

Juniata College Online Catalog 2015-2016

Juniata's Mission:

Juniata's mission is to provide an engaging personalized educational experience empowering our students to develop the skills, knowledge and values that lead to a fulfilling life of service and ethical leadership in the global community.

Juniata is an independent, privately supported, coeducational institution committed to providing a liberal arts education to qualified students regardless of sex, religion, race, color, national origin, ancestry, marital status, sexual orientation or disability. College policies comply with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable federal, state and local statutes, regulations and guidelines. A complete affirmative action policy is available in the Office of Human Resources.

Catalog provisions are not to be regarded as an irrevocable contract between the student and Juniata. While every attempt has been made to assure correct information, the College reserves the right to change any provisions or requirements when deemed appropriate.

The College

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Brief History

Juniata is an independent, co-educational college of liberal arts and sciences, founded in 1876 by members of the Church of the Brethren to prepare individuals “for the useful occupations of life.”

Juniata’s first classes were held on April 17, 1876 in a cramped, second-story room over a local printing shop. Two women and one man were in attendance. Unlike the common model at the time, Juniata was co-educational from the beginning. In 1879, classes were

moved to Founders Hall (completely restored in 2009) on the present Juniata campus in Huntingdon. The town is a county seat of 10,000 and lies in the scenic Central Pennsylvania mountains, mid-way between Interstate 80 and the Pennsylvania Turnpike.

The Juniata community now has available 43 buildings on over 800 acres, including the 316-acre Baker-Henry Nature Preserve. In addition, The Raystown Field Station, located on Raystown Lake encompassing a complete watershed, consists of 365 acres for exclusive College use and a full 29,000 acres for additional research and study. The Field Station is leased from the Army Corps of Engineers and provides one of the most distinctive opportunities in environmental science in the nation.

As of May 31, 2015, Juniata's total financial assets were \$208.3 million. For the 2014-2015 fiscal year, the total operating budget of the College is \$52.8 million.

Primarily residential (85% of degree seeking students live on campus), Juniata maintains an enrollment of approximately 1,600 students. Sixty percent are from Pennsylvania. Last year's student body represented 42 states and territories, and 44 foreign countries.

Commendations

Juniata is mentioned in scores of diverse guides, articles, and measures of colleges and universities. Regardless of evaluation methods, the College is consistently praised as supportive, innovative, and a model for the best that liberal arts education can be.

- We are praised for our overall offerings in *The College Solution: A Guide for Everyone Looking for the Right School at the Right Price*, *Baron's Best Colleges*, *Peterson's Competitive College Guide*, *U.S. News and World Report*, *The Princeton Review*, and *The Fiske Guide*.
- We are recognized for our distinctive focus on experience and excellent outcomes in Lauren Pope's *Colleges That Change Lives*, David L. Marcus's *Acceptance*, Weinstein's *Making a Difference College Guide*, Forbes.com's rankings of 3,200 colleges and universities in the U.S., the Teagle Foundation's study, "The Nation's 13 Best Performing Colleges," and *The Unofficial, Unbiased, Insiders Guide to the 331 Most Interesting Colleges*.
- Our accessibility and openness to students from diverse economic, social, racial and ethnic backgrounds has been recognized by the *Center for Student Opportunity's College Access Guide* and Leland Miles' *Provoking Thought: What Colleges Should Do for Students*.
- We are lauded for our commitment to service and community in guides like *Rugg's Recommendations on Colleges*, usnews.com's "America's Best Colleges--A+ Options for B Students," Entrepreneur.com's "Colleges with an Entrepreneurship Emphasis," *Washington Monthly's College Rankings*, Don Asher's *Cool Colleges*, and *ELLEgirl* magazine's "Top 50 Colleges that Dare to be Different."

- Our students themselves talk about the College in *Vault's College Buzz Book*, *College Prowler*, and, believe it or not, *Cosmo Girl Magazine's* "The Top 100 Colleges and Universities."

Academic Principles

The success of students is directly linked to Juniata's strong, dedicated faculty who consider teaching and advising their primary responsibilities.

The College supports a flexible, "value-centered" curriculum, wherein students may design their own Programs of Emphasis, which often transcend traditional majors. Programs of Emphasis may be tailored to personal goals and needs, may lead to either a B.A. or B.S. degree, and may include courses from among 19 academic departments. Each student consults with two faculty advisors and may also seek counsel from Career Services staff and Counseling staff. Coursework takes place both on and off campus and includes such varied experiences as seminars, fieldwork, "on-the-job" internships, study abroad, independent study and research.

Juniata's Approach to Student Development

As a community that focuses on the whole person, Juniata recognizes the importance of both curricular and co-curricular aspects of student development. Juniata has bridged the traditional higher education dichotomy between academic affairs and student affairs by merging these two branches of the College, a structural move that integrates the student's college experience. Academic affairs and student services officers meet regularly to coordinate efforts to meet students' educational and social development.

Accreditation

Juniata College is accredited by the Commission on Higher Education of the Middle States Association of Colleges, 3624 Market Street, Philadelphia, PA 19104, 215-662-5606.

The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation. The College is on the approved list of the American Association of

Collegiate Registrars and Admissions Officers and is certified by the American Chemical Society and the Council on Social Work Education. The Education Department is authorized by Pennsylvania's Department of Education to offer teacher certification programs in PreK-4th grade, and 12 content areas in Secondary Education. In addition, the Department is awaiting approval of the new Dual Special Education and PreK-4 certification program. The College is a member of the National Association of Independent Colleges and Universities, the Pennsylvania Association of Colleges and Universities, the Council of Independent Colleges, and numerous other state and national professional associations.

The Campus

Instructional Technology

Effectively using technology to strengthen the teaching-learning process is a high priority at Juniata. A Gigabit and fiber based network backbone provides connectivity in residence halls, classrooms, laboratories and offices. All students are automatically given accounts to access the network, print and e-mail servers, and the UNIX web servers. These accounts provide e-mail, Internet access, access to the Juniata on-line library catalogs, and web-based searches for all students and faculty. In addition, the college provides wireless access in all academic buildings and residence halls. Currently, several major public computing areas provide students access to Windows and Mac OSX, word processing, spreadsheet, presentation, statistics and database software in addition to e-mail and Internet access. All classrooms are fitted with computer projection equipment (or large screen LCD), laptop hook-ups, and sound systems. All students are required to have access to a laptop. The college portal, 'the Arch', provides students with quick and easy access to online college services such as grades, course registration, event scheduling, campus calendars and job listings.

A description of individual facilities follows:

Brumbaugh Academic Center - including Dale Hall

Geographic Information Systems Lab (B201) is a classroom/laboratory equipped with 18 Windows based machines and software focused on teaching and research using GIS tools. While this lab is primarily used for GIS, the equipment is available for general student use outside of normal class hours.

Networking and Telecommunications Lab (C102) - This room is primarily used as an Information Technology and Computer Science classroom, but is available to all disciplines for daytime academic activities. This classroom has 24 Windows-based workstations with flat panel monitors, including an instructor's podium and SmartBoard. The true benefit from this room stems from the fact that there is a complete, private, internal network that is separate from Juniata's network (EagleNet). This network allows students to experiment with building their own servers, client workstations, and private subnetworks. There are dedicated machines, network equipment, simulated T1, and an

internal wiring system to accommodate this private lab. This lab is not considered to be a public lab, but has been used to support Computer Science research projects, such as simulating a firewall and traffic-shaping design.

The Technology Solutions Center (C107) provides faculty, staff and students the latest hardware, software and training to maximize instructional and daily use of information technology. Juniata recognizes the importance of technology in today's society and brings that technology into the classroom and across campus through the Solutions Center . Software supported at the Center includes most of the newest media production software as well as standard office applications. With digital video editing software, digital video cameras available for student and faculty use, and staff to support projects, the Technology Solutions Center is the hub of digital video production for classroom projects. The Solutions Center is always investigating new technologies (hardware and software). The Center has IMAC workstations that can boot to either Windows or Mac OS X and 15 laptops for faculty, staff and student checkout.

In addition to the technology housed in the Solutions Center, it is also home to much of the computer support and training on campus. The Help Desk provides support to campus employees and classroom technology. The Solutions Center is responsible for the planning, deployment and maintenance of all classroom technology across campus. In addition, Sound systems and other media for special events are maintained and coordinated through Solutions Center.

Art and Theatre Studies Lab (P107) provides faculty, staff and students the latest hardware, software for theatre and arts production. This lab houses 20 state of the art iMacs with a full compliment of software and high-end color printing.

On Demand Education Resource and Collaboration Center (C229) is an area set aside for students specifically in the Innovations for Industry course sequence to gather in their respective teams to work on their client projects. Dedicated hardware, software and media presentation equipment is housed in this center specifically for the I4I course.

Physics Labs (P200 and P201) - Classrooms/laboratories equipped with 8 windows based machines and software focused on teaching and research in Physics. These labs are used almost exclusively by Physics students but are available to all students outside of scheduled class times.

Good Hall

Video Conference Room (G201) This room is equipped with LifeSize video conferencing equipment to facilitate distance education and online meetings.

Psychology Lab (G107) This classroom/laboratory houses 11 Windows based computers focused on teaching and research in Psychology. This room is dedicated to the Psychology students and faculty based on the nature of their research.

Beeghly Library

The library has a laptop checkout program that enables students to sign out one of 15 wireless laptops for use anywhere within the library. There are also numerous ports in the library for wired connection to the network.

Within the Reference Area are 30 computers used primarily by students and faculty for research using the library's online resources of over 100 databases and 10,000 periodicals, and access to over 200,000 e-books. The Library has six collaborative tables with large screens for group work with laptops, and two high speed printers.

The **Writing Center/Library Instruction Room** in the basement of Beeghly Library is a multi-purpose facility. During the day it serves as a classroom for teaching library research techniques and resources, in the evening it serves as a writing center for peer tutoring in writing skills. The room offers the capability for hands on teaching, especially of library technology skills, with MAC workstations, video presentation equipment, and several white boards. At the same time, in the evening it can provide a quiet and private place for students to go in order to receive personal help with their writing assignments. When the room is not in use for classes or tutoring, it is available as open computer lab space for the campus.

Ellis Hall

The Ellis Hall (1969 upgrades 2008) is noted for its imposing entrance columns, and honors Juniata's sixth and seventh presidents, Charles C. and Calvert N. Ellis. A focal point of student life, Ellis houses the Career Services Office, Public Safety Office, Information Desk, Office of Conferences and Events, Office of Student Activities, the bookstore, post office, broadcasting center for WKVR radio, and offices for Student Government, Juniata Activities Board (JAB), The Juniatian, Laughing Bush, and other student organizations. In addition, the dining hall (the 680-seat **Baker Refectory (renovated 2013)**), **Eagles Landing (renovated 2008)**, a ballroom, student lounge areas, and conference rooms are here.

von Liebig Center for Science

Public Lab (vLCS 2073) -This classroom/laboratory is located in the von Liebig Center for Science. It contains 18 windows-based computers, SmartBoard, and a projector. This room is primarily used for science classes, but when not in use, it acts as a public lab for all students and faculty. This room is equipped with many science oriented programs, including ChemOffice, HyperChem, ISIS Draw, and many more.

Halbritter Center for the Performing Arts

Performing Arts Management Studio - This studio is located on the garden level of the Halbritter Center for the Performing Arts and includes three high-end iMacs, a 5 terabyte multimedia server, Wacom Tablets, scanners, digital video and photo cameras, color archival printer, color digital printing press, 45" LCD screen television, and surround

sound. The room is equipped with industry standard design and video editing software, database creation and management software, and much more.

In addition to the Performing Arts Management Studio, the Halbritter Center has a sound editing studio and a state of the art lighting design suite.

Instructional Facilities

Carnegie Hall (1907; renovated in 1998), once the College library, is a center for the fine arts. Its Henry and Mabelle Shoemaker Gallery and Edwin and Susan (Rabinowitz) Malloy Gallery of Art, replete with original stained glass windows and skylight, are used for exhibits, lectures, and receptions. Carnegie Hall is home to the Worth B. Stottlemeyer and Guenther Spaltmann art collections. The hall also includes studios, darkroom, and the Juniata College Museum of Art. The **Sill Business Incubator (renovated 2013)** was renovated to provide a spacious new home for the ceramics program.

For the musical arts, headquarters is **Swigart Hall (1950)**, an attractive, white-brick building also on the northern side of the campus. Purchased for the College with a gift from W. Emmert Swigart '06, it contains faculty offices, practice rooms, teaching studios, and classrooms, one of which is home to a Yamaha Piano Laboratory.

The William J. von Liebig Center for Science (2002), is a state of the art facility for biology and chemistry. The facility has strengthened Juniata's position as a premier college for undergraduate teaching and learning in biology and chemistry. For research of all kinds, von Liebig is among the best equipped undergraduate science centers in the nation. Housed there are a cell culture facility, a shared facility for light (fluorescence, laser scanning confocal and DIC) and electron microscopy, and a fully equipped laboratory for molecular biology research. Other instrumentation includes an atomic force microscope, a gas chromatograph-mass spectrometer, a nuclear magnetic resonance spectrophotometer, a liquid chromatograph-mass spectrometer, and an x-ray diffractometer.

In the **Brumbaugh Academic Center (1968)**, three separate wings house seven departments. The **Dale Hall wing** houses business/accounting/economics, communication, information technology and computer science, and mathematics; with physics, earth and environmental science, geology, and the College Academic Computer Center located in the two corresponding wings. The circular hub of BAC includes Alumni Hall, a 400-seat auditorium, and one smaller lecture hall.

In addition, the 365-acre **Raystown Field Station** and the Davis and Robinson residence lodges on nearby Raystown Lake provides one of the country's most distinctive opportunities in environmental studies. The Raystown Field Station, encompassing a

complete watershed, consists of 365 acres for exclusive College use and a full 29,000 acres for additional research and study.

The center for the social sciences, **Good Hall (1967, renovated 2008)** contains more than 30 classrooms, two computer facilities, and three instructional laboratories: psychology, modern languages, and human interaction. A second facility, the **Early Childhood Education Center**, is located in Maude-Lesher Hall.

The world languages are currently headquartered in the former **Humanities Center (1979)** now called **World Languages Center (2011)**, **Carnegie Hall (1907, renovated 1998)** and **Founders Hall (1878, restored 2009)**. The buildings house faculty offices, seminar rooms, classrooms, and art galleries while the surrounding lawn and campus areas accommodate outdoor classes and art displays.

General Facilities

Founders Hall is the oldest building on campus. Constructed in 1879 (**restored 2009**) on land donated by local citizens, houses most administrative offices, including the President's Office, Provost's Office, Student Services, the Registrar, Academic Support Services, and College Advancement Offices and the departments of English and History.

The William E. Swigart, Jr. Enrollment Center (1975 remodeled in 1996) is located on 18th Street between Good Hall and the Brumbaugh Academic Center. It should be the first stop on any campus visit. The College Public Relations Office is located in the Pennington House, adjacent to Brumbaugh Academic Center. The Alumni Relations Office is located in the Harold B. Brumbaugh Alumni House on Mifflin Street behind Good Hall. Accounting Services, Digital Communications and Administrative Information Services are housed in The Stone House on Moore St. Business Services and Human Resources are located at 1923 Moore St.

The Oller Center for Peace and International Programs (1999) houses the offices of International Programs and Peace and Conflict Studies. The International Programs Office (IPO) coordinates Juniata's internationalization efforts. The office staff members support the College's international student population, maintain an active study abroad program, assist faculty in curricular and programmatic planning, and enhance the international environment of the College.

The Ellis Hall (1969 upgrades 2008) is noted for its imposing entrance columns, and honors Juniata's sixth and seventh presidents, Charles C. and Calvert N. Ellis. A focal point of student life, Ellis houses the Career Services Office, Public Safety Office, Information Desk, Office of Conferences and Events, Office of Student Activities, the bookstore, post office, broadcasting center for WKVR radio, and offices for Student Government, Juniata Activities Board (JAB), The Juniatian, Laughing Bush, and other

student organizations. In addition, the dining hall, the 680-seat Baker Refectory (**renovated 2005**), Eagles Landing (**renovated 2008**), a ballroom, student lounge areas, and conference rooms are here.

Juniata's L.A. Beeghly Library (1963) provides the Juniata community with a web-based online public access catalog and library system, many full-text and other electronic databases, a book collection built to support undergraduate research, an extraordinary Special Collection, the College's Archives, and a staff eager to assist patrons and to collaborate. The library's online resources are accessible throughout the campus and beyond, and by study abroad students, making the library's web page a very convenient source for academic research. Laptops are available for patron checkout at the circulation desk and the basement contains an instruction room with 15 desktops.

The first floor has many desktop computers, two high speed printers, and an Information Commons built to support comfort, technology and collaboration. The library contains some 208,000 bound volumes, microforms, government documents, audio-visual resource materials, and can offer access to over 15,000 periodicals (full-text online, microfilm and print), 200,000 e-books, as well as access to literally over a billion electronic documents, and several prominent rare book and document collections. The Library also has six collaborative areas with large screens for group study with laptops. Beeghly Library has the sixth ranked German-American rare book collection in the country. Study space can be found for over 400 patrons, including several interactive study rooms, and many network ports for laptops, including a wireless system. Almost all books and periodicals, except some rare editions in the W. Emmert Swigart Treasure Room, are accessible on an "open-stack" basis. The library offers interlibrary loan service, reserves, and classroom instruction, and welcomes suggestions for additions to the library collection. The library also houses the Writing Center and a Curriculum Library. The Friends of the Library is an active group which provide valuable support and is a very active group on behalf of the Beeghly Library. Many librarians teach College Writing Seminar Courses, as well as in the large library instruction program.

For cultural events, the **Halbritter Center for the Performing Arts (2006)** includes both the Rosenberger Auditorium and the Suzanne von Liebig Theatre. The **Rosenberger Auditorium (built in 1940 remodeled in 2006)** seats 850 and is used by most visiting speakers and performers as well as for student and faculty productions. The auditorium's acoustics are rated highly and large proscenium stage is equipped with modern lighting and sound equipment. **The Suzanne von Liebig Theatre (2006)** is a 200 seat, free form state of the art flexible theatre. The Center also includes a dance/movement theatre studio, costume shop, scene shop, classroom, green room, dressing rooms, and gallery space in its lobby.

The Kennedy Sports+Recreation Center (1983) provides Juniata students with modern recreational facilities. A hub for out-of-classroom activity, the Kennedy Center contains two gymnasiums; a six-lane, 25-meter swimming pool; and the F. Samuel Brumbaugh and Martha A. Brumbaugh Strength and Fitness Center (1998); racquetball/handball

courts; and three expanded locker rooms. Dedicated to those from the College who served in World War I and II, the Memorial Gym (1951) serves as the center for varsity sports activity with a seating capacity of 1,200 for basketball and volleyball.

Outdoor facilities include the Raffensperger Tennis Courts, several intramural and practice fields, Langdon/Goodale Field (baseball), the new Juniata/Huntingdon softball field, Goodman Field (2012) at Knox Stadium (football and field hockey), the Jefford F. Oller Track (2009) and the Winton Hill soccer fields.

Residence Halls

With Juniata's residence halls and apartment facilities, the College can accommodate more than 1,200 students. Most on-campus residence halls have been completely renovated and all now include computer and cable hookups in each room. Residence halls also have lounges, and free laundry facilities.

Among the residence halls is **The Cloister (1928; renovated in 1994)** located at the center of campus. An outstanding example of Pennsylvania German architecture, it vividly recalls the heritage of the College. At the other end of the architectural spectrum are the **East Houses (1970; renovated in 1999)**, a complex of four modern sections providing apartment-style living.

Tussey-Terrace (1966; renovated in 1997), Sunderland Hall (1955; renovated in 1992), and Sherwood Hall (1961; renovated in 1992) form part of the northern boundary of the campus. **Maude-Lesher Hall (1957; renovated in 2005)** is just across the street from the Ellis Hall, while **South Hall (1962; renovated in 1995)** overlooks College Field. **Nathan Hall (2014)** is the newest residence hall, located at the north end of campus next to the Winton Hill Soccer Fields. The residence hall features 77 single rooms, including suites with living rooms, as well as private and semi-private bathrooms.

College apartment buildings within convenient walking distance include the **Mission House** at 18th and Washington Streets, the **"Pink Palace"** on Moore Street, and **Hess Apartments** on 14th and Washington Streets. Five additional houses were added in 2004 and 2005, some of which house the Global Village, a globally themed living and learning community.

The Raystown Field Station

The Raystown Field Station is a 365-acre reserve operated as a center for environmental research and education. Located only 20 miles south of campus, the Station provides

students with access to 29,000 acres of Army Corps of Engineers property, including the 8,300-acre Raystown Lake, the largest lake in Pennsylvania. The Station has modern facilities and accommodations including Shuster Hall (2003) that features state-of-the-art green architecture. Sustainable design was a central factor in the construction of the lakefront Shuster Hall. Two lakeside lodges (2006) adjacent to Shuster Hall provide modern housing complete with internet access. The Station also provides rustic accommodations at Grove Farm, a remodeled 18th century log farmhouse. Two semester-long immersion programs are currently offered, The Environmental Field Semester in the fall, and Ecology and Organismal Biology in the spring. The Station also offers an abbreviated June semester with courses focused on wildlife biology and conservation.

Students participating in the immersion semesters take all of their courses at the Field Station and live in the lodges on the lakeshore. The Environmental Field semester provides an immersion experience into the Northern Appalachians. Course topics include ecology, geographic information systems (GIS), water resources or forestry (alternating years), field research, and the integrating seminar, A Sense of Place. Field work is integrated with course work and local projects as key educational approaches to this unique experience. Students in environmental science and studies, environmental education, geology and other natural sciences will find this semester to be central to their learning experience. Ecology and Organismal Biology is a joint venture with St Francis University, including courses in zoology or wildlife management (alternating years), plant or fish ecology (alternating years), animal behavior or marine biology (alternating years) and geographic information systems (GIS).

Other features of the Station include full internet connectivity, a series of ground water monitoring wells, a private harbor, a boat dock with a fleet of boats including a Boston Whaler, a 26' pontoon float boat and a 36' houseboat designed for aquatic laboratory work. The station also offers canoes and kayaks for student recreation. Two 4wd vehicles and a variety of field sampling gear, including microscopes, telemetry units, data loggers, laptop computers and portable water analysis labs, equip students and faculty for a wide range of field research activities. The Station hosts course activities for several academic departments, sponsors numerous faculty and student research projects and internships, provides community environmental education opportunities and is the home to the annual Juniata maple syrup program.

[Baker-Henry Nature Preserve and Elizabeth Evans Baker Peace Chapel](#)

In addition to the main campus and other buildings, Juniata owns the 316-acre Baker-Henry Nature Preserve on which is located the Elizabeth Evans Baker Peace Chapel. Architect and artist Maya Lin, who also designed the Vietnam Veterans' Memorial in Washington, D.C., and the Civil Rights Memorial in Montgomery, Alabama, designed the Baker Peace Chapel. The Chapel is a place for both private meditation and public

celebration. A grassy path ties two hilltops together: on one, a single, polished granite circle set in a bed of moss; on the other, a forty-foot circle of rough-cut English granite.

