must complete the requirements of FAS 232 twice, for a total of four credits. **Prerequisite:** FAS 110.

**FAS 233 Practicum: Acting (2 crs)**
Supervised and focused lab practice in acting technique through rehearsal and performance in campus productions. Students will focus on script analysis and discovering innate creative sensibilities for empathy with the dramatic motivation of the written character. Operating under the assumption that, in theater, experience is one of the best teachers, students will create a curricular design with FAS faculty. All designs must be pre-approved. **Prerequisite:** FAS 110.

**FAS 234 Practicum: Directing (2 crs)**
Supervised and focused lab practice in directing a one-act theatrical production on campus, including all aspects of directing from script selection and casting through crew recruitment, production design, rehearsal, and performance. Operating under the assumption that, in theater, experience is one of the best teachers, students will create a curricular design with FAS faculty. All designs must be pre-approved. **Prerequisites:** FAS 110, 111, 322.

**FAS 235 Practicum: Playwriting (2 crs)**
Supervised and focused lab practice in writing a one-act theatrical production to be produced and performed on campus. Operating under the assumption that, in theater, experience is one of the best teachers, students will create a curricular design with FAS faculty. All designs must be pre-approved. **Prerequisite:** FAS 110, 322.

**FAS 322 (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. **Prerequisites:** completed literature core and FAS 110.

**COURSES IN MUSIC:**

**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 Western and World musics 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.

**FAS 122 Survey of Western Music (3 crs)**
This course presents students with a basic overview of the development of music in the western world from Gregorian Chant through the twentieth century. Emphasis will be on the emergence of styles and schools of music and on highlighting significant composers whose works continue to find a place in today’s global cultural scene.

**FAS 123 Jazz (3 crs)**
Students will encounter and learn to differentiate among various jazz styles through active listening and study. This course examines the history and evolution of jazz as an American phenomenon and creates the basis for exploring and identifying jazz elements in the world music scene.

**FAS 124 Liturgical Music (3 crs)**
The music of worship has been much beloved and hotly contested for more than a millennium. This course explores liturgical music styles and elements in Catholicism and Protestantism from Gregorian Chant through Vatican II. Students will be introduced to musical settings and practice through a variety of chapel and parish on-site visits.

**FAS 125 Music and Movies (3 crs)**
Some of the most important orchestral composition, arrangement, and performance in contemporary music is undertaken in collaboration with filmmakers. Through a study of the legendary film score composers from Bernard Herrmann to John Williams to Philip Glass, students will explore the choreographic synergy of motion pictures and music.

**FAS 126 American Popular Music**
This study begins with jazz trends from 1900-1940s, followed by the emergence of rock and roll in the 1950s, with scrutiny of important styles and figures. A decade-by-decade approach completes the study of popular music 1960-present. Students are challenged to make critical assessments of style content and historical evolution. They are also challenged to speculate about the future of popular music in the U.S. based on changes in the music industry and media marketing approaches.

**FAS 241 Music Theory I (3 crs)**
The Music Theory sequence rigorously builds on the elementary skills learned in FAS 120 and 121. Through increased academic rigor and analysis, this course is designed to equip students with a more advanced knowledge of music notation, enabling them to use that knowledge effectively in various music media. Students will explore notation, scales, modes, harmony, and elementary sight-singing and ear-training, as well as perceiving and writing music through simple exercises in traditional harmony. **Prerequisites:** FAS 120, 121.

**FAS 242 Music Theory II (3 crs)**
Rigorously building on the elementary skills introduced in FAS 241, students will progress towards mastery of these skills. Additionally, students will learn basic conducting, score preparation, and simple
When we think about movies, we typically think of Hollywood – 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 extreme of filmmaking theory all the way through improvisation to the finished product of a film. Students will explore the auteur approach at one end of the spectrum, with an emphasis on the various "dialects" of film language that each filmmaker's position contributes to the finished film. Students will explore vocal theory, exercise materials, and an introduction to standard vocal literature. Prerequisites: FAS 120, 121.

FAS 244 Applied Music (1 cr)
This is a practical application course and is equal to the contact hours associated with a two-credit course. Requirements may be satisfied through consultation with the FAS faculty and will include the design of a curricular plan for the semester. All designs must be pre-approved. Activities that may be used to satisfy requirements are private lessons, campus-based ensembles, and independent practice. A component of academic inquiry must accompany any curricular design. Prerequisites: FAS 120, 121.

FAS 245 Building Musical Skills (3 crs)
This course seeks to equip students with the skills in basic musicianship that will introduce the art of music while also laying groundwork for continued musical study and exploration. Students will study essential music theory skills, including rhythms, harmonies, and notation of notes. Potential areas of focus will involve elementary vocalization and/or piano-playing.

COURSES IN FILM STUDIES:
FAS 130 Film: The Creative Process (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. Students will explore the auteur approach at one extreme of filmmaking theory all the way through improvisation at the other end of the spectrum, with an emphasis on the various "dialects" of film language that each filmmaker's position contributes to the finished product of a film.

FAS 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.

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.

FAS 133 New Hollywood and Independent Cinema (3 crs)
As an essentially conservative industry, Hollywood has always sought to manufacture crowd-pleasing formulas that swiftly slip into stale predictability. At the commercial fringes, however, filmmakers without big budgets or supervisory constraints take risks and make films that nudge film art (and its audiences) forward. Students will study DIY mavericks (Anderson, the Coens, Coppola, Lee, Soderbergh, Tarantino) of the “Sundance generation,” who are aesthetic godchildren of the 1970s directors (Allen, Altman, Coppola, Lucas, Scorsese, Spielberg) who changed the formal language of film.

FAS 134 The Art of Documentary (3 crs)
The powerful impressions made by fictional film narratives routinely persuade us of the reality of whatever we see and hear in a film. Such expressive formal power may also be used to inform, provoke, and/or move us about social and political realities. Using an understanding of film language, students will distinguish between rhetorical modes and categories of non-fiction filmmaking, exploring classic and contemporary cinematic agitprop, essays, and reportage.

FAS 135 Cinema Genres (3 crs)
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 on an innate acculturation to the arc of these narratives. Students will become familiar with several of the generic formulas of film and/or study one genre in depth, focusing on how film language helps to solidify (or subversively undercut, for thematic reasons) our consumption of narratives; films studied will include traditional examples of the genre and contemporary variations. Likely genre subjects for in depth study are The Western, Film Noir, and Horror.

FAS 136 (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. Prerequisites: RST 106 or 107.

FAS 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 retelling) these stories.

FAS 138 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.

FAS 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.

FAS 251 Film Studies Seminar (3 crs)
The language of film creates a sophisticated web of signs and symbols that both reflect and shape cultural perceptions of gender, race, class, and religious identity. Through careful study of examples from blockbuster mega-hits and artistic masterpieces of cinema, students will explore the ways in which ideology communicates to and through films we might otherwise view “merely” as entertainment. Students will begin to develop a personal poetics of cinema. Prerequisites: FAS 130 and 131.

FAS 285 (COM 285) Narrative 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 screen writing 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.

COURSES IN VISUAL ARTS:

FAS 140 Introduction to Visual Art (3 crs)
This course examines the visual elements, their nature, functions, and relationships in painting, sculpture, architecture and industrial design. Along with formal analysis of various artworks a brief survey of painting, sculpture, and architecture from prehistoric times to the present stressing critical thinking will also be explored. Some central questions we will address are: What is art? What is beauty? What is kitsch? Are artists crazy? Is art necessary for human beings?

FAS 141 Religion and Art (3 crs)
If all art is communication, religious art is an attempt to communicate specifically about spiritual experience. Within the context of this course, such communication may take the form of prayerful communion with and about God or of commentary about religious experience. In any form, artistic communication is meant to be absorbed by an audience. Students will explore varieties of religious communication (via several media, including painting, sculpture, architecture, and video) with an equal focus on the formal elements and the artist’s intention.

FAS 142 (COM 142) 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 camera with manual settings.

FAS 143 Women and Art (3 crs)
The history and practice of Western art is profoundly male-dominated, reflecting the larger patriarchal hegemony that has ruled the centers of art patronage since classical times. Yet women have exercised an increasingly resonant voice in artistic expression since the early modern era in Western Europe. Examining major “old master” artists such as Artemisia Gentileschi and Marie-Louise-Élisabeth Vigée-Lebrun and transitional Impressionists such as Mary Cassatt and Berthe Morisot, the class will encounter the explosion of modern artistic creativity by women in the twentieth century and the contemporary art world.

FAS 144 Classical Art and Archaeology (3 crs)
This course provides an outline of the major developments in classical Greek and Roman art and archaeology. Chronologically, the material in the course spans the Minoan to the Hellenistic periods in Greek culture, and the Etruscan to the late Roman and early Christian eras in Roman culture (approximately 3000 BCE –350 CE). Aspects of Greek and Roman life and society such as religion, military life, burial practices, and interaction with other cultures are integrated into the study of the material remains of ancient Greece and Rome.

FAS 145 Architecture (3 crs)
The structures that humans have built and continue to build for themselves have a variety of functions, from the elemental provision for shelter, to grandiose claims about power, to genuine communication about self-identity, community, and theology. Certain basic assumptions about design persist; this course will begin with the elements of architectural vision and extend to questions and issues centered around what the great Chicago architect Louis Sullivan summed up in his famous statement “form follows function.” Textbook examples will be balanced by field-trip study.
FAS 146 Major Painters (3 crs)
One of the great Romantic images of western culture is the solitary artist, envisioning the world, then capturing that vision on a frescoed wall, wood panel, or stretched canvas. This course examines the development of the western painting tradition from the Gothic era forward, acknowledging the influence of the classical world and other cultural traditions of image-making. Discussion will also consider a reassessment of canonical assumptions about “greatness.” While some emphasis will be placed on styles or schools, focus will be on representative geniuses of those schools, from Giotto through Warhol.

FAS 147 Hand and the Eye: Drawing
The relationship of inner-vision (what the mind sees) and creation (what the artist’s hands produce) is the focus of this introductory course. Along with a solid grounding in the aesthetic principles of visual art, the course will emphasize drawing from observation in a variety of dry media, exploring traditional techniques such as contour, gesture and perspective and experimenting with spatial organization.

FAS 148 Hand and the Eye: Watercolor
The relationship of inner-vision (what the mind sees) and creation (what the artist’s hands produce) is the focus of this introductory course. Along with a solid grounding in the aesthetic principles of visual art, the course will emphasize composition, color theory, landscape, portraiture, and still-life forms.

First Year Program
Contact Person: Rachel Amos, M.S.W.

The First Year Program is designed to aid students with their transition to Wheeling Jesuit University. Its goal is to offer students the tools necessary to succeed. Faculty lead the seminar sections and conduct classes on skills such as time management, note-taking and public speaking. Faculty also work closely with the students, trying to foster a sense of community and belonging. Student Development programs which reflect the developmental needs of first year students are presented. In keeping with the Jesuit tradition of service to others, all First Year Program students participate in “Make A Difference Day” where their services are offered to the greater Wheeling community. All first year students are required to participate in the First Year Program. This one credit course is taken in the fall of a student’s first year.

Course Descriptions
FYE 101 First Year Seminar (1 cr)
Introduction to college. Emphasizes basic skills, social concerns and developing a sense of community at Wheeling Jesuit University.

FYE 102 First Year Seminar II (1 cr)
Advanced work on time management, study skills, organization and responsibility. Prerequisite: Permission of Academic Dean.

FYE 103 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.

General Science
Contact Person: Peter D. Ehni, 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.

Course Descriptions
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.

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.

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.
General Studies

Contact Person: Adriana Wolf

Course Descriptions

GST 101 Strategies for Success – 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.

GST 102 Career and Life Transitions ICR 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.

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.

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.

Health Professions

Course Descriptions:

Any health professions major can take a CLS course

CLS 121 Introduction to Hospital Science (1 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 settings in relation to patient care management.

CLS 130 (PHY 130) Physics for Allied Health (3 crs)
General physical 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.

CLS 215 Concepts of Microbiology and 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.

CLS 221 Introduction to Research in Health Care (2 crs)
An introduction to research methods in the health care field. The class offers a systematic explanation of research theory and methods, which are applied in the development of a research proposal.

CLS 234 (BIO 234) Pathophysiology (3 crs)
A survey of disease processes which affect tissues, organs, or the body as a whole. A system-wide approach with interactions. Prerequisites: BIO 128 and BIO 129 or their equivalents.

CLS 311 Introduction to Pharmacology (1 cr)
Principles of drug actions and reactions.

CLS 312 Emergency Life Support Techniques (3 crs)
Emergency procedures for first responders. Includes cardiopulmonary resuscitation for health care providers.

CLS 320A Management Techniques for the Health Sciences (2 crs)
An introduction to the principles, practices and problems of management encountered in the allied health professions.

CLS 320B Management Practicum (1 cr)
An 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 320A or approval of instructor

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.

CLS 330B Principles of Instruction Practicum (1)
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
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.

Requirements for a History Major Bachelor of Arts Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 110</td>
<td>The Twentieth Century</td>
<td>3</td>
</tr>
<tr>
<td>HIS 120</td>
<td>Historical Methods</td>
<td>3</td>
</tr>
<tr>
<td>HIS 211, 212</td>
<td>History of the American People</td>
<td>6</td>
</tr>
<tr>
<td>(only offered every other year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 351, 352</td>
<td>The Western Tradition</td>
<td>6</td>
</tr>
<tr>
<td>(only offered every other year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 386</td>
<td>Junior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HIS 486</td>
<td>Senior Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Two non-western/comparative history courses</td>
<td>(3-6)</td>
<td></td>
</tr>
<tr>
<td>(Non-western HIS 120 courses might count. See chairperson for approval.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three or four free history electives</td>
<td>(9-12)</td>
<td></td>
</tr>
<tr>
<td>(39-42)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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.

Core Fulfilling Course

The core requirement in history may be fulfilled by taking the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 110</td>
<td>The Twentieth Century</td>
</tr>
<tr>
<td>HIS 120</td>
<td>Historical Methods</td>
</tr>
</tbody>
</table>

Course Descriptions

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.

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.

AMERICAN
HIS 211, 212 History of the American People (6 crs)
A two-semester survey of the history of the United States emphasizing the social, cultural, political and intellectual development of the American people.

HIS 213 The Indian in North America (3 crs)
First half of the course deals with the society and culture of our native Americans and is anthropological in nature; the second half is about Indian-White relations.

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.

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.

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.

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.

<table>
<thead>
<tr>
<th>HISTORY - Recommended Course Sequence for History Majors with Social Studies Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRESHMAN</td>
</tr>
<tr>
<td>FALL</td>
</tr>
<tr>
<td>FYS 101</td>
</tr>
<tr>
<td>HIS 110</td>
</tr>
<tr>
<td>ENG 105</td>
</tr>
<tr>
<td>MOL 102</td>
</tr>
<tr>
<td>INS 111</td>
</tr>
<tr>
<td>FAS 105</td>
</tr>
<tr>
<td>PHI 105</td>
</tr>
<tr>
<td>Semester total</td>
</tr>
<tr>
<td>SPRING</td>
</tr>
<tr>
<td>HIS 120*</td>
</tr>
<tr>
<td>MOL 111</td>
</tr>
<tr>
<td>RST 106/107</td>
</tr>
<tr>
<td>PSY 110</td>
</tr>
<tr>
<td>MAT</td>
</tr>
<tr>
<td>Science</td>
</tr>
<tr>
<td>PHI 205</td>
</tr>
<tr>
<td>Semester total</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
</tbody>
</table>

*There is a possibility that this course may not count as one of the Non-Western requirements.

**This course counts as a general history elective.
HIS 314 Contemporary America (3 crs)
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.

HIS 315 The American Civil War, 1850-1868 (3 crs)
A brief examination of the major causes and events of the war between the Union and the Confederacy.

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.

HIS 320 Immigration, Ethnicity and the American Experience (3 crs)
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.

HIS 371-374 History Through Films (3 crs each)
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.

HIS 351 The Western Tradition: Antiquity To Religious Revolution of 1789 to the present. It examines the principal political, social and economic changes in Western Europe through the lens of primary and secondary literature.

HIS 352 The Western Tradition from 1650 to the Present (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.

HIS 353 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.

HIS 340, 341 History of England (3 crs ea)
A two-semester survey; part one studies England from the coming of the Anglo-Saxons to the end of the Wars of the Roses in 1485; part two deals with England from the reign of Henry VIII to the present.

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.

HIS 354 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 present. It covers the major events, figures, and institutions that shaped the Middle Ages.

HIS 310 Eastern Europe Since Napoleon (3 crs)
The lands of Eastern Europe, such as Serbia, Slovenia and Poland, are examined in terms of their relationships with both Western Europe and Russia. The key processes of nation-building, industrialization and political modernization form the analytical framework of the course.

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.

HIS 380 Twentieth Century Germany (3 crs)
This course 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 ideas and thinkers in a number of ways. First, the instructor provides the historical background to the epochs when ideas such as Marxism and fascism appeared. Then students study revolutionary writings to analyze the writers’ criticisms of society, suggested methods of change and ultimate goals.
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.

**NON-WESTERN/COMPARATIVE**

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**HIS 336 Africa (3 crs)**

This course offers a survey of African history, with an emphasis on the rich diversity of its peoples and cultures, from antiquity through the pre-colonial, colonial and post-colonial periods. Topics that receive particular attention include civilization and state formation in pre-colonial rule on Africa, the Apartheid state of South Africa and the problems of civil war, military dictatorships, underdevelopment, famine and disease that have plagued independent Africa

**SEMINARS**

**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.

**HIS 386 Junior Seminar (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

**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.

**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 Cr/NCr), a topic or topics whose general breadth will encourage a multi-faceted approach. While a single faculty member coordinates 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 the presentation
of a scholarly project at the University's Annual Undergraduate Research Symposium (in addition to their individual major disciplinary requirements).

**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 coordinator or 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.

**Information Sciences**

*Contact Persons: Patrick Plunkett*

The Information 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. We offer two areas of concentration, “Systems and Networks” and “Web Design and Authoring”. Systems and Networks is more aligned with a traditional Computer Science curriculum and contains topics relating directly toward careers in networking and systems design, as well as graduate Computer Science programs. Web Design and Authoring is designed to prepare graduates for careers in Internet programming and graduate degrees in that field.

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 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.

Upon completion of the Information Sciences program, students will be able to demonstrate the ability to:

1. Frame and resolve ill-defined problems.
2. Write small-to-medium-scale programs using software engineering techniques and top-down structured programming.
3. Develop software in a team environment.
4. Integrate knowledge from other disciplines into solutions to real-world problems using various computer languages.
5. Recognize limitations and discover solutions to leading-edge technological issues.

**Requirements for Information Sciences Major**

**Bachelor of Science Degree**

In addition to completing the core curriculum requirements all majors in information sciences must complete at least the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC 110</td>
<td>Information Infrastructure I</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 112</td>
<td>Information Infrastructure II</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 210</td>
<td>Human-Computer Interaction</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 220</td>
<td>Social, Professional, and Ethical Issues</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 310</td>
<td>Information Representation</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 330</td>
<td>Database Design and Management</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 350</td>
<td>Intro to Computer Architecture</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 382</td>
<td>Junior Seminar</td>
<td>1 cr</td>
</tr>
<tr>
<td>ISC 435</td>
<td>Design and Development of Information Systems</td>
<td>3 crs</td>
</tr>
<tr>
<td>ISC 436</td>
<td>Senior Project</td>
<td>1 cr</td>
</tr>
</tbody>
</table>
ISC Elective (3 crs)
MAT 105 Intro to Statistics (3 crs)
COM 241 Intro to Web Authoring (3 crs)
(35 crs)
Additionally, students must complete either of the cognates listed below:

**Systems and Networking**
ISC 222 Data Structures (3 crs)
ISC 305 Intro to Networking (3 crs)
ISC 306 Network Security (3 crs)
ISC 325 Distributed Systems and Collaborative Computing (3 crs)
ISC 420 Systems Administration (3 crs)
MAT 235 Discrete Mathematics (3 crs)
(18 crs)

**Web Design and Authoring**
ISC 315 Intro to 3-Tier Web Design (3 crs)
ISC 336 Designing Rich Internet Applications (3 crs)
COM 103 Principles of Professional Communications (3 crs)
COM 242 Introduction to Web Animation (3 crs)
COM 341 Advanced Web Standards Design (3 crs)
COM 342 Designing for Web Interactivity (3 crs)
(18 crs)
(53 crs)

**Special Note on Elective:**
The elective course (minimum of one) is chosen from the following: Digital Image Editing, Computer Graphics, Artificial Intelligence, Haptics, Parallel Processing, Gaming, Mobile Computing, or any of the special topics offered. Additionally, an internship fulfills the requirement.

**Requirements for a Minor in Information Sciences**
For a minor in information sciences, the following are required: ISC 110, ISC 112, ISC 220, and at least three other ISC courses at the 200 level or above. Any information sciences course may be taken by a non-math or non-information sciences major provided the necessary prerequisites are met. Some courses which may be attractive include: ISC 108, 110, 112, 210, 220, and the occasional upper level course intended for a wider audience.

**Course Descriptions**
100 and 200-level courses are usually offered every year. Electives and 300 and 400-level courses are offered every two years.