The Juniata College Center for Entrepreneurial Leadership (JCEL)

The Juniata College Center for Entrepreneurial Leadership (JCEL) was developed to integrate entrepreneurial principles and actions into all academic disciplines; touching students and faculty alike. It promotes the “creation of value” in an economic or social sense. JCEL provides experiential learning opportunities to students by providing the tools and resources to act on their product or service idea and create businesses.

These tools and resources include technical assistance, mentoring, seed capital and space. Technical assistance & mentoring is provided by faculty, staff and volunteer mentors helping students move through the business planning process to ensure their plan has a reasonable chance to succeed. JCEL has a Student Seed Capital Fund able to loan or invest up to \$ 15,000 in a student business.

The space we provide is located in the Bob & Eileen Sill Business Incubator (SBI). SBI has 10,000 square feet of wet lab, professional office and light assembly space for undergraduate entrepreneurs, faculty members and community members. Our Next Step Fellowship Program can provide monetary support to a student who has a business idea they would like to develop. We can pay a student \$ 7.25 per hour, in a work study fashion, to research & expound upon their idea. The goal of which is for the student to have developed a full business plan and present it to the JCEL Board for financial support.

JCEL also offers internships to students from many disciplines/POEs including (but not limited to) entrepreneurship, finance, marketing, management, communications and information technology. Many students have benefitted from our large network of contacts and real world tasks & interactions.

In essence, JCEL offers many tools & resources to help students become successful here at Juniata. Full program details can be found at www.jcel.biz.

Academic Programs

Curriculum

Educated persons are prepared for lifelong learning, for continually dealing with changing perceptions and new bodies of knowledge. Beyond facts which become out-dated, they ask intelligent questions, to make informed decisions, and to think confidently for themselves.

Educated persons are capable of regulating their own lives, not only with regard to decisions made in vocational contexts, but within the larger contexts of their lives as citizens and social beings. An institution in the liberal arts tradition must take as its goal not only provision of the best possible career training, but also provision of the skills and knowledge graduates need to make contributions to the total community. At Juniata, we believe the procedures of acquiring an education are an important part of the educational process. Therefore, certain educational decisions are made by each student using the information provided by faculty advisors and the intellectual skills developed during the first few semesters at the College.

Educated persons should be able to think independently about intellectual and moral issues. Juniata's program is designed, therefore, to promote and develop the habits of mind and communications skills needed to make and implement decisions. Students wrestle with profound issues of human values, not only as dealt with in the past, but as they affect current thinking in a student's chosen field.

Core Requirements

Information Access

Information Access is a one credit course required of all entering students, first years and transfers that ensures competency in the use of computing, network and library technologies at Juniata College. There are no exemptions from the course.

College Writing Seminar

In CWS, students will develop their reading, writing, and analytical skills. CWS will introduce students to the diverse modes of thought and communication that characterize the college experience. Individual conferences, peer reading, revision of writing and portfolio assessment are some of the essential elements in this process-oriented approach to college work. Note: This course does not satisfy a distribution requirement.

Liberal Arts Distribution

The intent of the distribution requirement is to assist students in broadening their education. This breadth helps students to develop and retain the intellectual flexibility necessary to cope with their rapidly changing environment.

Students must complete at least six credit hours of coursework in each of the following five areas. In three of these five areas, at least one course must have a prerequisite or be at the 300-level. Courses may be used for only one area.

Fine Arts (F):

Fine arts courses examine the interaction of elements within art forms, the ways in which these interactions produce artistic expression, and the conventions of the particular artistic disciplines. In these courses, students expand their expressive abilities and/or sharpen their skills at formal analysis (such as how to experience a work of art).

International Studies (I):

International courses may study global issues in one of three ways: 1. The course introduces students to the history, art, literature, philosophy, or civic life of people of different nationalities. 2. The course requires students to think and express themselves in a language other than English. 3. The course examines international social, material, cultural, or intellectual exchange at a systemic level. Each semester spent abroad can be used to fulfill three credits of I distribution.

Social Science (S):

Social scientists strive to understand a wide range of human behavior, from the formation of the self to the interaction of nations. Knowledge is acquired from systematic study using a diverse set of scientific methods including laboratory experiments, field observation, survey analyses, and quantitative and qualitative ethnographic analyses, and insight acquired through experience.

Humanities (H):

The humanities use methods such as textual interpretation, historical analysis, and philosophical investigation to ask fundamental questions of value, purpose, and meaning in a rigorous and systematic way. The humanities teach us to think critically and imaginatively, informed by the knowledge of how those questions are (or have been) understood in different times, places, and cultures.

Natural Sciences (N):

Courses in natural and mathematical sciences enable students to engage with the methods of exploring the processes of the natural world. These methods include observation, generation of models and hypotheses, and analysis of models that pertain to the natural world, and empirical testing.

General Education Curriculum

All Juniata Students will complete two General Education courses. One course will be chosen from the Interdisciplinary Colloquia offerings and one will be from the Cultural Analysis offerings.

Interdisciplinary Colloquia (IC)

Juniata has a strong tradition of requiring students to have a team-taught and interdisciplinary experience. These courses emphasize reading, discussion, and writing in an interdisciplinary setting. Topics vary, but all IC courses, regardless of their content, will include serious consideration of the relationships between theory and practice in different disciplines and of how the insights provided by an interdisciplinary approach can have a positive effect on individuals' personal and public lives.

IC waiver: Students who take part in the Remote Field Station Program while living at the field station for the semester, will receive a waiver at the end of the semester once grades have been posted to have the program evaluations (degree audits) reflect the experience.

Cultural Analysis (CA)

CA courses deal with human culture in the variety of its philosophic, literary, artistic, economic, social, political, scientific, and other forms. Each course focuses on how relationships between ideas and institutions have shaped societies, and the thoughts and behaviors of individuals and groups. Approaches include: historical approaches that examine the development of a given culture over time; approaches that examine encounters or conflicts between two cultures or societies; or approaches that examine the variety of interactions among individuals and sub-groups within a given culture or society.

Students can also complete the CA requirement by completing corequisite courses that together meet the CA requirements and add to at least three credits. Such projects normally include either a synthetic paper of ten or more pages, or student generated presentations or productions (for example, original art, music or drama) accompanied by a shorter written commentary. A CA course with other liberal art distributions will only count once, either for a CA or the distribution, if one is so designated. The prerequisite for CA courses is EN-109 or EN-110.

Writing Requirement for IC and CA

Cultural Analysis courses will build on the skills of insightful reading, analysis, and writing acquired in the first year of study. Courses will provide a basic familiarity with

some concepts and methods of cultural analysis. They may be offered as either 3- or 4-credit courses. In CA courses, students will make use of both primary (textual or other artifacts) and secondary sources. (Secondary works are those which interpret primary sources, or develop a method for the study of primary sources.) These primary and secondary works will provide the raw materials for a synthetic project. Such projects will normally include either a synthetic paper of ten or more pages, or student-generated presentations or productions (for example, original art, music or drama) accompanied by a shorter written commentary. Any project must be designed to demonstrate the student's capacity for independent research and critical thinking. Students will be expected to show an awareness of their own presuppositions and of the possibilities and limitations of their methods. Faculty members proposing courses must include in their course proposal an explanation of how course assignments will demonstrate the student's capacity for analysis and synthesis with an appropriate degree of rigor.

IC and CA waivers:

The Interdisciplinary Colloquia (IC) and Cultural Analysis (CA) will be waived for students who has successfully completed a world language course beyond the 210 level in the target language and a semester of study abroad in the target language and culture. These waivers will be provided by the World Language department after the study abroad transcript has been received and confirmed.

Communications Component

In addition to the College Writing Seminar, students will take at least four "C" courses (minimum 12 credits), two courses or 6 credits must be writing-based (CW) and the additional courses may be speech-based (CS). One CW course must be in the POE.

A CW course devotes considerable time to the development and assessment of writing skills. CW courses require multiple writing assignments that total fifteen to twenty-five pages during the semester, though these totals may vary by discipline. The methods of teaching writing often vary by discipline and by instructor, but all CW courses explicitly address the mechanics of writing and editing. Consequently, the syllabus of a CW course indicates the specific writing goals of the class, the criteria by which writing assignments will be evaluated, and the writing or style manual(s) that serve as the basis of instruction. A significant portion of class time is specifically dedicated to learning writing skills. At least 35% of the final course grade will be determined by writing assignments.

CW courses are intended to help students develop, compose, organize, revise, and edit their own writing. They develop a student's abilities to identify and define a thesis as well as to collect, organize, present, and analyze evidence and documentation to disseminate knowledge. CW courses are not limited to English only.

A speech-based (CS) course requires at least 25% of the grade be determined by two or more oral individual or group presentations, and it fulfills two requirements: (1) The course aims to develop rhetorical skills necessary for effective and creative speech in individual, group or public presentation. This may include one or more of the following: speech design and delivery, listening, negotiation, leadership, persuasion, collaboration, or decision making; (2) The course offers students at least two opportunities to demonstrate these skills. Evaluation of the first opportunity guides improvement of the second.

Quantitative Component

There are two parts to the Quantitative Skills component: a statistical part (QS), and a mathematical part (QM). Courses that satisfy the statistics requirement will carry a QS designation and should contain elementary statistics topics such as averages, standard deviation and other measures of dispersion, as well as interpretation of data, tables, graphs, and some probability. Courses that satisfy the mathematical requirement will carry a QM designation and must use a combination of algebraic, graphical, and numerical reasoning. Such courses should teach students how to translate problems into mathematical language, how to solve the mathematical problems, and how to interpret the solutions. Courses that carry a Q designation must fulfill the requirements for both the statistical (QS) and mathematical (QM) components.

Courses with quantitative skills components necessarily involve the use of appropriate technology.

Students have two options for fulfilling the Quantitative Skills component. They may either 1) complete a single course that carries the Q designation or 2) complete a course that fulfills a QS designation and complete a course that carries a QM designation.

Program of Emphasis (POE)

More than 23 percent of Juniata graduates elect to develop an individualized POE. Students are encouraged to select the POE format that best serves their needs.

The Program of Emphasis (POE) is Juniata's unique approach to focused education in an academic area of a student's choosing. Somewhat similar to a traditional "major," the POE consists of up to half of the total degree and is an opportunity for students to explore in depth a particular discipline or to craft an interdisciplinary plan to study an area. With

advisors' help, students draft a POE goal statement, identify classes, and develop rationale for their program. They are:

Designated - A POE of 45-63 credits. Designated POEs have been proposed by a department or program and approved by the Curriculum committee. No student rationale is required.

Individualized - A POE of 45-63 credits designed by the student in consultation with faculty advisors. Individualized POEs are intended to meet particular student needs with unique combinations of courses. Approval requires students to write a rationale that describes how the courses they have listed help them reach the academic goals of the POE.

Secondary Emphases will not be a part of the POE; they will have a separate status, separate paperwork, and will be recorded separately on the student's transcript. For each department, a secondary emphasis description can be found on the department's website. The general guideline is: 18 credits with at least 6 of them are upper level.

Designated POEs

ACCOUNTING, BUSINESS, AND ECONOMICS

- Accounting
- Business Information Technology
- Economics
- Entrepreneurship
- Finance
- Human Resource Management
- International Business
- Management
- Marketing
- Philosophy, Politics, and Economics
- Accounting, Business & Economics-Secondary Emphases

ART AND ART HISTORY

- Art History
- Museum Studies/Art History Focus
- Studio Art
- Fine Arts - Secondary Emphasis
- Art History - Secondary Emphasis
- Museum Studies - Secondary Emphasis
- Studio Art - Secondary Emphasis

BIOLOGY

- Biology
- Biology and Secondary Education
- Biology - Secondary Emphasis

CHEMISTRY

- Biochemistry
- Chemistry
- Chemistry and Secondary Education
- Chemistry - Secondary Emphasis

COMMUNICATION AND THEATRE ARTS

- Communication
- Communication and Conflict Resolution
- Health Communication
- Theatre Performance
- Communication - Secondary Emphasis
- Theatre Arts - Secondary Emphasis

EDUCATION

- PreK-4th grade Certification
- PreK-4 and Special Education PreK-8th grade
- Secondary Education Certification in Biology, Chemistry, English, Earth & Space Science, Environmental Education, Social Studies, Math, Physics, French, German, Spanish and General Science
- Education - Secondary Emphasis

ENGLISH

- English
- English Secondary Education
- Professional Writing
- English - Secondary Emphasis

ENVIRONMENTAL SCIENCE AND STUDIES

- Environmental Economics
- Environmental Science
- Environmental Studies
- Wildlife Conservation
- Environmental Studies- Secondary Emphasis

GEOLOGY

- Environmental Geology
- Geology
- Earth and Space Science
- Earth and Space Science Secondary Education
- Geology - Secondary Emphasis

HISTORY

- History
- History and Museum Studies
- Social Studies Secondary Education Certification
- History - Secondary Emphasis

INFORMATION TECHNOLOGY AND COMPUTER SCIENCE

- Business Information Technology
- Information Technology
- Computer Science
- Integrated Media Arts
- Information Technology - Secondary Emphasis
- Computer Programming - Secondary Emphasis
- Computer Science - Secondary Emphasis
- Integrated Media Arts - Secondary Emphasis

INTERNATIONAL STUDIES

- International Studies
- International Studies - Secondary Emphasis

MATHEMATICS

- Mathematics
- Mathematics and Secondary Education
- Mathematics - Secondary Emphasis

PEACE AND CONFLICT STUDIES

- Communication and Conflict Resolution
- Peace and Conflict Studies
- Peace and Conflict Studies - Secondary Emphasis
- Women and Gender Studies -Secondary Emphasis

PHILOSOPHY

- Philosophy, Politics and Economics

- Philosophy & Religious Studies
- Philosophy - Secondary Emphasis

PHYSICS

- Engineering Physics
- General Science Secondary Education Certification
- Physics
- Engineering Physics and Secondary Education
- Physics - Secondary Emphasis

POLITICS

- Politics
- International Politics
- Philosophy, Politics and Economics
- Politics - Secondary Emphasis

PSYCHOLOGY

- Psychology
- Psychology - Secondary Emphasis

RELIGIOUS STUDIES

- Religious Studies
- Philosophy and Religious Studies
- Religious- Secondary Emphasis

SOCIOLOGY, ANTHROPOLOGY, SOCIAL WORK

- Anthropology
- Social Work
- Sociology
- Anthropology - Secondary Emphasis
- Sociology - Secondary Emphasis

WORLD LANGUAGES & CULTURES

- French
- Foreign Language Secondary Education (French, German, Spanish)
- German
- Russian
- Spanish/Hispanic Cultures
- Chinese Studies Secondary Emphasis
- French - Secondary Emphasis
- German - Secondary Emphasis

- Russian - Secondary Emphasis
- Spanish - Secondary Emphasis

Individual POEs

Following is a list of some recent student initiated individual POEs.

- Software Engineering & Web Design
- Chemical Sciences with a secondary emphasis in Criminal Justice
- Writing and Society
- Communication and Conflict Negotiation
- Biology and Ethics
- Psychology and Women's Studies
- Accounting Environmental Studies
- Creativity: Literature and Writing
- Computerized Polity
- Politics Law and Philosophy
- Ecology International Studies
- Economics and Finance
- Social Work & Business Management
- Marketing Strategies
- Mathematics Communication
- Peace and Social Institutions
- Peaceful Communication in Religion and the Church

Distinction in the Program of Emphasis

To achieve distinction in the Program of Emphasis, a student must fulfill all graduation requirements and a senior experience that integrates several areas of their POE. This requirement can be fulfilled in many ways. Some possibilities might include: an original independent creative project that involves significant academic work, such as laboratory research resulting in a significant report; a major paper on a well-defined project; a body of artistic work equivalent to a major exhibition or performance; or field experience (e.g. student teaching or certain internships) culminating in a significant report. The project must be evaluated and judged worthy of distinction in the POE by two faculty members, at least one of whom must be from the home department. The project must also be presented in a forum open to all interested parties, either at Juniata or to an outside audience such as the National Conference on Undergraduate Research (NCUR).

Departments and programs will be free to establish further requirements for receiving distinction in the POE, including higher GPA requirements.

Departments shall forward the names of successful candidates for distinction to the Registrar's Office.

Pre-Professional Programs

Health Professions

[Health Professions Link for different programs](#)

Health Professions Advisors: Professors Peter Baran, Kathy Baughman, Randy Bennett, James Borgardt, Jay Hosler, Kathy Jones, Jill Keeney, Susan Radis, Wade Roberts, and David Widman; Director of Career Services Darwin Kysor, Assistant Director of the Library Julie Woodling, and Director of the Health Professions Program Amanda Siglin.

Health Professions Assistant: Susan LaVere

We offer advising for entry into professional and graduate school training in such fields as Art Therapy, Audiology, Biotechnology, Chiropractic, Cytotechnology, Dentistry, Genetic Counseling, Health Administration, Health Communication, Social Work with a Focus in Medicine/Behavioral health, , Medical Technology, Medicine, Naturopathic Medicine, Nursing, Occupational Therapy, Optometry, Pharmacy, Physical Therapy, Physician Assistant, Podiatric Medicine, Public Health, Radiologic Sciences, and Veterinary Medicine. Students interested in a career in the health professions must meet the specific requirements for admission to a professional school. Since these vary from school to school, the students consult with a member of the Health Professions Committee as they prepare their courses so that students not only have an excellent chance of acceptance into professional schools, but also receive a breadth of knowledge that provides a firm foundation for their liberal arts education.

Students gain in-depth exposure to the health sciences through various types of opportunities that include internships at various health care facilities and universities, shadowing of local health professionals, health-related course work, participation in our Rural Health Rotations class, participation in the Primary Care Scholars Program offered by the Pennsylvania State University College of Medicine at Hershey, and/or various research opportunities on and off campus.

Juniata offers exceptional preparation for students interested in rural medicine through our Rural Health Care Issues and Rural Health Rotations courses, opportunities for shadowing at J.C. Blair Memorial Hospital in Huntingdon, a summer internship at Altoona Regional Health System and winter break programs at Altoona Regional and Geisinger Health Systems. We also have an Early Assurance Program for premedical students applying to Temple University School of Medicine that involves clinical training

in the third and fourth years at Geisinger in Danville, Pennsylvania. In addition, our rural health care courses introduce students to the integrative medical model, an emerging paradigm in the U.S. health care system that combines conventional medicine with complementary and alternative therapies.

To assist students for professional school applications we offer an on-campus, faculty led Admission Exam Prep Course, personal statement writing workshops, and interview training.

In addition, as a result of a bequest by a Juniata alumnus and physician, there is a four year Lawrence Johnson Scholarship at the University of Rochester School of Medicine and Dentistry for Juniata premedical students.

Pre-Law

Advisor: Professor Barlow

The pre-legal student should seek a broad undergraduate experience in the liberal arts. Students interested in law should have a thorough command of English, an extensive background in research methods, skill and experience in developing logical arguments, and a critical understanding of the human institutions and values with which the law deals. They are strongly encouraged to develop proficiency in another language and to study abroad. Juniata also offers courses in conflict resolution, a growing field in the legal profession. Although students may develop any Program of Emphasis which suits their particular talents and interests, the experience of others indicates that English, history, politics, American studies, and economics are the most common programs of students entering law schools.

In addition to helping students through the process of applying to law school, the prelaw advisor assists with course selections that will fulfill their POE goals while providing them with appropriate skills for the study of law. In addition, he helps to provide students with resources to prepare for the LSAT and helps to arrange internships that allow students to explore the legal field while they are in college. Students should plan to take the LSAT in the fall of the senior year and apply to law school by mid-January.

A special arrangement with the Duquesne University School of Law allows students to apply for admission to the Law School after three years of undergraduate study, allowing them to complete their degrees in six rather than seven years. Students must have a LSAT score that puts them at or above the 75th percentile, and a GPA of 3.36 or better.

Social Work

Advisors: Professor Radis

The Dorothy Baker Johnson and Raymond R. Day Social Work Program, accredited by the Council on Social Work Education since 1982, is designed primarily to prepare students for beginning professional practice in the field following successful completion of the undergraduate requirements. An important secondary objective of the program is preparation for graduate education in social work and related areas of study.

Students who seek professional competence in assisting individuals, families, groups, and communities in solving human problems develop Programs of Emphasis which reflect an interdisciplinary approach to undergraduate study. A foundation of courses from the natural and social sciences is combined with specific courses in social work practice and social welfare policy. Such a program also allows the student to focus on a particular area of inquiry (e.g., health care, criminal justice, families and children, developmental disabilities, etc.) that may complement the social work interest.

Of great importance to the social work student is Juniata's Social Work Professional Semester. In cooperation with social service agencies representing many areas of social work (e.g., medical, criminal justice, drug and alcohol, developmental disabilities, aging, family and children, etc.), the internship is organized to provide senior students with an educational opportunity to integrate and apply the skills, knowledge, and values mastered in the classroom with the daily tasks of the social worker in the field.

Teaching

Advisors: Professors Biddle, DeHaas, DeSantis, Glosenger, Jones, Park; Director of Clinical Experiences Paula Beckenbaugh

Since 1876 Juniata College prepared individuals for careers in teaching, human development, and childcare. Currently, the Education Department is authorized by Pennsylvania's Department of Education to offer teacher certification programs in PreK-4th grade, Unified PreK-4th grade and Special Education PreK-8th grade; and 12 areas of secondary education; including Biology, Chemistry, English, Earth & Space Science, Environmental Education, Social Studies, Math, Physics, General Science, French, German and Spanish. In addition, the Education Department works closely with the Office of International Education to promote study abroad.

Although the Education Department's primary focus is on teacher preparation, department members also provide guidance and serve as advisors for individuals who create their own Programs of Emphasis. Other students do a secondary emphasis in

education and combine studies in education with programs in social work, health professions, psychology, human development and child life.

Students who seek teacher certification must meet all of the certification requirements mandated by the Pennsylvania Department of Education and Juniata College's Education Department. All certification requirements for admission to, retention in, and completion of a certification program are outlined in the *Education Department Student Handbook*.

Cooperative Programs

Health Professions Affiliations

A distinctive feature of the Juniata College Health Professions Program is a broad array of formal affiliation agreements. These agreements enable qualified students to gain early acceptance or accelerated admission into professional school programs.

Several types of programs are included, designated below by the number of years a student spends at Juniata College, followed by the number of years spent at the affiliated institution. The 3 + _ programs allow students who matriculate at Juniata for three years and complete all the Juniata College general degree requirements, to earn degrees from both Juniata College and the corresponding professional institution.

The "_" designation indicates a variable number of years at the professional school, depending on the specialty chosen.

See the specific career track on the Health Professions website for details.

<http://www.juniata.edu/departments/healthprofessions/>

Biotechnology

3 + 1 B.S. program with Jefferson School of Health Professions

3 + 2 B.S./M.S. entry-level master's program with Jefferson School of Health Professions

Chiropractic

3 + 3 B.S./D.C. program with the New York Chiropractic College

Cytotechnology

3 + 1 B.S. program with Jefferson School of Health Professions

3 + 2 B.S./M.S. Entry-level Master's Program with Jefferson School of Health Professions

Dentistry

3 + 4 B.S./D.M.D. program with Temple University School of Dentistry

4 + 4 B.S./D.M.D. Early Acceptance Program with the LECOM School of Dental Medicine

Medical Technology

3 + 1 program with Jefferson School of Health Professions

3+2 B.S./M.S. Entry-level Master's program with Jefferson School of Health Professions

Medicine

4 + 4 B.S./D.O. Early Assurance Program with Lake Erie College of Osteopathic Medicine

4 + 4 B.S./M.D. Early Assurance Program with Temple University School of Medicine and Geisinger Health System

Nursing

3 + __ B.S./M.N./M.S.N./D.N.P. (Doctor of Nursing Practice) OR D.N.P/Ph.D. programs with the Frances Payne Bolton School of Nursing at Case Western Reserve University

4 + 13 month or 17 month Accelerated B.S./B.S. with a major in nursing from the Johns Hopkins University School of Nursing

Occupational Therapy

3 + 2 B.S./M.S.O.T. program with Jefferson School of Health Professions

Optometry

3 + 4 B.S./O.D. program with the Pennsylvania College of Optometry at Salus University

Pharmacy

3 + 3 and 3 + 4 Accelerated OR 4 + 3 and 4 + 4 Early Acceptance B.S./Pharm.D. programs with Lake Erie College of Osteopathic Medicine School of Pharmacy

Physical Therapy

4 + 3 B.S./D.P.T. Early Acceptance program with Drexel University

3 + 3 B.S./D.P.T. program with Jefferson School of Health Professions

4 + 3 B.S./D.P.T. Early Acceptance program with Widener University

Podiatric Medicine

4 + 4 B.S./D.P.M. Early Assurance program with Temple University School of Podiatric Medicine

Radiologic Sciences

4 +1 B.S. and M.S. options in a variety of specialities with Jefferson School of Health Professions

Other Affiliations

Engineering: 3+2 Programs

Advisor: Professor White

Juniata participates with The Pennsylvania State University, Washington University in St. Louis, Columbia University, and Clarkson University in cooperative programs for training in engineering. The purpose of such arrangements is to produce engineers who are educated in the fullest sense, as well as competent specialists in a particular field.

The student takes three years of undergraduate work at Juniata. Upon recommendations of the adviser and fulfillment of the transfer requirements, including the required GPA, he or she then transfers to the engineering institution for two additional years of engineering study. Upon successful completion of the five years, the student receives two degrees; a bachelor's of science degree from Juniata and an engineering degree from The Pennsylvania State University, Washington University in St Louis, Columbia University, or Clarkson University.

Law: 3+3 Program

Advisor: Professor Barlow

The pre-legal student should seek a broad undergraduate experience in the liberal arts. Students interested in law should have a thorough command of English, an extensive background in research methods, skill and experience in developing logical arguments, and a critical understanding of the human institutions and values with which the law deals. They are strongly encouraged to develop proficiency in another language and to study abroad. Juniata also offers courses in conflict resolution, a growing field in the legal profession. Although students may develop any Program of Emphasis which suits their particular talents and interests, the experience of others indicates that English,

history, politics, American studies, and economics are the most common programs of students entering law schools.

In addition to helping students through the process of applying to law school, the prelaw adviser assists with course selections that will fulfill their POE goals while providing them with appropriate skills for the study of law. In addition, he helps to provide students with resources to prepare for the LSAT and helps to arrange internships that allow students to explore the legal field while they are in college. Students should plan to take the LSAT in the fall of the senior year and apply to law school by mid-January.

A special arrangement with the Duquesne University School of Law allows students to apply for admission to the Law School after three years of undergraduate study, allowing them to complete their degrees in six rather than seven years. Students must have an LSAT score that puts them at or above the 75th percentile, and a GPA of 3.36 or better.

Masters Programs:

Purdue for Masters in Chemistry

<http://www.juniata.edu/departments/chemistry/outcomes.html>

To qualify for automatic acceptance the student must have a 3.3 GPA and has a letter of recommendation from the chair of the chemistry department. Purdue has a graduate program in chemistry and analytical chemistry.

International Education

Center of International Education

"As a member of the international community, Juniata College extends each student's academic experience into the wider world, supporting the free exchange of thought among peoples from distinct cultures and languages." - Mission Statement

Kati Csoman, Acting Dean, Center of International Programs

Since the inception of its faculty-generated exchange programs in 1962, Juniata has championed internationalism by welcoming students from partner institutions, enabling financial aid and scholarships to apply to overseas study, encouraging faculty to recommend international experiences for their qualified students, and allowing courses taken overseas to be incorporated into any academic curriculum. Juniata promotes international competencies through study abroad for students in every Program of Emphasis. Programs of Emphasis with strong international components may be found throughout this catalog, particularly under International Studies, World Languages and Cultures, History, Political Science, and Accounting/Business/Economics. Juniata cultivates proficiency in a second language, offers an Intensive English Program (IEP) for international students, hosts exchange students from twelve partner institutions, and boasts degree-seeking international students and alumni from all over the globe.

The Center for International Education (CIE) is at the core of developing and nurturing Juniata's partnerships with secondary schools and universities abroad, and with infusing internationalism into campus life. The College's vibrant exchange programs facilitate international engagement by offering a framework for Juniata students abroad, and increasing the variety and number of international students on campus. Our programs also provide faculty members with opportunities to conduct visits and arrange overseas teaching opportunities, and enable faculty members from international partner institutions to speak with classes, hold public lectures, share in joint research projects, and participate in informal interaction with students. An active "International Education Committee" and the "American Council on Education's Internationalization Leadership Team" (composed of faculty, administrators and students) advise the CIE, help to coordinate international activities at Juniata, and provide direction for future growth. The CIE maintains membership in several national and international organizations, including the National Association of International Educators (NAFSA); The Forum on Education Abroad; Teachers of English to Speakers of Other Languages (TESOL), the Institute for International Education (IIE); the Association of International Education Administrators (AIEA); the American Council on Education (ACE); and the Pennsylvania Council for International Education (PaCIE).

International Students

International Students

Kati Csoman, Acting Dean, Center for International Education

Juniata welcomes students from around the world. The staff of the Center for International Education (CIE) provides support to students from around the world with visa issues, pre-arrival planning, orientation, academic advising, and adjustment to

studying and living in the U.S. The CIE promotes academic and social programs incorporating language, international and intercultural subjects, and works closely with faculty members and departments to support the academic performance of international students. Requirements for admission and scholarship and financial aid information for international students can be found in the Admission section of this catalog.

Intercultural Activities

Juniata supports a number of student organizations and co-curricular activities that facilitate intercultural learning. Students may choose to live in the Global Village, which brings together diverse students with interests in world issues into common residences for intentional living and learning communities. The Global Alliance is a new student organization open to all Juniata students intended to provide a forum for exchanging ideas and for planning and participating in activities. French, German, and Spanish Clubs sponsor cultural events and join faculty in hosting language tables in the college dining hall and Global Village residences. The "Model United Nations Club" sponsors international negotiation simulations and field trips for students interested in foreign policy and world affairs. The Iota Chapter of "Sigma Iota Rho", a national honor society "to promote and reward scholarship and service among students and practitioners of international studies and global relations and to foster integrity and creative performance in the conduct of global affairs," honors successful students in International Studies. Other clubs like the Muslim Students Association, Chinese Club, and Russian Club have grown out of student interest in world cultures and are instrumental in the success of such activities as the Chinese New Year dinner, film series, lectures, and other intercultural learning activities on the campus.

Study Abroad

Carolyn Gibson, International Education Advisor, Study Abroad

Juniata encourages study abroad as an integral component of a liberal arts education. A variety of study abroad programs is available, including offerings for the full academic year, one semester, and short-term programs, many of which are led by Juniata professors. While year-long language immersion programs in which a student continues to study in the Program of Emphasis are the optimal, study abroad experiences offered at Juniata provide students opportunities for personal and academic growth.

Juniata students can study abroad on every continent (except Antarctica), in the following countries: Africa (the Gambia, Morocco, Rwanda), Asia (China, India, Japan, Taiwan), Europe (Austria, Belgium, Czech Republic, France, Germany, Greece, Ireland, Russia, Spain, United Kingdom), North America (Canada, Mexico), Oceania (Australia, New Zealand), and South America (Ecuador). Juniata supports Direct Enroll/ Exchange (EXC), and Brethren Colleges Abroad (BCA) programs; some of these are Limited Enrollment (LE). A complete list of programs and their requirements can be found at: <http://www.juniata.edu/departments/international/ea/programs.html>.

Students with Programs of Emphasis from all academic departments are eligible for approved study abroad programs, following the guidance of their faculty advisers to maintain academic progress. In Juniata approved programs, credits and grades will be indicated on the Juniata transcript. In all approved programs (except summer), Juniata financial aid is applicable, including grants-in-aid and scholarships. Students pay the regular Juniata tuition and fees for the semester and year programs and all financial aid and scholarships apply (tuition benefit involves special tuition arrangements; students can obtain information from the Center for International Education. PAR rates are not applicable to study abroad). A number of scholarships are also available specifically for study abroad (see <http://www.juniata.edu/departments/international/ea/scholarships.html> for complete list). The student is responsible for the passport, visa and airline tickets to program sites. Summer and short-term programs have specific fee structures; these are provided with the program information.

In each program, Juniata students are accepted into each host institution on a full-time basis and are treated as regular members of the student body, attending classes, writing papers, taking exams, etc., side-by-side with their counterparts in the host institution. In most programs, classes are conducted in the language of the host country; in others, (e.g., Czech Republic) classes are in English and the student also takes a class in the language of the host country to facilitate adjustment. Supervision for the student is provided by the host institution; in many BCA programs, there is a resident director whose sole responsibility is overseeing the program.

Occasionally, a student may desire to enroll in a non-Juniata program. Such programs must be offered by accredited U.S. colleges or universities or involve direct enrollment in an approved university outside the U.S. In either case, credit earned may be transferable to Juniata under the usual policies and requirements for the acceptance of transfer credit. To enter these programs, students need prior approval of the Dean of the Center for International Education, the Registrar, and the Dean of Students. Juniata grants-in-aid are not transferable to programs sponsored by other institutions. Procedures for receiving aid such as outside loans and grants are specific; students should consult the Director of Financial Planning. Credits from non-Juniata programs are entered on the Juniata transcript as transfer credits; grades are not indicated

Study Abroad Scholarships

Juniata offers a number of scholarships that are designated specifically for study abroad (see <http://www.juniata.edu/departments/international/ea/scholarships.html> for complete list).

[http://www.juniata.edu/services/catalog/section.html?s1=academic&s2=international activities](http://www.juniata.edu/services/catalog/section.html?s1=academic&s2=international_activities)

Internships

An internship is a structured learning experience in which a student applies concepts learned in the classroom to the workplace. The primary purpose of an internship is to provide an academically valid pre-professional work experience for the development of the student's communication, interpersonal, and professional skills. Interns receive practical training in a variety of settings through cooperatively arranged placements. Interns are given responsibilities that are high quality, and interns work side-by-side with other employees. Internships may be done either for credit (typically during the junior or senior year) or as non-credit, transcript notation internships (often paid and completed during the summer). More than 75% of Juniata students participate in at least one internship.

Internships for Credit

Advisor: Director of Career Services

The primary distinction between credit and non-credit internships is the degree to which students are required to reflect on their experiences. Students apply theoretical concepts in the workplace, reflect on the experience, and then reassess ideas. Academic credit is earned for the work and for placing the pre-professional experience in a conceptual and comparative context. Additional differences in the academic requirements between credit and non-credit internships include the degree of College supervision, the duration of the experience, the investment of College resources, and the student's payment for and receipt of credit.

Internships for credit may be arranged in virtually any academic area and vary in duration and in credit earned from 4 credits to 15 credits. A student may apply a maximum of 15 credit hours of internship toward their degree at Juniata. Placements are arranged through the cooperative efforts of the student, the faculty sponsor, and Career Services. Over 75 students participate in credit internships each year. Examples of internships include: Allegheny Heritage Development Corporation, Alliance to Save Energy, Altoona Curve, Altoona Family Physicians, American Red Cross, Antietam National Battlefield, Brethren Volunteer Services, Camp Blue Diamond, DuPont, Enterprise Holdings, Ernest & Young, Fidelity Investments, Fort Roberdeau Historic Society, Geisinger Medical Center, Hershey Medical Center, Highmark, Huntingdon County Office of Business & Industry, J.C. Blair Memorial Hospital, Jekyll Island Authority, La Jolla Playhouse, Lake Raystown Resort and Lodge, Mutual Benefit Group, National Institute of Health, National Institute of Standards and Technology, Northwestern Mutual Life, Oak Ridge Institute for Science and Engineering, PA Game Commission, PA Department of Environmental Protection, PA State Correctional Institutions, Partners for the Americas, Pittsburgh Zoo, Shaver's Creek Environmental Center, Smithsonian Conservatory Biology Institute, TE Connectivity, United Nations, WPSX - TV, local law offices, medical offices, and social service agencies.

Guidelines for credit is as follows:

The internship is typically designated as course 490 in the appropriate department ("Internship") and carries two to nine credits. Credit is awarded in proportion to the time spent on the job according to the following figures:

- 2 credits = 8 hours/week
- 3 credits= 12 hours/week
- 4 credits= 16 hours/week
- 5 credits= 20 hours/week
- 6 credits= 24 hours/week
- 7 credits= 28 hours/week
- 8 credits= 32 hours/week

- 9 credits= 36 hours/week

Grading is based on the following criteria: supervision by the placement supervisor; contact with the faculty sponsor; a written learning contract, a final evaluation conducted by all three individuals; a journal/log of activities; and, if appropriate, a portfolio of work completed.

The internship seminar is designated as course 495 in the same department ("Internship Seminar") for two to six credits. Credit for this course is awarded in proportion to time spent working with the faculty member as follows:

- 2 credits= 6 contact or study hours/week
- 3 credits= 9 contact or study hours/week

4 credits= 12 contact or study hours/week

5 credits= 15 contact or study hours/week

6 credits= 18 contact or study hours/week

Grading for the seminar is based on regular contact with the faculty sponsor; an extensive written project, paper, or program as arranged with and periodically reviewed by the faculty sponsor.

Examples of past seminar requirements are:

2 credits: Journal of activities, outline of final paper, final paper, talk to student group;
Work journal, portfolio, annotated bibliography, oral presentation;
Journal, public presentation, short assignment, term paper;

Meet with sponsor, submit copies of projects, descriptive analysis of operations at placement.

3 credits: Log and annotated bibliography, research project and report, self-evaluation of performance, weekly meeting with sponsor;

Read three books, daily journal, 15-20 page research paper,

Journal, abstracts, outline of final paper, final paper, talk to student group.

4 credits: Daily journal, two book reviews, outline of research paper, major research paper, weekly meetings with sponsor.

6 credits: Daily journal on significant events, weekly meetings with sponsor, three major research projects.

The intern must fulfill any additional departmental requirements provided these requirements do not conflict with internship policies.

Non-Credit Summer Internships

Exciting opportunities are available for Juniata students in virtually every academic area, and Career Services is available to assist students in finding academically-meaningful positions. Students must have a minimum GPA of 2.0 to apply for a transcript notation internship, and must submit a learning agreement plan. With few exceptions, summer internships are not for credit, but can be officially noted on the student's transcript as an academically-valid experience. Over 150 students participate in this program each

summer. Note: Transcript Notation internships can also take place during the academic year. There is a maximum of two notations in a single summer and one per academic semester.

The College encourages organizations to pay summer interns, and students have earned from minimum wage to \$17.50/hour. To qualify for transcript notation, an internship must last for a minimum of 240 hours and should be directly related to the student's P.O.E. Each intern is evaluated by his/her supervisor, and must make a presentation on the experience. If the Internship is deemed appropriate and successful, the experience will be noted on the student transcript; e.g., ABC Employer, BI XX1 Internship: Biomedical Technician, Harrisburg, PA or EB XX1 Internship: XYZ Employer, Retail Sales/Mktg., Seattle, WA. While most students live and work near home, many students have taken advantage of summer internships as a way to travel and live in other areas. Students have interned in locations ranging from Hawaii to California and in organizations such as: Abbott, African Wildlife Foundation, Brigham and Women's Hospital, Geisinger Medical Center, Hershey Entertainment & Resorts, Human Rights Campaign, Johns Hopkins University, Long Island Rough Riders, PA Lions Beacon Lodge Camp, Pennsylvania Department of Environmental Protection, Philadelphia Zoo, Penn State College of Medicine, Secular Student Alliance, Tom Steel Clinic, UPMC, Yale School of Medicine.

Urban Semester Experiences

Juniata is affiliated with several urban semester internship experience programs including: the Philadelphia Center, the Washington Center, and the Washington Internship Institute. In all these experiences, students typically earn 15 academic credits, but only a limited number (2-3) of individuals may participate annually. Approval by the Internship Committee is on a competitive basis. Program costs vary and students are responsible for any costs above and beyond tuition and room fees paid to Juniata. Students may plan to participate in these programs during their junior or senior year. One year international students (and other students not seeking a degree at Juniata and/or attending Juniata for one year or less) are not eligible to participate in these programs. The application deadline is December 1 of the academic year prior to planned participation and is made through the Director of Career Services. A faculty sponsor is required.

Washington Internship Institute

Advisor: Director of Career Services

Students participating in WII's internship program work four days per week and attend the fifth day seminar to process their experiences. Students actively create and shape personal and professional learning goals by utilizing the three experiential learning components which guide the program: knowledge, activity and reflection. Past internship placements include: CNN, FAA, American Red Cross, Amnesty International, and others. Housing (excluding board) is provided.

*Participation requires approval by the Internship Committee- Deadline to apply: December 1 of the academic year prior to planned participation.

Philadelphia Center

Advisor: Director of Career Services

The Philadelphia Center program is open to students regardless of academic field. Through cooperation with the Great Lakes Colleges Association, students may spend a semester interning in Philadelphia, gaining firsthand insight into potential careers and exposure into the issues and problems confronting our cities. Blending theory and direct experience, each program includes a supervised internship for four days per week in business, industry, social service agencies, medical facilities, political offices, schools and other organizations. Seminars, academic classes and/or research projects provide academic complements. Assistance in locating housing is provided.

*Participation requires approval by the Internship Committee – Deadline to apply: December 1 of the academic year prior to planned participation.

Washington Center

Advisor: Director of Career Services

Under a cooperative arrangement with the Washington Center, Juniata students may participate in internships in Washington, D.C., in nearly every academic field. Internship placement assistance is available to help students secure meaningful, relevant placements. Interns work four days per week and attend seminars, political, and cultural events the fifth day. Internship placements include public administration, congressional offices, lobbying associations, and public interest organizations like Common Cause and the Environmental Policies Center. Housing (excluding board) is provided.

*Participation requires approval by the Internship Committee – Deadline to apply: December 1 of the academic year prior to planned participation.

Special Juniata Programs

Degree Completion Programs

The Degree Completion programs are designed for Juniata College students who are not GPA deficient and wish to complete the requirements to earn a Juniata degree.

How you can reapply:

The readmission process requires the students contact the Dean of Students Office for readmission for degree seeking status. These students do not enter through Enrollment admissions as they are not first time degree seeking students. Once they have been cleared by the Dean of Students records for any behavioral sanctions, they are forwarded to the Registrar's Office for re-admittance.

Walker Program:

Students who have not completed their Walker requirements and/or who are returning fulltime to complete their degree:

- Regular admissions will include a statement letter of intent sent to the Registrar's Office who reviews with the Dean of Students to determine space accommodations for on campus living, and with the Provost and Academic Support office to review academic record for feasibility for completion and advisor assignment. A \$300.00 administrative fee may be applied when accepted into the program.

Completion Program:

It is designed for those former students who need to earn 30 semester credits or less to meet their degree requirements.

- Typically these students can not return fulltime on campus to finish requirements.
- Students will register for a Degree Completion Planning Seminar to work out the details of their program. Following that, the program requires enrollment in at least one semester. The Fall or Spring enrollment need not be full-time or on campus.
- The POE must be approved by the Department Chair.
- Upon readmission, students are assigned a POE advisor to assist them in developing a program of emphasis which meets the degree requirements. The remaining credits needed to graduate may be earned through:
 - regular courses offered at the College;
 - through independent studies with the College faculty (including emeritus faculty) or with practitioners or scholars recognized as qualified by the Provost;
 - or through courses taken at other accredited institutions.

Students may transfer in credits if the student has not exhausted the current transfer credit policy. A \$300.00 administrative fee is applied when accepted into the program.

Deadlines to apply for readmission to Juniata in the Degree Completion program:

- July 1 for Fall semester
- November 1 for Spring semester

Academic Amnesty Program

Broad Guidelines:

- The Academic Amnesty Program applies only to students that have been away from the college for at least 5 years and wish to complete their degrees.
 - - Under the Academic Amnesty policy, a maximum of 15 credits (with grades) may be forgiven from the student's GPA calculation when he or she re-enters the college. Alternatively a student's GPA may be reset if the student has over 55 credits remaining to graduate.
 - No grades will be removed from a student's permanent record
 - Academic Amnesty can be offered only once per student
 - Final transcript will show GPA before and after Amnesty administered, and the new or adjusted GPA will be marked, "Academic Amnesty"
 - Students under this program will not qualify for academic honors, and their class rank will not be calculated
 - All requests for implementation of degree completion programs, including academic Amnesty, will be heard by SAD
 - Recognizing that certain areas of study may have changed dramatically over the course of decades, a student's POE must be approved by the relevant department chair as a condition of re-entry.
 - Curriculum committee will address concerns over outdated distribution requirements.
 - Students who graduate in these programs may take part in the May commencement ceremony
 - A \$300.00 administrative fee is applied when accepted into the program.

Masters Programs at Juniata

Master of Accounting (MAcc)

The Master of Accounting program is designed to prepare students for entry into a world where individuals must have a command of relevant knowledge about accounting, management, and economics, and have a capacity to apply that knowledge in addressing problems and making decisions. The program will emphasize the development of skills

necessary for a productive long term career along with a firm understanding of accounting theories and concepts. This understanding and development of skills will give students the knowledge they need to do well on the CPA Examination and achieve their career goals. Additionally, accounting skills are highly valued in the marketplace and can lead to career possibilities in corporate, non-profit sector, and governmental work.

Admission to the Master of Accounting program is administered by the Accounting, Business, and Economics Department. For more information or to apply to the program, please use the link below.

Application can be mailed to:

Dominick Peruso, Chair, Accounting, Business, and Economics
Master of Accounting Program
Juniata College
1700 Moore Street
Huntingdon, PA 16652

[Master of Accounting \(MAcc\)](#)

Nonprofit Leadership Master's Degree

Program Description:

The program in Nonprofit Leadership at Juniata College is an interdisciplinary Master of Arts (MA) program that provides students with the fundamental theories and skills leaders need to work successfully in the nonprofit sector. The program engages students in a combination of disciplinary perspectives, blending theory and practice so that students are well equipped to address the challenging social issues of our time.