**ISC 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.

**ISC 110 Information Infrastructure I (3 crs)**
An introduction to the general fields of study of Information 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 Information Sciences major.**

**ISC 112 Information Infrastructure II (3 crs)**
This course extends the acquaintance with the general fields of study of Information Sciences, 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 fully treated. Programming and other written assignments. **Prerequisite:** ISC 110. **Required for Information Sciences major.**

**ISC 210 Human-Computer Interaction (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:** ISC 112, or an intermediate level of computer programming. **Required for Information Sciences major (usually only offered every two years).**

**ISC 222 Data Structures (3 crs)**
This course continues the exploration of the general fields of study of Information Sciences, 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 Information Sciences major, Systems & Networking cognate.**

**ISC 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 Information Sciences major.**
**ISC 305 Introduction to Networking (3 crs)**

This course is an introduction to the general topics of computer networking, both at the theoretical and practice levels. Topics are centered around 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 (ISC 420) and Network Security (ISC 306) is foundational for students desiring a career in the networking field. **Prerequisite:** ISC 222. **Required for the Systems and Networking cognate.**

**ISC 306 Network Security (3 crs)**

This course, an extension of ISC 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 (ISC 420) and Introduction to Networking (ISC 305) is foundational for students desiring career in the networking field. **Prerequisite:** ISC 305. **Required for the Systems and Networking cognate.**

**ISC 310 Information Representation (3 crs)**

Investigates the basic structure of information representation in

### INFORMATION SCIENCES - Systems/Networking Cognate

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 1</td>
<td>MAT 235 4</td>
<td>Science Core 3</td>
<td>ISC 420 3</td>
</tr>
<tr>
<td>ENG 105/110 3</td>
<td>COM 241 3</td>
<td>ISC 305 3</td>
<td>ISC 435 3</td>
</tr>
<tr>
<td>ISC 110 3</td>
<td>ISC 222 3</td>
<td>ISC 350 3</td>
<td>PHI/RST 305 3</td>
</tr>
<tr>
<td>HIS 110 3</td>
<td>RST 106/107 3</td>
<td>RST 2xx 3</td>
<td>LIT 250 3</td>
</tr>
<tr>
<td>MAT 108 3</td>
<td>MOL 101/102 3</td>
<td>ISC Elective 3</td>
<td>Elective 3</td>
</tr>
<tr>
<td>PHI 105 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total 16</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC 112 3</td>
</tr>
<tr>
<td>MAT 111 4</td>
</tr>
<tr>
<td>MAT 105 3</td>
</tr>
<tr>
<td>LIT 120 3</td>
</tr>
<tr>
<td>HIS 120 3</td>
</tr>
<tr>
<td>PHI 105 3</td>
</tr>
<tr>
<td>Semester total 16</td>
</tr>
</tbody>
</table>

| Total Credits | 32 | 31 | 31 | 28 |

### INFORMATION SCIENCES - Web Design/Authoring Cognate

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 1</td>
<td>ISC Elective 3</td>
<td>COM 341 3</td>
<td>ISC 336 3</td>
</tr>
<tr>
<td>ENG 105/110 3</td>
<td>COM 241 3</td>
<td>ISC 350 3</td>
<td>ISC 435 3</td>
</tr>
<tr>
<td>ISC 110 3</td>
<td>POS/PSY/ECO 110 3</td>
<td>ISC 315 3</td>
<td>LIT 250 3</td>
</tr>
<tr>
<td>HIS 110 3</td>
<td>RST 106/107 3</td>
<td>RST 2xx 3</td>
<td>PHI 305/RST 305 3</td>
</tr>
<tr>
<td>COM 103 3</td>
<td>MOL 101/102 3</td>
<td>Science Core 3</td>
<td>Elective 3</td>
</tr>
<tr>
<td>PHI 105 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total 16</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISC Info 3</td>
</tr>
<tr>
<td>MAT 105 3</td>
</tr>
<tr>
<td>HIS 120 3</td>
</tr>
<tr>
<td>LIT 120 3</td>
</tr>
<tr>
<td>PHI 205 3</td>
</tr>
<tr>
<td>Semester total 16</td>
</tr>
</tbody>
</table>

| Total Credits | 31 | 31 | 31 | 31 | 124 |
social and scientific applications. Representational structures and approaches from many disciplines are introduced: philosophical theories of classification and categorization; information access and representation on the World Wide Web: object-oriented design and relational databases; and artificial intelligence knowledge representation and discovery. Prerequisite: ISC 112. Required for Information Science Major.

ISC 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. This course is required for Information Sciences, Web Authoring cognate.

ISC 325 Distributed Systems & Collaborative Computing Systems (3 crs)
This course investigates the use of multiple computers, connected via a network, to solve problems requiring the use of parallel processing and information sharing. Designing, coding, and implementing distributed algorithms is a primary goal of this course, along with developing techniques and protocols that allow efficient sharing of data and programs across network connections between autonomous hosts. Prerequisite: ISC 222. Required for the Systems and Networking cognate.

ISC 330 Database Design and Management (3 crs)
Logical and physical database design concepts, database administration, with an emphasis on the relational model. A team or individual project requires the design and implementation of a relational database. Prerequisite: ISC 112. Required for Information Sciences major.

ISC 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 Information Science Major, Web Authoring cognate.

ISC 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: ISC 222, MAT 235; MAT 111. (MAT 240 is also helpful). Elective for Information Sciences major.

ISC 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, microarchitecture and microinstructions and parallel architectures. Prerequisites: ISC 112. Required for Information Sciences majors.

ISC 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 an Information Sciences major, recommendation of the department chair.

ISC 382 Junior Seminar (1 cr)
Junior Seminar will include a group study of a topic chosen by the instructor, and students will make individual presentations in this area. Additionally, we will prepare 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. Prerequisite: Junior status in the Information Sciences major. Required for Information Science Major.

ISC 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: ISC 112, MAT 235. Elective for Information Sciences major.

ISC 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: ISC 222. This course is required for Information Sciences, Systems & Networking cognate.

ISC 435 Design & Development of an Informational System (3 crs)
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 ISC 436. Prerequisite: Completion of ISC 112 and at least two of the 300-level Information Sciences required courses. This course is required for Information Sciences majors, and is normally taken only by seniors, except by special permission.

ISC 436 Senior Project (1 cr)
A major project for a team is planned in ISC 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 off-campus departments, businesses or individuals. Prerequisite: ISC 435, except by special permission. This course is required for Information Sciences majors and is normally only taken by seniors.
ISC 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

Integrated Marketing Communications

Contact Person: Richard Cain

In support of the overall mission of Wheeling Jesuit University, the Integrated Marketing Communication Program provides courses in marketing, public relations, advertising, health and biomedical communication, and science, energy and environmental communication. For additional related courses, see Communication and Business—Marketing.

Core Fulfilling Courses
FAS/COM 142 Digital Photography
FAS 143/COM 232 Image Editing with Photoshop

The integrated marketing communication major is designed to meet the needs of students who hope to pursue careers in which marketing, advertising, and public relations are essential. It is appropriate for students who want to work in public relations, advertising, multimedia, marketing, technical communication, and other careers.

Upon completion of the Integrated Marketing Communication major, students will demonstrate the ability to:

1. Identify and apply reasoned and effective marketing and communication strategies across a range of topics;

2. Make an effective oral presentation.

Requirements for Integrated Marketing Communications
Major Bachelor of Arts Degree
In addition to completing the core curriculum requirements, all professional communications majors must complete the following courses:

Major in Integrated Marketing Communication
ACC 123 Principles of Accounting I
ACC 124 Principles of Accounting II
MKT 211 Principles of Marketing
BUS 221 Quantitative Business Analysis
MKT 316 Consumer Behavior
MKT 310 Marketing Research
MKT 420 Marketing Strategies
MKT 323 Marketing and e-Commerce
COM 103 Intro to Communications
COM 211 Reporting
COM 212 Copy editing and Layout
COM 213 Visual Design and Desktop Publishing
COM 258 Public Relations Writing
COM 259 Advertising Communication
COM 358 Advanced PR or COM 359 Advanced Advertising
COM 401-402 Senior IMC Seminar and Project

52 credits

MINOR in Integrated Marketing Communication
Option A (for those already majoring in Marketing):

COM 103 Intro to Communications
COM 211 Principles of Reporting
COM 212 Copy editing and Layout

INTEGRATED MARKETING COMMUNICATION - Recommended Course Sequence

<table>
<thead>
<tr>
<th></th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td>FYE 1</td>
<td>MKT 211 3</td>
<td>COM 258 or COM 259 3</td>
<td>COM 401 3</td>
</tr>
<tr>
<td></td>
<td>HIS 110 3</td>
<td>COM 211 3</td>
<td>FAS 142 3</td>
<td>COM 259 or COM 258 3</td>
</tr>
<tr>
<td></td>
<td>ENG 105/110 3</td>
<td>LIT 250 3</td>
<td>POS/PSY/ECO 110 3</td>
<td>LIT 300+ 3</td>
</tr>
<tr>
<td></td>
<td>ACC 123 3</td>
<td>PHI 105 3</td>
<td>Science Core 3</td>
<td>Electives 6</td>
</tr>
<tr>
<td></td>
<td>INS 111 3</td>
<td>MOL 101 or 102 3</td>
<td>RST 305 or PHI 305 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM 103 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16 15</td>
<td>15 15</td>
<td>15 15</td>
<td></td>
</tr>
<tr>
<td>SPRING</td>
<td>HIS 120 3</td>
<td>BUS 221 3</td>
<td>COM 351 or COM 358 or</td>
<td>COM 351 or COM 358 or</td>
</tr>
<tr>
<td></td>
<td>LIT 120 3</td>
<td>COM 212 3</td>
<td>COM 359 3</td>
<td>COM 359 3</td>
</tr>
<tr>
<td></td>
<td>RST 106 or 107 3</td>
<td>PHI 205 3</td>
<td>MKT 310 or MKT 316 3</td>
<td>MKT 310 or MKT 316 3</td>
</tr>
<tr>
<td></td>
<td>ACC 124 3</td>
<td>MOL 102 or 111 3</td>
<td>MKT 323 or MKT 420 3</td>
<td>MKT 323 or MKT 420 3</td>
</tr>
<tr>
<td></td>
<td>MAT Core 3</td>
<td>COM 231 or COM 232 3</td>
<td>Science Core 3</td>
<td>Electives 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RST 2xx or 3xx 3</td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15 15</td>
<td>15 15</td>
<td>15 15</td>
<td></td>
</tr>
<tr>
<td>Total Credits</td>
<td>31 30</td>
<td>30 30</td>
<td>30 121</td>
<td></td>
</tr>
</tbody>
</table>
OR COM 241 Web Authoring
COM 231 Visual Design and Desktop Publishing
COM 258 Public Relations Writing
COM 259 Writing for Advertising

18 credits

Option B (for those already majoring in Communication):

ACC 123 Principles of Accounting I
MKT 211 Principles of Marketing
BUS 221 Quantitative Business Analysis
MKT 316 Consumer Behavior
MKT 310 Marketing Research
MKT 420 Marketing Strategies

19 credits

For individual course descriptions, see the course listings under the various programs listed alphabetically in this catalog. For example, COM courses would be listed under Communication.

**International Studies**

*Director: John Poffenbarger*

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. 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.

**Requirements for International Studies Major**

**Bachelor of Arts Degree**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INS 111</td>
<td>World Community</td>
<td>3 crs</td>
</tr>
<tr>
<td>COM 261</td>
<td>Cross cultural communication</td>
<td>(X crs)</td>
</tr>
<tr>
<td>SSC 414</td>
<td>Statistical Analysis</td>
<td>(X crs)</td>
</tr>
<tr>
<td>ECO 110</td>
<td>Macroeconomics</td>
<td>3 crs</td>
</tr>
<tr>
<td>POS 212</td>
<td>Global Politics</td>
<td>3 crs</td>
</tr>
<tr>
<td>RST 203</td>
<td>World Religions</td>
<td>3 crs</td>
</tr>
<tr>
<td>MOL</td>
<td>Two languages in addition to core</td>
<td>(6 crs)</td>
</tr>
<tr>
<td>SSC 488</td>
<td>Senior Thesis</td>
<td>(3 crs)</td>
</tr>
</tbody>
</table>

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.

**INTERNATIONAL STUDIES - Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td>FYS 101</td>
<td>MOL</td>
<td>MOL</td>
<td>INS 484</td>
</tr>
<tr>
<td></td>
<td>INS 111</td>
<td>LIT 250</td>
<td>RST 203</td>
<td>HISP/POS</td>
</tr>
<tr>
<td></td>
<td>ECO 110</td>
<td>RST 106/107</td>
<td>PHI 205</td>
<td>INS Electives</td>
</tr>
<tr>
<td></td>
<td>ENG 105 or 110</td>
<td>POS 212</td>
<td>INS Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MOL 102</td>
<td>Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIS 110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>SPRING</td>
<td>HIS 120</td>
<td>INS Elective</td>
<td>MOL</td>
<td>Electives</td>
</tr>
<tr>
<td></td>
<td>LIT 120</td>
<td>MOL</td>
<td>INS Electives</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>MOL 111</td>
<td>PHI 105</td>
<td>RST/PHI 305</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT Core</td>
<td>SSC 110</td>
<td>FAS 1xx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>POS 110</td>
<td>POS 211</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>31</strong></td>
<td><strong>30</strong></td>
<td><strong>30</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>
**Programs & Courses of Instruction**

**Humanities**
- ENG 252 Border Crossings
- FRE 210 Readings
- FRE 220 Culture Through Communications
- FRE 230 Conversation I/Conversation II
- FRE 320 French Civilization and Culture
- HIS 217 History of the Holocaust
- HIS 221 Japan since 1800
- HIS 222 China since 1800
- HIS 223 India and South Asia
- HIS 224 Southeast Asia
- HIS 250 Revolution and Ideology
- HIS 300 Modern Ireland
- HIS 310 Eastern Europe Since Napoleon
- HIS 316 The Rise of the US as a World Power
- HIS 331 Modern Russia
- HIS 336 Africa
- 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 Culture Through Communications
- SPA 230 Conversation I/Conversation II
- SPA 320 Hispanic Civilization and Culture
- SPA 321 Survey of Peninsular Spanish Literature
- SPA 322 Survey of Spanish American Literature
- SPA 330 Advanced Conversation
- SPA 350 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 Revolution and Ideology
- POS 311 War and Peace: Philosophical and Political Issues
- POS 333 Global Political Economy
- POS 334 International Organization
- POS 341 Global Issues
- POS 350 Environmental Law and Politics
- PSY 235 Human Sexuality in a Diverse World
- PSY 425 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.

**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.

**Course Descriptions**

**INS 111 World Community (3 crs)**
An introduction to the global environment. Topics include world geography, comparative cultures, international conflict and economic interdependence.

**Wheeling Jesuit University Study Abroad**
The following criteria apply to all students who wish to study abroad:
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.
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 students financial aid package). This amount is subject to change.

*This policy does not apply to the Jesuit Program in Beijing, China.

**Mathematics**

*Contact Persons: Marc Brodie, Ph.D.  
Theodore Erickson, 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 Courses

Mathematics Requirement 1 course
- ISC 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 ISC course to fulfill the core requirement.)

Requirements for Mathematics Major Bachelor of Science Degree

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   (4 crs)
MAT 111  Calculus I   (4 crs)
MAT 112  Calculus II   (4 crs)
MAT 211  Calculus III   (4 crs)
MAT 235  Discrete Math   (4 crs)
MAT 212  Differential Equations   (4 crs)
MAT 240  Linear Algebra   (4 crs)
MAT 382  Junior Seminar   (2 crs)

Upper-Level Requirements:
Three courses from MAT 351, MAT 352, MAT 411, MAT 413   (9 crs)

Upper-Level Electives:
Four courses from MAT 204 and MAT 300 and above (one may be taken from ISC and PHY)   (12 crs)
MAT 482 Senior Seminar   (2 crs)

(53 crs)

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 MAT 335 or MAT 204. PSY 110 should be taken as early as possible.

Requirements for Mathematics Minor

Mathematics minors must complete a minimum total of 15 credit hours in mathematics beyond MAT 111.

Course Descriptions

MAT 096 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.

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 096 or equivalent.

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 096 or equivalent.

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 096 or equivalent.

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.

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.

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 statistical analyses, such as analysis of variance and analysis of covariance are applied to the appropriate design. Prerequisite: MAT 111 (offered every spring semester).
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, variations of parameters and power series; and an introduction to numerical methods and Laplace Transforms. Prerequisite: MAT 112.

MAT 225 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 108 or equivalent.

MAT 240 Linear Algebra (4 crs)
Solution spaces for systems of linear equations, elementary row operations, vector spaces, linear independence, linear transformations, change of basis, inner products, projections, the Gram-Schmidt process, eigenvalues and eigenvectors. Prerequisite: MAT 211 or MAT 235.

MAT 300 Advanced Topics in Mathematics (3 crs)
Topics will be selected by the instructor. Offered spring semester of even years to alternate with MAT 310. Permission of the instructor is required.

MAT 310 History of Mathematics (3 crs)
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.

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 even years.

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 distribution (including CLT), multivariate distributions, stochastic processes. Prerequisite: MAT 112. Offered fall semester of odd years.

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 constructibility. Prerequisite: MAT 240. Offered fall semester of odd years.

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 of homomorphisms. Prerequisite: MAT 240. Offered fall semester of even years.

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.

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105 or 110</td>
<td>MAT 211</td>
<td>MAT 351/352</td>
<td>MAT 352/351</td>
</tr>
<tr>
<td>HIS 110</td>
<td>MAT 235</td>
<td>MAT 335/331</td>
<td>MAT 331/335</td>
</tr>
<tr>
<td>MAT 111</td>
<td>PHY 110</td>
<td>INS/SSC</td>
<td>MAT 482</td>
</tr>
<tr>
<td>PHY 121</td>
<td>PHY 106/107</td>
<td>RST/PHI 305</td>
<td>FAS 1xx</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Science</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>17</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

| FALL |
|------------------|------------------|------------------|
| MAT 112 | LIT 120 | MAT 411/413 | MAT 413/411 |
| MAT 204 | MAT 212 | MAT 300/310/424 | MAT 204/300/310/424 |
| HIS 120 | MAT 240 | MAT 310/413 | Electives |
| MOL | RST 2xx/3xx | MAT 382 | 9 |
| POS/PSY/ECO 110 | PHI 205 | LIT 250 | 3 |
| Semester total | 16 | 17 | 14 | 15 |
| Total Credits | 33 | 33 | 29 | 29 |

| SPRING |
|------------------|------------------|------------------|
| MAT 112 | LIT 120 | MAT 411/413 | MAT 413/411 |
| MAT 204 | MAT 212 | MAT 300/310/424 | MAT 204/300/310/424 |
| HIS 120 | MAT 240 | MAT 310/413 | Electives |
| MOL | RST 2xx/3xx | MAT 382 | 9 |
| PHI 205 | LIT 250 | Elective |
| Semester total | 16 | 17 | 14 | 15 |
| Total Credits | 33 | 33 | 29 | 29 |

Programs & Courses of Instruction
Modern Languages & Cultures

Contact Persons: James R. Ashton, Ph.D.
Dominick DeFilippis, Ph.D.
Denise L. Radaker, MS

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.

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

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,
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.

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.

Romance Language majors who plan to teach both languages are also strongly encouraged to study abroad during the summer or an academic semester and to complete more than the minimum number of credits in both languages.
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,

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. The senior seminar will include a comprehensive exam.

To ensure transfer of credits, the student should obtain departmental approval before beginning a program of study abroad.

Requirements for a Minor in Spanish or French
Minors in Spanish or French are required to take five upper-level courses in the language, subject to departmental approval. Students may partially fulfill the requirement through study abroad during the summer or during an academic semester.

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.

Core Requirements
Based on placement results, students will fulfill Modern Language Core by completing the appropriate requirements as outlined below:

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

For students who place in the 102 level:
Two courses in the same language:
FRE 102 and FRE 111 or SPA 102 and SPA 111

For students who place in the 111 level:
One course: FRE 111 or SPA 111 or an upper-level course (200+)
*For Nursing, Nuclear Medicine and Respiratory Therapy 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.

Placement
Placement for all students will be determined by prior study and/or an 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)

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. Successful completion of any upper-level course will also satisfy the core requirement.

Course Descriptions
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.

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.

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.

FRE 205 Grammar Review (3 crs)
Review of difficult grammatical topics; four skills enhancement. Prerequisite: Core Completion or instructor’s permission.

FRE 210 Readings (3 crs)
Emphasis on reading French texts, both literary and nonliterary, with discussion and composition. Prerequisite: Core Completion or instructor’s permission.

FRE 220 Culture Through Communication (3 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.
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.

FRE 240 Composition (3 crs)
Development of basic composition skills; grammar and syntax; reading for models. Prerequisite: Core Completion or instructor’s permission.

FRE 320 French Civilization and Culture (3 crs)
Four-skills enhancement through an examination of the foundation and the highlights of French culture. Prerequisite: Core Completion or instructor’s permission.

FRE 321 Survey of French Literature I (3 crs)
Medieval through 18th Century. Prerequisite: Core Completion or instructor’s permission.

FRE 322 Survey of French Literature II (3 crs)
19th and 20th Century. Prerequisite: Core Completion or instructor’s permission.

FRE 330 Advanced Conversation (3 crs)
Discussion of topics related to Francophone world advanced phonetics. Prerequisite: Core Completion or instructor’s permission.

FRE 340 Advanced Composition (Stylistics) (3 crs)
Prerequisite: Core Completion or instructor’s permission.

FRE 350 Special Topics (3 crs)
Period, genre, or author studies; may be repeated when topics change. Core completion or instructor’s permission.

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.

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.

SPANISH

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 for those students who have not studied the language or have had only one year of foreign language instruction.

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.

SPA 111 Core Skills Development (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.

SPA 205 Grammar Review (3 crs)
Review of difficult grammatical topics; four skills enhancement. Prerequisite: Core Completion or instructor’s permission.