The program addresses all areas of the sector including working with boards and volunteers, marketing and fundraising, fiscal managements, assessment and evaluation, advocacy and social change. The program provides a special emphasis on social innovation and problem solving skills, particularly for working with communities who have been marginalized by geography, culture, or custom.

Program goals include:

- engaging and strengthening the ability of local leaders to utilize interdisciplinary knowledge systems to work collaboratively

- teaching skill sets that enable leaders to be analytic and adaptive as they innovate to meet emergent challenges
- supporting leaders in developing a strategic impact vision and strategy with a trajectory to compel social change.

The Juniata Nonprofit Leadership MA is a fully online program.

Academic Program Requirements

The Nonprofit Leadership MA consists of a set of four required courses, a series of electives, and a capstone project or thesis. Students have the option of a master's thesis or a capstone project to complete the degree. A master's thesis involves completing and defending original research. Students may do a capstone project, individually or as part of an interdisciplinary team, to address a specific issue for a particular organization. A thesis committee must approve and review all capstone projects.

The program offers two MA options.

NPL MA 30 credits

Students entering the program with work or significant volunteer experience (1 or more years volunteering with a specific agency, or 2 or more supervised internship experiences) in a nonprofit environment can complete the master's program in one year (12 months, 4 semesters) with 30 credit hours of coursework.

NPL MA 42 credits

Success in the program, as well in the nonprofit sector, requires students to have some level of relevant professional work experience. Students with no work or significant volunteer experience must complete a for-credit internship in addition to the other MA requirements, to finish the MA with 42 credit hours.

Students may transfer in up to 6 credits (subject to the approval of the graduate committee) to fulfill program requirements. In addition to taking credits at Juniata, students enrolled in the program may take up to 6 credits at our partner institutions and up to 12 credits while studying abroad at our international partner sites.

Certificate Programs

Students may also choose to enroll in non-degree, certificate programs. To earn a certificate, students must complete three courses within a certificate area. The certificate program is designed for professionals interested in enhancing their skills in particular areas of professional development. Courses may be applied to a MA degree if a student chooses to enroll in the full program at a later date. Certificate options include:

- Leadership
- Social Innovation and Social Change
- Conflict Transformation

- Finances and Marketing

Curriculum:

NP-501 Foundations Nonprofit (Variable; Yearly; 3.00 Credits) In this course students will develop an informed understanding of the nature of the nonprofit sector, and the criteria that shape and define nonprofit organizations. Students will explore the factors that have shaped the expansion of nonprofit work and current trends influencing the structure of nonprofit organizations and the roles they play in governance and social change efforts as part of civil society.

NP-502 21st Century Leadership (Variable; Yearly; 3.00 Credits) This course examines the challenges of providing leadership in the information age of global and cultural contexts. Leadership as manifested in today's workplace provides both opportunity, and a great responsibility. The role and function of leaders looks very different today than years ago. Change is the norm. Leaders must understand today's challenges and be able to function effectively given a borderless, multicultural, virtual, and diverse group of partners, stakeholders and constituents.

NP-503 Leading and Managing NP (Variable; Yearly; 3.00 Credits) The past decade has seen an explosion of nonprofit and nongovernmental organizations, and an accompanying expansion of academic research and training about, and for, the field. This course utilizes this information to explore what it means to lead and manage nonprofit organizations. In particular this course will explore leadership roles within a nonprofit organization, the management tasks necessary to develop and run a healthy and successful organization, and examine what leadership looks like outside the organization when working with constituents, stakeholders, partners and the "opposition." Students will learn theories to enhance their capacities to provide effective leadership for nonprofit organizations and explore the leadership skills needed to build partnerships across sectors, respond to emerging trends and challenges, to partner with diverse groups, and to leverage power in order to bring about desired changes.

NP-504 NP Fiscal Management (Variable; Yearly; 3.00 Credits) This is a core course in the Non-Profit Leadership Master's program. The course introduces students to the basics of financial management as applied to non-profit organizations. Students will be invited to learn about the fundamentals of budgeting and accounting for public, health, and not-for-profit organizations. Through readings, webcasts, online chat, assigned problems, case studies, and problem sets, students will gain an understanding of how to use financial information in organizational planning, implementation, control, reporting, and analysis.

NP-510 Organizational Communication and Culture (Variable; Yearly; 3.00 Credits) This course blends the exploration of a critical, theoretical understanding of organizational culture with the theories and skills of leadership and change, equipping students with the knowledge and ability to develop a healthy, successful nonprofit organization. As part of this course, students will explore how values shape and define

organizational culture, along with management structure, geographic scope, size, client groups and governance structures. Students will develop the theories and skills needed to lead organizational change processes.

NP-520 Fundraising for the NP (Variable; Yearly; 3.00 Credits) This course builds the student's understanding of the sources of income for nonprofit organizations, with a specific focus on the fundamentals of effective resource development and fundraising. Students will explore principles and theories of " best practices " of fundraising, the fundraising process (research, planning, cultivation, solicitation, stewardship, and evolution), and emerging trends in the field (crowd sourcing, public/private partnerships, social investment, and social entrepreneurship). The course also provides students with a clear understanding of the historical, organizational, legal and ethical contexts that define how leaders and managers raise funds to support the organizations mission and vision.

NP-522 Marketing in Info Age (Variable; Yearly; 3.00 Credits) This course examines traditional marketing and how it has adjusted as a result of the challenges and opportunities of marketing in the Information Age. Information technology as manifested in the Internet and other enabling technologies creates a valuable marketing opportunity, and a great peril. As customers and competitors learn the power of real-time information, companies must learn to compete in a world where location and other long-held advantages may be less important.

NP-530 Conflict and Change (Variable; Yearly; 3.00 Credits)

NP-540 Social Entrepreneurship (Variable; Yearly; 3.00 Credits) The goal of the class is to expose students to the field of social entrepreneurship, with a particular emphasis on understanding how social entrepreneurs effect positive social change. The course aims to provide you with a comprehensive overview of the emerging field of social entrepreneurship, understand what makes it distinctive from traditional entrepreneurship, and identify and understand the framework needed to start and grow a sustainable social venture. The course will explore the assessment of the variations of social entrepreneurship, from the creation of an organization aimed at creating positive social change, to social responsibility initiatives within the concept of corporate social entrepreneurship.

NP-590 Internship (Variable; Variable; 2.00-9.00 Credits) See catalog

NP-594 Internship Seminar (Variable; Variable; 2.00-6.00 Credits) See catalog

NP-595 Capstone (Variable; Yearly; 3.00-6.00 Credits) The Nonprofit MA capstone is designed to provide students with the opportunity to synthesize the materials they have worked with over the course of the program. The capstone provides students with a critical learning opportunity either in the form of public service project where students work with a client organization on a specific challenge or task, or conduct original research. The capstone project provides students with the opportunity to pursue a specific body of knowledge within a particular context, thus honing their expertise in a specific

knowledge area, while also developing research skills, gathering and analyzing data, and in the case of a project, the opportunity to apply their knowledge and skills to a real-time need. Students are encouraged to work in teams to complete the capstone project.

Certificate Programs

The Genomics Leadership Initiative at Juniata College

The Genomics Leadership Initiative at Juniata College has been funded by the Howard Hughes Medical Institute and National Science Foundation. The initiative seeks to achieve its goal by developing a genomics certificate program, a leadership module, and student summer research experiences.

GENOMICS CERTIFICATE PROGRAM:

Comprised of seven courses, the genomics certificate addresses both the science and the broader ethical, legal and social implications (ELSI) surrounding progress and discoveries in the field of genomics. The ethical, legal and social issues surrounding advances in genomics provides a strong focus for practicing a breadth of knowledge and skills; the understanding of the scientific foundation of genomics provides the focus for developing an interdisciplinary base and cross disciplinary understanding of the life sciences in an era of “big data”. To help support this part of the program the grant has also funded an ELSI faculty development workshop, a seminar series, stipends for faculty developing new or revised classes, and stipends for faculty to formally assess the learning gains of students as a result of programmatic activities.

What is a certificate?

In general, an undergraduate certificate provides an interdisciplinary curriculum that is not available within any single academic unit. A certificate offers the possibility of a more cohesive general education experience oriented around a theme and taught by faculty who work together as a group on an ongoing basis and have common inter-departmental learning objectives and assessments. The awarding of the certificate is noted on the student’s transcript.

Who is this certificate for?

Students intending to pursue careers in biological research and medicine are the primary target. However, students interested in careers in public policy, public health, law, and business will gain by developing similar competencies.

Why should a student get this certificate?

As cost of a human genome approaches \$1000, appreciation of both the science and the ethical, legal, and societal implications of genomics has become an increasingly pressing issue. Design of the certificate was based on recommendations from a joint document

between the Howard Hughes Medical Institute (HHMI) and the Association of American Medical Colleges (AAMC) entitled, “Scientific Foundations for Future Physicians.” This report emphasized the importance of integrative scientific approaches, scientific reasoning, intellectual curiosity, communication and decision making skills, adaptability, ethical principles, and understanding of patients as individuals and in a social context. HHMI has funded Juniata College to implement this certificate program.

Description and Goals of a Certificate in Genomics, Ethics, and Society

Comprised of seven courses, the certificate addresses both the science and the broader ethical, legal and social implications (ELSI) surrounding progress and discoveries in the field of genomics. No area of modern biology provides a more appropriate focus for combining the humanities and sciences than the ethical, legal, and social implications (ELSI) of the human genome project and the evolution of the field of personalized medicine. The subject cannot be completely addressed without the input of specialists working across disciplinary boundaries. The ethical, legal and social issues surrounding advances in genomics provide a strong focus for practicing a breadth of knowledge and skills while understanding the acts of judgment and social contexts involved in the development and application of scientific knowledge; the understanding of the scientific foundation of genomics provides the focus for developing an interdisciplinary base and cross disciplinary understanding of the life sciences in an era of “big data”.

Learning objectives

Students who attain genomics certification will be able to:

Describe the basic concepts and principles of genomics.

Explain the scope of genomics from genes to society.

Integrate knowledge of the chemical, physical, mathematical and computational bases of genomics.

Explain the importance of the place of genomics in the human effort to understand natural phenomena, including its history and social impact.

Be able to make and justify ethical judgments about genomics research and its uses in medical practice and elsewhere.

Use the skills and interdisciplinary perspectives of the liberal arts in understanding trends in genomics and communicating them to academic peers and others.

Apply the process of science to questions in genomics.

Demonstrate an in-depth knowledge of a selected field in genomics.

Progress into a leadership role, working with experts and non-experts, with an awareness of the likely results of one's actions and an understanding of how results might differ in different settings and different cultures.

REQUIREMENTS

Core Courses: All students pursuing a genomics certificate must take four core courses required for a genomics certificate. Download the Genome Certificate Sheet to organize and plan your course of study.

1. Genomics, Ethics and Society (IC 203; Fall; MW 2-3:50PM; CWS prereq) A team-taught course that lays the foundations for interdisciplinary work on the ethical and social dimensions of genomics.
2. A course covering basic molecular biology, genetics, and genomics:

Biology II BI 106; Fall; N division class; T/Th 9 to 10:20AM, or T/Th 1 to 2:20PM, Discussion Sections Weds 8 or 10AM; BI-105 CH-105 prereqs
Human Biology BI 109; Not for biology majors; Fall; N division class; MWF 9 to 9:55PM

3. At least three credits of statistics:

Biostatistics with lab BI 305, Fall; N and QS division class; T/TH 10:30 to 11:50AM; Lab M 1 to 2:55PM or 3 to 4:55; BI105 or ESS100 prereq
Environmetrics ESS 230; Spring N division and QS class; T/Th 10:30 to 11:55AM; Sophomore standing
Introductory Probability and Statistics MA 220, Fall MWF 10 to 10:55AM; Discussion T noon; Spring MWF 1 to 1:55PM, TH 2:30 to 3:25PM; QS and N division class, prereq MA130.

4. One course covering informatics and analysis of large data sets:

Information Discovery IM 241, Fall QS and S division class; T/TH 9 to 10:20AM; prereqs IT110 or IT111 or CS110 or Instructors Permission (Loren Rhodes)
Biological Sciences Research Methods (Lamendella, Buonaccorsi, and Keeney sections)
Even Spring Semesters (Buonaccorsi), N division class; MW 2 to 4:50PM; prereqs BI207 or Instructors Permission
Odd Fall Semesters (Lamendella), N division class; schedule TBA; prereqs BI207 or Instructors Permission
Even Fall Semesters (Keeney), N division class; schedule TBA; prereqs BI207 or Instructors Permission
Computer Science 110 section G only, Spring N class, MWF 8AM to 8:55AM
Unix CS 255U, 1 credit every semester, T 8AM, prereq Computer Science 110 or Instructors Permission (Loren Rhodes);

AND

Perl CS255P, 2 credits, Summer, prereq Computer Science 110 or Instructors Permission (Loren Rhodes), sophomore standing, self study

or

Python CS255Y, 2 credits, Summer, prereq Computer Science 110 or Instructors Permission (Loren Rhodes), sophomore standing, self study

Electives: In addition to the core courses, students must take at least three elective courses related to ELSI genomic themes:

Social History of Medicine History HS 211; Every Fall; May count as either a CA, or an H or I division class. T/TH 1 to 2:20PM

Medieval Medicine: Health and Disease in the Middle Ages History HS 399, Every Spring. H division class. MW 11AM to 12:20PM

Doctors, Medicine and Literature Russian RU 299 01, Fall of odd numbered years. May count as either a CA, or an H or I division class. T/TH 10:30 to 11:50PM, T Noon to 12:55pm.

Science and Human Values Philosophy PL 250, Spring of odd numbered years, H division class.

Moral Judgment Psychology 3XX, Every Summer online, S division class.

Leadership in the 21st Century. Business EB 299, Odd Springs online (3 cr), S division class

AND Executive Leadership Business 199, 1 cr, Spring, 3PM, Weds.

Certificate in Geographical Information Systems

Geographic Information System (GIS) and spatial reasoning are a mainstay knowledge base for working professionals in environmental science, resource management, local and regional planning, disease monitoring and evaluation, real estate, military planning, and social science research. The Juniata GIS certificate program is offered jointly by the Environmental Science and Studies and the Computer Science and Information Technology Departments. We have two tracks to prepare a student for a career in any of the GIS fields. The first track has a focus on Environmental Science. This track has more courses in field methods in GIS and spatial analysis. The second track has a focus on Information Technology. This track has more courses in programming and data mining. the certificate is open to students in all departments as well as Juniata alumni.

Requirements for GIS (18-21 credits):

We have designed this certificate based on looking at successful programs. We have tried to match core strengths of other successful programs while differentiating ourselves based on our key strengths. The cores courses include

- Introduction to geographic information systems

- Topics in remote sensing and spatial analysis
- Quantitative methods

The ways we differentiate ourselves is through our strength in field data collection techniques for environmental sciences. We include tracks in Environmental Science and in Information Technology

The requirements of the certification are as follows:

Quantitative field intro (1 course) (4 credits): This section requires the student to have a quantitative introductory class in their field. The requirement of this course is that it has a lab or quantitative section where Excel or other spreadsheet or database program is used to compile and represent or analyze data. One course from the following:

- **Environmental Track**
 - ESS 100: Introduction to Environmental Science
- **IT Track**
 - IT 111: Principles of Information Technology, OR
 - CS 110: Computer Science I

Core Statistics or data analysis (1 course) (3-4 credits): One course from this section must be taken:

- **Environmental Track**
 - ESS 230: Environmetrics, OR
 - BI 305: Biostatistics
- **IT Track**
 - IM 241: Information Discovery

Core Geographic Information Courses (3 courses)(8 credits)

- Both Tracks:
 - ESS 330: Introduction to Geographic Information Systems (or Methods in Marine Science)
 - ESS 337: Advanced Topics in GIS and Remote Sensing

Field data collection component (1 course) (3-4 credits): This section is intended to have students exposed to the vagaries of field data collection. It is preferred that students collect spatially explicit data using GPS technologies or other spatially explicit survey methods. Database manage or other courses that explore the process of data collection will also meet this requirement.

- **IT Track:**
 - CS 370: Database Management/li>
- **Environmental Track: (Pick One From)**
 - ESS 399: Ecology of Fishes(3)

- ESS 399: Forestry
- ESS 399: Hydrology at the Station(3)
- ESS 399: Wildlife Techniques(3)
- BIO 399: Field and Stream: Grant & Muth(4)
- ESS 350: Field Research Methods(4)
- GL 240: Geological Field Meth. I(4)

Capstone or project requirement (1-4):

- **IT Track:** This will normally be a GIS related project done via an IT 307/308 and 380 or 480: Innovation for Industry course series, but it may be done as an independent study or project stemming from another course
- **Environmental Track:** This will normally be a GIS related project done via ESS 410 Senior Capstone class, but it may be done as an independent study or project stemming from another course

Table of Requirements

Environmental track	Information Technology Track	Requirement
ESS 100	IT 111/ CS110	Base Course
ESS 230 Environmetrics		
Or		
BI 305 BioStat	IM 241: Information Discovery	Data Analysis
ESS 330: Introduction to Geographic Information Systems	ESS 330: Introduction to Geographic Information Systems	Basic GIS
ESS 337 Advanced Topics in GIS and Remote Sensing	ESS 337 Advanced Topics in GIS and Remote Sensing	Remote Sensing
One from	CS 370 Database Management	Data Collection
ESS 399 Ecology of Fishes: (3)		
ESS 399 Forestry		
ESS 399 Hydrology at RFS: (3)		
ESS 399 Wildlife Techniques (3)		
BIO 399 Field and Stream: (4)		
ESS 350 Field Research Methods—(4)		
GL 240 Geological Field Methods. I (4)		
Senior Capstone or Other GIS project	I4I or other project with Spatial Data	Capstone
Total Credits		

Contacts:

Neil Pelkey, PhD.: Associate Professor Environmental Science and Studies and IT
Email: pelkey@juniata.edu or (814) 641-3589

Dennis Johnson, PhD.: Professor and Chair Environmental Science
Email: johnson@juniata.edu or (814) 641- 5335

Loren Rhodes, PhD.: Professor and Chair, Computer Science and Information
Technology
Email: rhodes@juniata.edu or (814) 641-3620

Academic Planning, Policies, and Procedures

Academic Planning

Graduation Checklist

View online version of the [graduation checksheet](#).

The Graduation Checklist is designed to help students keep a record of their progress toward fulfilling graduation requirements. It is Juniata's intention to encourage all students to graduate within four years. The following is a series of notes explaining the various requirements.

I. College Writing Seminar (CWS) This foundation course is required of all Juniata freshmen

II. Information Access Information Access is a one credit course required of all entering students, first years and transfers that ensures competency in the use of computing, network and library technologies at Juniata College. There are no exemptions from the course.

III. Interdisciplinary Colloquia and Cultural Analysis Students fulfill one Interdisciplinary Colloquia (IC) and one Cultural Analysis (CA) course type requirement by completing a two-course sequence.

Writing Requirement for IC and CA: Cultural Analysis courses will build on the skills of insightful reading, analysis, and writing acquired in the first year of study. Courses will provide a basic familiarity with some concepts and methods of cultural analysis. They may be offered as either 3- or 4- credit courses. In CA courses, students will make use of both primary (textual or other artifacts) and secondary sources. (Secondary works are those which interpret primary sources, or develop a method for the study of primary

sources.) These primary and secondary works will provide the raw materials for a synthetic project. Such projects will normally include either a synthetic paper of ten or more pages, or student-generated presentations or productions (for example, original art, music or drama) accompanied by a shorter written commentary. Any project must be designed to demonstrate the student's capacity for independent research and critical thinking. Students will be expected to show an awareness of their own presuppositions and of the possibilities and limitations of their methods. Faculty members proposing courses must include in their course proposal an explanation of how course assignments will demonstrate the student's capacity for analysis and synthesis with an appropriate degree of rigor.

IV. Communication Skills In addition to the College Writing Seminar, students will take at least four "C" courses (minimum 12 credits), two courses or 6 credits must be writing-based (CW) and the additional courses may be speech-based (CS). One CW course must be in the POE.

A CW course devotes considerable time to the development and assessment of writing skills. CW courses require multiple writing assignments that total fifteen to twenty-five pages during the semester, though these totals may vary by discipline. The methods of teaching writing often vary by discipline and by instructor, but all CW courses explicitly address the mechanics of writing and editing. Consequently, the syllabus of a CW course indicates the specific writing goals of the class, the criteria by which writing assignments will be evaluated, and the writing or style manual(s) that serve as the basis of instruction. A significant portion of class time is specifically dedicated to learning writing skills. At least 35% of the final course grade will be determined by writing assignments.

CW courses are intended to help students develop, compose, organize, revise, and edit their own writing. They develop a student's abilities to identify and define a thesis as well as to collect, organize, present, and analyze evidence and documentation to disseminate knowledge. CW courses are not limited to English only.

A speech-based (CS) course requires at least 25% of the grade be determined by two or more oral individual or group presentations, and it fulfills two requirements: (1) The course aims to develop rhetorical skills necessary for effective and creative speech in individual, group or public presentation. This may include one or more of the following: speech design and delivery, listening, negotiation, leadership, persuasion, collaboration, or decision making; (2) The course offers students at least two opportunities to demonstrate these skills. Evaluation of the first opportunity guides improvement of the second.

V. Quantitative Skills To demonstrate quantitative literacy, students have two options: (1) complete a "Q" course; (2) complete a mathematical course (QM) and a statistics course (QS). Q, QM and QS courses may be used in the POE.

Q fulfills FISHN distribution except for MA 103.

VI. Distribution Students must complete six credits in each of five categories: Fine Arts, International, Social Sciences, Humanities, Natural Sciences. In three of these five areas, at least three credits must have a prerequisite or be numbered at the 300-level or above. Distribution courses may count in a student's POE.

VII. Program of Emphasis The Program of Emphasis (POE) must include 45-63 credits. At least 18 credits must be at the 300-level or above. No more than two courses and a maximum of 15 credits in the POE can be research, internship, or independent study. The POE must include one writing course (CW). Degree seeking, one-year international students must have 14-16 Juniata credits in their POEs.

Distinction in the POE To achieve distinction in the POE, a student must fulfill all graduation requirements and complete a senior experience that integrates several areas of their POE. This requirement can be fulfilled in many ways. Some possibilities might include an original independent creative project that involves significant academic work, such as laboratory research resulting in a significant report; a major paper on a well-defined project; a body of artistic work equivalent to a major exhibition or performance; or field experience (e.g. student teaching or certain internships) culminating in a significant report. The project must be evaluated and judged worthy of distinction in the POE by two faculty members, at least one of whom must be from the home department. The project must also be presented in a forum open to all interested parties, either at Juniata or to an outside audience such as the National Conference on Undergraduate Research (NCUR).

Departments and programs will be free to establish further requirements for receiving distinction in the POE, including higher GPA requirements.

Departments shall forward the names of successful candidates for distinction to the Registrar's Office.

VIII. Service Learning (optional) Students who serve in the community may earn one credit per semester, for a maximum total of 4 credits. Students choosing this option must attend bi-weekly reflections sessions exploring connections among their service, coursework and citizenship. Credit is awarded on a pass/fail basis.

STUDENTS ARE RESPONSIBLE FOR ENSURING THAT ALL GRADUATION REQUIREMENTS ARE COMPLETED.

Advising

Faculty advisors are an invaluable source of support for students. At the time of enrollment, first-year students are assigned a Freshman Advisor who assists in orienting new students to College academic policies and procedures. By the early part of February

of their first year, students choose two faculty advisors: a program advisor to assist specifically with POE and career issues, and a liberal arts or general advisor to assist with general academic issues such as fulfilling graduation requirements. The liberal arts or general advisor teaches in a discipline outside of his or her student advisee's Program of Emphasis. Those students who do not choose a general advisor by the appointed deadline will have one assigned to them. For exploratory students, advisors can help identify potential areas of interest. At any time, students may change advisors, subject to approval of the Registrar, as long as one advisor is from the department most prominently represented in the Program of Emphasis (POE). Students pursuing dual fields of study should select one advisor from each area.

Advising is a crucial form of guidance for all students, especially for those individuals pursuing highly structured academic programs. During summer orientation, incoming freshmen work individually with faculty advisors in their area of academic interest to select and register for fall semester courses. On the first day of classes, first-year students meet with their Freshman Advisors to review course registration and make adjustments as needed.

Advising Worksheet Meetings and Program of Emphasis (POE)

During the spring semester, freshmen meet individually with both of their advisors to discuss course selection for the following year and to devise a four-year academic plan. The Advising Worksheet is available to assist the student and advisors as they map individual plans of study. The worksheet includes a checklist and planning guide for students' general education requirements, including: the liberal arts distribution (FISHN), Communication Skills (CW and CS), Quantitative Skills (Q), Interdisciplinary Colloquia (IC), Cultural Analysis (CA), College Writing Seminar (CWS), and Information Access (IA). The process of completing the document provides students with the opportunity to consider personal academic and career goals, and to begin to identify those courses that will provide the background, skills, and perspective needed to achieve those goals. In addition, it is an opportunity to consider internships, study abroad and other experiential learning opportunities.

During the spring of the sophomore year, prior to selecting courses for the following year, students must complete the Sophomore POE, which guides in planning their coursework. In addition to enumerating academic and career objectives, students sketch out a complete set of courses totaling 45-63 credits, and to explain how each course or set of courses contributes to the overall goals listed. Advisor-approved POEs are submitted to the Registrar. Failure to submit a POE by the deadline posted by the Registrar will result in a hold for future registration and a late fee of \$50.

In the fall of the senior year, students are asked once again to review the POE they have on file. Again, changes can be made either by drafting an entirely new POE or by

completing a minor POE change form. In some instances, the POE completed sophomore year will remain accurate and no changes are needed. The final document, due in the Registrar's Office on or prior to preregistration for the spring semester, is considered a contract between the student and the College; students who do not complete the courses they have listed or who do not have a POE on file, are considered to have failed to meet degree requirements and will not graduate. A \$50 late fee may be applied.

List of POEs

Academic Support

Juniata students may receive assistance with academic coursework in a number of ways. Through the Office of Academic Support Services, students may receive general academic counseling and study skills guidance on topics such as note taking and exam preparation. The campus-wide peer tutoring system offers individualized or group tutoring assistance with material in a particular course. Similarly, by visiting the Writing Center students may receive individual help on written assignments for any class. Students may take advantage of the Baldrige Reading Program, at additional cost, during the fall or spring semester to improve their reading comprehension and rate.

Peer Tutoring Program

Juniata offers a popular, campus-wide program of peer tutoring. Peer tutoring is available in any offered course to each student who desires additional help with subject material. Before requesting tutoring assistance for a course, students must discuss their academic performance with the course instructor and ask for his or her verbal permission; some faculty would prefer to work with a student during office hours before tutoring begins. In select courses, tutoring is offered in the form of group review sessions, and there are also small group tutoring opportunities in which two or more students work with a peer tutor.

A reasonable amount of tutoring is available at no charge to the student, but the number of hours of tutoring per week may not exceed the amount of time spent in lecture each week (three to four hours/week would be the maximum).

Request for tutoring is seen as a commitment from the student asking for assistance and is an obligation that requires consideration and motivation. Tutees are expected to arrive at prearranged meetings appropriately prepared and to notify tutors when they are unable to make an appointment. A tutee who fails to show up for prearranged meetings more

than two times will have his or her tutoring privileges revoked for the remainder of the semester.

Students/tutees understand that tutoring is a supplement to class preparation, class attendance, and faculty office hours assistance—it is not intended to replace any of these critical academic responsibilities. Students who are motivated to get the most out of tutoring find that the program is very successful for them.

All tutors have faculty recommendation, must make application for the position, and have an interview with the Director of Academic Support Services. In addition, each tutor must attend one hour of training per semester to maintain the program's integrity and to help tutors maximize their tutoring skills.

Student Research and Scholarship

In preparation for graduate work, students are encouraged to engage in independent research projects as part of an independent study or internship or as a member of an upper level research-oriented course. All students conducting research are encouraged to present their work in a public forum such as the annual National Conference on Undergraduate Research (NCUR). Funding for instruments, supplies, and travel is available through application to the Scholarship Committee. Interested students should contact any of the following Scholarship Committee members: Professors Beaky, Biddle, Buonaccorsi, Muth, J. Tuten and Kruse. For more information go to the website address: <http://www.juniata.edu/academics/research/student.html>

Students with strong records of academic achievement are encouraged to consider competing for national fellowship awards such as the Rhodes, Fulbright, Goldwater, and Marshall Scholarships, and the Mellon Fellowship. Students with meritorious records are contacted by members of the Scholarship Committee and mentored through the application process. Most applications are due early in the senior year. Interested students should contact a member of the Scholarship Committee.

Academic Policies

Definition of a Semester Hour of Credit

Juniata's guidelines for defining the approximate amount of work required for one semester hour of credit is as follows: For a course composed of classroom instruction, a semester hour of credit would normally involve 14 to 15 meeting times each semester with each lecture class meeting for 55 minutes. For one credit of a laboratory course the student should have three to four hours of laboratory instruction each week of the semester.

For each hour of classroom instruction the student is expected to do two hours of preparation. Therefore, a typical three semester hour credit course over a semester would include 43 to 44 hours of class meetings and 86 to 88 hours of student work out of the classroom

Registration and Drop/Add

Normally students preregister for classes online midway through the previous semester, but registration changes can be made during the first seven class days of each semester, known as the drop/add period. During this period students may adjust their schedule by adding and/or dropping classes, and latecomers can register for the semester. Students make changes to their schedules with advisors' approval. Failure to register during the scheduled preregistration may result in a late registration fee of \$50.

Normal Course Load

The normal course load for freshmen and upper-class students is 30 semester hours of credit per academic year. Normally students who complete an average of 15 credits per semester graduate in four years. Freshmen often opt to take lighter loads during the first few semesters and heavier loads later. Any course load above 18 credits per semester is considered an overload and will have the overload fee applied to the student's account.

Overload Policy

In special cases, an upper-class student may register for an overload. An overload charge is made for all credit hours attempted above 18 per academic semester. The upper-class student who wishes to take more than 19 hours of credit must have an outstanding academic record, including satisfactory completion of all courses attempted and must obtain by petition the consent of the Student Academic Development Committee. No student may take more than 21 credit hours per semester.

Excluding advanced placement credit, freshmen normally are not permitted to receive credit for more than 34 credit hours that academic year. A freshman may take more than 18 semester hours of credit only during the second semester and must fulfill two special

requirements: (a) satisfactory completion of all first semester courses attempted, and (b) approval by advisors and/or other appropriate faculty as determined by the Registrar.

If a student registers for an overload and then withdraws from the College, a refund will be made according to the refund policy explained under Student Finances. No refunds are given for course withdrawal from an overload after the drop/add period. Some courses extend over more than one term. All courses must be completed, however, within one academic year, not including the summer. All special arrangements for programs must be made in the Registrar's Office.

Auditing Courses

Persons who wish to audit classes may make arrangements with the Registrar to attend one or more courses without receiving grades or credit. The decision to audit a course must be made by the end of the drop/add period. The transcript does carry notations of audited courses. Permission of the course instructor is necessary and an auditing fee must be paid at the Bursar's Accounting counter in Founders. This fee is waived for students enrolled in a regular full-time College program, but occasional academic course fees remain in effect (lab and field trip fees, etc.).

Repeating Courses

Students who wish to repeat courses for which they have already received credit must obtain the permission of the Registrar. Although credit may not be granted twice for a particular course, in cases where a course is repeated both grades will be used to calculate final grade point average.

Independent Study, Credit by Examination and Tutorial

A student may wish to pursue studies not listed as course offerings. In such a case, independent study may be appropriate. Requests for independent study are handled by the Curriculum Committee through the Registrar's Office.

Independent Study:

Students applying for an Independent Study (**INS**) must make arrangements with a faculty member and register for the course (using forms available in the Registrar's Office and on the Registrar's website) two weeks prior to the semester in which the credit will be earned. The instructor will designate a syllabus, text, or other materials required and will submit to the Registrar an explanation of course requirements (i.e., examinations, papers, and faculty-student conferences). A student may enroll for no more than two Independent Studies in a semester. An Independent Study is considered an upper level course; no more than two Independent Studies are permitted in a POE.

Independent Studies will not carry any FISHN or SKILLS distribution unless petitioned to the Registrar's Office and/or the Curriculum Committee.

Credit by Exam:

Students may be given credit for some courses without participation in class meetings but by meeting all other requirements of the courses. To determine if a course is available for Credit by Examination (**CBE**), the student should consult the faculty member who is currently teaching the course. If the course is not currently offered a faculty member who has taught the course at least once in the last three years may conduct the course on a CBE basis. A course may be offered CBE only to full-time Juniata students. CBE is intended to be used as an option when scheduling conflicts prevent a student from scheduling a course required for graduation, which will not be available in any other semester prior to their graduation and cannot be fulfilled by any other course. The decision to offer a course CBE rests solely with the faculty member responsible for the course, since not all courses lend themselves to Credit by Examination (e.g., courses dependent on discussions and field trips and laboratory courses). The faculty member currently responsible for a course is NOT obligated to offer the course CBE in a given semester, as each faculty member must consider their own previously scheduled work load. The deadline for CBE registration is the end of the drop/add period during the semester in which the course is to be taken. Independent Study and CBE courses are considered part of the normal load of a student and, if taken as an overload, are subject to the usual overload fee.

Tutorial:

In a tutorial (**TUT**) the faculty instructor and the student work closely on a regularly scheduled basis involving lectures, demonstrations, explanations, and evaluation. The purpose of the tutorial is to enable a student to pursue a study which is too complex either in nature or scope to address as an independent study. Through regular contact with the instructor the student will benefit of his/her expertise on a highly individualized basis. Some tutorials are arranged to assist the faculty with classroom activities and for review sessions for large introductory classes. No pay is associated with students who are earning credit for the course.

During the Summer Session, a student may register for one Independent Study, Credit by Examination, or Tutorial if enrolling concurrently in one regularly offered course.

All forms can be found here: <http://www.juniata.edu/services/registrar/forms/>

Summer Sessions

Juniata conducts a Summer Session program designed for a wide variety of students. The course offerings are a subset of those offered during the regular year and are similarly rigorous. During Summer Session, the normal class load is three to six semester hours per four-week term.

Student Classification

A student's class is determined by the number of semester hours completed in accordance with the following:

- Freshman up to 23.99 credit hours
- Sophomore 24 up to 53.99 credit hours
- Junior 54 up to 86.99 credit hours
- Senior 87 and above credit hours

Full-time Status

A student is regarded as full-time if he or she registers for 12 or more hours of credit in each academic semester. A student who in the course of the semester considers dropping his or her credit load below 12 credit hours should confer with advisors and/or Student Financial Planning to discuss the consequences of this action.

Transfer Credit

Transfer credit is granted only for academically-valid courses in which the student earns a grade of C- or higher. Transfer credit is granted in the form of a comparable course, distribution credit, or elective credit. Credit is normally only awarded for courses taken at a similarly accredited institution. Students who take courses at schools without a similar

regional accreditation must provide syllabi for all courses for individual evaluation by the Registrar's office and departmental review. If the course is too focused or outside our curriculum delivery, no credit will be granted.

Current students wishing to transfer credit back to Juniata must obtain pre-approval by completing a "Request for Clearance of Transfer Credit" form available in the Registrar's Office. On this form, the appropriate department chair will note the comparable Juniata course(s) (consulting as needed with the most recent instructor of the comparable course), and the student's advisors will indicate approval. For courses not deemed comparable with a Juniata offering, decisions will be made by the Registrar with advice from the appropriate department and the Student Academic Development Committee as appropriate. It is the student's responsibility to obtain information about the course and present this information to advisors and the department chair(s).

Students who enter Juniata with fewer than 24 credit hours may apply no more than 15 transfer credits toward a Juniata degree after their initial entry. No more than eight of these 15 credits can be included in the POE. Students who enter Juniata with 24 or more credit hours may transfer credit according to the following chart.

# of credits awarded upon entry	total # transfer credits allowed after entry	# transfer credits allowed in POE after entry
0 - 23.99	15	8
24 - 53.99	9	4
54 - 86.99	6	0
87 or more	0	0

Exceptions may be made for students participating in cooperative programs, study abroad programs, and other Juniata-approved programs. Students who have earned an associate degree elsewhere are awarded credit as indicated in the Admission section of this catalog.

Students taking a leave of absence to study at another institution whether abroad or domestic, that is not a Juniata-approved program, must obtain pre-approval by completing a "Request for Clearance of Transfer Credit" form available in the Registrar's Office. These requests are subject to the guidelines listed above.

Students who have earned an associate degree elsewhere are awarded credit as indicated in the Admission section of this catalog. Students transferring to Juniata from an accredited institution without a degree (including those that previously attended Juniata) are awarded credit as indicated in the Admissions section of this catalog.

Residency Policy

Students are allowed to transfer credits during their last semester within the provisions of the transfer policy. However, 30 of the last 36 credits must be taken in residence. There are degree requirements that are unique to Juniata and may not be completed elsewhere. Students participating in cooperative programs, study abroad programs, and other Juniata-approved programs are considered to be in residence.

Advanced Placement Credit

Juniata encourages students to pursue additional credits through the Advanced Placement process. Incoming freshmen with scores of 4 or 5 on an Advanced Placement test may be offered Juniata credits. Selected Advanced Placement tests have been designated by the appropriate academic programs as equivalent to one or more Juniata courses. If the student accepts Advanced Placement credit for such a test, the student is then exempt from taking the equivalent course(s) and in fact may not take the course(s) for additional credit. If an Advanced Placement test is not designated equivalent to a Juniata course or courses, general credits in the appropriate division (Natural Sciences, Social Sciences, Arts and Humanities) may still be offered.

Test scores arrive at the end of July and are reviewed by the Registrar's Office. During the first week of school, students will receive a letter in their campus mailboxes with a form that directs them to department chairpersons for discussions about whether they will accept their AP test scores for college credit and/or direct course equivalency. Such meetings should preferably happen during the drop/add period (the first 7 class days of the semester).

Please go to the Catalog to the Department page to see the specific policy for credit application.

A student who receives a sufficient number of Advanced Placement credits will be granted sophomore status.

To have scores sent to Juniata: Go to www.collegeboard.org or call 1-877-274-6477

Foreign Language Placement

In foreign languages, students are placed at the appropriate college level based on their years of high school language or a placement exam. If a student decides to decline the evaluated level assigned and prefer to take the introductory course, students will be

advised that they can not count the course type of H or I for their FISHN requirements. It will be counted as basic general elective credit.

When students enroll in world language courses and plan to study for a semester in the target language and culture on a study abroad, students can have both requirements of IC/CA waived if they take one course beyond WL 210 in the target language. English speaking placements would not count for this waiver.

International Baccalaureate

International Baccalaureate Diploma recipients are granted credit for one full year (30 credits) toward a degree at Juniata. Students who have an IB Diploma normally enter the College with sophomore standing. IB certificate recipients receive course credit for each examination passed with a score of 5 or higher. To receive this credit the student will meet with the appropriate department chair or designee to consider the advantage or disadvantage of accepting credit. IB credits may be counted toward degree requirements.

Academic Integrity

All members of the Juniata community share responsibility for establishing and maintaining appropriate standards of academic honesty and integrity. Students oblige themselves to follow these standards and to encourage others to do so. Faculty members also have an obligation to comply with the principles and procedures of academic honesty and integrity. Academically dishonest acts include cheating, fabrication and falsification, multiple submission, plagiarism, unacceptable use of College computing systems or of electronic technology, abuse of materials, and complicity in academic dishonesty.

All offenses are reported to the Assistant Provost and all confirmed violations of the policy are kept on file until the student is separated from the College. If a student is accused a second time, the case can be automatically referred to the Judicial Board. Penalties may include, but are not limited to, the following: a formal warning; a reduced grade for the assignment; a reduced grade for the course; suspension from the College; dismissal from the College.

A more complete description of the College's policy on academic integrity and the procedures followed during a hearing of the Judicial Board can be found in the Pathfinder on the Juniata College intranet.

Leave of Absence

Students who want to pursue a program of study at another institution, engage in other off-campus educational experiences, and/or address personal issues without severing their connection with Juniata may request a leave of absence. A leave of absence is granted only with written approval from the Dean of Students Office in consultation with the Registrar. A student requesting a leave of absence must be in good academic standing. Absent extraordinary circumstances, a leave of absence will not exceed one-year.

Any student who plans to take a leave of absence should consult the Registrar, Student Financial Planning, and The Dean of Students Office.

Voluntary Medical Leave of Absence:

When a student's health impedes normal academic progress and/or a situation requires a student to leave the College for one or more weeks, the student may seek a voluntary medical leave of absence. A medical leave of absence is granted through the Dean of Students Office in consultation with the Registrar. The student will be required to submit supporting documentation from his or her medical/health care provider to substantiate the need for the leave. A student on a medical leave of absence will be required to submit documentation from his or her medical/health care provider attesting to the student's ability to return from the leave of absence (and outlining any reasonable accommodations, if applicable) prior to expiration of the leave of absence.

Upon receiving notification of an approved medical leave of absence, the Registrar will enter a "W" grade for all registered but not completed courses in the current semester. "W" grades are not calculated into the student's cumulative GPA, but may impact progress towards the degree standards. A student who is granted a medical leave of absence may still have financial obligations to the college. The student should consult with Accounting Services and Student Financial Planning to clarify any outstanding financial obligations.

Involuntary Medical Leave of Absence:

A student may be required to take an involuntary medical leave of absence in situations where the student is a threat to his own health and safety or the health and safety of others, or where the student's illness or behavior interferes with the academic pursuits of the student or others or interferes with the regular activities of the College community. The student will be notified by the Dean of Students of the reasons for the involuntary leave and any conditions for the student's return. The student will be required to submit documentation from the student's medical/health care provider attesting to the student's ability to return from such a leave (and outlining any reasonable accommodations, if applicable). Supporting documentation, along with the student's written request to return

to the College, must be received by the Dean of Students at least 30 days prior to the first day of the semester in which the student wishes to return. This is designed to provide the College with sufficient time to evaluate the documentation and the student's request to return as well as to ensure that the student no longer presents any potential threat.

A student on an Involuntary Medical Leave of Absence will receive a "W" grade for all registered but not completed courses in the current semester. "W" grades are not calculated into the student's cumulative GPA and will not be reviewed for academic progress. Financial obligations to the College will be pro-rated based upon the date of involuntary medical leave.

Military Leave of Absence:

A student who receives orders to report for active military duty should contact the Dean of Students Office. The student should be prepared to present a copy of military orders (if timing does not permit an initial presentation of military orders, the student may begin the leave process by submitting, in writing, a personally signed request indicating times and dates of intended call-up). However, when available, a copy of the military orders must be provided in order for the leave process to be completed and any financial reimbursements made.

The Dean of Student Office will notify the Registrar's Office, Accounting Services, Student Financial Planning Office and if appropriate the Office of Residential Life to expedite the military leave of absence process. The Registrar will enter a grade of "W" for all registered but not completed courses in the current semester. If the leave occurs late in the semester, the student may arrange for a final graded evaluation of his/her course work or take Incompletes for all remaining coursework. The Registrar will add the notation of "Military Leave of Absence" to the student's transcript.

The Student Financial Planning Office will provide information on the status of the student's financial aid, including information on deferring any loan payments.

The College will refund complete tuition payments to a student who processes a military leave of absence for the current semester. Room and board charges will be prorated based upon the date of the military leave of absence (No refunds can be made until the College has received a copy of the military orders calling the student to active duty).

Upon completion of active military duty, the student will be automatically readmitted to the College by notifying the Registrar's Office in writing of his/her intent to resume academic study at Juniata . All rights, privileges, academic status and rank are resumed at the same level as prior to the Military Leave of Absence.

Medical Withdrawal:

A student may make a request for a medical withdrawal from a course, or withdrawal for other extraordinary circumstances, through the Dean of Students Office or the Student

Academic Development Committee. A request for a medical withdrawal must be accompanied by supporting documentation from the student's medical/health care provider.

Upon receiving notification of an approved medical withdrawal, the Registrar will enter a grade of "W" which will not be calculated in the student's cumulative GPA. Medical withdrawals may impact College progress- towards-the-degree standards. Students are encouraged to discuss these implications with family, faculty advisors and counselors from Financial Planning or the Dean of Students Office.

Withdrawal from College:

If a student is considering withdrawing from the College, an appointment should be arranged through the Dean of Students Office. A decision to withdraw from the College may have broad implications including as to the student's financial aid. A student should meet with the Dean of Students Office to discuss withdrawal procedures and to complete the appropriate clearance forms.

If a student withdraws from the College during a semester, the Registrar will enter a grade of "W" for all registered but not completed courses. "W" grades are not calculated in the student's cumulative GPA, but may have other ramifications. Students who withdraw during a semester may still have financial obligations to the College. Students are encouraged to discuss these matters with family, faculty advisors and counselors from Financial Planning and the Dean of Students Office.

On-Time Graduation Guarantee

The keys to an affordable education and great career momentum are the same – on-time graduation. Juniata expects all full time students who are admitted to be able to graduate in four years or less. In fact, at recent graduations, 92-96% of the graduates had completed their degrees in four years or less. This has been possible because students at Juniata are motivated, focused and well advised by the College's faculty. Remarkably, they also are able to study abroad and complete significant research and internship experiences which are career enhancers while maintaining the pace for achieving their degrees.

Of course, not all students are in a position to graduate in four years. Some may need or prefer to work more than the 17 hours per week that are permitted and attend school part-time. Others may just choose a different pace or the opportunity to take a wider range of courses that are not directly related to their field of study. This program is designed for those who want to complete their degree program as quickly as possible.