**FRENCH - Recommended Course Sequence**

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>INS/SSC</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105/110</td>
<td>3</td>
<td>SCI Core</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>French Upper Level</td>
<td>3</td>
</tr>
<tr>
<td>MAT Core</td>
<td>3</td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>French Upper Level</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| SPRING | | | |
| | | | |
| LIT 120 | 3 | Global Persp. | 3 | RST 2xx/3xx | 3 | French Upper Level | 3 |
| HIS 120 | 3 | PHI 105 | 3 | PHI 205 | 3 | Electives | 12 |
| RST 106/107 | 3 | LIT 250 | 3 | French Upper Level | 3 |
| French Upper Level | 3 | French Upper Level | 3 | Minor/Electives | 6 |
| Elective | 3 | Elective | 3 | | | |
| Semester total | 15 | | | 15 | | 15 | |

| Total Credits | 31 | 30 | 30 | 30 | 121 |
SPA 210 Readings (3 crs)
Reading selected Spanish texts, both literary and nonliterary, with discussion and composition. Prerequisite: Core Completion or instructor’s permission.

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: Core Completion or instructor’s permission.

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: Core Completion or instructor’s permission.

SPA 224 Business Spanish (3 crs)
Skills enhancement and vocabulary building in the business area. Prerequisite: Core Completion or instructor’s permission.

SPA 230 Conversation (3 crs)
Emphasis on communicative skills in the context of everyday experiences in a Hispanic environment; basic phonetics. Prerequisite: Core Completion or instructor’s permission.

SPA 240 Composition (3 crs)
Development of basic composition skills; grammar and syntax; reading for models. Prerequisite: Core Completion or instructor’s permission.

SPA 320 Hispanic Civilization and Culture (3 crs)
Four-skills enhancement through an examination of the foundation and the highlights of Hispanic and Hispano-American culture. Prerequisite: Core Completion or instructor’s permission.

SPA 321 Survey of Peninsular Spanish Literature (3 crs)
Prerequisite: Core Completion or instructor’s permission.

SPA 322 Survey of Spanish American Literature (3 crs)
Prerequisite: Core Completion or instructor’s permission.

SPA 330 Advanced Conversation (3 crs)
Discussion of topics related to the Hispanic world advanced phonetics. Prerequisite: Core Completion or instructor’s permission.

SPA 340 Advanced Composition (3 crs)
Prerequisite: Core Completion or instructor’s permission.

SPA 350 Special Topics (3 crs)
Period, genre, or author studies; may be repeated when topics change. Core completion or instructor’s permission.

SPA 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.

Nuclear Medicine Technology

Contact Persons:
Robert George, PhD
RT(N), CNMT, Director of Nuclear Medicine Technology Program, Assistant Professor
Deborah Wilkinson, MS, CNMT,
Clinical Assistant Professor of Nuclear Medicine Technology Program

SPANISH - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105/110</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 102</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPA Upper Level</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total 16</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 120</td>
<td>POS/PSY/ECO 110</td>
</tr>
<tr>
<td>HIS 120</td>
<td>PHI 105</td>
</tr>
<tr>
<td>RST 106/107</td>
<td>LIT 250</td>
</tr>
<tr>
<td>SPA Upper Level</td>
<td>SPA Upper Level</td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>Semester total 15</td>
<td>15</td>
</tr>
<tr>
<td>Total Credits 31</td>
<td>30</td>
</tr>
</tbody>
</table>
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, the Nuclear Medicine Technology major must complete the following didactic and clinical courses with a grade of “C” or higher.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 109</td>
<td>General Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 121</td>
<td>Methods of Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 127</td>
<td>Anatomy and Physiology I Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>BIO 128</td>
<td>Anatomy and Physiology I</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 129</td>
<td>Anatomy and Physiology II</td>
<td>3 cr</td>
</tr>
<tr>
<td>CHE 110</td>
<td>Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>CHE 121</td>
<td>Chemistry Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 121</td>
<td>Introduction to Hospital Science</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 215</td>
<td>Epidemiology</td>
<td>2 cr</td>
</tr>
<tr>
<td>CLS 221</td>
<td>Intro to Research in Health care</td>
<td>2 cr</td>
</tr>
<tr>
<td>CLS 234</td>
<td>Pathophysiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>CLS 311A</td>
<td>Introduction to Pharmacology</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 312</td>
<td>Emergency Life Support Technique</td>
<td>3 cr</td>
</tr>
<tr>
<td>CLS 320A</td>
<td>Management Techniques for the Health Sciences</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 320B</td>
<td>Management Practicum</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 330A</td>
<td>Principles of Instruction</td>
<td>1 cr</td>
</tr>
<tr>
<td>CLS 330B</td>
<td>Instruction Practicum</td>
<td>1 cr</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Pre-calculus</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 225</td>
<td>Nuclear Radiation Physics</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 225L</td>
<td>Nuclear Radiation Physics Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 226</td>
<td>Radiation Biology and Protection</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 320</td>
<td>Radiopharmacy</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 320A</td>
<td>Radiopharmacy Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 332</td>
<td>Lab Skills for Nuclear Medicine</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 340</td>
<td>Essentials of Nuclear Medicine</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 342</td>
<td>Human Cross Sectional Anatomy</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 345</td>
<td>PET CT Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 362B</td>
<td>Instrumentation and Quality Control II</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 363</td>
<td>Clinical Radiopharmacy</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 365</td>
<td>In Vivo Studies I</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 367</td>
<td>Nuclear Cardiology I</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 368</td>
<td>Nuclear Cardiology II</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 420</td>
<td>Registry Review</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 430</td>
<td>Research Capstone</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 440</td>
<td>Special Topics for Nuclear Medicine</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 464</td>
<td>In Vivo Studies II</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 465</td>
<td>In Vivo Studies III</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 466</td>
<td>In Vivo Studies IV</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 467</td>
<td>Clinical Computer Applications</td>
<td>2 cr</td>
</tr>
<tr>
<td>NME 468</td>
<td>Departmental Administration</td>
<td>1 cr</td>
</tr>
<tr>
<td>NME 469</td>
<td>In Vitro Studies</td>
<td>3 cr</td>
</tr>
<tr>
<td>NME 470</td>
<td>Advanced Clinical Administration</td>
<td>1-3 cr</td>
</tr>
<tr>
<td>PHY 130</td>
<td>Physics for Allied Health</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Course Descriptions

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.

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

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.

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.

NME 320A Radiopharmacy Lab (1 cr)

Lab-directed class which will encompass practical applications of a radiopharmacy lab.

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.

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.
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.

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.

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.

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.

NME 365 In Vivo Studies I (3 crs)
Demonstrating the basic functions and applications of imaging equipment in nuclear medicine, performing IV injections and associating radiopharmaceutical localization to introductory level general nuclear medicine procedures. Prerequisite: Completion of pre-practicum courses.

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.

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

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.

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

### NUCLEAR MEDICINE TECHNOLOGY - Recommended Course Sequence

<table>
<thead>
<tr>
<th>Semester</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL</strong></td>
<td>BIO 128  3</td>
<td>PHY 130  3</td>
<td>CLS 234 3</td>
<td>NME 368 2</td>
</tr>
<tr>
<td></td>
<td>ENG 105/110 3</td>
<td>CHE 110  4</td>
<td>NME 225 3</td>
<td>NME 464 3</td>
</tr>
<tr>
<td></td>
<td>HIS 110  3</td>
<td>CHE 121  1</td>
<td>NME 320 2</td>
<td>NME 465 3</td>
</tr>
<tr>
<td></td>
<td>BIO 127  1</td>
<td>RST 106/107 3</td>
<td>NME 225L 1</td>
<td>NME 363 3</td>
</tr>
<tr>
<td></td>
<td>FYS 101  1</td>
<td>PHI 105  3</td>
<td>CLS 312  3</td>
<td>NME 467  2</td>
</tr>
<tr>
<td></td>
<td>FAS 100  3</td>
<td>SSC 105, INS 111</td>
<td>CLS 320A 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLS 121  1</td>
<td>or SSC 110 3</td>
<td>CLS 311A 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or BIO 121 1</td>
<td></td>
<td>CLS 330B 1</td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>18</td>
<td>15</td>
<td>13</td>
</tr>
</tbody>
</table>

| **SPRING** | BIO 129  3 | NME 342 3 | CLS 221 2 | NME 466 3 |
|           | HIS 120  3 | CLS 215 2 | NME 320A 1 | NME 430 1 |
|           | MAT 108  3 | RST 200, 300 or 400* | NME 340 3 | NME 469 3 |
|           | SPAN 106 or SPAN 111 3 | PHI 205 3 | NME 332 2 | NME 362B 1 |
|           | LIT 120  3 | CLS 330A 1 | NME 345 3 | NME 420 1 |
|           | POS 110, PSY 110 or ECON 110 3 | BIO 109 3 | NME 226 3 | NME 440 3 |
| Semester total | 18 | 18 | 17 | 12 |

| **SUMMER** | NME 365 3 |
|            | NME 367 2 |
|            | CLS 320B 1 |
| Semester total | 6 |

<table>
<thead>
<tr>
<th>Total Credits</th>
<th>33</th>
<th>36</th>
<th>38</th>
<th>25</th>
</tr>
</thead>
</table>

* RST 305 will not fulfill upper level theology
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.

NME 464 In Vivo Studies II (3 crs)
An extension of In Vivo I further integrating anatomy and physiology and pathophysiology understanding in protocols for routine and non-routine nuclear medicine procedures. Rotations of study should include general, cardiac, pediatric, PET, PET/CT, SPECT, SPECT/CT. Prerequisite: Completion of pre-practicum courses.

NME 465 In Vivo Studies III (3 crs)
An extension of In Vivo I and II, further integrating anatomy and physiology and pathophysiology understanding in protocols for routine and non-routine nuclear medicine procedures. Concentrations of study should include general, cardiac, pediatric, PET, PET/CT, SPECT, SPECT/CT and the advanced practices performed. Prerequisite: Completion of pre-practicum courses.

NME 466 In Vivo Studies IV (3 crs)
An extension of In vivo I, II, and III. Understanding and development of procedures involving role in the administration of radiopharmaceuticals in therapeutic doses, as well as associated imaging protocols. Prerequisite: Completion of pre-practicum courses.

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.

NME 468 Departmental Administration (1 cr)
Experience in understanding the role that the technologist has in the overall operation of the clinical department. Prerequisite: Completion of pre-practicum courses.

NME 469 In Vitro Studies (3 crs)
Experience and understanding of In Vitro studies including theory, practice, instrumentation and evaluation. Prerequisite: Completion of pre-practicum courses.

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.

Nursing
Contact Persons: Margaret Bowman, Ph.D.
Kelly Brewer, MSN
Jennifer McCracken, MSN
Helen Faso, Ph.D.
Barbara Kulpa, MSN
Rose Kutlenios, Ph.D.

Jody Seabright, MSN
Marimar Weeks, MSN

The nursing program provides an integrated curriculum of liberal arts and nursing education for the development of the student as a person, citizen and practitioner of nursing. The graduate of the program is prepared to function in a variety of 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 and is eligible to make application to take the State Board Examination for licensure as a registered nurse. The program also provides a foundation for graduate education in nursing. Upon completion of the Nursing program, students will be able to demonstrate the ability to:

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 in providing care for clients in various stages of health/wellness.
3. Establish therapeutic relationships which reflect the uniqueness of self and client.
4. Assume accountability for nursing practice consistent with professional standards and ethical codes.
5. Collaborate with health care providers and consumers in the promotion of health/wellness.
6. Provide leadership for decision making related to health/wellness issues.
7. Integrate knowledge of historical, cultural, ethical, spiritual, legal and economic dimensions of nursing.
8. Assume responsibility for personal and professional growth.

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLS 215</td>
<td>Introduction to Epidemiology</td>
<td>2 crs</td>
</tr>
<tr>
<td>BIO 129</td>
<td>Anatomy and Physiology II</td>
<td>3 crs</td>
</tr>
<tr>
<td>NUR 203</td>
<td>Health Assessment</td>
<td>1 cr</td>
</tr>
<tr>
<td>NUR 227</td>
<td>Clinical Nutrition</td>
<td>1 cr</td>
</tr>
<tr>
<td>NUR 230C</td>
<td>Basic Care Clinical</td>
<td>2 crs</td>
</tr>
<tr>
<td>NUR 230D</td>
<td>Basic Care</td>
<td>3 crs</td>
</tr>
<tr>
<td>NUR 309C</td>
<td>Introduction to Nursing Clinical</td>
<td>6 crs</td>
</tr>
<tr>
<td>NUR 309D</td>
<td>Introduction to Nursing Care</td>
<td>4 crs</td>
</tr>
<tr>
<td>NUR 319C</td>
<td>Acute Care Nursing I Clinical</td>
<td>3 crs</td>
</tr>
<tr>
<td>NUR 319D</td>
<td>Acute Care Nursing I</td>
<td>4 crs</td>
</tr>
<tr>
<td>NUR 320C</td>
<td>Acute Care II Clinical</td>
<td>3 crs</td>
</tr>
<tr>
<td>NUR 320D</td>
<td>Acute Care Nursing II</td>
<td>3 crs</td>
</tr>
<tr>
<td>NUR 326</td>
<td>Introduction to Pathophysiology</td>
<td>2 crs</td>
</tr>
</tbody>
</table>

Programs & Courses of Instruction
NUR 327  Elements of Research in Nursing  (2 crs)
NUR 329  Pharmacology   (2 crs)
NUR 335  Systems Concepts   (1 cr)
NUR 405C  Multisystem Care I Clinical  (5 crs)
NUR 405D  Multisystem Care Nursing I  (3 crs)
NUR 406C  Multisystem II Clinical  (3 crs)
NUR 406D  Multisystem Care Nursing II  (3 crs)
NUR 412  Critical Thinking   (1 cr)
NUR 421  Pathophysiology   (2 crs)
NUR 422C  Complex Cares Nursing I Clinical  (5 crs)
NUR 422D  Complex Cares Nursing I  (3 crs)
NUR 423C  Complex Care II Clinical  (3 crs)
NUR 423D  Complex Nursing II Care  (2 crs)
NUR 424  ACLS  (1 cr)
NUR 426  Nursing Trends and Issues  (2 crs)
NUR 430  Basic EKG  (1 cr)
NUR 480  Senior Seminar I  (1 cr)
NUR 481  Senior Seminar II  (1 cr)
PSY 212  Developmental Psychology  (3 crs)

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 2.75 and have successfully completed the prerequisites: CHE 105, PSY 110, BIO 128, NUR 227 and be enrolled in the concurrents: 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 of clinical experience.
10. The Department of Nursing offers two other programs that lead to the BSN degree. The BSN for the Registered Nurses program and the BA/BS to BSN accelerated program. Information on both of these programs is contained in the Adult and Graduate Catalog.

Course Descriptions
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. Concurrents: NUR 230, BIO 129, CLS 215.

NUR 227 Clinical Nutrition (1 cr)
Study of clinical nutrition as related to the nurse’s role in promoting health. Concurrents: PSY 110, BIO 128.

NUR 230C Basic Care Clinical (2 crs)
This is the clinical component of NUR 230D.

NUR 230D Basic Care (3 crs)
A study and practice of basic patient care. Prerequisites: BIO 128, PSY 110, NUR 227. Concurrents: PSY 212, BIO 129, CLS 215, NUR 203, NUR 230C

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. Concurrents: NUR 335, 329, 327, NUR 309C.

NUR 309C Introduction to Nursing Care Clinical (6 crs)
This is the clinical component of NUR 309D.

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. Concurrents: NUR 319C, 323, 326, 320C/D.

NUR 319C Acute Care Nursing I Clinical (3 crs)
This is the clinical component of NUR 319 D.

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. Concurrents: NUR 319C/D, 320C, 323, 326.

NUR 320C Acute Care Nursing II Clinical (3 crs)
This is the clinical component of NUR 320D.
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. Concurrents: 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.

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.

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.

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.

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 clients within the pediatric and psychiatric populations. Lifelong care and prevention of complications are emphasized. Prerequisites: NUR 323, 326, 320C/D and 319C/D. Concurrents: NUR 421, 480, 406C/D and 406D.

NUR 405C Multisystem Care Nursing I Clinical (5 crs)
This is the clinical component of NUR 405D.

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. Concurrents: NUR 421, 480, 405C/D and 406C.

NUR 406C Multisystem Care Nursing II Clinical (3 crs)
This is the clinical component of NUR 406D.

NUR 412 (RET 412) Critical Thinking (1 cr)
Critical thinking and problem solving skills are applied to patient situations involving complications. This course has one-half (1/2) credit of laboratory. Prerequisites: Same as 422.

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.

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. Concurrents: 426, 481, 412 and 423C/D.

NUR 422C Complex Nursing Care I Clinical (3 crs)
This is the clinical component of NUR 422D.

---

### NURSING - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FALL</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>PSY 110</td>
<td>3</td>
</tr>
<tr>
<td>ENG 105</td>
<td>3</td>
<td>MAT 105</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>3</td>
<td>BIO 128</td>
<td>3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>PHI 205</td>
<td>3</td>
</tr>
<tr>
<td>RST 106/107</td>
<td>3</td>
<td>FAS 1xx</td>
<td>3</td>
</tr>
<tr>
<td>INS/SSC</td>
<td>3</td>
<td>NUR 227</td>
<td>1</td>
</tr>
</tbody>
</table>

Semester total 16 16 18 18

| SPRING | | | |
|--------| | | |
| CHE 105 | 3 | PSY 212 | 3 | NUR 323 | 2 | NUR 426 | 2 |
| LIT 120 | 3 | BIO 129 | 3 | NUR 326 | 2 | NUR 422C | 5 |
| RST 2xx/3xx | 3 | CLS 215 | 2 | NUR 320C | 3 | NUR 481 | 1 |
| HIS 120 | 3 | LIT 250 | 3 | NUR 320D | 3 | NUR 424 | 1 |
| SPA 106 | 3 | NUR 230C | 2 | NUR 319C | 3 | NUR 412 | 1 |
| | | NUR 230D | 3 | NUR 319D | 4 | NUR 422D | 3 |
| | | NUR 203 | 1 | | | NUR 423C | 3 |
| | | | | | | NUR 423D | 2 |

Semester total 15 17 17 18

Total Credits 31 33 35 36 135
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. Concurrents: 426, 481, 412, 422C/D and 423C.

NUR 423C Complex Nursing Care II Clinical (3 crs)
This is the clinical component of NUR 423D.

NUR 424 (RET 424) ACLS (Advanced Cardiac Life Support) (1 cr)
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. Prerequisite: NUR 430.

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.

NUR 430 (RET 430) Basic EKG (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. Prerequisite: Senior standing or permission of faculty.

NUR 467 Nursing Externship (1-3 crs)
A clinical nursing elective which enables rising senior nursing students to integrate a summer externship into their program of studies. Prerequisite: Senior standing.

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.

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.

Requirements for the Minor in Peace Studies
The minor in peace studies consists of 18 credits (six three credit courses, two of which are required and four elective). Required courses are: PHI/PST 240 Philosophy of Peace and Justice, PST 486 Senior Seminar in Peace Studies. As for electives, a full listing of such courses is available on the Web page. Questions about the minor should be directed to contact persons listed above.

Peace Studies
Contact Persons: Fr. James A. O’Brien, S.J., Ph.D.
Christopher Stadler, Ph.D.

The minor in Peace Studies is an interdisciplinary academic program which offers a vision of human communities dedicated to the pursuit of justice and peace in their political, economic and everyday activities. In a post-9/11 world intent on power tactics and military solutions, Wheeling Jesuit proposes a careful search for right relationships as the true path to human flourishing. Thus this minor is eminently in keeping with the mission of the University to develop persons for life-long learning, leadership and service.

Philosophy
Contact Person: Beverly J.B. Whelton, Ph.D.
James H. Stover, Cand., Ph.D.
Derek A. Elliott, M.A.
Rev. James A. O’Brien, S.J., Ph.D.
Richard P. Mullin, Ph.D., Emeritus

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.

Philosophy

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 metaphysics (PHI 307, 308 and 309), all three are recommended.

Special Note on Major Requirements
As graduation requirements, philosophy majors must pass in their senior year a comprehensive one-hour oral examination and write and deliver a qualifying paper. The oral examination will concern a list of thematic questions provided by the philosophy faculty. The qualifying paper can be the result of an upper level (300+) philosophy course, or independently prepared by the student on another subject of interest. For information about guidelines for and scheduling of the oral examination and qualifying paper, a student should consult the department.

Political & Economic Philosophy
Coordinator: James H. Stover, Cand., 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.

Requirements for Bachelor of Arts Degree in Political & Economic Philosophy University Core-Fulfilling
PHI 105 Logic and Knowledge
PHI 205 Philosophy of the Human Person
PHI 305 Ethics
POS 110 American Political Process
PEP (Political & Economic Philosophy) Core-Fulfilling
ECO 110 Principles of Macroeconomics
ECO 221 Principles of Microeconomics

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, interdisciplinary, with faculty from each area participating (3 crs)

Because political and economic philosophy is a dynamically changing field and because it involves three departments each committed to on-going growth, students can expect the program to undergo change during their years at the University. As the program evolves, students will be given the option to fulfill the requirements that are in effect when they enter the program or to adapt to the changes as they are made.

Philosophy
Required (2 courses):
PHI 347 Medieval Political Thought
PHI 349 Contemporary Political Thought
Electives (Choose any two non-core philosophy courses)

Political Science
Required (2 courses):
POS 346 Ancient Political Thought
POS 348 Modern Political Thought
Electives (Choose two from the following):
POS 211 Comparative Politics
POS 212 Global Politics
POS 310 Church and State
POS 329 Civil Rights & Liberties
POS 330 Constitutional Law
POS 333 Global Economy

Economics
Required (2 courses):
ECO 321 History of Economic Thought
MGT 315 Conceptual Foundations of Business
Electives (Choose two from the following):
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:
PHI 485 Senior Seminar in Political & Economic Philosophy – interdisciplinary, with faculty from each area participating.

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 course.

Core-Fulfilling Courses
PHI 105 Logic and Knowledge
PHI 205 Philosophy of the Human Person
PHI 305 Ethics (juniors and seniors only)

Course Descriptions

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.

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.

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 and PHI 205.

THEMATIC AND HISTORICAL PHILOSOPHY

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.

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.

PHI 225 Eastern Patterns of Thought (3 crs)
A study of the doctrines, ideals and practices advanced by Eastern
Programs & Courses of Instruction

traditions of thought such as Hinduism, Buddhism, Confucianism and Taoism.

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.

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.

PHI 251 Philosophy and Human Creativity (3 crs)
Study of the roots, scope and fundamental role of human creativity as the means to intervene in the structure and direction of the world; the implications of this for education, laws, social arrangements.

PHI 252 Philosophy of Culture (3 crs)
Philosophical analysis of human efforts to understand and confront the problems of human life through the creation and use of symbols. Major symbolic forms of the human enterprise—language, myth, art, history and science are considered within topics like the origin of language, theories of magic, religious significance of taboo, and the importance of play.

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?

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.

PHI 302 Society, Ethics and Technology (3 crs)
This course begins with a history of the philosophy of technology in order to understand the ethical values that characterize the development of technology. With this background, the course defines a model for the ethical assessment of technological invention and innovation, and then applies that model to evaluate specific issues relevant to the complex interrelationships between political economy, public policy and cultural change.

PHI 306 Philosophy and History of Sports (3 crs)
Sports are a significant social and cultural phenomenon, and they merit philosophical analysis. This study examines sports from the perspectives of history, the nature of play, religion, ethics and business. Prerequisite: Second year standing.

PHI 307-309 Metaphysics
Claims, methods and limits of metaphysics. A study of the issues of transcendence, causality, the categories, space and time and the human condition, with emphasis on textual study:

PHI 307 Metaphysics I: Ancient (3 crs)
Thinkers to be considered include the Pre-Socratics, Plato and Aristotle. Prerequisites: PHI 105 and 205.

### PHILOSOPHY - Recommended Course Sequence

<table>
<thead>
<tr>
<th></th>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>FYS 101</td>
<td>3</td>
<td>PHI Elective</td>
<td>PHI 305</td>
<td>PHI Electives</td>
</tr>
<tr>
<td>ENG 105/110</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>MOL</td>
<td>3</td>
<td>RST 2xx/3xx</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>SCI Core</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>PHI 105</td>
<td>3</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS/PSY/ECO 110</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>SCI Core</td>
<td>PHI Electives</td>
<td>PHI Electives</td>
</tr>
<tr>
<td>MOL</td>
<td>3</td>
<td>MAT Core</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>FAS 1xx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHI 205</td>
<td>3</td>
<td>PHI Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RST 106/107</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total Credits</td>
<td>31</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
PHI 308 Metaphysics II: Medieval (3 crs)
Thinkers to be considered include Plotinus, Augustine, Thomas Aquinas and Bonaventure. Prerequisites: PHI 105 and 205.

PHI 309 Metaphysics III: Modern (3 crs)
Thinkers to be considered include Descartes, Hume, Kant and Hegel. Prerequisites: PHI 105 and 205.

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.

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.

PHI 318 Symbolic Logic (3 crs)
A study of the formal systems of deductive proofs of validity and the relationship between ordinary and symbolic languages. Prerequisites: PHI 105 and 205.

PHI 320 Bioethics (3 crs)
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.

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.

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.

PHI 338 Phenomenology and Existentialism (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.

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.

PHI 346 (POS 346) Ancient Political Thought (3 crs)
Selections from, e.g., Plato, Aristotle, Xenophon, Thucydides and Aristophanes will be examined in this course. Special attention will be placed on the relationship between politics and philosophy. Prerequisites: PHI 105 and 205.

PHI 347 (POS 347) Medieval Political Thought (3 crs)
A survey of influential Western political thinkers from the medieval world up to Machiavelli. Emphasis will be placed on the anthropological and metaphysical underpinnings of their political theories. Thinkers to be discussed will include St. Augustine, St. Thomas Aquinas, Dante and Machiavelli. Prerequisites: PHI 105 and 205.

PHI 348 (POS 348) Modern Political Thought (3 crs)
Selections from modern political thinkers, e.g., Machiavelli, Locke, Tocqueville, Rousseau and Nietzsche will be examined in this course. Special emphasis will be placed on the modern idea of rights, the relationship between politics and philosophy and the role and responsibilities of government in the modern world. Prerequisites: PHI 105 and 205.

POLITICAL & ECONOMIC PHILOSOPHY - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>ECO 110</td>
<td>PHI 305</td>
</tr>
<tr>
<td>ENG 105/110</td>
<td>3</td>
<td>MGT 315</td>
<td>PEP-POS Elective</td>
</tr>
<tr>
<td>MOL 3</td>
<td>RST 2xx/3xx</td>
<td>3</td>
<td>PHI 347</td>
</tr>
<tr>
<td>HIS 110</td>
<td>LIT 250</td>
<td>3</td>
<td>ECO 321</td>
</tr>
<tr>
<td>POS 110</td>
<td>PEP-POS Elective</td>
<td>3</td>
<td>PEP-MGT/ECO Elective</td>
</tr>
<tr>
<td>PHI 105</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>ECO 221</td>
<td>FAS 1xx</td>
</tr>
<tr>
<td>MOL 3</td>
<td>SCI Core</td>
<td>3</td>
<td>POS 348</td>
</tr>
<tr>
<td>RST 106/107</td>
<td>3</td>
<td>PEP-PHI Elective</td>
<td>Electives</td>
</tr>
<tr>
<td>PHI 205</td>
<td>POS 346</td>
<td>3</td>
<td>SCI Core</td>
</tr>
<tr>
<td>MAT Core</td>
<td>HIS 120</td>
<td>3</td>
<td>INS/SSC</td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total Credits</td>
<td>31</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
PHI 349 (POS 349) Contemporary Political Thought (3 crs)
A critical survey of major contemporary political philosophies such as liberalism, conservatism and communitarianism and the ways in which they impact the law, the economy and principles of civil rights and civic responsibilities. Prerequisites: PHI 105 and 205.

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, conflicts of interest, environmental and consumer issues and the social responsibility of business. Prerequisites: PHI 105 and 205.

PHI 356 Ethics and Public Policy (3 crs)
An application of the principles of ethics to contemporary American institutional structures and public policies, e.g., health care, prison systems, international finance, world trade, foreign policy, war and peace, world hunger, immigration, education and individual rights. Prerequisites: PHI 105 and 205.

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.

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.

PHI 485 Senior Seminar in Political and Economic Philosophy (3 crs)
Interdisciplinary, with faculty from each area participating. Prerequisites: PHI 105 and 205. Students without 300-level prerequisites may register with permission of the instructor.

Physics
Contact Persons: Joseph R. Busche, Ph.D.
Peter D. Ehni, Ph.D.
John 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 104</td>
<td>Physical Science</td>
</tr>
<tr>
<td>PHY 105</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHY 107</td>
<td>Astronomy</td>
</tr>
<tr>
<td>PHY 108</td>
<td>Geology</td>
</tr>
<tr>
<td>PHY 110</td>
<td>Physics I (4 crs)</td>
</tr>
<tr>
<td>PHY 130</td>
<td>Physics for Allied Health</td>
</tr>
<tr>
<td>PHY 131</td>
<td>Earth &amp; Space Science</td>
</tr>
</tbody>
</table>

Requirements for Physics Major Bachelor of Science Degree
In fulfilling the core curriculum requirements, the Physics majors will take MAT 111 to fulfill the mathematics core and take PHY 110 to full one of the science core courses. In addition to completing the core curriculum requirements, Physics majors must complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 111</td>
<td>Calculus I, II</td>
<td>8 crs</td>
</tr>
<tr>
<td>MAT 211</td>
<td>Calculus III</td>
<td>4 crs</td>
</tr>
<tr>
<td>MAT 212</td>
<td>Ordinary Differential Equations</td>
<td>4 crs</td>
</tr>
<tr>
<td>MAT 204</td>
<td>Scientific Statistics</td>
<td>3 crs</td>
</tr>
<tr>
<td>PHY 110</td>
<td>Physics I</td>
<td>8 crs</td>
</tr>
<tr>
<td>PHY 121</td>
<td>Physics Labs I, II</td>
<td>2 crs</td>
</tr>
<tr>
<td>PHY 311</td>
<td>Modern Physics</td>
<td>4 crs</td>
</tr>
<tr>
<td>PHY 321</td>
<td>Modern Physics Lab</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHY 221</td>
<td>Mathematical Physics or</td>
<td>3 crs</td>
</tr>
<tr>
<td>PHY 243</td>
<td>Statics</td>
<td>3 crs</td>
</tr>
<tr>
<td>PHY 331</td>
<td>Mechanics I, II</td>
<td>6 crs</td>
</tr>
<tr>
<td>PHY 341</td>
<td>Electromagnetic Theory I, II</td>
<td>6 crs</td>
</tr>
<tr>
<td>PHY 435 A, B, C, D</td>
<td>Advanced Lab</td>
<td>4 crs</td>
</tr>
<tr>
<td>PHY</td>
<td>4 Approved electives</td>
<td>(13-16 crs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(62-65 crs)</td>
</tr>
</tbody>
</table>

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.

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.

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, 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:

BIO   Approved Electives  (8 crs)
CHE 110, 120  General Chemistry I, II  (8 crs)
CHE 121, 122  General Chemistry Lab I, II  (2 crs)
MAT 111  Calculus I   (4 crs)
MAT   Approved Elective  (4 crs)
ISC   Approved Elective  (3 crs)
PHY 110, 120  Physics I, II   (8 crs)
PHY 121, 122  Physics Lab I, II   (2 crs)
PHY 311  Modern Physics   (4 crs)
PHY   4 Approved Electives  (13-16 crs)

Course Descriptions

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.

PHY 105 General Physics (3 crs)
A one-semester physics course for technology majors. The course is quantitative requiring algebra and trigonometry.

PHY 107 Astronomy (3 crs)
Introduction 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.

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.

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.

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.

PHY 130 (CLS 130) Physics for Allied Health (3 crs)
General physics principles with special emphasis on gas laws, fluid principles, fluids, the use of formulae and how they apply to nuclear medicine technology and respiratory therapy.

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.
**PHY 160 Engineering Orientation (1 cr ea)**
A sequence of six one-credit courses, usually spread over four semesters and a summer, as career orientation in both engineering and physics. Treatment of such topics as problem analysis, computer programming and surveying.

**PHY 221 Mathematical Physics (3 crs)**
Supplements the mathematics background of the physics major. Topics to be covered include power series, Taylor's 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.

**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.

**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. **Concurrently:** MAT 112

**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.

**PHY 312 Electronics (4 crs)**
Digital and analog electronics. Topics covered include: Boolean algebra, basic gates, flip-flops, counters, Kirchoff's equations, Thévenin'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.

**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 linear equations, differential equations and fast fourier transforms. A solid background in calculus and introductory physics is assumed. **Prerequisite:** PHY 110 and MAT 112.

**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.

**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.

**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.

**PHY 318 Hydrodynamics (3 crs)**
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.

**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.

**PHY 320 Methods of Medical Physics and Dosimetry (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.

**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.

**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.

**PHY 341 Electromagnetic Theory I (3 crs)**
Electrostatics, electric fields in matter, magnetic fields and Maxwell's equations.
PHY 421, 422 Mathematical Physics I, II (8 crs)
Supplements the mathematics background of the physics major.
I: Taylor’s series, Fourier series, Fourier integrals, determinants, matrix theory, Lagrange’s equations, Hamilton’s principle, partial differentiation, calculus of variations 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.

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.

PHY 435 A, B, C, D Advanced Lab (1 cr each)
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.

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 431.

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.

PHY 486-489 Thesis (variable)
A research topic requiring a detailed report and oral defense. Prerequisite: Senior standing.

Political Communication

Contact Person: Richard Cain
In support of the overall mission of Wheeling Jesuit University, the Political Communication Program provides courses in political communication, social advocacy communication, and legal writing and pre-law. For additional related courses, see Political Science, Criminal Justice, and Communication.

Core Fulfilling Courses
FAS/COM 142 Digital Photography
FAS 143/COM 232 Image Editing with Photoshop

The integrated marketing communication major is designed to meet the needs of students who hope to pursue careers in which marketing, advertising, and public relations are essential. It is appropriate for students who want to work in public relations, advertising, multimedia, marketing, technical communication, and other careers.

Upon completion of the Political Communication major, students will demonstrate the ability to:
1. Identify and apply reasoned and effective political communication strategies across a range of topics;
2. Make an effective oral presentation.

Requirements for Political Communication Major Bachelor of Arts Degree
In addition to completing the core curriculum requirements, all Political Communication majors must complete the following

<table>
<thead>
<tr>
<th>Programs &amp; Courses of Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL SCIENCE (PHYSICS) - Recommended Course Sequence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FYS 101</td>
<td>1</td>
<td>PHY Elective 4</td>
<td>PHY Elective 2</td>
</tr>
<tr>
<td>PHY 110</td>
<td>4</td>
<td>CHE 110 4</td>
<td>BIO Elective 4</td>
</tr>
<tr>
<td>PHY 121</td>
<td>1</td>
<td>CHE 121 1</td>
<td>PHI 205 3</td>
</tr>
<tr>
<td>MAT 111</td>
<td>3</td>
<td>LIT 250 3</td>
<td>MOL 102 3</td>
</tr>
<tr>
<td>ENG 105 or 110</td>
<td>3</td>
<td>RST 106/107 3</td>
<td>INS/SSC 3</td>
</tr>
<tr>
<td>HIS 110</td>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 120</td>
<td>4</td>
<td>PHY 311 4</td>
<td>PHY Elective 4</td>
</tr>
<tr>
<td>PHY 122</td>
<td>1</td>
<td>ISC Elective 3</td>
<td>BIO Elective 4</td>
</tr>
<tr>
<td>MAT Elective 4</td>
<td>4</td>
<td>CHE 120 4</td>
<td>RST 2xx/3xx 3</td>
</tr>
<tr>
<td>LIT 120</td>
<td>3</td>
<td>CHE 122 1</td>
<td>MOL III 3</td>
</tr>
<tr>
<td>HIS 120</td>
<td>3</td>
<td>PHI 105 3</td>
<td>14</td>
</tr>
</tbody>
</table>

| Total Credits | 29 | 31 | 29 | 31 | 122 |
Programs & Courses of Instruction

Political Communication interdisciplinary major Political Science

Core classes:

- SSC 327 Research Methods (3 crs)
- SSC 415 Statistical Analysis (3 crs)
- SSC 488 Senior Thesis (3 crs)
- SSC 489 Senior Seminar (3 crs)
- POS 211 Comparative Politics (3 crs)
- POS 212 Global Politics (3 crs)
- POS 346 A Ancient Political Thought (3 crs)

One course taken from:
- POS 241, POS 242, POS 329, POS 330, POS 340, POS 305, POS 306, POS 473 (3 cr)
- POS 228, POS 311, POS 316, POS 327, POS 333, POS 334, POS 341 (3 cr)

Communication Core classes

- COM 104 Persuasion (3 cr)
- COM 211 Reporting (3 cr)
- COM 204 Argumentation and Evidence (3 cr)
- COM 275 Intro to Political Communication (3 cr)
- COM 276 Social Analysis and Advocacy Communication (3 cr)

- COM 304 Communication Law (3 cr)
- COM 277 Legal Writing (Closed Universe) (3 cr)
- COM 377 Legal Reasoning and LSAT Preparation (3 cr)

One of the following electives:

- COM 376 Legal Research and Advanced Legal Writing

(Open Universe)

COM 371 Topics in Political Communication (27 cr)

(54 cr)

(Optional internships would add 2 credits) For individual course descriptions, see the course listings under the various programs listed alphabetically in this catalog. For example, COM courses would be listed under Communication.

Political Science

Contact Person: Robert J. Phillips, Ph.D.

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 110</td>
<td>American Political Process</td>
</tr>
<tr>
<td>INS 111</td>
<td>World Community</td>
</tr>
</tbody>
</table>

POLITICAL COMMUNICATION - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 1</td>
<td>POS 212</td>
<td>3</td>
<td>POS 346</td>
</tr>
<tr>
<td>HIS 110</td>
<td>COM 211</td>
<td>3</td>
<td>FAS 142</td>
</tr>
<tr>
<td>ENG 105/110</td>
<td>LIT 250</td>
<td>3</td>
<td>SSC 327</td>
</tr>
<tr>
<td>POS 110</td>
<td>PHI 105</td>
<td>3</td>
<td>Science Core</td>
</tr>
<tr>
<td>INS 111</td>
<td>MOL 101 or 102</td>
<td>3</td>
<td>RST 305 or PHI 305</td>
</tr>
<tr>
<td>COM 211</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester total</td>
<td>16</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 120</td>
<td>COM 204 or COM 104</td>
</tr>
<tr>
<td>LIT 120</td>
<td>COM 275</td>
</tr>
<tr>
<td>POS 211</td>
<td>PHI 205</td>
</tr>
<tr>
<td>COM 104 or COM 204</td>
<td>MOL 102 or 111</td>
</tr>
<tr>
<td>MAT Core</td>
<td>RST 106 or 107</td>
</tr>
<tr>
<td>Semester total</td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credits: 31 30 30 30 121
In addition to completing the core curriculum and social science core requirements (including senior thesis and seminar and the comprehensive oral examination in POS 488, 489), all political science majors must complete the following courses:

**POS 211 Comparative Politics** (3 crs)
**POS 212 Global Politics** (3 crs)
**POS 346 or 348 Ancient or Modern Political Thought** (3 crs)
Five (5) Approved POS Electives (15 crs)
(24 crs)

One course must be taken from each of the following areas:


**International Relations**: POS 228, POS 311, POS 316, POS 327, POS 333, POS 334, POS 341.

**Political Theory**: POS 250, POS 311, POS 346.

### Requirements for Political Science Minor

Minors in political science must complete POS 110, INS 111 and five upper-division courses (numbered 200 or above).

#### 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 write two senior theses.

#### 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.

### Course Descriptions

#### POS 110 American Political Process (3 crs)


#### 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.).

#### 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.

#### 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.

#### 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.**

#### 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.**

#### POS 305 The American Presidency (3 crs)

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.**

#### 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.

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.).

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.

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.

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.

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.

POS 340 Issues in American Politics (3 crs)
Analysis of specific topics, depending on student interest and current importance. 
Prerequisite: POS 110.

POS 341 Global Issues (3 crs)
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.

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.

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.

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.
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.

Professional Education Department/Teacher Preparation Program

Contact Persons: Connie Myer, Ed. D
Jane Neuenschwander, M.A.

The Professional Education Department (PED) Teacher Preparation Program (TPP) is designed for students who wish to pursue certification leading to licensure in Elementary Education (K-6 Multi-Subjects), Secondary Education (5-Adult Content Specialization) and/or Special Education and General Science as add-on endorsements.

The Wheeling Jesuit University Teacher Preparation program is nationally accredited by the Teacher Education Accreditation Council (TEAC).

Early and extensive field experiences in local schools complement content-rich University course work, leading successful candidates to initial certification in West Virginia (WV). The program is aligned with the West Virginia Professional Teaching Standards (WVPTS), International Society for Technology in Education (ISTE) Standards, the elements of the Principles of Learning and Teaching (PLT) Praxis examination, national content-area standards, speaking and listening standards, Standards for Professional Practice for Teacher Leaders (WV Policy 5800).

**General Requirements**

TPP students complete course work in three areas:

1. the 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 (middle and high school) Education 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.

Formal application to the program is made 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 program, students must maintain a 3.0 GPA in the major, as well as in all 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 Pre-Professional Skills Test (PPST) 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 WV for the initial certification.

Real-world experiences are a critical component of high-quality teacher-preparation programs. Many PED courses include a field experience in local schools. When scheduling classes, students should consider this requirement and allocate an appropriate block of time for field work.

**Major/Licensure Field Offerings**

- Biology (9-Adult) and General Science (5-Adult)
- Chemistry (9-Adult) and General Science (5-Adult)
- English/Language Arts (5-Adult)
- French (Pre-K-Adult and 5-Adult)
- History/Social Studies (5-Adult)
- Liberal Studies Elementary Education (K-6, Multi-Subjects)
- Mathematics (5-Adult)
- French and/or Spanish (Pre-K-Adult and 5-Adult)
- Spanish (5-Adult)
- Physics (9-Adult) and General Science (5-Adult)

Theology majors are welcome to complete the Professional Education program; however, no state licensure is available for Theology majors.

**Special Education**

The Multi-Categorical Special Education endorsement is not a stand-alone program. It is earned in conjunction with one of the previously listed licenses. Adding the Special Education endorsement requires careful course scheduling during the student’s four-year program and may result in additional course work beyond the typical course load.

Students seeking the Special Education endorsement will complete one of the two required student-teaching placements in a Special Education setting.

**Professional Education Suggested Sequence of Course Work**

**Professional Education Component:**

*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 and PED 476. Student Teaching is a full-time experience. Additional courses, participation in athletics and employment are strongly discouraged during this semester.*
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:

<table>
<thead>
<tr>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PED 320</td>
<td>PED 422 C &amp; F</td>
</tr>
<tr>
<td>PSY 315**</td>
<td>PED 423 C &amp; F</td>
</tr>
</tbody>
</table>

**PED 476 is cross-listed with PSY 315, Tests and Measurements.

Course Descriptions

PSY 110 General Psychology (3 cr.)
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.

PSY 214 Child Psychology (3 cr.)
A study of the physiological, intellectual, social, and emotional factors in child development. Prerequisite: PSY 110. Required for K-6 Multi-Subject licensure.

PSY 216 Adolescent Psychology (3 cr.)
A study of basic research and theories concerning development in the adolescent years. Prerequisite: PSY 110. Required for 5-12 Content specialization licensure.

PSY 220 Educational Psychology (3 cr.)
A study of the cognitive and affective dimensions of student behavior with an emphasis on the theoretical conceptions of learning which underlie education methods. Prerequisite PSY 110.