The College's Commitments

The College will provide eligible students with advising about their academic programs and with the courses they need to complete them. To assist students in their plans to graduate in four years, the College will:

- Ensure that its students are well-informed about College Degree and Program of Emphasis requirements and provide students with qualified faculty advisors.
- Advise the students if any of their planned semester's activities will prevent them from fulfilling their commitments.
- Provide timely access to the courses students must take to meet degree requirements.
- Encourage and support the students in pursuing study abroad. It is important to note that not all study abroad opportunities provide the diversity of coursework necessary for the guarantee to remain in force. Students considering study abroad must consult with their advisors to determine if their course of study while abroad will allow them to complete necessary College and Program of Emphasis requirements and therefore are permissible under this guarantee.
- Encourage and support the students in obtaining research and internship opportunities that will enhance their careers and maintain required progress to on-time graduations.
- Stop the plan's clock if students must withdraw from the College because of serious health or family problems or take approved leaves of absence (e.g., church mission, National Guard deployment, pregnancy). If the student is unable to complete any credits due to this withdrawal and the circumstances are reported and satisfactorily documented to Student Services, the interruptions will not count toward the four year totals.

The Students' Commitments

Students shall follow the academic advice provided by their advisors and must take the courses which are available to them. If they are committed to graduating in four years, they must:

- Be first-time Juniata College domestic freshmen (including freshmen with Advanced Placement, but excluding freshmen admitted on conditional or part-time status and those required to complete an English as a Second Language course).
- Declare their final Program of Emphasis prior to earning 60 credits. If students change their Program of Emphasis after that time, they may be unable to complete the requirements of the new Program of Emphasis within the four-year time frame and therefore would not be eligible for the guarantee.
- Meet with their academic advisors every semester to ensure that the courses they select will meet all program requirements (College degree and Program of Emphasis) within their commitment periods.
- Register for classes as early as permitted by the College for each semester, promptly notifying their advisors when a required course is not available. Students may need to adjust their preferred schedules to take courses that are offered at times other than those preferred by a student.

- Complete thirty credits each academic year and not drop any course required for their degree or Program of Emphasis after their third semester.
- Maintain satisfactory qualitative academic progress as outlined in the student handbook and as required for their declared Programs of Emphasis. Students must earn grades sufficient to allow them to enroll in the next level of required courses in order not to repeat courses and thereby lose time.
- Remain in good disciplinary standing.

The Guarantee

The conditions described above apply to the guarantee only and not to any specific graduation requirements. In the event that a student has met all of the student's commitments and is unable to complete the degree in four years or less, the College will:

- Not charge the student for any tuition that would otherwise apply to credits earned after the fourth year that are required for the Program of Emphasis or degree. The student will be responsible for any room and board expenses, books and fees other than course fees.
- This program does not cover students wanting to complete double majors that would require more time or students seeking dual certification in education who must pay for credits which are earned after graduation but are needed for dual certification.
- This does not apply to international students or to transfers.
- This does not apply to any student whose graduation is delayed for failure to make full payment of all fees incurred for graduation or that otherwise apply in a fifth year.

Students are presented this guarantee after completing 40 but not more than 60 credits. By signing and providing two signed copies to the Registrar's Office, they accept the College's offer of a guarantee and agree to meet the required commitments. The Registrar will record the commitment and return a copy to the student.

Principles of a Liberal Arts Lifestyle:

As a community, Juniata is dedicated to providing an academically rigorous and personally enriching liberal arts education. Students have a responsibility to expand and fulfill their lifestyles to embrace the opportunities that lead to well-rounded citizenship.

The Student Government of Juniata College, as servant of the students, approves the following principles of a liberal arts lifestyle, and believes that these principles serve as the vehicle to successful life experiences.

A Juniata student who fully engages in a liberal arts lifestyle:

- Recognizes the value of being a citizen of the world in an increasingly global and diverse community.
- Seeks opportunities to serve in activities that enrich communities and give back to humanity.
- Builds meaningful and lasting relationships with academic peers, faculty, staff, and future colleagues.
- Regards healthy lifestyle choices as the keystone to success.
- Embodies a spirit of sustainability through awareness of finite resources.
- Realizes that learning is a lifelong process encompassing many disciplines.
- Questions the assumptions and truths presented in life, as embodied in Juniata's maxim "Veritas Liberat."
- Understands that integrity and honesty in all of life's pursuits are virtues unto themselves.
- Assumes responsibility for choices made

Approved by Juniata College Student Government, April 14, 2006

Policy on Student Accommodations

The College makes reasonable accommodations for students with respect to disabilities which do not impose an undue hardship on the College. If a student believes he or she requires a reasonable accommodation or has a question regarding educational services, activities, programs, or facilities that are accessible to or usable by students with disabilities, please contact the Director of Disability Services who serves as the point person and advocate for students with learning challenges.

Documentation

Students requesting reasonable accommodations with respect to disabilities must obtain and provide to the College current (within three years prior to enrollment) documentation of their disability before the start of the session in which they are enrolling and requesting an academic adjustment or services. This documentation must support both that a student has a disability as well as the necessity of the requested academic adjustment or services. The primary purpose of this documentation is to determine a student's eligibility for accommodation and, if eligible, to help the College work interactively with a student to provide appropriate services. The College is not required, however, to provide accommodations that would result in a fundamental alteration to the nature of the program in which the student is enrolled or seeks to be enrolled, would create an undue financial burden on the College, or which would pose a threat to safety and security. General documentation requirements include, but are not limited to:

- Documentation is typically provided by a licensed or otherwise properly credentialed professional/medical specialist who has no personal relationship (i.e., family member or former school teacher or school counselor) with the individual but who is knowledgeable about the individual's disability and/or condition.
- Documentation must be typed or printed, dated, signed and legible with the name, title, and professional credentials of the evaluator on official letterhead and define/explain:
 - The clear description of the disability
 - The description, name, and scores of the tests and assessments used, as appropriate
 - How the condition was diagnosed
 - The current existence of the disability and current need for an accommodation
 - Functionality of the individual in an educational setting
 - Expected progression or stability of the disability
 - Rule-out statement that describes which academic and other functions the disability does not affect
 - Recommended accommodations related to functional limitations and a rationale for how the requested accommodation remedies the functional limitation
 - Date of observation

The above criteria are general guidelines only; the type of documentation will vary according to the disability. For students with learning differences, it is preferable that the student provide a full and recent psycho-educational evaluation. In addition, in some instances, a student may be requested to provide updated or augmented documentation in order to be reviewed more fully before being considered for services. It is possible that in reviewing a student's specific accommodation request or the recommendations of an evaluator, the College may find that while the recommendation is clinically supported, it is not the most appropriate accommodation given the requirements of a particular student's academic program. In addition, the College may also propose accommodations that would be appropriate and useful to the student, but which neither the student nor the evaluator have requested. The College appreciates that student disability records contain personal and confidential information. Such documentation is maintained in a confidential file in office of Academic Support Services and is considered part of a student's education record and will only be disclosed with a student's permission or as permitted by law (e.g., in the event of a health or safety risk). However, at times, in order to evaluate and/or provide requested or recommended services and accommodations, it may be necessary for the College to disclose disability information provided by a student or a student's healthcare provider to appropriate College personnel participating in the accommodation process and who have a legitimate need to know more and review the file.

If documentation provided by a student does not support the existence of a disability or the need for an accommodation, the student will be advised and will be provided an opportunity to supplement the initial documentation with further information from a

physician, psychologist, or other appropriate specialist. In the event a student's accommodation request is denied, a student may appeal that decision by utilizing the appeal/grievance process found below.

Supporting Students with Disabilities

In its commitment to ensuring that no otherwise qualified student with a disability is subjected to unlawful discrimination in the context of his/her educational experience, the College makes certain that students with disabilities are provided equal access to educational and career development programs and/or student activities. Consequently, as noted above, the College will make, on behalf of qualified students with learning and physical disabilities of which the College is aware, reasonable accommodations that do not impose undue hardships on the College. Students and their families are strongly encouraged to disclose and discuss possible accommodations during the enrollment process.

If a student believes he/she requires a reasonable accommodation or has a question regarding educational services, activities, programs, or facilities that are accessible to or usable by students with disabilities, please contact the academic counselor in Academic Support Services who has responsibility for students with learning challenges. All information associated with a disclosure of this nature is confidential, and the College will communicate this information to others only on a need-to-know basis.

Appeal/Grievance Process

Scope and Application: This appeal/grievance process applies to any student allegedly aggrieved by a denial (in whole or in part) of his/her request for an accommodation/academic adjustment under the College's Policy Regarding Students with Disabilities or who otherwise has an unresolved complaint regarding his/her disability. The College commits that no retaliation will occur at any stage of this process.

Initial Time Period for Filing an Appeal/Grievance: A student, alleging a disability and wishing to file an appeal/grievance hereunder, must initiate the procedure described below within thirty (30) calendar days of when the student knew or should have known of the action of which the student complains or is otherwise aggrieved by, including a denial (in whole or in part) of a request for accommodation/academic adjustment.

(A) The student or, any person(s) acting on behalf of the student, may file an appeal/grievance with the Office of Academic Support Services. An academic counselor (or his/her designee from Academic Support Services) will discuss the student's complaint and attempt to resolve or adjust the dispute on an informal basis. The student may present any facts or circumstances he/she deems relevant to the complaint/dispute. The academic counselor may investigate the matter and gather any relevant facts and circumstances, including conducting interviews. The academic counselor shall render a determination within twenty (20) calendar days after being assigned to handle the student's appeal/grievance. Within seven (7) calendar days from the date of the

determination by the academic counselor that the complaint/dispute could not be resolved, the student (or the person acting on his/her behalf) must submit a written request for a further review by the Dean of Students to the Office of Academic Support Services and must document the student's attempt to first resolve the appeal/grievance with the academic counselor. The written request must explain the nature of the student's complaint/dispute and/or the accommodation/adjustment sought.

(B) The Dean of Students shall review all matters relating to the complaint/dispute as presented to the Office of Academic Support Services and may solicit additional facts and evidence as the Dean may deem necessary. The student may present any further facts or evidence he/she deems relevant. The Dean of Students shall complete the review and render a decision within twenty (20) calendar days after the appeal/grievance is submitted to the Dean of Students. If, after the Dean of Students has had an opportunity to render his/her decision, the student remains unsatisfied with the resolution of the appeal/grievance, the student, or person(s) acting on behalf of the student, may submit an appeal/grievance in writing, within seven (7) calendar days from the date of the decision by the Dean of Students, to the Provost. If no written request is submitted within the seven-day period, the decision of the Dean of Students shall be final.

(C) Upon the submission of the student's written request for a review of his or her appeal/grievance, the Provost will consider all facts and circumstances, including the investigatory file as developed by Academic Support Services and any medical evidence presented. The Provost may also interview the student or such other witnesses as may be necessary. If, upon such inquiry, the Provost determines that a proper review of the matter was conducted, the decision of the Dean of Students shall be confirmed. The Provost may also amend, alter or revise the decision and, therefore, the Provost is responsible for the final decision. The Provost will render a decision within thirty (30) calendar days after the appeal/grievance has been submitted to the Provost as described above.

Academic Records

Family Educational Rights and Privacy Act of 1974

FERPA (otherwise known as The Buckley Amendment)

The Family Educational Rights and Privacy Act of 1974 (FERPA), commonly referred to as the Buckley Amendment, provides college students with certain rights relative to access and release of records that are personally identifiable. Juniata College's policy and procedures relating to the amendment are outlined below:

Student Records

- Records that can be reviewed by students are maintained by the Registrar, the Director of Career Services, the Dean of Students, the Director of Student Financial Planning, and the Controller.

- Students have the right to inspect records listed above by asking for an appointment with the appropriate administrator. Records will be produced within a 45 day period and students have the right to seek the correction of information they consider inaccurate.
- Students have the right to copies of their records.
- Personally identifiable information from these records will not be disclosed to a third party without written consent of the student with the exceptions listed below:
 - To other Juniata College administrators and faculty with a legitimate educational need (including faculty advisors and coaches of intercollegiate athletes).
 - To accrediting agencies, certain governmental agencies involved in educational research, legal officers presenting a subpoena, and in emergencies to protect the health and safety of the student or others.
 - Records of request and disclosure of student records will be maintained by the appropriate administrators. These records will indicate the name of the party making the request, any additional party to whom information may be re-disclosed, and the legitimate interest the party had in obtaining the information. These records are available to students.
- According to the Buckley amendment, students do not have the right to review the following documents which may be in their files.
 - Confidential letters and statements of recommendation which were placed in a file before January 1, 1975.
 - Letters of recommendation that students have waived their right to review.
 - Personal notes of faculty members, counselors, and administrators which are written only for the use of the writer.
 - Financial records and statements of parents.

Directory Information

Directory Information includes name, home and local address, home and local phone number, email address, POE, class level, co-curricular activities, dates of attendance, enrollment status, cumulative credit hours, degrees, honors and awards received, and College-sanctioned photographic imagery. College-sanctioned photographic imagery is defined as digital or photographically printed images captured and created by College-financed operations including but not limited to the Marketing Office, the Digital Media Studio, the Advancement Office, Student Services, and the Office of the Registrar Juniata may use parents names to promote announcements of their student's activities.

Students may refuse to have the directory information listed above, or some of the categories, released to third parties by submitting a written request to the Dean of Students by the fourth week of any given semester. Juniata has determined that College-sanctioned photographic imagery is part of directory information, and thus is covered by blanket permissions implied in the Juniata policies regarding directory information.

Parental Notification

In the interest of promoting better communication regarding students' academic and personal development, parents of dependent students may opt to receive copies of all correspondences involving violations, charges, actions, awards and citations that are sent from the Dean of Students Office to respective students unless we are asked not to send copies (hard waiver). Revealing such information is permissible under section 4.1 Disclosure of Educational Record Information – 3i, which permits colleges to share educational records or components thereof without the written consent of the student to “parents of a student who have established that student’s status as a dependent” (chapter 5.3).

The Registrar’s Office for academic actions will release grades and send copies of academic actions including academic probation, suspension and dismissal, to parents of dependent students provided there is an acknowledge consent on file from the respective student. If students would like parents to receive grade reports for the semester, the student must submit a request form each time the grades are to be sent. The form is located in the Registrar's office.

The Student Accounting Services Office will communicate with parents of dependent students about billing for course registration, room and board, and any incidental fees which are the responsibility of a registered Juniata College student.

NOTE: By registering, students are obligated to pay tuition, fees and other charges associated with the registration. Failure to meet these obligations by scheduled due dates, may result in additional costs associated with collection efforts including late fees, collection agency commissions, court costs, and other collection costs that might be incurred.

Transcripts

The Registrar's Office maintains a complete record of a student's academic work. This record is available for inspection by the student and/or the parents of dependent students. For purposes of employment, transfer or further study, the student may request in writing that an official transcript of the record be sent to an individual or institution. Official transcripts are for the use of a third party and bear the College seal. Unofficial transcripts are for personal use by the student and bear no seal.

No transcript of a student's permanent record will be issued without written authorization from the student. No telephone or third-party requests will be honored. Members of the faculty or administration may have access to the records if they have a legitimate interest in and demonstrate a need for the information.

Grade Reports

Grade reports are available to the student through the ARCH at the conclusion of each semester. Students wanting to have a grade report sent to his/her permanent address or another third party must submit the request to the Registrar. The form is located in Founders Hall in the Registrar's Office.

Academic Progress and Grade Reports

The implementation of probationary requirements and the determination of the fulfillment of graduation requirements are duties of the Registrar. *Notification of any action comes from the Registrar's Office and is sent to the student's parents unless the student sends a letter preventing such notification.* Development and interpretation of policies are the function of the Student Academic Development Committee (SAD).

Advisors are notified of all advisees placed on academic probation, suspension or dismissal.

Grades

Grades are due 48 hours after the last exam or meeting time and are awarded according to the following scale.

A - indicates work of the highest excellence, showing a superior grasp of content as well as independent and creative thinking in the subject.

B - signifies unusual achievement wherein the student reveals exceptional insight and ability.

C - is given for satisfactory achievement on the college level where the work in the course has been conscientious and shows no considerable deficiency in either quality or quantity.

D - indicates that the work in the course is below the quality normally expected for college work, but is only marginally so.

F - signifies work which is distinctly unsatisfactory at the college level.

The above grades may be qualified by the use of a plus(+) or a minus(-). For the permanent record, a grade point average (GPA) is compiled and the GPA appears on the transcript. The following equivalents should be used for calculating the GPA:

- A = 4.00
- A- = 3.67
- B+ = 3.33
- B = 3.00
- B- = 2.67
- C+ = 2.33
- C = 2.00
- C- = 1.67
- D+ = 1.33
- D = 1.00
- D- = 0.67
- F = 0.00
- S = Satisfactory
- U = Unsatisfactory

S (satisfactory) or U (unsatisfactory). Performance in a few courses is graded as S or U, but in the majority of courses, the grades listed above are given. Only grades of A(-), B(+,-), C(+,-), D(+,-), and S are given credit toward a degree.

AU (Audits). Performance in audit classes are given a grade of AU. This is given regardless of the students' participation. Audits can not be changed after the drop/add period and it is up to the faculty to determine at what level a student should participate in their class. There is no withdrawal from audit coursework, if a student stops attending, they will still receive an auditing with no grade or credit.

In addition to the regular grade designations, the following irregular grades are used as occasion may demand:

I (incomplete). At the discretion of the faculty member involved, a grade of incomplete may be submitted. This option is to be used sparingly, however, and only when the student has given a satisfactory explanation (such as extended illness or accident) for failure to complete a required piece of work. Otherwise, a student receives an F for a course which is not completed. Simple preference on the part of the student for an extension of time is not regarded as sufficient cause for granting an incomplete. Upon the granting of an incomplete, the student must complete the work within three weeks of the beginning of the next semester of the academic year or an F automatically will be recorded. Any exceptions to this policy must be approved in writing by both the instructor and the Registrar.

WF or WP (withdrawal). A student may withdraw from a course after the Drop/Add period only with the written approval from the course instructor and the student's faculty advisor. A grade of WP or WF will be recorded for any courses that a student withdraws

from following the Drop/Add period. A grade of WP will be recorded if the student was passing the course at the time of the withdrawal, while a WF will be recorded if the student was failing the course. WP and WF grades are not calculated into the student's cumulative GPA. Course withdrawals will only be approved, absent extraordinary circumstances, until the scheduled mid-point of the term. For withdrawal after the mid-term date, please consult the course syllabus of the class instructor. The official Mid-Term Date is posted on the Academic Calendar.

Unofficial withdrawals from courses will be recorded as F and will be calculated into the student's cumulative GPA. Withdrawals from class are considered unofficial if the student fails to obtain the required written approvals as outlined above.

Withdrawal from courses may impact financial aid and/or inter-collegiate athletic eligibility. Students are encouraged to discuss these implications with family, faculty advisors, coaches, and counselors from Financial Planning or the Dean of Students Office.

Absent extraordinary circumstances, a student will be permitted a maximum of four course withdrawals at Juniata College during the undergraduate career.

W (withdrawal). If a student withdraws from the College during a semester with the Dean of Students approval, the Registrar will enter a grade of "W" for all registered but not completed courses. "W" grades are not calculated in the student's cumulative GPA, but may have other ramifications. Students who withdraw during a semester may still have financial obligations to the College. Students are encouraged to discuss these matters with family, faculty advisors and counselors from Financial Planning and the Dean of Students Office.

If students withdraw from all classes (withdrawal from the College), they must apply to the Student Academic Development Committee through the Registrar to be readmitted.

Grade Appeals

The assignment of grades for academic work is an important matter which falls within the professional responsibility of each individual faculty member. Grades are determined in such a way as to reflect as accurately as possible student performance according to criteria available to the student and to protect the academic freedom both of the faculty member and the student. There is an inherently subjective element to grading, but it does not follow from this that grading is done in an arbitrary fashion.

A student may dispute a grade given in or for a course. When this occurs, the student should follow the appeal procedure outlined below. The faculty member issuing the grade has final authority and responsibility for determining that grade.

- Within two weeks of the time the questioned grade is received, the student should talk to the faculty member who assigned the grade and attempt to resolve the issue.
- If the course is team taught and no resolution is achieved, the student may request, where course policy permits, a second faculty opinion from another section leader in the course selected by the director of the course. If this is permissible and the opinion of the second leader differs from the opinion of the first in the disputed grade, the course syllabus or past practice in the course should specify how these different opinions are resolved. Where there are recognized past practices, these should be included in the course syllabus.
- If no resolution of the grade dispute is achieved after steps 1 or 2, the student should discuss the matter with the department chairperson or course director. In this case, the function of the chairperson or director is to attempt to determine the relevant facts and mediate the disagreement.
- If no resolution is achieved at step 3, the matter may be referred by the student or the faculty member to the Provost, whose function it is to mediate the disagreement. The Provost will confer privately with the faculty member and the student and may call additional witnesses. Following this process, the faculty member communicates to the student the final decision. This step is the final step in the appeal process.
- It is expected that a final decision will be made within four weeks of the time the questioned grade is received. All parties are requested to adhere to the deadlines.

Academic Standards of Progress

The maintenance of good academic standing requires students to meet several standards.

Any student whose semester or cumulative grade point average at any time falls below 1.00 may be academically dismissed. Any student whose semester grade point average falls below 1.66 at any time will be placed automatically on academic probation. In addition, any student whose cumulative average falls below those in the following table will be placed on academic probation. In addition to meeting the grade point average requirements, students must show appropriate progress toward degree completion. Full-time students must successfully complete 24 academic credits prior to the beginning of the third semester; 48 academic credits prior to the beginning of the fifth semester; and 72 academic credits prior to the beginning of the seventh semester. Any student failing to meet these standards is placed on Academic Probation and is required to complete 12 credits in the subsequent semester. Failure to complete 12 credits (in the subsequent semester) results in suspension or dismissal. A second failure to meet these standards of progress will result in suspension or dismissal. Students have the right to appeal suspension and dismissal.

Credit Hours Attempted Grade Point Average

- 0 - 35.99 1.66

- 36 - 61.99 1.80
- 62 - 89.99 1.95
- 90 or more 2.00

Students on Academic Probation will be evaluated at mid-term to determine adherence to Academic Probation contracts. Students failing to meet requirements of Academic Probation contracts may be suspended or dismissed at mid-semester. Students have the right to appeal suspension and dismissal. Students on probation must achieve good standing in the next semester or face suspension or dismissal. In addition, any student who accumulates three semesters of probation will be suspended or dismissed. Also, any student on academic probation will be counseled regarding possible limitation or curtailment of his or her participation in co-curricular and/or employment activities. Students who have not satisfactorily completed the College Writing Seminar course by the end of the sophomore year are automatically dismissed. Academic Standards of Progress are established by the faculty and monitored by the Student Academic Development Committee in conjunction with the Registrar.

The implementation of probationary requirements and the determination of the fulfillment of graduation requirements are duties of the Registrar. Notification of any actions comes from that office and are sent to a student's parents unless the student signs a form preventing such notification. Development and interpretation of policies are the function of the Student Academic Development Committee.

Dean's List

At the end of each semester, the Provost announces the Dean's List. Matriculated students are named to the Dean's List when:

- 1) they have taken at least 12 graded credits,
- 2) they achieve an average of 3.60 or better, and
- 3) they have no unsatisfactory grades.

A notation of Dean's List achievement appears on the transcript.