PED 210 Educational Technology (3 cr.)
Experiences in teaching in technology, with technology, and through technology by incorporating hands-on work with computers and associated peripherals, the Internet, the World-Wide Web, and content software. Strategies for effective integration of technology and the security and ethical issues associated with technology are included.

PED 223 Curriculum Development & Methods: Physical Education, Health, and Safety (2 cr.)
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.

PED 231C (1 cr.) & PED 231F (1 cr.) Professional Education I: Schools and Communities (total 2 cr.)
Introduction to teaching as a profession with an emphasis on exploring various perspectives on education through classroom discussions and activities related to current issues relevant to today's classroom teachers. Topics include such broad areas as 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. Corequisite: PED 231 C and PED 231 F.

PED 232C (2 cr.) & PED 232F (1 cr.) Professional Education II: Classroom and Teacher Roles (total 3 cr.)
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. Corequisite: PED 232 C and PED 232 F. Prerequisite: PED 231.

PED 310 Curriculum Development & Methods: Secondary English/Language Arts (3 cr.)
Study of English/Language Arts curriculum, incorporating specific methods to prepare students to teach secondary English/Language Arts.

---

### TEACHER PREPARATION PROGRAM - Recommended Course Sequence

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 110</td>
<td>PED 210</td>
<td>PED 333 C/F</td>
<td>PED 334</td>
</tr>
<tr>
<td>MAT 096</td>
<td>PED 231 C/F</td>
<td>PED 322 C/F</td>
<td>PED 325</td>
</tr>
<tr>
<td>PSY 214 (Elementary) or PSY 216 (Secondary)</td>
<td>PED 324 C/F</td>
<td>PED 327</td>
<td>PED 441 C/F</td>
</tr>
<tr>
<td>GSC 110</td>
<td>PED 310, 311, or 312 (Secondary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIS 214</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Semester total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 110</td>
<td>PED 223</td>
<td>PED 316</td>
<td>PED 473 (Elementary)</td>
</tr>
<tr>
<td>PED 232 C/F</td>
<td></td>
<td>PED 323</td>
<td>PED 475</td>
</tr>
<tr>
<td>GSC 120</td>
<td></td>
<td>PED 341</td>
<td>PED 476</td>
</tr>
<tr>
<td>HIS 211 or 212</td>
<td></td>
<td>PED 481</td>
<td></td>
</tr>
<tr>
<td>MAT _____</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Programs & Courses of Instruction**

**PED 311 Curriculum Development & Methods: Secondary Mathematics & Science (3 cr.)**  
Study of mathematics and science curriculum, incorporating specific methods to prepare students to teach secondary mathematics and science.

**PED 312 Curriculum Development & Methods: Secondary Social Studies (3 cr.)**  
Study of Social Studies curriculum incorporating specific methods to prepare students to teach secondary Social Studies.

**PED 316 Grammar (2 cr.)**  
Study of grammar and instructional strategies for teaching the conventions of language. Focus is on integrating the teaching of grammar in the context of literary activities. Students will analyze their own writing, teach mini-lessons, and develop/analyze a writing task for K-6 students. Required of all K-6 LSEE and secondary English majors. **Prerequisite:** LIT 120.

**PED 320 The Special Education Process (2 cr.)**  
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 will be discussed.

**PED 322 C (2 cr.) & PED 322 F (1 cr.) Teaching Reading in the Elementary School (total 3 cr.)**  
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. **Corequisite:** PED 322 C and PED 322 F.

**PED 323 Curriculum Development & Methods: Art through Children’s Literature (2 cr.)**  
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.

**PED 324 C (3 cr.) & PED 324 F (1 cr.) Curriculum Development and Methods: Mathematics and Science (total 4 cr.)**  
Theories and strategies for 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 mentor teacher and University supervisor with a focus on teaching practice in Mathematics and Science. **Corequisite:** PED 324 C and 324 F.

**PED 325 Diagnosis and Correction: Mathematics (2 cr.)**  
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. **Prerequisite:** PED 324 C and PED 324 F.

**PED 327 Curriculum Development and Methods: Music for Elementary Teachers (2 cr.)**  
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.

**PED 333 C (3 cr.) & PED 333 F (3 cr.) Exceptionality and Diversity in the Classroom (total 6 cr.)**  
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.

**PED 334 C (2 cr.) & PED 334 F (1 cr.) Reading in Content Areas (total 3 cr.)**  
Systematic introduction to current theory, research, and practice in the integration of literacy activities across content areas. Students 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. PED 334 C and PED 334 F are corequisites. **Pre-requisite:** PED 232.

**PED 341 C (2 cr.) & PED 341 F (1 cr.) Curriculum Development & Methods: Language Arts and Social Studies (total 3 cr.)**  
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 a master teacher and University supervisor with a focus on teaching practice in Language Arts and Social Studies. **Corequisite:** PED 341 C and PED 341 F. **PED 375 Special Projects (1-3 cr.)**

**PED 375 Special Projects (1-3 cr.)**  
Development of a student-selected and instructor-approved project directly related to the teaching process, which may incorporate field and University activities. **Prerequisite:** PED 231.

**PED 422 C (2 cr.) & PED 422 F (1 cr.) Special Education: Assessment & Methods – I (total 3 cr.)**  
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. Corequisite: PED 422 C and PED 422 F. Pre-requisite: PED 320.

PED 423 C (2 cr.) & PED 423 F (1 cr.) Special Education: Assessment & Methods–II (total 3 cr.)
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, mathematics, and social skills, as well as the evaluation of a variety of skills curricula. Corequisite: PED 423 C and PED 423 F.

PED 441 C (1 cr.) & PED 441 F (1 cr.) Diagnosis and Correction: Reading and Language Arts (total 2 cr.)
Lab-based extension of the assessment/instruction process through construction, administration, and interpretation of authentic reading and written language assessments, as well as planning, teaching, and evaluating lessons that incorporate the instructional strategies acquired and practiced during class time. Corequisite: PED 441 C and PED 441 F. Pre-requisite: PED 322.

PED 473 Elementary Internship - Research (2 cr.)
Capstone activity in which students work with elementary-aged children in an instructional setting, develop action-research projects. They will prepare and present a summary of research-related activities and their results.

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. Corequisite: PED 481.

PED 476 Evaluation (2 cr.)
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 PSY 315.

PED 481 Student Teaching (Variable: 3 – 11 cr.)
A full semester (14 weeks) 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: Major department and PED approvals. Corequisite: PED 475.

NOTE: 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.

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 is approved by the West Virginia Department of Education.

The online ACT program is aimed at individual qualification for a West Virginia teaching certificate with potential reciprocity to other states. Through reciprocity agreements among the states, a West Virginia teaching certificate may be converted to the equivalent teaching certificate in another state. 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 can learn more by visiting our Web site, www.online.wjwu.edu/ACT or speaking with an ACT counselor.

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. The online ACT program offers you the flexibility to remain in your present career, 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.

A Practical Timeline to Certification

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 online 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.

Program Features
The ACT program delivers 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 5th-12th grade learning needs.
- Minimal direct, face-to-face campus visits are required, allowing you the flexibility to remain living and working in your home town community.
- You will be supported during your student teaching with training by a mentor and through the online community of professionals learning to be educators, just like yourself.

Secondary, 5th-12th grade, Certification Areas
(Concentrations) Available
- Biology
- Physics
- Chemistry
- Social Science/History
- English
- Social Science/Political Science
- French
- Spanish
- General Science (Add-on endorsement)
- Mathematics

Please note that we do not offer preparation for special education or elementary education on-line at this time; however, pilot projects are currently being conducted in these areas.

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 3.0 in transferred-in coursework, including concentration
- Qualifying Scores on the Praxis I and Content Exams. Please note that in order to be hired in any state school system, employees must pass a criminal background check. This is included in the West Virginia Teacher’s Certification process.

Tuition and Fees
An up-to-date and complete tuition and fees sheet for the ACT program is available online or from an ACT Counselor. This certificate program is offered for less than half the traditional full-time tuition rate at Wheeling Jesuit University.

<table>
<thead>
<tr>
<th>ACT Program Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPRING</strong></td>
</tr>
<tr>
<td>Orientation to the Online Environment—non-credit, on-site program</td>
</tr>
<tr>
<td>PED 232 Classroom and Teacher Roles – 3 credits</td>
</tr>
<tr>
<td>PED 333F Exceptionalities and Diversity Field – 1 credit</td>
</tr>
<tr>
<td>PSY 220 Educational Psychology – 3 credits</td>
</tr>
<tr>
<td><strong>SUMMER</strong></td>
</tr>
<tr>
<td>PED 210 Educational Technology – 3 credits</td>
</tr>
<tr>
<td>PED 310 Secondary English/Language Arts/Foreign Language – 1 credit</td>
</tr>
<tr>
<td>PED 311 Secondary Mathematics/Science – 1 credit</td>
</tr>
<tr>
<td>PED 312 Secondary Social Sciences – 1 credit</td>
</tr>
<tr>
<td>Methods of Teaching requires a face-to-face component, one day on campus, for lab work in concentration area.</td>
</tr>
<tr>
<td>PSY 216 Adolescent Psychology – 3 credits</td>
</tr>
<tr>
<td><strong>FALL</strong></td>
</tr>
<tr>
<td>PED 325 Secondary Methods – 1 credit</td>
</tr>
<tr>
<td>PED 333 C Exceptionalities and Diversity – 3 credits</td>
</tr>
<tr>
<td>PED 333 F Exceptionalities and Diversity Field – 1 credit</td>
</tr>
<tr>
<td>PED 334 Reading in Content Areas</td>
</tr>
<tr>
<td><strong>SPRING</strong></td>
</tr>
<tr>
<td>PED 375 Special Topics: Field Experience in Content Area – 1 credit</td>
</tr>
<tr>
<td>PED 333 F Exceptionalities and Diversity Field – 1 credit</td>
</tr>
<tr>
<td>PED 475 Student Teaching Seminar – 1 credit</td>
</tr>
<tr>
<td>PED 476 Evaluation – 2 credits</td>
</tr>
<tr>
<td>PED 481 Student Teaching – 3-11 credits</td>
</tr>
</tbody>
</table>
Candidates will be asked to write a separate check for their criminal background checks, which is covered in their teacher license application fee as they conclude their student teaching.

Is Financial Aid Available for the program?
There is financial aid for those who are enrolled in at least 6 credit hours, have filed the FAFSA (www.fafsa.ed.gov), 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 (800) 873-7665 to be transferred to the WJU Financial Aid Office.

As a Service Opportunity College, Wheeling Jesuit University welcomes adult students from the military who are making use of military aid or 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/ACT or by speaking with an ACT Counselor.

What is my Next Step?
Contact the Center for Professional and Graduate Studies at 800-873-7665 or 304-243-2250, or e-mail adulted@wju.edu to receive an ACT application for an initial transcript analysis.

Mailing Address:
Wheeling Jesuit University
Center for Professional and Graduate Studies
316 Washington Avenue
Wheeling, WV 26003

Course Descriptions:

PSY 216 Adolescent Psychology (3 cr.)
A study of basic research and theories concerning development in the adolescent years. Prerequisite: PSY 110. Required for 5-12 content specialization licensure.

PSY 220 Educational Psychology (3 cr.)
A study of the cognitive and affective dimensions of student behavior with an emphasis on the theoretical conceptions of learning which underlie education methods. Prerequisite PSY 110.

PED 210 Educational Technology (3 cr.)
Experiences in teaching in technology, with technology, and through technology by incorporating hands-on work with computers and associated peripherals, the Internet, the World-Wide Web, and content software. Strategies for effective integration of technology and the security and ethical issues associated with technology are included.

PED 232 C (2 cr.) & PED 232 F (1 cr.) Professional Education II: Classroom and Teacher Roles (total 3 cr.)
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. Corequisite: PED 232 C and PED 232 F. Prerequisite: PED 231.

PED 310 Curriculum Development & Methods: Secondary English/Language Arts (3 cr.)
Study of English/Language Arts curriculum, incorporating specific methods to prepare students to teach secondary English/Language Arts.

PED 311 Curriculum Development & Methods: Secondary Mathematics & Science (3 cr.)
Study of mathematics and science curriculum, incorporating specific methods to prepare students to teach secondary math and science.

PED 312 Curriculum Development & Methods: Secondary Social Studies (3 cr.)
Study of Social Studies curriculum incorporating specific methods to prepare students to teach secondary Social Studies.

PED 375 Special Topics: Field Experience in Content Area (1 cr.)
Field experiences related to Curriculum Development and Methods course work according to secondary teaching discipline interrelating specific subjects methods with other professional teaching practices.

PED 333 C (3 cr.) & PED 333 F (3 cr.) Exceptionality and Diversity in the Classroom (total 6 cr.)
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.

PED 334 C (2 cr.) & PED 334 F (1 cr.) Reading in Content Areas (total 3 cr.)
Systematic introduction to current theory, research, and practice in the integration of literacy activities across content areas. Students 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. PED 334 C and PED 334 F are corequisite. Pre-requisite: PED 232.

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. Corequisite: PED 481.

PED 476 Evaluation (2 cr.)
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
Programs & Courses of Instruction

presented will be classroom, program, individual, formative, summative, traditional, and alternative assessment models.

Prerequisite: Senior standing. This course is cross-listed with PSY 315.

PED 481 Student Teaching (Variable: 3 – 11 cr.)
A full semester (14 weeks) 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: Major department and PED approvals. Corequisite: PED 475.

NOTE: 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.

Psychology

Contact Persons: Bryan Raudenbush, Ph.D.
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.

Requirements for Psychology Major Bachelor of Arts Degree

In addition to completing the core curriculum requirements, psychology majors must complete the following courses:

*Core fulfilling

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 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).
6. PSY 212 (Developmental Psychology) is designed for non-psychology majors, especially nursing majors. Psychology majors interested in developmental psychology should take courses within the developmental sequence (PSY 214, 216, 218). Students taking PSY 212 should not take PSY 214 (Child Psychology) and vice-versa.

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.

Core Fulfilling Courses PSY 110 General Psychology
Serves as a social science core.

Course Descriptions:

PSY 110 General Psychology (3 crs)
A survey of contemporary psychology, including the topics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 110</td>
<td>General Psychology</td>
<td>(C+ or better) (3 crs)</td>
</tr>
<tr>
<td>PSY 115</td>
<td>Statistics for the Behavioral Sciences (C or better)</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>PSY 211</td>
<td>Experimental Psychology</td>
<td>(C or better) (4 crs)</td>
</tr>
<tr>
<td>PSY 420</td>
<td>History &amp; Systems of Psychology</td>
<td>(4 crs)</td>
</tr>
<tr>
<td>PSY 388</td>
<td>Junior Seminar</td>
<td>(1 crs)</td>
</tr>
<tr>
<td>PSY 488</td>
<td>Senior Seminar</td>
<td>(1 crs)</td>
</tr>
<tr>
<td>PSY</td>
<td>Research Electives (2)</td>
<td>(8 crs)</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology Electives (6)</td>
<td>(18 crs)</td>
</tr>
<tr>
<td>BIO</td>
<td>any human biology course</td>
<td>(3 crs) (45 crs)</td>
</tr>
</tbody>
</table>
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.

**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. **Prerequisite: PSY 110 with a grade of C+ or better.**

**PSY 130 States of Consciousness (3 crs)**

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.**

**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.**

**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 in the Pre-Physical Therapy concentration. Students taking this course should not take PSY 214, 216, or 218. **Prerequisite: PSY 110.**

**PSY 214 Child Psychology (3 crs)**

A study of the physiological, intellectual, social and emotional factors in child development. Students taking this course should not take PSY 212. **Prerequisite: PSY 110.**

**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.**

**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.**

**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. **Prerequisite: PSY 110.**

**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.

**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.**

**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.**

**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.**

**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.

**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.**

**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 and permission of the instructor.**

**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.**
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.

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.

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.

PSY 315 Tests and Measurements (3 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. Prerequisite: PSY 110, PSY 115

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.

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.

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.

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.

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.

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.

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.

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.

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

<table>
<thead>
<tr>
<th>PSYCHOLOGY - Recommended Course Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRESHMAN</strong></td>
</tr>
<tr>
<td>FYS 101                                  1</td>
</tr>
<tr>
<td>ENG 105/110/110                          3</td>
</tr>
<tr>
<td>MOL                                      3</td>
</tr>
<tr>
<td>PSY 110                                  3</td>
</tr>
<tr>
<td>HIS 110                                  3</td>
</tr>
<tr>
<td>MAT Core                                 3</td>
</tr>
<tr>
<td>Semester total                           16</td>
</tr>
<tr>
<td><strong>FALL</strong></td>
</tr>
<tr>
<td>PSY 115                                  3</td>
</tr>
<tr>
<td>MOL                                      3</td>
</tr>
<tr>
<td>HIS 120                                  3</td>
</tr>
<tr>
<td>LIT 120                                  3</td>
</tr>
<tr>
<td>PHI 105                                  3</td>
</tr>
<tr>
<td>Semester total                           15</td>
</tr>
<tr>
<td><strong>SPRING</strong></td>
</tr>
<tr>
<td>PSY 115                                  3</td>
</tr>
<tr>
<td>MOL                                      3</td>
</tr>
<tr>
<td>HIS 120                                  3</td>
</tr>
<tr>
<td>LIT 120                                  3</td>
</tr>
<tr>
<td>PHI 105                                  3</td>
</tr>
<tr>
<td>Semester total                           15</td>
</tr>
<tr>
<td><strong>JUNIOR</strong></td>
</tr>
<tr>
<td>PSY 211                                  4</td>
</tr>
<tr>
<td>PSY Elective                             3</td>
</tr>
<tr>
<td>RST 106/107                              3</td>
</tr>
<tr>
<td>BIO 105/115/120                          3</td>
</tr>
<tr>
<td>Elective                                 3</td>
</tr>
<tr>
<td>SCI                                      3</td>
</tr>
<tr>
<td>FAS 1xx                                  3</td>
</tr>
<tr>
<td>Semester total                           16</td>
</tr>
<tr>
<td><strong>SENIOR</strong></td>
</tr>
<tr>
<td>PSY 211                                  4</td>
</tr>
<tr>
<td>PSY Elective                             3</td>
</tr>
<tr>
<td>RST 2xx/3xx                              3</td>
</tr>
<tr>
<td>INS/SSC                                  3</td>
</tr>
<tr>
<td>LIT 250                                  3</td>
</tr>
<tr>
<td>PSY Electives                            6</td>
</tr>
<tr>
<td>PSY Electives                            3</td>
</tr>
<tr>
<td>Electives                                15</td>
</tr>
<tr>
<td>Total Credits                            31</td>
</tr>
</tbody>
</table>

121
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.

**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 regress, factor analysis, discriminant 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 and permission of instructor.

**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, Gestalt psychology and psychoanalysis. Prerequisite: PSY 110, junior level status.

**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.

**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.

**PSY 486 Thesis (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.

**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.

**Respiratory Therapy**

*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 Therapy program, students will be able to demonstrate the ability to:

1. Comprehend, apply and evaluate information relevant to their role as a Respiratory Therapist (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 therapist (Psychomotor).

**Requirements for Respiratory Therapist Bachelor of Science Degree**
In addition to completing the core curriculum requirements, the respiratory therapy major must complete the following courses with a letter grade of “C” or better and must maintain a 2.3 GPA in all math and science courses to enter clinical practicum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 109, 121</td>
<td>Cells &amp; Chromosomes &amp; Lab</td>
<td>3 and 1 cr</td>
<td></td>
</tr>
<tr>
<td>BIO 127, 128</td>
<td>Anatomy &amp; Physiology I &amp; Lab</td>
<td>3 and 1 cr</td>
<td></td>
</tr>
<tr>
<td>BIO 129</td>
<td>Anatomy &amp; Physiology II</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>*CHE 105/110</td>
<td>Introductory General Chemistry</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>*CLS/PHY 130</td>
<td>Physics for Allied Health</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 215</td>
<td>Concepts of Microbiology and Epidemiology</td>
<td>2 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 221</td>
<td>Intro. To Research In Health Care</td>
<td>2 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 234</td>
<td>Pathophysiology</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 311</td>
<td>Introduction to Pharmacology</td>
<td>1 cr</td>
<td></td>
</tr>
<tr>
<td>CLS 312</td>
<td>Emergency Life Support Techniques</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 320</td>
<td>Management Techniques for the Health Sciences</td>
<td>2 crs</td>
<td></td>
</tr>
<tr>
<td>CLS 330</td>
<td>Principles of Instruction</td>
<td>2 crs</td>
<td></td>
</tr>
<tr>
<td>RET 212</td>
<td>Intro. to Respiratory Therapy Equipment and Procedures</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>RET 320</td>
<td>Respiratory Pharmacology</td>
<td>1 cr</td>
<td></td>
</tr>
<tr>
<td>RET 325</td>
<td>Adult Respiratory Therapy Equipment and Procedures</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>RET 330</td>
<td>Pulmonary Functions, Physiology, and Rehabilitation</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>RET 340</td>
<td>Advanced Ventilation and Adjunctive Therapy</td>
<td>3 crs</td>
<td></td>
</tr>
<tr>
<td>RET 342</td>
<td>Arterial Blood Gases, Hemodynamics and Cardiac Physiology</td>
<td>2 crs</td>
<td></td>
</tr>
<tr>
<td>RET 345</td>
<td>Neonatal and Pediatric Respiratory Care</td>
<td>3 crs</td>
<td></td>
</tr>
</tbody>
</table>

(* or higher level course)
RET 482 Special Project Capstone (1 cr)

Clinical Practicum including:
RET 262 Intro. to Clinical Principles (2 cr)
RET 362 Clinical Orientation (2 crs)
RET 363 Principles of General Care I (3 crs)
RET 365 Introduction to Anesthesia (1 cr)
RET 366 Principles of Critical Care I (5 crs)
RET 464 Pulmonary Functions (1 cr)
RET 465 Principles of General Care II (4 crs)
RET 466 Principles of Critical Care II (4 crs)
RET 467 Rehab. and Home Care (2 crs)
RET 468 Clinics (1 cr)
RET 469 Emergency Medicine (1 cr)
NUR/RET 412 Critical Thinking Skills (2 cr)
NUR/RET 430 EKG Interpretation (1 cr)

Electives (Not Required)
NUR/RET 424 Advanced Cardiac Life Support (1 cr)
RET 420 Registry Review for Respiratory Therapy (1 cr)
RET 480 Advanced Clinical (1 to 2 crs)

Course Descriptions

RET 212 Introduction to Respiratory Therapy Equipment and Procedures (3 crs)
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. Topics such as inspection, palpation, auscultation, and percussion techniques are utilized to help the student to understand the relationships between the body’s anatomy and physiology and the various signs and symptoms seen during a full patient examination. A major component of patient assessment includes the exploration and 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 and equipment (tanks, regulators, flow meters), medical gas safety systems, oxygen therapy (devices), and various RT math skills. Prerequisite: Application and official acceptance into the professional phase of the respiratory therapy program.

RET 262 Introduction to Clinical Principles (2 cr) (a clinical practicum)
This course is the student’s first exposure to clinical practicums. Throughout this course, students will bring the topics of RET-212 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 therapy program, coenrollment in RET-212.

RET 320 Respiratory Pharmacology (1 cr)
A study of the application, uses and effects of pharmacological agents administered by respiratory therapists, and those affecting the cardiovascular system. Prerequisite: CLS 311.

RET 325 Adult Respiratory Therapy Equipment and Procedures (3 crs)
This foundation course for the respiratory therapy 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, foundation ventilator modes (such as A/C and SIMV), and ventilator equipment. Prerequisite: Successful completion of RET 212 with a grade of C or higher.

RET 330 Pulmonary Functions Physiology and 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.

RET 340 Advanced Ventilation and Adjunctive Therapies (3 crs)
This course is designed to allow the student to master basic ventilation techniques, and learn about advanced respiratory therapy procedures and assessment. Students will be exposed to advanced modes of ventilation, and current ventilation protocols. Adjunctive therapies and diagnostics including items such as: medical gas therapies (NO, HE/OX etc), chest x-ray interpretation, HFOV, chest tubes, arterial monitoring, ETCO2 monitoring, etc. are also included. Prerequisites: Successful completion of RET 212 and RET 325 with a grade of C or higher.

RET 342 Arterial Blood Gases, Hemodynamics, and Cardiac Physiology (2 crs)
Advanced physiology of the cardiovascular system. Topics included connective tissues of the heart, ECG technique and interpretation, blood, heart and body pressure regulation, gas exchange and transport, advanced blood gas analysis and its application to the practice of respiratory care.

RET 345 Neonatal and Pediatric Respiratory Care (3 crs)
Students will master concepts relating to: fetal growth and development, the process of neonatal delivery and assessment, basic newborn resuscitation, common neonatal and pediatric disease
processes, and congenital heart defects. This course will also help
the student to identify and master skills relating to assessment of
the neonatal/pediatric populations. Basic respiratory therapies are
rediscovered and directly applied to the neonatal and pediatric
populations. These therapies include items such as humidity and
aerosol therapy, medical gas therapy, bronchial hygiene techniques,
basic ventilation, airway maintenance and care, etc. Prerequisites:
Successful completion of RET 212 and RET 325 with a grade of C or
higher.

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
coenrolled RET-325 course. This course is designed to orient the
student to the various environments in which respiratory therapists
work. Students are exposed to basic patient therapeutic procedures
in both on-campus 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.

RET 363 Principles of General Care I (3 crs) (a clinical practicum)
This junior level clinical practicum is designed to compliment the
material presented in RET 340, RET 345, RET 330, and RET 342. Clinical
rotations will allow the student to apply classroom theory in a real
world scenario. Students will be exposed to principles of nursing,
advanced patient care, mechanical ventilation, advanced patient
assessment, and other various aspects of respiratory care. Clinical
rotations may vary, but generally include work in areas such as
surgical intensive care units (ICU), medical ICU, general floor areas,
pulmonary function testing labs. 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.

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
courses.

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.

RET 412 (NUR 412) Critical Thinking Skills (2 crs) (spring)
Critical thinking and problem solving skills are applied to patient
situations involving complications. Prerequisites: Same as 430.

RET 420 Registry Review for Respiratory Therapy (1 cr)
(elective)
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.

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. Prerequisite: NUR 430.

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.

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.

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.

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 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.

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 pre-practicum courses.

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.
### RESPIRATORY THERAPY - Recommended Course Sequence

#### FRESHMAN
- **FYS 101**: 1
- **BIO 128**: 3
- **BIO 127**: 1
- **HIS 110**: 3
- **MAT 105++**: 3
- **PSY 110**: 3
- **CLS 121**: 2

#### SOPHOMORE
- **PHY 130**\(^{**}\): 3
- **BIO 109**: 3
- **SSC/INS**: 3
- **PHI 105**: 3
- **RST 2xx/3xx**: 3
- **BIO 121**: 1
- **CLS 320A/320B**: 2

#### JUNIOR
- **RET 325**: 3
- **CLS 234**: 3
- **CLS 311**: 1
- **CLSC 312**: 3
- **RET 362**\(^{**}\): 2
- **CLS 320A**: 1
- **CLS 320B**: 1

#### SENIOR
- **RET 464**\(^{**}\): 2
- **RET 465**\(^{**}\): 4
- **RET 466**\(^{**}\): 4
- **RET 467**\(^{**}\): 2
- **RET 468**\(^{**}\): 1
- **RET 469**\(^{**}\): 1
- **NUR/RET 430**: 1

<table>
<thead>
<tr>
<th>Semester total</th>
<th>16</th>
<th>18</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
<td>16</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

#### SUMMER
- **RET 342**: 2
- **FAS 105**: 3

#### Total Credits
- 30
- 33
- 41
- 31+ 135+

---

**INDICATES RESPIRATORY THERAPY CLINICAL ROTATIONS**

---

### RESPIRATORY THERAPY - PRE-PHYSICAL THERAPY - Recommended Course Sequence

#### FRESHMAN
- **FYS 101**: 1
- **BIO 128**: 3
- **BIO 127**: 1
- **HIS 110**: 3
- **MAT 105++**: 3
- **PSY 110**: 3
- **CLS 121**: 2

#### SOPHOMORE
- **BIO 109**: 3
- **PHY 110**: 4
- **PHI 105**: 3
- **PSY 110**: 3
- **RST 2xx/3xx**: 3
- **CLS 320A and B**: 2

#### JUNIOR
- **RET 325**: 3
- **CLS 234**: 3
- **CLS 311**: 1
- **CLS 312**: 3
- **RET 362**\(^{**}\): 2
- **CLS 320A**: 1
- **CLS 320B**: 1

#### SENIOR
- **RET 464**\(^{**}\): 2
- **RET 465**\(^{**}\): 4
- **RET 466**\(^{**}\): 4
- **RET 467**\(^{**}\): 2
- **RET 468**\(^{**}\): 1
- **RET 469**\(^{**}\): 1
- **NUR/RET 430**: 1

<table>
<thead>
<tr>
<th>Semester total</th>
<th>18</th>
<th>18</th>
<th>18</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>14(+)</td>
</tr>
</tbody>
</table>

#### SUMMER
- **RET 342**: 1
- **FAS 105**: 3

#### Total Credits
- 32
- 31
- 37
- 31/32 132+

---

**INDICATES RESPIRATORY THERAPY CLINICAL ROTATIONS**

---

*Or a higher-level course

**Indicates Respiratory Therapy Clinical Rotations

*This course sequence may or may not fulfill pre-requisites to various graduate level programs/degrees. Students will need to individually assess this course sequence for fulfillment of any required graduate level program pre-requisites

*This course sequence will fulfill current pre-requisites for graduate level DPT program at WJU. This course sequence may or may not fulfill pre-requisites at other schools/universities. Students will need to individually assess this course sequence for fulfillment at other school/universities, as well for any ongoing changes in the WJU DPT admission criteria.
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.

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

RET 482 Research Capstone (1 cr) (spring)
Completion of a research project with poster presentation and final
paper is required.

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.

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 culture-creating entities in the linguistic, marital,
educational, economic, political and religious spheres.

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.

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.

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.

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.

Statistical Analysis and Data Management Certification
Program
Contact Person: Bryan Raudenbush, Ph. D.

Introduction
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.

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
PSY 115 Behavioral Statistics
PSY 211 Experimental Psychology
PSY 410 Advanced Statistics and Data Management
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

Theology & Religious Studies

Contact Persons:
Daniel M. O’Hare, Ph.D
Normand J. Paulhus, Ph.D.
Michael F. Steltenkamp, S.J., Ph.D.
Kristopher L.Willumsen, 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 106</td>
<td>The Religious Quest or</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 107</td>
<td>Catholicism</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 203</td>
<td>World Religions or</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 303</td>
<td>Studies in Living Religious Traditions</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 200</td>
<td>Introduction to the Old Testament</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 204</td>
<td>Jesus the Christ</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 305</td>
<td>Christian Morality Today</td>
<td>(3 crs)</td>
</tr>
</tbody>
</table>

B. Take ONE course from three of the following groups:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 206</td>
<td>The Church in the Modern World</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 207</td>
<td>Christian Marriage</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 304</td>
<td>The Quest for God</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 306</td>
<td>Christian Ritual and Worship</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 307</td>
<td>Studies in Church History</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 201</td>
<td>Introduction to the New Testament</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 202</td>
<td>The Gospels</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 300</td>
<td>Studies in the Old Testament</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 301</td>
<td>Studies in the New Testament</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 302</td>
<td>Paul’s Letters</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 208</td>
<td>A Theology of War and Peace</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 209</td>
<td>Issues in Sexual Morality</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 230</td>
<td>Catholic Social Thought</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 308</td>
<td>Issues in Bioethics</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 309</td>
<td>Christianity and Capitalism</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 401</td>
<td>Contemporary Theological Trends and Issues</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 402</td>
<td>Action and Contemplation in Christian Life</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 403</td>
<td>Great Theologians: Past &amp; Present</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 404</td>
<td>Religion and Science</td>
<td>(3 crs)</td>
</tr>
</tbody>
</table>

C. Complete SIX other theology electives.

* Additional courses are listed under the Catholic Studies Minor.

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.

Requirements for Minor

To earn a minor in Theology and Religious Studies, students must:

A. Complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RST 106</td>
<td>The Religious Quest or</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 107</td>
<td>Catholicism</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 203</td>
<td>World Religions or</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 303</td>
<td>Studies in Living Religious Traditions</td>
<td>(3 crs)</td>
</tr>
<tr>
<td>RST 305</td>
<td>Christian Morality Today</td>
<td>(3 crs)</td>
</tr>
</tbody>
</table>

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 Christian Morality Today (juniors and seniors only)

*Note: Courses numbered 400 are advanced and require of non-majors permission of the instructor for admission.
### Course Descriptions:

**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.

**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.

**RST 200 Introduction to the Old Testament (3 crs)**
A survey of the religious traditions of ancient Israel reflected in the diverse types of literature of the First (Old) Testament, with emphasis on their historical context, development over time and contemporary relevance.

**RST 201 Introduction to the New Testament (3 crs)**
A study of the Second (New) Testament literature in its historical and cultural context, with special emphasis given to the development of beliefs about Jesus, the Christian community, its relationship to contemporary society and the relevance of this literature for today.

**RST 202 The Gospels (3 crs)**
An introduction to the definition and development of “gospel” including comparative study of the evangelists, their literary styles, contexts and interests; their uniqueness and relationship to each other; and their perspectives on Jesus.

**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.

**RST 204 Jesus the Christ (3 crs)**
A study of the person and meaning of Jesus as presented in scripture and as understood throughout the Christian tradition.

**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.

**RST 207 Christian Marriage (3 crs)**
Psychological, sociological and experiential reflections on marriage as a way of life examined in the light of insights offered by the Christian tradition and its understanding of marriage as a Christian sacrament; reflections on moral issues related to marriage.

**RST 208 A Theology of War and Peace (3 crs)**
A study of the Christian tradition’s teachings about war and peace and of their impact on contemporary issues, such as the use of nuclear weapons, preemptive wars, terrorism and humanitarian interventions.

**RST 209 Issues in Sexual Morality (3 crs)**
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.

**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.

**RST/POS 230 Catholic Social Thought (3 crs)**
An introduction to the basic principles of Catholic Social Thought, e.g., subsidiarity, the preferential option for the poor, solidarity and the common good and an examination of how this differs from other forms of social and political thought.

**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.

**RST 300 Studies in the Old Testament (3 crs)**
An in-depth study of specific literary forms (law, history, prophets, writings), theological themes (war and peace, Deuteronomy history, messianic expectations), or historical problems (conquest of Canaan, Exile) in the Old Testament.

**RST 301 Studies in the New Testament (3 crs)**
An in-depth investigation of specific issues in New Testament studies, such as the deutero-Pauline writings, apocalypticism, the New Testament church and its ministry, or of New Testament writers.

**RST 302 Paul’s Letters (3 crs)**
A survey of the letters traditionally associated with the Apostle Paul, with attention to Paul’s life, ancient literary genres, major elements in Paul’s thought, the unity of some letters and non-Pauline authorship of others, their role in the development of the early Christian churches and their relevance for today.

**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.

**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.

**RST 305 Christian Morality Today (3 crs)**
A study of contemporary efforts to rethink the Christian framework of moral decision-making: an analysis of love, freedom, conscience,
sin and natural law and of the use of these terms in resolving current moral problems. (Juniors and seniors only.)

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.

RST 307 Studies in Church History (3 crs)
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.

RST 308 Issues in Bioethics (3 crs)
An analysis of the impact of Christianity’s vision of life on current issues in bioethics, such as caring for the dying, abortion, medical experimentation, organ transplants and the new procreative technologies.

RST 309 Christianity and Capitalism (3 crs)
A careful review of the controversies surrounding theological and official Catholic documents critical and supportive of democratic capitalism; a study of the use of “justice” language and of the philosophical and theological assumptions underlying such uses in these documents.

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.

RST 314 Religious Traditions of Native North America (3 crs)
In considering how histories, 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 and 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.

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.

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.)

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.)

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.)

**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.)

**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.

**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.

**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.

---

Web Mastering/ Web Authoring

**Contact Person: Richard Cain**

In support of the overall mission of Wheeling Jesuit University, the programs in Web Mastering provide courses in web authoring, web programming, graphic design, networking, and systems administration. For additional related courses, see Information Science and Communication.

**Core Fulfilling Courses**

FAS/COM 142  Digital Photography
FAS 143/COM 232  Image Editing with Photoshop
ISC 110  Information Infrastructure

The major Web Mastering is designed to meet the needs of students who hope to pursue careers in which programming, graphic design, and server-side technologies are essential. It is appropriate for students who want to work in web-related and similar careers. Upon completion of the majors in Web Mastering, students will demonstrate the ability to:

1. Identify and apply reasoned and effective web mastering strategies across a range of topics;
2. Make an effective oral presentation.

**Requirements for Web Mastering Major Bachelor of Arts Degree**

In addition to completing the core curriculum requirements, all Web Mastering majors must complete the following courses:

**NOTE:** All Web Mastering majors are required to take FAS 142 Photography for their Fine Arts Core and ISC 110 Information Infrastructure I — Java for their math core.
Special Note on Electives for Women’s Studies Minor:
The student will complete two or three three-credit courses as the elective component of the minor (depending on whether the student chooses the thesis option). A full list of elective courses is available from the director of the program. A student must complete the proper form for the elective during the preregistration period. Courses that have a significant component involved with gender may also be eligible for elective credit in Women’s Studies. Please contact the director for further information.

Course Descriptions:

WST 201 Introduction to Women’s Studies (3 crs)
“Feminism for Everyone: An Introduction to Women’s Studies,” is a course for women and men that introduces students to the thought and practice of the feminist movement. We will ask and attempt to answer the question, “What does it mean to be a woman in the context of a sexist society?” and will investigate issues of gender, race/ethnicity, class and sexuality. Together we will analyze sociocultural, historical and global influences on women and ask how those influences help shape how women identify themselves and are identified by others. Students will examine aspects of popular culture to understand the multiple layers of gendered meaning in film, advertising, television and so on. We will read and discuss important pieces of literature (both fiction and nonfiction) and analyze them within a feminist framework. In essence, we will ask the questions, “What’s gender got to do with it?” and “What can we do about it?”

WST 220 (HIS 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.

WST 230 (CRJ 230) Women and the Criminal Justice System (3 crs)
This course involves an in-depth approach to uncover the issues surrounding women and gender in the criminal justice system from both a theoretical and practical perspective. Concomitant with an exploration of current feminist ideologies, the course will provide a better understanding about the etiology of female crimes. This will be accomplished by highlighting three main areas: 1) women as offenders; 2) women as victims; and 3) women as criminal justice practitioners (includes law enforcement, the judiciary and corrections).

WST 235 (PSY 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.
LIT/WST 310 Women and Early Literature (3 crs)
Study of women's contribution to literature from the Classical Period through the 18th 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.

LIT/WST 312 Women and Modern Literature (3 crs)
Study of women's contribution to literature from the 19th Century to the present day. 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.

WST 355 Gender and Politics (3 crs)
Introduction to theories of the relationship between gender and political power. Detailed examination of a topic relating to gender and politics, e.g., the women's movement in the US, women of the Third World.

WST/PSY 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.

WST 486 Women's Studies Thesis (1 cr)
A research project integrating an issue in the field of Women's Studies with the student's major field.
Student Development
Student Development

Wheeling Jesuit’s Division of Student Development is dedicated to assisting students by providing quality support, cocurricular 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 discerner, 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 assist the University in producing students who can and will contribute to the community and help each to become more competent, virtuous and responsible citizens.

New Student Programs

Beginning with the early registration program and continuing throughout most of the fall semester, an orientation program is conducted on the campus for all new students including transfer students.

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 students may adjust to their surroundings, meet classmates, settle into a new room and familiarize themselves with the campus and its services.

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.

The First Year Program (FYP), which includes the First Year Seminar, a one-credit course taken in the fall semester, is designed for first year students and covers a wide variety of topics, both academic and social.
**Housing & 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. Freshman 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.

The Residence Life staff informs students of University policies and rules and assists them in their adjustment to the University environment. All students living on campus must utilize a meal plan. Freshmen (0-27 credit hours) are assigned the top meal plan. Sophomores, Juniors and Seniors have additional options.

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.

Residence Life also develops programs and social activities for all students, residents and commuters. Commuters are strongly encouraged to become active in campus life at Wheeling Jesuit.

**Career Development Center**

The mission of WJU’s Career Development Center 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. The Career Development Center offers many activities, services and resources to assist all students in their transition from college to post-graduation pursuits in the world-of-work or graduate school.

Some of the services that may be found useful are individual career counseling and assessment testing, career or graduate school fairs, career planning, presentations on various topics and interview preparation. A wealth of career, internship and graduate school information is available in the career library as well as on the Web site (www.wju.edu/career center).

The Career Development Center at Wheeling Jesuit University is a member of the National Association of Colleges and Employers (NACE) and the Upper Ohio Valley Career Seminars Consortium (UOVSCC). The Career Development Center is located on the second 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.

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.

**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 within the Health Center.

**Health Center**

The Health Center, located on the second floor of the Alma Grace McDonough Center, is staffed by a full-time secretary and a part-time registered nurse. Three days a week the nurse is available to serve students in a variety of ways: primary care for minor injuries and illnesses, health maintenance and medical consultation.

Referrals are made to off campus medical specialists when indicated, and for laboratory and x-ray needs. All health records and visits are kept confidential unless otherwise directed by the student. The Health Center also houses the Counseling Center.

**Campus Safety & Security/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.

**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 Academic Resource Center in G24 Ignatius Hall, 304-243-4484.

Students with disabilities that require specific housing accommodations must contact Student Development before June 1.

**Student Rights & 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 section of the WJU Student Handbook, available online or in hard copy through the Dean of Student Development Office.

**Campus Activities**

The Office of Student Life 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 Swint Lounge and game room that include pool and ping pong tables. CAB annually works with the Student Government Association and other campus organizations in events such as Welcome Week, Homecoming Weekend and Last Blast.

The Office, with the assistance of the Rathskeller Board (students and faculty), also oversees the operation of the Rathskeller. 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.

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.

All WJU students are encouraged to participate in or take advantage of these various programs. Most events sponsored by the Office of Student Life, CAB and the campus Intramural Program are free of charge to WJU students and can be found advertised in the online events calendar.

**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, 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 Life 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 society 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.

**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.

**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 Manifest**, the University yearbook, is conceived, designed and distributed by students. The yearbook offers students the opportunity to test their writing, photography and marketing skills.

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.

**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. There are several meal plan options available to resident and commuter students. A Kiosk, located in the Acker Science Center, is designed to cater to faculty and students on the run. The dining 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 on the food service committee which meets on a regular basis and speaking to Parkhurst management. (Organized through the Student Government Association).

**Athletic Activities**

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

**Intercollegiate Athletics**

Wheeling Jesuit is a member of the West Virginia Intercollegiate Athletic Conference, composed of 16 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 lacrosse, women's fast-pitch softball and men's baseball.

**Intramurals**

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

**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.
Tuition, Room Deposits
Each entering student is required to make a tuition and also a room-damage deposit, if planning on being a resident student, upon notice of acceptance to Wheeling Jesuit University.

Each enrolled student is to make the above deposit(s) as an advanced payment. These deposits are required prior to pre-registration and housing assignments, if applicable, for the upcoming fall semester.

The tuition deposit is credited to the student’s account on the first billing of the corresponding semester. The room damage deposit is used to cover damages throughout the year and any remaining balance will be credited to the student’s account at the end of the spring semester and all damage charges have been applied.