Juniata students studying abroad will not be eligible for the Dean's List. Students who are partner degree visiting students and visiting non degree students are also not eligible for this notation.

Graduation Honors

Honors are conferred at commencement ceremonies according to the following grade point average scale:

- summa cum laude 3.90-4.0
- magna cum laude 3.75-3.89
- cum laude 3.60-3.74

Students who are partner degree visiting students are not eligible for graduation honors.

Honor Societies

The Juniata College Honor Society is a group of junior and senior students elected on the basis of outstanding academic achievement and leadership ability. Other honor and honorary societies on campus also recognize students for their accomplishments: Beta Beta Beta (biology), Lambda Pi Eta (speech communication), The Masque (theatre), Omicron Delta Kappa (leadership), Phi Alpha (social work), Phi Alpha Theta (history), Pi Lambda Theta (education), Pi Sigma Alpha (politics), Psi Chi (psychology), Rho Epsilon Chapter of Gamma Sigma Epsilon (chemistry), Sigma Gamma Epsilon (geology), Sigma Iota Rho (international studies), Sigma Pi Sigma (physics), Sigma Tau Delta (english) and Tau Pi Phi (accounting, business and economics).

Distinction in the Program of Emphasis

To achieve distinction in the Program of Emphasis, a student must fulfill all graduation requirements and a senior experience that integrates several areas of their POE. This requirement can be fulfilled in many ways. Some possibilities might include: an original independent creative project that involves significant academic work, such as laboratory research resulting in a significant report; a major paper on a well-defined project; a body of artistic work equivalent to a major exhibition or performance; or field experience (e.g. student teaching or certain internships) culminating in a significant report. The project must be evaluated and judged worthy of distinction in the POE by two faculty members, at least one of whom must be from the home department. The project must also be presented in a forum open to all interested parties, either at Juniata or to an outside audience such as the National Conference on Undergraduate Research (NCUR).

Departments and programs will be free to establish further requirements for receiving distinction in the POE, including higher GPA requirements.

Departments shall forward the names of successful candidates for distinction to the Registrar's Office.

Co-Curricular Life

Student Life

Athletics and Recreation

The commitment of the Juniata College Athletic Department is explicitly linked to the educational mission of the institution. Juniata athletics emphasizes fair play and sportsmanship co-existing with a high degree of competitiveness in all varsity programs. Such competitiveness applies as well to the academic efforts of Juniata student-athletes. Care is taken to assure the overall health and well-being of students in and outside of the training and competitive arenas. The dynamics of equitable and fair treatment of men and women within Juniata athletics is thoroughly examined and pursued.

The College promotes recreation, physical activity, and athletic programs for all students. Intercollegiate varsity sports offered for men: baseball, basketball, cross country, football, soccer, tennis, track (indoor and outdoor), and volleyball; for women: basketball, cross country, field hockey, soccer, softball, swimming, tennis, track (indoor and outdoor), and volleyball. In addition, clubs compete in a variety of sports largely determined by the interest of the student body. Active clubs include, or have included, men's and women's rugby, ultimate frisbee, men's and women's lacrosse, equestrian, and golf. A variety of recreational clubs ranging from skiing and snowboarding to dance and the martial arts are also available.

Intramural programs include: basketball, indoor soccer, and bowling.

Juniata is a Division III member of the NCAA, the Eastern Collegiate Athletics Conference (ECAC), the Landmark Conference, the Centennial Conference (football only), and the Continental Volleyball Conference (men's volleyball only).

The Kennedy Sports+Recreation Center includes a 25 meter natatorium, a fully equipped 5,500 sq. ft. Fitness Center, two separate gymnasiums for volleyball and basketball, two handball/racquetball courts, and an indoor walking track. Outdoor facilities feature

playing fields for football, soccer, field hockey, baseball and softball as well as seven tennis courts and a eight-lane track.

Beyond the facilities explicitly provided by the College, the Huntingdon area is rich with opportunities for fishing, hunting, hiking, boating, canoeing, rafting, swimming, camping, downhill and cross-country skiing and golf.

Community Service

Over 70% of Juniata students participate in Community Service. Students perform service in many ways: individually, through class, as part of their residence hall, or through the many student service organizations on campus such as Habitat for Humanity, Circle K, Health Occupations Students of America (HOSA), Colleges Against Cancer, and Big Brothers Big Sisters. Registered student organizations are supported with community contacts through the Community Service Office. Throughout the year, Juniata hosts many campus-wide service events including American Red Cross Blood Drives, Special Olympics, Relay for Life and numerous "service days". In addition, the Community Service Office offers service-learning alternative break trips to inspire global action and awareness. In order to recognize the efforts of those students who consistently perform service, the Community Service Office coordinates transcript notation for those who perform at least 120 hours of non-paid, non-credit volunteer work over their college careers. Students can begin tracking their service hours for service notation the fall semester of freshman year and can count all service until graduation, including summer service. Information and materials to initiate the Community Service Notation are available in the Community Service Office.

Community Work Study

The Community Work Study Program places Federal Work Study-eligible students at community agencies across Huntingdon County for part-time employment in service to the community. Students earn minimum wage while aiding organizations. Tutoring programs such as the Huntingdon Community Center After-School Program, the Salvation Army ARC of Learning Program and the Bethel AME After-School program work with Huntingdon County youth. There are also positions available with other agencies. Information, position descriptions, and applications are available in the Community Service Office

Diversity and Inclusion

Please visit the Office of Diversity and Inclusion website at <http://www.juniata.edu/diversity/>

First Year Experience

Orientation

The Summer Orientation program consists of parallel programs for new students and their parents. The orientation program includes faculty advising for class registration, discussions on residential living, and sessions on various other adjustment concerns. Parents meet in groups with college administrators and faculty to share concerns, discuss services available to both students and parents, and participate in question-and-answer sessions. Students participate in a variety of informational and social activities designed to help them become more familiar with college life and the unique traditions and opportunities at Juniata. Recreational opportunities are also a part of the Summer Orientation program.

Prior to the first day of classes, new students consult with advisors, confirm their course registration, meet with Residence Staff, and participate in planned college activities to inaugurate the new academic year.

The College also provides special orientation programs specifically designed for the following distinct student groups: visiting high school students, and international students.

Inbound Retreats

Inbound Retreats help first-year Juniata students become aware of and engaged in our academic and co-curricular community. New students arrive on campus early and participate in retreat options designed to provide a smooth transition into college.

Each retreat is led by two Peer Leaders who are upper-class Juniata College students and one faculty/staff advisor.

Goals:

Inbound Retreats is a social, transitional program for first-year students. Upon completion of the Inbound program through small and large group activities, students will:

- Establish new social relationships;
- Become acclimated to the campus and surrounding community;
- Experience less anxiety about starting college;

- Become acclimated to collegiate living;
- Learn ways in which to become engaged and involved on campus;
- Become more confident with oneself;
- Gain knowledge about collegiate interests; and
- Meet faculty, staff and/or community members which serve as additional resources to students.

To learn more: www.juniata.edu/inbound

Plexus Orientation

Please visit the Office of Diversity and Inclusion website at <http://www.juniata.edu/diversity/PlexusOrientation.php> for information regarding the Plexus Orientation.

Campus Ministry

Although Juniata is chartered as an independent college, it was founded by members of the Church of the Brethren and continues to value the importance of a spiritual dimension as a part of individual growth. Through the campus ministry office, located in the college's Unity House, students are encouraged to integrate their faith and vocational direction and offered opportunities to become involved in meaningful religious activities. Campus worship opportunities include weekly Catholic Mass and regular interdenominational services. In addition to worship, there are regular opportunities for students to engage in study of scripture, community service, prayer, observation of Holy days, interfaith dialogue, and informal fellowship. There are also several active religious and faith focused clubs that support the spiritual growth of our students. Juniata's religious programs are guided by the College Chaplain, campus ministry staff, and a variety of student leaders. The Juniata student body reflects a diversity of religious faiths and the local community provides worship opportunities for Jewish, Protestant, Eastern Orthodox, and Roman Catholic students. The Stone Church of the Brethren, which is adjacent to campus, a prayer labyrinth outside the library, and an interfaith meditation room in the Unity House are available for private meditation and prayer.

Student Activities

Student Government

Elected by students, members of Student Government represent the interests and the concerns of the student body in a variety of ways. Student Government officers serve as student representatives on faculty and trustee committees and the Executive Board and

Student Senate serve as the governing body for the 90+ Registered Student Organizations.

Juniata Activities Board (JAB)

JAB plans and executes a broad range of social, cultural, educational, and recreational programs for Juniata College students and the Juniata community. Through various committees, JAB coordinates many of Juniata's traditions and late night activities. JAB committees typically include: Friday Night Live (FNL), Mountain Day, Madrigal, Major Event, Springfest/Relay for Life, and May Day.

Registered Student Organizations (RSO)

Juniata College offers students over 90+ Registered Student Organizations (RSO), which represent an array of student interests. Students can sign-up for RSOs at either our Fall involvement fair (Lobsterfest) or learn about upcoming RSO meetings/events through the Daily Announcements. If students would like to contact a specific organization, a current list of active RSOs, officers and advisors is located on the P: Drive, under StudentActivities, "Registered Student Organizations."

The Juniata College Center for Entrepreneurial Leadership (JCEL)

The Juniata College Center for Entrepreneurial Leadership (JCEL) was developed to integrate entrepreneurial principles and actions into all academic disciplines; touching students and faculty alike. It promotes the "creation of value" in an economic or social sense. JCEL provides experiential learning opportunities to students by providing the tools and resources to act on their product or service idea and create businesses.

These tools and resources include technical assistance, mentoring, seed capital and space. Technical assistance & mentoring is provided by faculty, staff and volunteer mentors helping students move through the business planning process to ensure their plan has a reasonable chance to succeed. JCEL has a Student Seed Capital Fund able to loan or invest up to \$ 15,000 in a student business.

The space we provide is located in the Bob & Eileen Sill Business Incubator (SBI). SBI has 10,000 square feet of wet lab, professional office and light assembly space for undergraduate entrepreneurs, faculty members and community members. Our Next Step Fellowship Program can provide monetary support to a student who has a business idea they would like to develop. We can pay a student \$ 7.25 per hour, in a work study fashion, to research & expound upon their idea. The goal of which is for the student to have developed a full business plan and present it to the JCEL Board for financial support.

JCEL also offers internships to students from many disciplines/POEs including (but not limited to) entrepreneurship, finance, marketing, management, communications and information technology. Many students have benefitted from our large network of contacts and real world tasks & interactions.

In essence, JCEL offers many tools & resources to help students become successful here at Juniata. Full program details can be found at www.jcel.biz.

Residence Life

Residence Life

Juniata is a residential campus and, as such, residence hall experiences are designed to complement the formal instructional program. Guidelines for residence hall living are provided in detail through the campus computer network, EagleNet, in the student handbook, *The Pathfinder*; and in its periodic supplement, The Student Services Newsletter.

With a limited number of exceptions, students are expected to live in college-owned facilities. To secure permission for non-campus housing, arrangements must be made in the prior spring and approval is based on the number of spaces available on campus. Students will not be permitted to move off campus during the academic year. Upper-class residential students choose their rooms on class standing and grade point average (GPA).

Residence Hall Staff

Juniata seeks to provide the best possible living experience in the residence halls. This begins with qualified, caring, and well-trained staff. Staff members in each building are carefully selected, and trained, and are willing to help students have a successful campus living experience. One of the first people students meet on check-in day is the Resident Assistant, better known as the RA. Resident Assistants are assigned to each residence hall floor to help with the adjustment to community life and are instrumental in planning activities to help students become acquainted with their living environment. In addition,

RAs are available throughout the year to assist with academic, personal, and community living concerns. Resident Assistants are specially trained upper-class students who are able to answer many questions about Juniata and the residence halls. Resident Assistants report to live-in Residence Directors, known as RDs. Residence Directors are professional staff members who manage each residence hall. They supervise the hall staff, coordinate programs and activities, and work with the student judicial process. Residence Directors can answer many questions about policies and procedures and the campus in general.

Residence Hall Programs

The residential staff offers a wide variety of activities in which students can participate. These programs are planned and organized by students, (RA) Resident Assistants, and the (RD) Resident Directors. Everyone is encouraged to make their interests known, to become actively involved in planning events, and to participate. The staff assists on the floor to develop programs that enhance a sense of community. These programs generally have a social and/or educational focus.

Living Options

Juniata's residence halls are smoke-free living environments.

Eco House: The everGREEN Eco House encourages students to develop and promote a sustainable and 'green' lifestyle. Living in this coed house provides an opportunity to live and work with other students who are committed to the campus community's goal of becoming more sustainable.

Global Village: the Global Village is a distinct globally-themed living and learning community designed to provide opportunities for intensive, in-depth cultural interaction and community development. The GV combines language and cultures in a living/learning experience. Residents come home to speak and hear the language of their themed housing. The GV welcomes native speakers; non-native students who have lived, traveled extensively, or studied abroad; and students enrolled in language courses. We currently have Spanish, German, French and Chinese housing along with the Intercultural floor in Terrace Hall.

Co-ed: South Hall is available for upper-class students who choose to live in a community in which men and women live on the same floor. These are gender specific by room.

Female only: Lesher Hall an all-female resident hall. Available to upperclass and freshmen students.

Suites: East Houses apartment style living, housing 8 students. There are 4 bedrooms, a common room and bathroom. Each room is air conditioned.

Student Services

Juniata College Health and Wellness Center

Wellness is important at Juniata. Students are encouraged to optimize their physical and emotional health. Although prevention is the primary focus of the Health & Wellness Center, intervention is also provided through the following services:

Medical Services:

The center is staffed by a nurse and administrative assistant Monday thru Friday and visiting physicians on Wednesdays from 9:00 a.m. to 4:00 p.m. and Mondays from 6:00 – 8:00 p.m. Treatment is provided for minor injuries and ailments and routine care of chronic illnesses for full-time students. A health fee is assessed each semester for medical and counseling services. The fee is for services and is not a supplemental form of health insurance. For comprehensive and specialized care, students are referred to the local hospital or to other medical facilities in the area. All full-time Juniata students are required to provide proof of insurance. If proof is not provided, full-time students will be charged a premium and enrolled in a student accident insurance program.

For additional information, please visit the Health and Wellness Center site at <http://www.juniata.edu/health>

Counseling Services:

The Health & Wellness Center also provides personal counseling for all students. Each student may receive up to ten sessions of counseling per year free of charge. These services are provided by master's level therapists who are supervised by the center's consulting psychiatrist. All services are confidential and are not included on the student record. Counseling services also include assessments, screenings, prevention programming, appropriate referrals, workshops/presentations, support groups, drug and alcohol education programs, and when appropriate, referral to the center's consulting psychiatrist.

Career Services

The Career Services staff is dedicated to providing students with the fundamental skills and experiential opportunities needed to prepare for the challenges in an ever-changing, global work force.

Career Services provides Juniata students with individual counseling, computerized guidance and information programs (FOCUS II), and workshops on career development and professionalism topics. The office supports a comprehensive website and library of up-to-date career resource materials and graduate/professional school information. Juniata offers a top Career Day which annually attracts over 100 employers and over 500 students. Additionally, Juniata students are invited to participate with other Pennsylvania colleges in numerous regional job fairs throughout the year. The largest of these include the Western PA Career Services Association (Pittsburgh area) job fair, the Central PA Employment Consortium (Harrisburg area) job fair, and the Pittsburgh Educational Recruiting Consortium.

The Career Services Office also coordinates Student Internship Programs. Juniata encourages students to seek internship placements generally after completion of the freshman or sophomore years. Students receive assistance in the application process from Career Services and from Juniata faculty. Information regarding credit and non-credit internships is available online and in the Career Services Office in Ellis Hall.

Co-Curricular Transcript

Students are encouraged to utilize a Co-Curricular Transcript (CCT) to document and validate their out-of-class experience. The CCT process enables students to structure their personal development outside the classroom by matching individual needs and goals with available experiences to stimulate growth and learning in specific areas. The CCT documents a student's leadership and involvement in student programming and provides an opportunity for the student to reflect on his or her development outside the classroom. Information and materials to start a CCT are available in the Career Services Office.

This same document is used to recognize the efforts of those students who perform community service throughout their college career. Students who perform at least 120 hours of non-paid, non-credit volunteer work can receive transcript notation through the Community Services Office.

Dining Services

Baker Refectory, located on the first floor of Ellis Hall, is the main dining hall choice for students on a College meal plan. All residential students are required to select one of the appropriate meal plan options. The dining room is an “all-you-care-to-eat” facility open for breakfast, lunch, and dinner in accordance with the College calendar. Students may select from assorted entrees, including vegetarian selections at each meal, grill and pizza lines, exhibition cooking station, Wok-your-way interactive cooking, and more! Monies from a spending account (called DCB) associated with all of the meal plan options can be used by the students to pay for a variety of uses and circumstances including additions to meal exchange purchases. Students are required to bring their ID cards with them to all meals. Admittance will not be granted without an ID card.

The **Eagles Landing** is located on the third floor of Ellis Hall and features a variety of menu items. The five main stations include Salsa Rico, Grill 155, Jump Asian, Cyclone Salads, and Sub Connection. A coffee shop called Mocha Run resides just outside the Landing. Eagles Landing is open to the general public as well as students. Monies from meal plan spending accounts (DCB) can also be used for purchases in Eagles Landing, Mocha Run, Jitters, Catering services, and Simply-to-go (located in the Brumbaugh Academic Center).

A catering staff is available for special functions. Catering arrangements can be made through the catering service office.

Mail and Banking Services

The College postal service is located on the ground floor of Ellis Hall. Students receive one assigned post office box for their entire stay at Juniata. A deposit is required in order to receive a mailbox key. Students should use their post office box number as part of their Juniata address. Stamps are available at the post office and parcels can be mailed there during open hours.

An automatic teller machine is available in Ellis Hall. Checks for \$100 or less may also be cashed at the Accounting Office in Oneida Hall.

Public Safety Office

The Public Safety Office is committed to providing a safe and secure environment as essential to the Juniata College community. Public Safety strives to protect college assets, but the primary goal is to assure a safe, secure, and comfortable living environment which promotes learning and personal development. Respect, consideration, and fairness to others are paramount in daily operations.

For additional information, go here: [security](#)

Identification Cards

The College I.D. card must be presented for admission to meals and used for access into the residence halls. It is used for admittance to many of the activities at the College, including home athletic events and various College-sponsored programs and also for checking out materials at Beeghly Library.

The card should be carried at all times. Identification cards are nontransferable. If lost or stolen, the I.D. card can be replaced by request at the Public Safety Office. A fee of \$5 is charged for replacement of the damaged card (must surrender old I.D.). A \$10 fee is charged for replacement of a lost card.

Vehicle Registration

All students who bring motor vehicles to the College campus must register their cars, motorcycles, motor scooters, or bikes with campus Safety and Security. Upon approval of the vehicle registration form, a display sticker is issued and should be placed on the left side of the rear bumper.

For additional information, go here: [parking](#)

Fees for Vehicle Registration

Currently, the vehicle registration fee is \$35 for residential students and \$25 for non-residential students.

Parking

A valid vehicle registration permit properly displayed (left side on rear bumper) entitles a student to park in student parking areas only; parking in unauthorized areas subjects students to a \$10 fine.

Traffic Regulations

In addition to the rules and regulations for operating a motor vehicle in the Commonwealth of Pennsylvania, there are several regulations specific to the Juniata campus:

- All vehicles must be operated at a reasonable speed on campus streets with particular consideration for pedestrian traffic.
- All vehicles must yield to pedestrians in cross-walk areas.
- Improper operation of any motor vehicle may result in the revoking of motor vehicle privileges on campus.
- All vehicles must comply with all traffic devices, stop signs, etc.
- No vehicles (including 2-wheel motorized vehicles) may be operated on, traveled over, or parked on any grass area, macadam or concrete walkway. Failure to comply with this regulation will result in a \$25 fine.
- Vehicles may not block any fire lane, alley, or roadway.

Firearms and related items

Illegal and/or dangerous weapons, including but not limited to BB / pellet guns, sling shots, and pneumatic weapons that resemble a real firearm, are not permitted on campus. Violators will be subject to disciplinary action and arrested if appropriate. Legal and approved firearms used for skeet/trap or hunting, ammunition, archery equipment, knives and other edged - weapons with blades exceeding three inches, and/or devices that can be considered a danger to the campus community must be registered and stored in the Public Safety Office.

With proper identification, students may sign-out their registered items by contacting the Public Safety Office. Please Note: All firearms being transported to or from campus must be secured and placed within an approved firearms carrying case.

Registered firearms and/or dangerous weapons are not permitted in administrative/academic buildings or college residence halls. Failure to comply with this regulation may result in expulsion from the college and/ or arrest.

Standards of Student Conduct

Alcohol

The College maintains that the use of alcohol and other drugs is not necessary for the success of social occasions.

Although students are considered adults for most phases of community life, Pennsylvania State Law prohibits the purchase, possession, or consumption of alcoholic beverages by persons under 21 years of age. Persons who furnish alcoholic beverages to those under 21 are subject to civil liability and criminal prosecution. Local ordinances and state laws also prohibit open containers of alcoholic beverages in public areas and in vehicles. College policy permits only students 21 years of age and older to possess or consume alcoholic beverages on campus.

Drugs

Juniata considers the possession and/or use of illegal or dangerous drugs a serious violation of College policy. Disciplinary action for involvement could lead to separation from the College. The College will assist the efforts of law enforcement officials who are investigating the involvement of persons with illegal or dangerous drugs.

Since the use of drugs, including alcohol, may be associated with medical and psychological problems, students may be referred, or refer themselves, to the counseling and medical resources of the College and/or the local community.

Sexual Harassment

It is Juniata policy to promote and maintain a campus environment free of all forms of discrimination, intimidation, and exploitation, including sexual harassment. The use of one's institutional position or authority to seek or solicit unwanted sexual relations with a member of the Juniata community is incompatible with the mutual trust and respect among members of the College community fundamental to the mission of Juniata. If a

student has a supervisor, teacher or coach who has used his or her position to seek or solicit unwanted sexual relations, that student should report the matter to the Director of Human Resources (employment-related problem), the Provost (professor-student incidents), or the Dean of Students (student-student incidents). A copy of the sexual harassment policy is distributed to all students under separate cover. Additional copies are available from residence hall staff, the Dean of Student Office, and the Human Resources Office.

Admission

Philosophy

The Enrollment Center encourages students to apply to Juniata if they demonstrate the proper desire, motivation, and maturity needed to benefit from a four-year private college experience. Such qualities are evaluated through the application requirements listed below. The Admission Committee places the most emphasis on a student's high school transcript. The second most important item would be standardized testing results followed by activities, community involvement and all the things that make up the student's life. Juniata seeks a broad student population base including a wide geographic and cultural representation from a variety of social and economic backgrounds.

The College reserves the right to determine which applicants will be admitted. The selection of candidates is made without regard to race, sex, religion, creed, national origin, and or handicap.