Payments
All fees are due and payable by Aug. 1 for the fall semester and Dec. 31 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 deferred payment plan is accepted, registration will be incomplete and the student may not attend classes, or have access to residence hall or meal plans.

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 is included in admissions material or 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, 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 externally deferred 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.

Deferred Payment Plan
Wheeling Jesuit University accepts deferred payments made through a monthly payment plan endorsed by the University. For additional information about the deferred payment plan, a student should contact the University’s Student Account Office.

Refunds
Tuition
No refund of tuition is made after the ninth week of a semester. For students who withdraw from school, the date of formal withdrawal is the date the form is received by the Registrar. This date determines the refund.

No tuition adjustment on over-hour charges after drop/add. If a student changes his/her schedule going from full to part-time, no tuition adjustment will be made after drop/add.

Refund Schedule
The University follows the Title IV federal aid refund policy. Student tuition account refunds will be based on a weekly percentage using the table below:

<table>
<thead>
<tr>
<th>Completed Weeks</th>
<th>Weekly Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1</td>
<td>100%</td>
</tr>
<tr>
<td>Before 2</td>
<td>80%</td>
</tr>
<tr>
<td>Before 3</td>
<td>80%</td>
</tr>
<tr>
<td>Before 4</td>
<td>73%</td>
</tr>
<tr>
<td>Before 5</td>
<td>67%</td>
</tr>
<tr>
<td>Before 6</td>
<td>60%</td>
</tr>
<tr>
<td>Before 7</td>
<td>53%</td>
</tr>
<tr>
<td>Before 8</td>
<td>47%</td>
</tr>
<tr>
<td>Before 9</td>
<td>40%</td>
</tr>
<tr>
<td>No refunds after 9</td>
<td></td>
</tr>
</tbody>
</table>

The above refund applies to withdrawals from school, 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.

Financial Requirements for Finals and Graduation

All balances are to be paid in full prior to exams or graduation activities. If the student’s account has an outstanding balance, he/she may not be permitted to take final exams and/or 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.

Housing Contracts

A $100 room damage deposit must be paid prior to reserving a residence hall room for the following fall semester. This deposit will be refunded only after a written request is received by the Office of Housing and Residence Life Office prior to May 1st.

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.

Meals

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.

Additional

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 Directors.

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 determines the amount of payment due on a case-by-case basis.

Any student who wishes to move off campus at any point during an academic year must pick up an application in the Housing and Residence Life Office in Swint Hall 201.

Cardinal Card/Debit Card

Money may be deposited on your cardinal card/debit card for purchases at the Campus Shop or the Kiosk. 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.

Student Fees

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.

Technology Fee

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

Professional Writing Fee

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

Parking Permit

A parking permit fee for registering a car on campus is assessed annually.

Student Activity 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.

Health Fee

To assist with providing student health center services and keep cost to a minimum.

Student Recreation 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.

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.ed, 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.ed.

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.).

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 SAR, 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 Federal income tax return, the applicant parents’/spouse’s Federal income tax return and WJU verification form.

Standards of Satisfactory Academic Progress for Financial Aid

The following minimum requirements apply to all aid programs administered by Wheeling Jesuit University and appropriate agencies. Scholarships may require higher academic standards than those provided under the academic progress guidelines. Credit completion requirements and grade point requirements will be monitored at the end of each semester.

1. Credit Completion Requirement

   To determine enrollment status of a student, the University will use the number of credit hours the student is enrolled for on the first day of classes of each semester.

   A. Credit completion requirement for a full-time student (12+ credits/semester): the student is required to complete a minimum of 24 credits per academic year.

   B. Credit completion requirement for a three-quarter-time student (9-11 credits/semester): the student is required to complete a minimum of 18 credits per academic year.

   C. Credit completion requirement for a half-time student (6-8 credits/semester): the student is required to complete a minimum of 12 credits per academic year.

Note: A student who enrolls at different enrollment levels during the academic year will have the credit completion requirement pro-rated. Ex. Full-time enrollment - Fall semester and half-time enrollment -Spring semester, student must complete a total 18 credits during the academic year.

2. Grade Point Average Requirement

   A student must maintain at least a 2.000 cumulative grade point average (GPA). If the student’s GPA falls below the cumulative 2.000 requirement for two consecutive semesters, the student will automatically lose financial aid eligibility. Consequently, students must have a higher cumulative GPA in order to retain eligibility for scholarships and some state grants.

3. Length of Eligibility for Aid Funding

   A. PA, WV and other state grant programs 8 semesters

   B. WJU aid and scholarships 8 semesters

   C. Title IV Federal Aid

   Full-time student 8 semesters

   Three-quarter time student 12 semesters

   Half-time student 16 semesters

   Full-time student 8 semesters

   Three-quarter time student 12 semesters

   Half-time student 16 semesters

4. Re-establishing Financial Aid Eligibility

   If a student does not comply with either the grade point average or the credit completion academic progress requirements, the student is not eligible for financial aid funding until the deficiencies are resolved or appealed.
A. Summer School
A student who has not complied with the credit completion requirement may use the following summer to meet the academic progress requirements; however, no financial aid is provided to help defray summer school expenses. A student may attend summer school at Wheeling Jesuit University or another college to resolve credit hour deficiencies. However, the student should consult Wheeling Jesuit’s Registrar’s Office to ensure that the University will accept the transfer credits.

A student who has not complied with the grade point average requirement may use the following summer to meet the academic progress requirements; however, no financial aid is provided to help defray summer school expenses. A student must attend Wheeling Jesuit’s summer school in order to resolve a GPA deficiency. Transfer credits do not change your WJU cumulative GPA.

B. Appeal Process
A student may submit a written appeal to the Financial Aid Committee requesting an exception to the academic progress requirements. The appeal letter must indicate the extenuating circumstances that the student feels merit an exception to the requirements and how these circumstances have been resolved and will not hinder the student’s future progress. The student will receive a letter from the Financial Aid Committee indicating the results of the appeal.

Note: Once the student achieves the academic progress requirements, he or she must contact the Financial Aid Office. Financial aid may be reinstated based upon the availability of funds at the time and the student’s financial need.

Note: If a student is suspended or dismissed for academic or disciplinary reasons, the student is not eligible for financial aid. Upon readmission, the student would receive aid only if satisfactory progress had been maintained upon dismissal or suspension.

Wheeling Jesuit Aid Programs & Federal Aid Programs
Wheeling Jesuit University aid and federal aid will only be awarded for a total of four years. Students who take longer than four years to complete a bachelor’s degree may appeal to use financial aid for an additional semester. The Financial Aid Committee will review and decide the outcome of the appeal request. Most aid requires full-time enrollment. A minimum 2.0 cumulative GPA is required to maintain aid. Academic and merit scholarships may require a higher cumulative GPA. These requirements are discussed elsewhere in the Wheeling Jesuit University catalog. No student who has Wheeling Jesuit University aid as a part of a financial aid package will receive grant assistance in excess of his or her direct costs with the University.

Rights & Responsibilities of 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.

You have the right to:

• What financial assistance is available, including information on federal, state and institutional financial aid programs.
• The deadlines for submitting applications for the financial 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, 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 progress and what happens if you are not.

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. Intentional 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.

Federal and State Aid Programs

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.

West Virginia Grant
Awarded by the State of West Virginia, this grant is based upon financial need and a satisfactory academic record. Deadline April 15.

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.

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.

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.

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.jsp.

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

Federal Nursing Loan
This low-interest federal loan is available to nursing students with demonstrated financial need; limited funding.

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.

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.

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.

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 loans depend upon the borrower. For details on these loan programs, contact the Financial Aid Office.

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.

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.

Renewal of Financial Aid
Students must reapply for financial aid each academic year. To process your renewal FAFSA online, go to www.fafsa.ed 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.

Withdrawals, Refunds & Financial Aid
Withdrawal from a class or from all classes may impact aid eligibility, both in the semester in which the withdrawal occurs and subsequent semesters. Refunds are made based on University policy as specified in the “Refunds” section 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.

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.)

Presidential Scholarship
This scholarship is awarded at the time of acceptance, based on academic information submitted in the application for admission. This scholarship is renewable for four years based on academic performance. You must maintain a 2.7 cum. GPA freshman year and a 3.0 cum. GPA thereafter.

Dean’s Awards
This scholarship is awarded at the time of acceptance, based on academic information submitted in the application for admission. This scholarship is renewable for four years based on academic performance. You must maintain a 2.3 cum. GPA freshman year and a 2.5 cum. GPA thereafter.

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

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.

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.

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.

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).

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.asp.

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.

Aluise Family Scholarship
This scholarship benefits a student from: 1st preference – St. Joseph’s Central Catholic HS in Charleston, WV; 2nd preference – any other Catholic students from Cabell County, WV; 3rd preference – any student from WV.

Benedum Memorial Scholarship
Established in loving memory of Claude Worthington Benedum this scholarship benefits a student based on merit.

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.

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.

Board of Directors Scholarship
This scholarship is awarded at the President’s discretion.

Bodkin (Sally) Memorial Music Ministry Scholarship

Financial Information
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.

**Buckius/Burke Scholarship**
Established in honor of Rev. Walter A. Buckius, S.J. and Rev. Joseph A. Burke, S.J., on the occasion of their 60th anniversary as members of the Society of Jesus. This scholarship benefits a third-year student who demonstrates need and is majoring in either science or theology.

**Buckius/Loyola Scholarship**
Awarded to men and women who demonstrate the capacity for Christian leadership and distinguished citizenship.

**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.

**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.

**Chambers (James B.) Memorial Scholarship**
Awards available to residents of Ohio County, WV who demonstrate need and academic promise.

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

**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.

**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.

**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.

**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.

**CONSOL Fund**
To benefit a student from Greene County, PA.

**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.

**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.

**DiPiero (Vicky) ’65 Diversity Scholarship**
Awarded to a minority student from West Virginia. Student must maintain a cumulative GPA of 2.5.

**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.

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

**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.

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

**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.

**Hanzely (Rev. Joseph B., S.J.) Scholarship**
To benefit a student majoring in Science.
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 demonstrate need.

Heardt (William Randolph) Appalachian Scholarship
Established by the William Randolph Heardt 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.

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.

Hess (Margaret Blackford) Scholarship
For worthy students from West Virginia with priority given to Wheeling and Ohio County, WV students.

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.

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.

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.

Kirk (Frank H.) 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.

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.

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.

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.

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

McDonough (Bernard P. and Alma G.) Scholarship
A competitive scholarship based on high academic achievement for students from Wood County, WV.

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.

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.

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.

Nesbitt (Florence Irene) Scholarship
Established to benefit an undergraduate student.

O’Brien (Rev. James A., S.J., Ph.D.) Scholarship
Awarded to a junior or senior student from West Virginia. Recipient must be committed to community service. Preference will be given to a student serving in the Mother Jones House.

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.

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

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.
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.

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 50-mile radius of the University who demonstrate financial need.

Schroer Family Fund
To benefit a student that is currently enrolled in the Physical Therapy Program and who demonstrates need.

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.

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.

Summit 2000
Awarded to incoming or returning students who demonstrate need and have a minimum cumulative GPA of 2.5.

Szitar (Mary Magdalene) Memorial Scholarship
For deserving students, Catholic or non-Catholic, from Belmont County, OH who demonstrate need. Number and amounts vary.

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.

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.

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.

Winkler Memorial Scholarship
Established by Mr. and Mrs. Richard J. Winkler in loving memory of their daughter, Rose Marie Winkler Updegrave ‘81. This scholarship will be awarded annually to students who demonstrate need and are majoring in business administration.

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.

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.

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.

EXTERNALLY-SUPPORTED SCHOLARSHIPS

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.

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.

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.

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.gov/.

**OTHER WHEELING JESUIT UNIVERSITY AID PROGRAMS -**

**Campion Grant**
Awards are made by the University to athletes in basketball, cross country, track, swimming, soccer, golf, lacrosse, volleyball, baseball and softball. Team coaches recommend students for these awards; limited funding.

**Wheeling Jesuit University Grant**
Grants are made by the University on the basis of financial need; limited funding.

**Wheeling Jesuit University Employment**
Part-time employment is used to supplement other forms of financial assistance or to provide assistance for students who do not qualify for need-based aid; limited funding.

**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, and at a maximum of six credit hours per semester 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.
Directories
Directories

Board of Directors
William P. Bresnahan, Esq.
Rev. Timothy Brown, S.J.
John P. Buch
James S. Cullen
Sr. Kathleen Durkin, SSJ
Jane S. Friday
Rev. Michael Garanzini, S.J.
Rev. Thomas F. Gleeson, S.J.
David C. Haddad, Ph.D
Daniel L. Haller, Esq.
Margaret M. Helm, Chair
Christopher Helmrath
Donald H. Hofreuter, M.D.
Adam S. Monks, CPA
The Most Rev. George Murry, S.J.
Rev. Brian O’Donnell, S.J.
James R. O’Malley, CPA
Andrew Paterno
Rev. Gerard L. Stockhausen, S.J.
Rev. Kevin Wildes, S.J.
James Will
Carol A. Yarnall, USAF (ret.)
Robert Young, CPA
Emeritus Members:
L. Thomas Marchlen, Esq.
John B. Yasinsky, Ph.D.

President’s Cabinet
Sr. Francis Marie Thrailkill, O.S.U., Ed.D.
Interim President
J. Davitt McAteer, Esq.
Vice President for Sponsored Programs
Rev. James Fleming, S.J.
Vice President for Mission Effectiveness
Stephen D. Stahl, Ph.D.
Chief Academic Officer
W. Jay Van Horn, C.P.A.
Chief Financial Officer
Rebecca S. Forney
Dean of Enrollment Management
Christine A. Ohi-Gigliotti, Ph.D.
Dean of Student Development

TBA
Chief Advancement Officer
Kelly J. Klubert
Director of Alumni
Daniel W. Sancomb
Director of Athletics
Larry A. Skrzypek
Director of Physical Plant

Department Heads
Christine A. Ohi-Gigliotti, Ph.D.
Dean of Student Development
Stephen D. Stahl, Ph.D.
Chief Academic Officer
Daniel T. Feeley
Associate Vice President for Information Technology
Kelly L. Mummert
Director of the Library
Kathleen G. Tagg
Director of the Academic Resource Center
Eileen P. Viglietta
Director of the English Language Institute and International Student Center
James E. Brogan, Jr.
Director of Campus Ministry
Larry A. Skrzypek
Director of Athletics
Daniel W. Sancomb
Director of Athletics
Stephen R. Habursky
Director of Campus Safety and Security
Kelly J. Klubert
Director of Alumni
Christie L. Tomczyk
Director of Financial Aid
Rebecca S. Forney
Dean of Enrollment Management
Richard A. West
Registrar
Rachel R. Amos, M.S.W.
Director for Undergraduate Student Success
Charles A. Wood, Ph.D.
Director of Center for Educational Technologies
Directories

Jackie A. Shia
Assistant Director, Challenger Learning Center

J. Davitt McAteer, Esq.
VP for Sponsored Programs, Governmental Relations &
Legal Advisor

Alan Sherwin
Interim Director, Washington Operations, National Technology
Transfer Center
The Faculty
The date of first appointment to the University appears in parentheses at the end of each person’s name.

Professors Emeriti

**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

**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., West Virginia University

**C. James Goodwin (1973)**
Professor Emeritus of Psychology
A.B., College of the Holy Cross
M.A., University of Pittsburgh

**Caterina M. Abraham (2007.5)**
Clinical Assistant Professor of Physical Therapy
B.S., West Virginia University
M.S., Wheeling Jesuit University
M.P.H., West Virginia University
D.P.T., Temple University

**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

Professor Emeritus of Philosophy
B.A., St. Vincent College
M.A., West Virginia University

**Margaret S. Geroch (1979)**
Professor Emerita of Computer Science
B.A., The College of Wooster
M.A., West Virginia University

**Mary M. Moore (1978)**
Librarian Emerita
B.A., Wheeling Jesuit College
M.L.S., University of Pittsburgh

**Margaret S. Geroch (1979)**
Professor Emerita of Computer Science
B.A., The College of Wooster
M.A., West Virginia University

**Mary M. Moore (1978)**
Librarian Emerita
B.A., Wheeling Jesuit College
M.L.S., University of Pittsburgh

**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

**Joseph P. Sanders, S.J. (1965)**
Professor Emeritus of Sociology
B.A., M.A., Bellarmine College
M.A., Saint Louis University
Ph.D., Boston College

**Betty F. Thacker (1967)**
Professor Emerita of Biology
B.S., M.A., University of North Carolina
Ph.D., University of Delaware

**Robert J. Rush (1979)**
Professor Emeritus of Management and Organization Behavior
B.S., University of Tennessee
M.S., Ph.D., Ohio University

**Robert J. Rush (1979)**
Professor Emeritus of Management and Organization Behavior
B.S., University of Tennessee
M.S., Ph.D., Ohio University

**Paul A. Orr (1956)**
Professor Emeritus of English
B.A., Loyola College (Montreal)
M.A., McGill University
Ph.D., University of Notre Dame

**Thomas G. Wack (1965)**
Professor Emeritus of English
(Academic Dean, 1970-1977)
B.A., M.A., University of Notre Dame
Ph.D., University of Notre Dame

**John T. Wack (1961)**
Professor Emeritus of History
A.B., M.A., Ph.D., University of Notre Dame

**Joseph P. Sanders, S.J. (1965)**
Professor Emeritus of Sociology
B.A., M.A., Bellarmine College
M.A., Saint Louis University
Ph.D., Boston College

**Barbara A. Miller (1964)**
Librarian Emerita
B.S., M.S.L.S., Marywood College
M.L.S., University of Pittsburgh

**Thomas G. Wack (1965)**
Professor Emeritus of English
(Academic Dean, 1970-1977)
B.A., M.A., University of Notre Dame
Ph.D., University of Notre Dame

**Caterina M. Abraham (2007.5)**
Clinical Assistant Professor of Physical Therapy
B.S., West Virginia University
B.S., Wheeling Jesuit University
M.P.H., West Virginia University
D.P.T., Temple University

**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

**Joseph P. Sanders, S.J. (1965)**
Professor Emeritus of Sociology
B.A., M.A., Bellarmine College
M.A., Saint Louis University
Ph.D., Boston College

**Betty F. Thacker (1967)**
Professor Emerita of Biology
B.S., M.A., University of North Carolina
Ph.D., University of Delaware

**Robert J. Rush (1979)**
Professor Emeritus of Management and Organization Behavior
B.S., University of Tennessee
M.S., Ph.D., Ohio University

**John T. Wack (1961)**
Professor Emeritus of History
A.B., M.A., Ph.D., University of Notre Dame

**Joseph P. Sanders, S.J. (1965)**
Professor Emeritus of Sociology
B.A., M.A., Bellarmine College
M.A., Saint Louis University
Ph.D., Boston College

**Barbara A. Miller (1964)**
Librarian Emerita
B.S., M.S.L.S., Marywood College
M.L.S., University of Pittsburgh

**Mary M. Moore (1978)**
Librarian Emerita
B.A., Wheeling Jesuit College
M.L.S., University of Pittsburgh

**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

**Joseph P. Sanders, S.J. (1965)**
Professor Emeritus of Sociology
B.A., M.A., Bellarmine College
M.A., Saint Louis University
Ph.D., Boston College

**Betty F. Thacker (1967)**
Professor Emerita of Biology
B.S., M.A., University of North Carolina
Ph.D., University of Delaware

**Robert J. Rush (1979)**
Professor Emeritus of Management and Organization Behavior
B.S., University of Tennessee
M.S., Ph.D., Ohio University

**John T. Wack (1961)**
Professor Emeritus of History
A.B., M.A., Ph.D., University of Notre Dame

**Thomas G. Wack (1965)**
Professor Emeritus of English
(Academic Dean, 1970-1977)
B.A., M.A., University of Notre Dame

Faculty

**Caterina M. Abraham (2007.5)**
Clinical Assistant Professor of Physical Therapy
B.S., West Virginia University
B.S., Wheeling Jesuit University
M.P.H., West Virginia University
D.P.T., Temple University
James R. Ashton (1979)
Associate Professor of Modern Languages
B.A., M.A., (Spanish), M.A., (French),
University of Montana
Ph.D., University of Texas at Austin

Janet L. Bischof (2005)
Assistant Professor of Nursing
B.S.N., West Liberty State College
M.S., The Ohio State University
Ph.D., Duquesne University

Margaret H. Bowman (1980)
Associate Professor of Nursing
B.S.N., West Virginia University
M.S.N., University of Maryland
Ph.D., Case Western Reserve University

Kelly M. Brewer (2010)
Instructor in Nursing
A.D.N., Westmoreland County Community College
B.S.N., California University of Pennsylvania
M.S.N., Duquesne University

Marc A. Brodie (2005)
Associate Professor of Mathematics
B.A., Ithaca College
M.A., M.M., Ph.D., SUNY at Binghamton

Joseph S. Brumble (1981)
Associate Professor of English
B.A., Randolph-Macon College
M.A., Old Dominion University
Ph.D., University of Delaware

Associate Professor of Physics
B.S., Texas A&M University
M.S., Ph.D., University of Pittsburgh

Associate Professor of English/Professional Writing
B.A., Cornell University
M.A.T., Duke University
M.A., Indiana University School of Journalism

M. Roberta Caswell (2006)
Assistant Academic Resource Center Coordinator
B.A., West Liberty State College
M.A., West Virginia University

Elisabeth M. Chalovich (2006)
Visiting Assistant Professor of Biology
B.S., Boston University
Ph.D., University of Pittsburgh

James E. Coffield (2005)
Assistant Professor of Chemistry
B.S., University of the South
Ph.D., The University of Tennessee

Harold A. Cook (2007.5)
Professor of Biology
B.S., West Liberty State College
M.S., Ph.D., West Virginia University

Dominick A. DeFilippis (1984)
Associate Professor of Modern Languages
B.S., Georgetown University
M.A., New York University
Ph.D., University of Pittsburgh

David N. Dennis (2007)
Clinical Instructor in Athletic Training
B.S., West Virginia University
M.S., University of Pittsburgh

Lawrence N. Driscoll (2010)
Associate Professor of Criminal Justice
B.A., M.A., University of Pittsburgh
Ph.D., Indiana University of Pennsylvania

Mark V. Drnach (1999)
Clinical Associate Professor of Physical Therapy
B.S., University of Pittsburgh
M.B.A., West Virginia University
D.P.T., Temple University

Norman V. Duffy (1996)
Professor of Chemistry
B.S., Ph.D., Georgetown University

Peter D. Ehni (1990)
Associate Professor of Physics
B.S., Wheeling College
M.S., Ph.D., University of Maine

Cecilia J.Einloth (1995)
Associate Academic Resource Center Coordinator
B.S., Wheeling College
M.S., University of Maine

Derek A. Elliott (2010)
Visiting Instructor in Philosophy
B.A., B.S., Wheeling Jesuit University
M.A., Duquesne University

Marybeth Emmerth (1989)
Assistant Professor;
Director of Respiratory Therapy Program
B.S., Wheeling Jesuit College
M.S., University of Pittsburgh
Theodore S. Erickson (1980)
Professor of Mathematics
B.A., University of South Dakota
M.A., Ph.D., University of Massachusetts at Amhurst

Helen M. Faso (1980)
Professor of Nursing
B.S.N., West Virginia University
M.S.N., Medical College of Georgia
Ph.D., University of Texas

Robert F. George (2007)
Assistant Professor & Director of Nuclear Medicine Technology Program
B.A., Harding University
M.A., University of Northern Colorado
Ph.D., University of New Mexico

Homayoun Hajiran (1982)
Professor of Economics and Business Administration
B.S., National University of Iran
M.S., M.B.A., University of Southern Mississippi
Ph.D., University of Georgia

David R. Hanna (2007)
Clinical Assistant Professor and Director of Program Athletic Training
B.S., West Liberty State College
M.S., West Virginia University
D.P.T., Wheeling Jesuit University

Michael D. Hoops (2008)
Assistant Professor of Chemistry
B.S., Wheeling Jesuit University
M.S., Northwestern University
Ph.D., University of Cincinnati

Debra B. Hull (1981)
Professor of Psychology
B.A., Alma College
M.A., Ph.D., Kent State University

Associate Professor of Psychology
B.A., Lynchburg College
M.A., Ph.D., The University of Mississippi

Alison Kregel (2008)
Clinical Assistant Professor of Physical Therapy
B.A., M.S.P.T., Wheeling Jesuit University
D.P.T., Wheeling Jesuit University

Barbara A. Kulpa (1992)
Academic Associate in Nursing
B.S.N., Wheeling Jesuit College
M.S.N., West Virginia University

Rose M. Kutlenios (1980)
Professor of Nursing
B.S.N., Duquesne University
M.N., Ph.D., University of Pittsburgh

Tadeusz Laska (1996)
Instructor in Physical Therapy
B.S., M.S., Academy of Physical Therapy
Krakow, Poland
D.P.T., Chatham University

Paula E. Lestini (2008.5)
Assistant Librarian
B.S., West Liberty College
M.L.I.S., University of Pittsburgh

Leslie L. Liedel (1999)
Associate Professor of History
B.S., M.A., East Carolina University
Ph.D., Kent State University

Jonathan H. Lief (1977)
Professor of Biology
A.B., Princeton University
Ph.D., University of Pittsburgh

Associate Professor of Physics
B.A., Tufts University
M.S., Ph.D., University of Colorado

Paula C. Makris (2005)
Assistant Professor of English
B.A., Indiana University
M.A., Ph.D., Case Western Reserve University

John E. Mansuy (1988)
Professor of Management and Quantitative Business
B.S., The Ohio State University
M.S.E., Ph.D., West Virginia University

Allen H. Marangoni (1983)
Associate Professor of Physical Therapy
B.S., Wheeling College
B.S., Wheeling Jesuit College
B.S., West Virginia University
M.M.Sc., Emory University
Ed.D., Nova Southeastern University

Jennifer M. McCracken (2010)
Clinical Instructor in Nursing
B.S.N., Waynesburg College
M.B.A., M.S.N., Waynesburg University
Maureen H. McKenna (1999)  
Associate Professor of Physical Therapy  
M.C.S.P., Middlesex Hospital,  
London, England  
M.A., Ph.D., Pacifica Graduate Institute

Charles A. Millick (2005)  
Associate Professor of Management  
B.A., U.S. Military Academy  
M.B.A., Xavier University

Kelly L. Mummert (2004)  
Associate Librarian and Director of the Library  
B.A., Bethany College  
M.L.I.S., University of Pittsburgh

Connie L. Myer (2007)  
Assistant Professor & Director of the Professional Education Department  
A.B., Fairmont State College  
M.A.,Ed.D., West Virginia University

Jane M. Neuenschwander (2009)  
Instructor in Professional Education  
B.S., Miami University  
M.S., West Virginia University

Daniel M. O’Hare (2010)  
Assistant Professor of Theology and Religious Studies  
B.A., Grace College  
M.A., Grace Theological Seminary  
Ph. D., University of Notre Dame

Julie A. Osland (2004)  
Associate Professor of Psychology  
B.A., Central College  
M.A., Ph.D., SUNY Albany

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

Theodore N. Pauls (2007)  
Assistant Professor of Marketing/Management  
B.S., M.B.A., West Virginia University

Associate Professor of Political Science  
B.S., North Central College  
M.A., Ph.D., Northern Illinois University

Assistant Professor of Political Science  
B.A., Xavier University  
M.A., Ph.D., West Virginia University

Patrick A. Plunkett (1998)  
Associate Professor of Computer Science  
B.A., Montana State University  
M.S., University of Idaho

Elizabeth K. Prather (2009)  
Instructor in Mathematics  
B.A., College of St. Benedict  
M.A., M.S., University of Kentucky

Denise L. Radaker (2007.5)  
Academic Associate in Modern Languages  
B.A., Bethany College  
M.S., McDaniel College

Mary E. Railing (1992)  
Associate Professor of Chemistry  
B.S., Chatham College  
M.S., University of Pittsburgh  
Ph.D., West Virginia University

Kenneth E. Rastall (1992)  
Associate Professor of Biology  
B.S., Lake Superior State University  
M.A.T., Central Michigan University  
Ph.D., West Virginia University

Bryan C. Raudenbush (1998)  
Associate Professor of Psychology  
B.S., Pennsylvania State University  
M.S., Shippensburg University  
Ph. D., University of Cincinnati

Craig E. Ruby (2006)  
Assistant Professor of Physical Therapy  
B.S., University of Pittsburgh  
M.P.T., Slippery Rock University  
D. Ed., Indiana University of Pennsylvania

Jeffrey C. Rutherford (2008)  
Assistant Professor of History  
B.A., SUNY at Binghamton  
M.A., SUNY at Albany  
Ph.D., University of Texas at Austin

Marlene E. Sebeck (1992)  
Academic Associate in English  
B.A., Fairmont State College  
M.A., West Virginia University
Jody M. Seabright (2006)
Assistant Professor of Nursing
B.S.N., Wheeling Jesuit University
M.S.N., West Virginia University

Donald M. Serva, S.J. (1997)
Academic Associate in Biology
B.S., University of Detroit
M.S., Case Western Reserve University
M.Div., S.T.M., University of California

Robert D. Shurina (2000)
Professor of Biology
B.S., The Pennsylvania State University
Ph.D., Thomas Jefferson University

Donna L. Simpson (1990)
Associate Professor of History
B.A., Hood College
M.A., Ph.D., University of Maryland

Ann M. Smith (2010)
Associate Professor of Nursing
A.D.N., West Virginia Northern Community College
B.S.N, M.S.N., Wheeling Jesuit University

Associate Professor of Accounting
B.S., M.B.A., Wheeling College
M.P.A., West Virginia University

Darlene M. Sperlazza (2008.5)
Instructor in Nursing
B.S.N, M.S.N., Wheeling Jesuit University

Christopher M. Stadler (2008)
Assistant Professor of Political Science
B.S., Embry-Riddle Aeronautical University
M.A., University of Southern California
M.A., Ph.D., New York University

Professor of Theology
B.A., University of Detroit
M.A., Indiana University
M.Div., Loyola University
Ph.D., Michigan State University

Benjamin M. Stout III (1990)
Professor of Biology
B.S., West Virginia University
M.S., Tennessee Technological University
Ph.D., Virginia Polytechnic Institute and State University

James H. Stover (2007)
Instructor in Philosophy
B.A., Maranatha Baptist Bible College
Th.M., Grace College & Seminary
M.A., Duquesne University

Kathleen G. Tagg (2002)
Associate ARC Coordinator and Director of the ARC
B.S., St. Joseph Calumet College
M.A., West Virginia University

Angela C. Thompson (2009)
Assistant Professor of Nursing
B.S., M.S.N., West Virginia University

Robert F. Troeger (2007)
Instructor in Fine Arts
M.M., D. The Cleveland Institute of Music &
Case Western Reserve University
M.A., Yale Divinity School &
Yale Institute of Sacred Music

Cam M. Twarog (2010)
Clinical Instructor in Respiratory Therapy
B.S., Wheeling Jesuit University
M.B.A., Franklin University

Kathryn A. Voorhees (1990)
Professor of English
B.A., West Chester University
M.A., Villanova University
Ph.D., Temple University

Marimar D. Weeks (2009)
Clinical Instructor in Nursing
B.A., B.S., Wheeling Jesuit University

Daniel Weimer (2006)
Assistant Professor of History
B.A., John Carroll University
M.A., Ph.D., Kent State University

Beverly J. B. Whelton (2001)
Associate Professor of Philosophy
B.A., Northeastern University
M.S.N., M.A., Ph.D., The Catholic University of America

John W. Whitehead III (1991)
Assistant Professor and Director of Fine Arts
B.A., Eastern College
M.A., Temple University
Directories

Deborah A. Wilkinson (2006.5)
Clinical Assistant Professor of Nuclear Medicine
B.S., Wheeling Jesuit College
M.S.L., Wheeling Jesuit University

Kristopher L. Willumsen (1990)
Associate Professor of Theology
B.A., Syracuse University
M.A., Ph.D., The Catholic University of America

Professor of Accountancy and Business Administration
B.S., Wheeling College
M.B.A., Duquesne University
Ph.D., University of Mississippi

Adjunct Faculty

Thomas J. Conti (2002.5)
Lecturer in Chemistry
B.S., St. Vincent College
M.A., State University of New York, Binghamton
Ph.D., St. Thomas Institute

J. David Diosi (2005.5)
Lecturer in Business
B.S., Miami University
M.B.A., Wheeling Jesuit University

Daniel L. Frizzi, Jr. (2005)
Lecturer in Business
B.S., Ohio University, Belmont
J.D., Ohio Northern University

H. Lawrence Jones (1998.5)
Lecturer in Professional Education
B.A., Marshall University
M.A., M.A., Ed.D., West Virginia University
M.B.A., Wheeling Jesuit University

Nahla N. Khoury (1987)
Lecturer in Nursing
B.S., American University of Beirut
Ph.D., West Virginia University

Joseph M. Purpura (1987)
Lecturer in Chemistry
B.S., Wheeling Jesuit College
M.S., West Virginia University

Georgia Tambasis (2006.5)
Lecturer in Fine Arts
B.S.N., Thiel College
B.F.A, Youngstown State University
M.F.A., University of Texas at San Antonio
Index

A
Academic Faculty ........................................ 12
Academic Integrity .................................... 22
Academic Probation ................................ 24
Academic Programs ................................. 19
Academic Standing ................................ 24
Academic Resource Center ................. 13
Access to Student Records ................. 15
Accelerated Certification for Teaching .... 108
Accreditation ........................................... 5
Activities Board ................................... 128
Administration Directory ................. 142
Admissions
Advanced Placement ......................... 9
Early Admissions .................................. 9
Freshmen .............................................. 8
International Students .................... 8
Requirements ..................................... 8
Transfer ................................................ 8
Adult Education ................................... 29
Aid, Financial ..................................... 133
Appeal Process ..................................... 25
Application Procedures.................. 8
Athletic Activities .............................. 129
Attendance Policies ......................... 25
Auditing Courses ............................. 26
Awards ................................................. 27

B
Biology ................................................. 36
Board of Directors ................................ 142
Business Department ....................... 42

C
Cardinal Connection ....................... 129
Career Development Placement .......... 127
Changes in Registration ..................... 26
Chemistry ............................................ 48
Class Standing ..................................... 24
Classical Studies ................................. 51
Clinical Progression Policies .......... 25
Clubs ................................................... 128
Communications .................................. 52
Computer Center ................................ 13
Core Curriculum
Distribution requirements .................. 16
Philosophy of ...................................... 16
Correspondence Directory ............... 10
Counseling .......................................... 127
Campus Activities Board ................. 128
Course Changes and Withdrawals ....... 26
Course Limitations ......................... 26
Courses of Instruction
Accountancy ....................................... 43
Athletic Training ............................... 33
Biology ................................................ 36
Business .............................................. 42
Catholic Studies ................................. 48
Chemistry ............................................ 48
Classical Studies ................................. 51
Communication ................................. 52
Criminal Justice ................................. 59
Economics .......................................... 45
Engineering ......................................... 62
English ............................................... 62
Finance .............................................. 46
Fine Arts ............................................. 66
First Year Program ......................... 70
French ............................................... 86
General Science ................................. 70
General Studies ................................. 71
Health Professions ............................. 71
History .............................................. 72
Honors Program ................................ 75
Information Science ......................... 76
Integrated Marketing Communications . 80
International Studies ....................... 81
Literature ............................................ 64
Management ........................................ 46
Marketing ............................................ 47
Mathematics ......................................... 82
Modern Languages .......................... 85
Nuclear Medicine Technology .......... 88
Nursing ................................................. 91
Peace Studies ....................................... 94
Philosophy .......................................... 94
Philosophy, Political and Economic .... 94
Physics ............................................... 98
Political Communication ................ 101
Political Science ................................. 102
Professional Education Program ...... 105
Psychology ......................................... 111
Respiratory Therapy ......................... 114
Social Science ...................................... 118
Spanish ................................................. 87
Statistical Analysis ............................. 118
Teacher Preparation Program .......... 105
Theology/Religious Studies ............ 119
Web Mastering/Web Authoring .................................. 122
Women's Studies .................................................. 123
Credit by Examination .......................................... 21
Credit Earned at other Institutions .............................. 8
Credit/No Credit .................................................... 23
Credits Required for Graduation ................................. 22
Criminal Justice ...................................................... 59
Crossover Policy ..................................................... 26

D
Dean's List .......................................................... 27
Deferred Payment ................................................. 131
Degree Requirements ........................................... 22
Degrees ................................................................ 19
Deposits ............................................................... 131
Disability Services .................................................. 13, 127
Dismissal (Academic) ............................................. 24
Double Major .......................................................... 19
Drop/Add Regulations ............................................ 26

E
Early Admissions ...................................................... 9
Economics, Courses in ............................................. 45
Education, (Professional Education Department) ........ 20, 105
Engineering ............................................................ 62
English .................................................................... 62
English Language Institute ........................................ 21
Evening Program ....................................................... 26
Examinations ............................................................ 21

F
Faculty ................................................................. 12
Faculty Directory .................................................... 144
Federal and State Aid .............................................. 135
Fee Schedule ........................................................... 131
FERPA ................................................................. 15
Finance ................................................................. 46
Financial Assistance
  Application Process .............................................. 133
  Consumer rights/responsibilities ......................... 134
  Grants ................................................................. 140
  Renewal policies .................................................. 136
  Scholarships ........................................................ 136
Financial Information .............................................. 131
First Year Program .................................................. 70
Food Service .......................................................... 129
Foreign Student Admissions .................................... 8
French ..................................................................... 86

G
Grade Point Averages ............................................. 22
Grade Replacement Policy ....................................... 22
Grading ................................................................ 22
Graduate Programs ............................................... 29
Graduation Honors ................................................ 27
Graduation Requirements ....................................... 22
Grants ................................................................. 140

H
Handicapped Services ............................................. 127
Health Careers Advisement ..................................... 29
Health Services ...................................................... 127
High School Students/Special Courses ..................... 140
History .................................................................... 72
Honorary Societies ................................................ 27
Honors/Achievement ............................................. 27
Honors Program (Laut) .......................................... 27, 75
Housing, Contracts ................................................ 132

I
Incomplete Grades .................................................. 22
Independent Major ................................................. 20
Independent Study ............................................... 20
Information Science ............................................. 76
Intercollegiate Athletics ....................................... 129
International Studies ............................................ 81
International Students .......................................... 8, 21
Internships ............................................................ 20

J
Jewelweed ............................................................... 129
Jobs, Campus ......................................................... 135, 140

L
Languages ............................................................. 85
Laut Honors Program ............................................. 27, 75
Laut Scholarship .................................................... 136
Law (pre-professional) ......................................... 29
Library ................................................................. 12
Literature .............................................................. 64
Loans ................................................................. 135
Lucent ................................................................. 126

M
Major/Minor Policy ............................................... 19
Manifest ............................................................... 129
Management ......................................................... 46
Marketing ............................................................. 47
Mathematics ......................................................... 82
Media Center ........................................................ 13
Medical Certificate ............................................... 9
Medicine (pre-professional) .................................... 29
Minors, List of ....................................................... 19
<table>
<thead>
<tr>
<th>Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern Languages</td>
<td>85</td>
</tr>
<tr>
<td>Motor Vehicle Policy</td>
<td>127</td>
</tr>
<tr>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Non-degree Status</td>
<td>26</td>
</tr>
<tr>
<td>Nondiscrimination Policy</td>
<td>5</td>
</tr>
<tr>
<td>Nuclear Medicine Technology</td>
<td>88</td>
</tr>
<tr>
<td>Nursing</td>
<td>91</td>
</tr>
<tr>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Off-campus Study</td>
<td>20</td>
</tr>
<tr>
<td>Orientation</td>
<td>126</td>
</tr>
<tr>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Pass/Fail Option</td>
<td>23</td>
</tr>
<tr>
<td>Payments</td>
<td>131</td>
</tr>
<tr>
<td>Peace Studies</td>
<td>94</td>
</tr>
<tr>
<td>Performing Arts Committee</td>
<td>128</td>
</tr>
<tr>
<td>Philosophy</td>
<td>94</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>29</td>
</tr>
<tr>
<td>Physics</td>
<td>98</td>
</tr>
<tr>
<td>Placement Examination</td>
<td></td>
</tr>
<tr>
<td>Advanced Placement</td>
<td>9</td>
</tr>
<tr>
<td>CLEP Test</td>
<td>9</td>
</tr>
<tr>
<td>Political and Economic Philosophy</td>
<td>94</td>
</tr>
<tr>
<td>Political Science</td>
<td>102</td>
</tr>
<tr>
<td>Probation (Academic)</td>
<td>24</td>
</tr>
<tr>
<td>Pre-professional programs</td>
<td>29</td>
</tr>
<tr>
<td>Psychology</td>
<td>111</td>
</tr>
<tr>
<td>Publications, Student</td>
<td>129</td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Recreation Center</td>
<td>129</td>
</tr>
<tr>
<td>Refund Policy</td>
<td>131</td>
</tr>
<tr>
<td>Reinstatement after Suspension</td>
<td>24</td>
</tr>
<tr>
<td>Religious Studies</td>
<td>119</td>
</tr>
<tr>
<td>Repetition of Courses</td>
<td>23</td>
</tr>
<tr>
<td>Requirements for Admission</td>
<td>8</td>
</tr>
<tr>
<td>Requirements for Graduation</td>
<td>22</td>
</tr>
<tr>
<td>Residence Halls Program</td>
<td>127</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>114</td>
</tr>
<tr>
<td>Room Deposit</td>
<td>131</td>
</tr>
<tr>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Schedule Changes</td>
<td>26</td>
</tr>
<tr>
<td>Scholarships</td>
<td>136</td>
</tr>
<tr>
<td>Second Bachelor's Degree</td>
<td>20</td>
</tr>
<tr>
<td>Social Science</td>
<td>118</td>
</tr>
<tr>
<td>Spanish</td>
<td>87</td>
</tr>
<tr>
<td>Student Activities</td>
<td>128</td>
</tr>
<tr>
<td>Student Government</td>
<td>129</td>
</tr>
<tr>
<td>Student Records</td>
<td>15, 25</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>21</td>
</tr>
<tr>
<td>Summer School</td>
<td>26</td>
</tr>
<tr>
<td>Suspension</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>24</td>
</tr>
<tr>
<td>Disciplinary</td>
<td>24</td>
</tr>
<tr>
<td>T</td>
<td></td>
</tr>
<tr>
<td>Teacher Preparation Program</td>
<td>20, 105</td>
</tr>
<tr>
<td>Theology</td>
<td>119</td>
</tr>
<tr>
<td>Transcripts</td>
<td>25</td>
</tr>
<tr>
<td>Transfer Student</td>
<td></td>
</tr>
<tr>
<td>Admissions</td>
<td>8</td>
</tr>
<tr>
<td>Credit</td>
<td>9</td>
</tr>
<tr>
<td>Tutorials</td>
<td>20</td>
</tr>
<tr>
<td>V, W</td>
<td></td>
</tr>
<tr>
<td>Veterans Service</td>
<td>135</td>
</tr>
<tr>
<td>Web Mastering/Web Authoring</td>
<td>122</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>26</td>
</tr>
<tr>
<td>Women's Studies</td>
<td>123</td>
</tr>
<tr>
<td>Work Study Program</td>
<td>135</td>
</tr>
</tbody>
</table>