Guidelines for Entering Freshmen

Application and Information

Students may apply to Juniata using the Common Application any time after completion of their junior year in secondary school. A complete secondary school transcript indicating courses and grades (including senior year courses and grades to date) must be sent from the applicant's guidance office along with SAT-I and/or ACT scores, an essay, and a letter of recommendation.

Candidates for freshman admission can choose from three application options - Early Decision I, Early Decision II, and Regular Decision:

- **Early Decision I – Application Deadline November 15.** The Early Decision (ED I) option is available for those students who know that **Juniata is their number one choice**. Early Decision is a binding agreement; applicants agree to apply ED I *only* to Juniata and to enroll if offered admission. ED I students receive admission notification by December 15th. Accepted ED I students will

- receive financial aid notification by late January. A non-refundable \$400 deposit is required by February 15th. Please refer to the Early Decision Information section of the Common Application when deciding whether or not to apply as an ED I candidate.
- **Early Decision II – Application Deadline January 1.** The Early Decision II (ED II) option is available for those students who decide that Juniata is their top choice after November 15th. Once all required materials are received, ED II applicants will receive an admission decision by February 15th. If applying for need-based aid, students must complete the FAFSA by February 15th. The ED II option is a binding agreement and requires the student to submit a non-refundable \$400 deposit two weeks after receipt of a financial planning award. Please refer to the Early Decision Information section of the Common Application when deciding whether or not to apply as an ED II candidate.
 - **Regular Decision – Application Deadline February 15*.** Regular Decision Candidates are encouraged to apply in the fall. Students who apply before November 1 *may* receive an admission decision by mid-December. Students applying after January 1 will receive a decision 4 to 6 weeks after the application is complete. Students who wish to be considered for all additional competitive scholarships should have their application submitted no later than January 1. Students accepted as a Regular Decision candidate must submit a non-refundable \$400 deposit by May 1 to reserve a space in the entering class.

Note: Students who wish to be considered for all additional competitive scholarships should have their application submitted no later than January 1.

**** - Please call the Enrollment Center (814-641-3420) to inquire whether applications are still being accepted beyond the application deadline.***

Contents of Application

An application for admission consists of the components listed below. Credentials that are reviewed include: high school academic record, SAT or ACT test results, completed application form including evidence of extracurricular involvement, recommendation letter(s), and a personal essay.

High School Transcript A secondary school program including at least 16 college preparatory courses from an approved public, private, or parochial school must be completed or anticipated. These courses must include a minimum of four years of academic English, two years of a foreign language, and a combination of mathematics, laboratory science courses, social sciences and humanities.

A complete secondary school transcript must be sent from the applicant's guidance office, noting all courses taken and grades received from the freshman year through the

junior year. A listing of courses to be taken in the senior year should accompany this transcript and grades from the first marking period and/or the first semester should be sent when they become available. Upon graduation, students must submit a final secondary school transcript noting graduation date and guidance counselor signature or raised seal.

Standardized Test Results Results of the Scholastic Assessment Tests (SAT-I) taken in the junior and/or senior year are required. Students may also choose to participate in Juniata's Optional Standardized Test Program. The American College Test (ACT), taken in either the junior or senior year, may be substituted for the SAT-I. Applicants whose native language is not English also must provide results of a Test of English as a Foreign Language (TOEFL) or scores from an approved English language program. International applicants who have studied wholly in an English speaking high school are required to submit an SAT/ACT score. All other international students are not required to submit SAT or ACT scores but should still submit TOEFL (or similar) results. SAT-II: Subject Tests are not required but may be submitted for admission consideration. Contact the Admissions Office for more information.

Application Form Juniata uses the "Common Application". Application forms may be submitted at www.commonapp.org. The application requires a listing of extracurricular activities in both school and community, guidance counselor or teacher letter(s) of recommendation, and an essay which answers one of the essay questions listed in the application for admission. The applicant should complete the form and submit it online.

Campus Visits

Although not generally required for admission, the College strongly recommends that each prospective student make a visit to campus. A campus visit serves as an opportunity to learn more about the College, its students, and faculty, and is a great way for the admission team to meet interested students. During the academic year, the enrollment center has a variety of visit options. Students are encouraged to visit <http://www.juniata.edu/admission/campus-visit> to select the appropriate visit program to serve their information needs. In general the Enrollment Center is open 9 a.m. to 3 p.m. Mondays through Fridays from September through April, and for selected Saturdays from 9 a.m. to noon. Appointments for the summer months can be scheduled for 9 a.m. to 2 p.m. weekdays. Please contact the Office of Admission at 814-641-3428 for more information or to schedule an appointment.

Guidelines for Transfer Students

Applicants are considered transfer students if they have graduated from an approved secondary school program and completed the equivalent of one full-time semester of coursework at a regionally accredited community college, junior college, or four-year institution. Student's work will be evaluated on a case-by-case basis. Notification of a transfer admission decision is given within one month upon receipt of all credentials. Application deadlines for transfer students are May 15th for fall semester entry and November 15th for spring semester entry, though earlier submission is highly encouraged.

Application deadlines for transfer students are June 1 for fall semester entry and December 1 for spring semester entry, though earlier submission is highly encouraged.

First semester freshmen who transfer a semester worth of transfer credits MUST take CWS (College Writing Seminar) even if they have taken English credits. Students who wish to demonstrate they have competency should bring with them a portfolio of writing to be reviewed by the English department.

Contents of Transfer Application

An application for transfer admission consists of the following components:

Application Form and Fee Juniata uses the "Common Application" Transfer Application. Forms may be obtained at www.commonapp.org. The application requires an **essay** which answers one of the essay questions listed in the application for admission. The applicant should complete the form and submit online.

High School Academic Records The Office of Admission requires an official, final high school transcript indicating final grades, class rank (if applicable) and date of graduation. The transcript should be sent directly from the school to the Juniata admission office.

Standardized Test Scores SAT and or ACT scores should also be submitted. Scores can either be sent directly from the testing agency, or may be indicated on the official high school transcript. Juniata 's code number for the SAT is 2341, and for the ACT 3600. SAT/ACT results are often waived for qualified transfer students whose previous institution did not require scores for admission.

College Records Transfer applicants must also submit an official transcript from each college previously attended and a college catalog or course descriptions of classes taken at previous institutions. The transcript must be sent directly to Juniata from the former institution(s). Catalogs and course descriptions are used to evaluate transfer credit.

Statement of Interest Transfer applicants must submit a written statement of interest indicating the reason(s) for transfer and potential benefits from enrolling at Juniata. This is in addition to the application essay.

College Transfer Report Form The College Transfer Report Form is a required document. It must be completed by a college official who has access to your academic and disciplinary records.

Financial Aid

All transfer students offered admission are eligible to apply for financial aid. The application procedure is the same as that for new freshman students and is found under the section "Student Finances." For further information, contact: Transfer Coordinator, Enrollment Center, Juniata College, Huntingdon, PA 16652-2196.

Transfer Credit

Juniata does not accept in transfer any coursework below a grade of "C-" nor coursework of a strictly technical or remedial nature, nor physical education coursework. Credit is normally only awarded for courses taken at a similarly accredited institution. Special circumstances may affect the transferability of an individual student record. These cases will be handled on an individual basis and decisions will be based on Juniata's academic policy. An official credit evaluation will be completed by the Office of the Registrar after a student has been admitted to Juniata.

Students will have their work evaluated on a course-by-course basis. Courses equivalent to Juniata's curriculum course description will be granted direct course equivalence. Coursework accepted in transfer may be used to meet both liberal arts graduation requirements and Program of Emphasis requirements.

While Juniata will accept credit from any regionally accredited college or university, the college has formal transfer agreements with Harrisburg Area Community College and Penn Highlands Community College. Articulation agreements are in place to facilitate the transfer of credit from one institution to another. Contact the Transfer Coordinator at either institution for more information.

Juniata also offers a 2+2 Joint Enrollment Program with Penn Highlands Community College (PHCC). Students apply, and are admitted, to both Juniata and PHCC at the same time. Accepted students are able to be advised by faculty at both colleges, receive

priority in registration and room assignment when transferring to Juniata, and have guaranteed transfer credit. The student will receive the Associate degree from Penn Highlands, and either the BA or BS degree from Juniata. Consult the Enrollment Center for more information.

Other Admissions Programs

Supported Admission

Students who are offered Supported Admission are admitted to Juniata with the belief that they have the potential to succeed in college, but would benefit from extra mentoring and assistance from faculty and staff.

During the fall semester, all freshmen enroll in the required four-credit foundation course—College Writing Seminar—designed to provide first-year students with the reading, writing, computer, library, time management, and study skills necessary for success in college. For a Supported Admission student, a specially designated Freshmen Advisor is the student's CWS instructor or a professor who has that student in a POE class during the first semester. Freshmen Advisors work closely with students to monitor their academic performance and address individual needs.

The program for Supported Admitted students includes regularly scheduled, required appointments (at least five such meetings) throughout the semester with the Director of Academic Support Services and the Assistant Dean of Students to monitor and assess progress in each class, discuss issues related to transition to college living and a college-level workload, discuss how to prepare for and take tests, give pre-registration advice, assist with selection of a second advisor, and many other topics appropriate to the individual circumstances of each student.

Supported Admitted freshmen also benefit from resources offered through or coordinated by the Office of Academic Support Services. These include use of the Writing Center, how to best utilize the faculty and faculty advisors, determining when referral to the counseling center is appropriate, how to build an academic schedule and design a Program of Emphasis, how to go about exploring possible careers, etc. There is a broad network of support and advisors available to all students.

While receiving the additional support described herein, Supported Admission students carry a typical course load of 12-16 credits during the first semester and are in no way distinguishable from their peers in the classroom. Upon completion of one semester in good academic standing, the student is no longer required to have regular appointments with the Office of Academic Support Services, but is able to utilize their continued advocacy and resources.

Deferred Admission

Deferred Admission is designed for students who wish to begin their college studies at a time other than the fall semester after graduation from secondary school. Application procedures and requirements are the same as for all other applicants. Candidates should note their interest to be considered under the Deferred Admission Program by contacting the admission office. Students may defer admission for up to one year.

Spring Semester Admission

Application procedures and requirements are the same as fall admission. The Spring semester application deadline is December 1, though earlier submission is encouraged. Interested persons may contact the Enrollment Center for further information.

Early Admission

Juniata encourages applications from students who demonstrates the aptitude, desire and maturity to begin college level work prior to the completion of his/her secondary school program. Students may consider enrolling at Juniata the last year or the last semester of their senior year. A formal application for admission must be completed. In addition students must: 1) Have an admission interview on campus; 2) Provide a written recommendation from their guidance counselor supporting their application for early admission and indicating they will receive a diploma either at the end of their junior year or after they have successfully completed one year of college level work, which includes college level English; and 3) Provide a written statement from their parents indicating approval of early admission. Applicants are expected to meet all other admission requirements.

Home-Schooled Students

Juniata welcomes applications from students who are home-schooled and have been approved by their local school district. Students must submit an application for admission and include standardized test results, an application essay, letter(s) of recommendation and portfolio of academic work. Students are also encouraged to interview and submit

additional information to support their application. Please contact the Juniata Home School Coordinator in the Enrollment Center for further information.

International Students

International students are strongly encouraged to submit applications. The procedures for admission are the same as for other freshman or transfer applicants, except for standardized test requirements. SAT/ACT test results are required only for international students who have spent their secondary education in an English-speaking school. In addition, for applicants whose native language is not English, a TOEFL score of 80 Internet-based/550 Paper-Based (or equivalent IELTS or Pearson PTE Academic) or higher is required for unconditional admission to Juniata.

Minimum section scores are also required:
(<http://www.juniata.edu/departments/international/iep/courses.html>).

All students who submit a TOEFL score, however, will still be tested upon arrival to ensure appropriate course placement, including ESL courses. If you have submitted a score lower than 80 iBT/550 PBT, or you test below that level on arrival, your status will be English-Conditional.

A complete set of original or notarized educational credentials with certified English translations is also necessary for international applicants and is required before eligibility for admission can be determined. In addition, an affidavit of financial responsibility is required (by U.S. law) before an I-20 form (necessary for procuring a student visa from a U.S. Embassy or Consulate) can be issued.

Further information regarding international applications is available from:

Coordinator of International Admission
Enrollment Center
Juniata College
Huntingdon, PA 16652-2196 USA

FAX: (814) 641-3100 E-mail: usastudy@juniata.edu

English Conditional Admission

International applicants with TOEFL test scores of 52 - 79 Internet-Based (iBT)*/470 – 549 Paper-Based (PBT)* may, if otherwise qualified academically, be granted English-Conditional (EC) Admission, provided they complete the appropriate English as a Second Language (ESL) coursework in Juniata's Intensive English Program (IEP). Minimum section scores on the TOEFL* must also be met to be admitted.

The IEP follows all Juniata policies regarding advancement in its courses. Students may earn up to 15 credits in their ESL courses toward graduation requirements. While taking ESL courses the IEP faculty evaluates the students' English proficiency and they may enroll in academic coursework outside the IEP based on an acceptable English proficiency level and in consultation with their advisors and professors. There is no guarantee EC students will be able to take courses outside the IEP until they have finished all appropriate ESL courses.

English Conditional Students will also be required to sign a *Statement of Understanding* concerning English-Conditional Admission prior to beginning their studies. As needed, continued English language support is offered to all international students throughout their degree program. For more information, please refer to the Intensive English Program section.

*Equivalent IELTS and Pearson PTE scores are also accepted.

International Baccalaureate

International Baccalaureate Diploma recipients are granted credit for one full year (30 credits) toward a degree at Juniata. Students who have an IB Diploma normally enter the College with sophomore standing. IB certificate recipients receive course credit for each examination passed with a score of 5 or higher. To receive this credit the student will meet with the appropriate department chair or designee to consider the advantage or disadvantage of accepting credit. IB credits may be counted toward degree requirements.

Non-Degree Students

Any person who wants to take coursework at Juniata as a non-degree student need not apply for admission consideration, but must provide proof of academic ability. The Registrar enrolls and registers all non-degree candidates.

Non-degree students are required to fill out the registration form located at our Registrar's Office website under Class

Schedules: <http://www.juniata.edu/services/registrar/schedules/> Cost of course credit will be the tuition charge of part-time tuition.

Non-Traditional Student Admission Programs

Returning Adult Students

Qualified students who have been away from the classroom are welcome to attend Juniata. Courses are offered for both degree and non-degree seeking students and may be taken on either a full-time or part-time basis. Students are enrolled in regular Juniata classes; there are currently no evening, weekend, or accelerated programs for returning adult students. Students must meet admission criteria. Degree-seeking students may apply either as transfer or freshman students. Consult the Enrollment Center for further details.

Education Certification Program

Students with a B.A. or B.S. from an accredited four-year American college or university and who meet Education Department criteria may take courses at Juniata to receive their education certification. Students may take courses on a full-time or part-time basis. A minimum 3.0 cumulative GPA in the student's previous coursework is required. Consult the Enrollment Center or Education Department for further details.

Second Baccalaureate Degree Program

Students who have earned a bachelor's degree at an accredited, domestic American university or college and desire a second bachelor's degree reflecting in-depth study in a discipline other than that of their first degree may enroll upon completion of application requirements. Courses from a previous degree will be evaluated on a course by course basis and may be used to fulfill graduation requirements. Students must meet all Juniata graduation requirements, fulfill the department requirements within the new discipline, and observe the College residency requirement. International students who desire a second degree will be evaluated individually for their candidacy. For further information, contact the Enrollment Center.

Senior Citizens Program

Citizens who are 60 years of age or older may take courses on a part-time basis.

High School Student Programs

Juniata continues to support what was previously known as Dual Enrollment for high school students in our non-degree visiting student program for Huntingdon County and the surrounding area. In the interest of promoting a positive post secondary experience, students who are a junior or senior in high school can study a course per semester (maximum of 4) with supporting signatures from their guidance counselors and/or instructional supervisor. Please note that the student must demonstrate a readiness based on the student's ability to be successful.

The course availability will be based on open seats and prerequisites and co-requisites requirements with all rules and fees applied in accordance to campus policy. Students are responsible for any fees for labs, field trips, supplies and books and does not include Internships, Credit by Exam, Independent Studies or College Writing Seminar (CWS). Students must complete a Visiting Student form available from the Registrar's Office and have it signed with official support signatures. Billing will go directly to the student for payment.

Master's Programs at Juniata

Master of Accounting (MAcc)

The Master of Accounting program is designed to prepare students for entry into a world where individuals must have a command of relevant knowledge about accounting, management, and economics, and have a capacity to apply that knowledge in addressing problems and making decisions. The program will emphasize the development of skills necessary for a productive long term career along with a firm understanding of accounting theories and concepts. This understanding and development of skills will give students the knowledge they need to do well on the CPA Examination and achieve their career goals. Additionally, accounting skills are highly valued in the marketplace and can lead to career possibilities in corporate, non-profit sector, and governmental work.

Admission to the Master of Accounting program is administered by the Accounting, Business, and Economics Department. For more information or to apply to the program, please use the link below.

Application can be mailed to:

Dominick Peruso, Chair, Accounting, Business, and Economics
Master of Accounting Program
Juniata College
1700 Moore Street
Huntingdon, PA 16652

[Master of Accounting \(MAcc\)](#)

Certificate Programs

The Genomics Leadership Initiative at Juniata College

The Genomics Leadership Initiative at Juniata College has been funded by the Howard Hughes Medical Institute and National Science Foundation. The initiative seeks to achieve its goal by developing a genomics certificate program, a leadership module, and student summer research experiences.

GENOMICS CERTIFICATE PROGRAM:

Comprised of seven courses, the genomics certificate addresses both the science and the broader ethical, legal and social implications (ELSI) surrounding progress and discoveries in the field of genomics. The ethical, legal and social issues surrounding advances in genomics provides a strong focus for practicing a breadth of knowledge and skills; the understanding of the scientific foundation of genomics provides the focus for developing an interdisciplinary base and cross disciplinary understanding of the life sciences in an era of “big data”. To help support this part of the program the grant has also funded an ELSI faculty development workshop, a seminar series, stipends for faculty developing new or revised classes, and stipends for faculty to formally assess the learning gains of students as a result of programmatic activities.

What is a certificate?

In general, an undergraduate certificate provides an interdisciplinary curriculum that is not available within any single academic unit. A certificate offers the possibility of a more cohesive general education experience oriented around a theme and taught by faculty who work together as a group on an ongoing basis and have common inter-departmental learning objectives and assessments. The awarding of the certificate is noted on the student’s transcript.

Who is this certificate for?

Students intending to pursue careers in biological research and medicine are the primary target. However, students interested in careers in public policy, public health, law, and business will gain by developing similar competencies.

Why should a student get this certificate?

As cost of a human genome approaches \$1000, appreciation of both the science and the ethical, legal, and societal implications of genomics has become an increasingly pressing issue. Design of the certificate was based on recommendations from a joint document between the Howard Hughes Medical Institute (HHMI) and the Association of American Medical Colleges (AAMC) entitled, “Scientific Foundations for Future Physicians.” This report emphasized the importance of integrative scientific approaches, scientific reasoning, intellectual curiosity, communication and decision making skills, adaptability, ethical principles, and understanding of patients as individuals and in a social context. HHMI has funded Juniata College to implement this certificate program.

Description and Goals of a Certificate in Genomics, Ethics, and Society

Comprised of seven courses, the certificate addresses both the science and the broader ethical, legal and social implications (ELSI) surrounding progress and discoveries in the field of genomics. No area of modern biology provides a more appropriate focus for combining the humanities and sciences than the ethical, legal, and social implications (ELSI) of the human genome project and the evolution of the field of personalized medicine. The subject cannot be completely addressed without the input of specialists working across disciplinary boundaries. The ethical, legal and social issues surrounding advances in genomics provide a strong focus for practicing a breadth of knowledge and skills while understanding the acts of judgment and social contexts involved in the development and application of scientific knowledge; the understanding of the scientific foundation of genomics provides the focus for developing an interdisciplinary base and cross disciplinary understanding of the life sciences in an era of “big data”.

Learning objectives

Students who attain genomics certification will be able to:

Describe the basic concepts and principles of genomics.

Explain the scope of genomics from genes to society.

Integrate knowledge of the chemical, physical, mathematical and computational bases of genomics.

Explain the importance of the place of genomics in the human effort to understand natural phenomena, including its history and social impact.

Be able to make and justify ethical judgments about genomics research and its uses in medical practice and elsewhere.

Use the skills and interdisciplinary perspectives of the liberal arts in understanding trends in genomics and communicating them to academic peers and others.

Apply the process of science to questions in genomics.

Demonstrate an in-depth knowledge of a selected field in genomics.

Progress into a leadership role, working with experts and non-experts, with an awareness of the likely results of one's actions and an understanding of how results might differ in different settings and different cultures.

REQUIREMENTS

Core Courses: All students pursuing a genomics certificate must take four core courses required for a genomics certificate. Download the Genome Certificate Sheet to organize and plan your course of study.

1. Genomics, Ethics and Society (IC 203; Fall; MW 2-3:50PM; CWS prereq) A team-taught course that lays the foundations for interdisciplinary work on the ethical and social dimensions of genomics.
2. A course covering basic molecular biology, genetics, and genomics:

Biology II BI 106; Fall; N division class; T/Th 9 to 10:20AM, or T/Th 1 to 2:20PM, Discussion Sections Weds 8 or 10AM; BI-105 CH-105 prereqs
Human Biology BI 109; Not for biology majors; Fall; N division class; MWF 9 to 9:55PM

3. At least three credits of statistics:

Biostatistics with lab BI 305, Fall; N and QS division class; T/TH 10:30 to 11:50AM; Lab M 1 to 2:55PM or 3 to 4:55; BI105 or ESS100 prereq
Environmetrics ESS 230; Spring N division and QS class; T/Th 10:30 to 11:55AM; Sophomore standing
Introductory Probability and Statistics MA 220, Fall MWF 10 to 10:55AM; Discussion T noon; Spring MWF 1 to 1:55PM, TH 2:30 to 3:25PM; QS and N division class, prereq MA130.

4. One course covering informatics and analysis of large data sets:

Information Discovery IM 241, Fall QS and S division class; T/TH 9 to 10:20AM; prereqs IT110 or IT111 or CS110 or Instructors Permission (Loren Rhodes)
Biological Sciences Research Methods (Lamendella, Buonaccorsi, and Keeney sections)
Even Spring Semesters (Buonaccorsi), N division class; MW 2 to 4:50PM; prereqs BI207 or Instructors Permission
Odd Fall Semesters (Lamendella), N division class; schedule TBA; prereqs BI207 or Instructors Permission
Even Fall Semesters (Keeney), N division class; schedule TBA; prereqs BI207 or Instructors Permission
Computer Science 110 section G only, Spring N class, MWF 8AM to 8:55AM
Unix CS 255U, 1 credit every semester, T 8AM, prereq Computer Science 110 or Instructors Permission (Loren Rhodes);

AND

Perl CS255P, 2 credits, Summer, prereq Computer Science 110 or Instructors Permission (Loren Rhodes), sophomore standing, self study

or

Python CS255Y, 2 credits, Summer, prereq Computer Science 110 or Instructors Permission (Loren Rhodes), sophomore standing, self study

Electives: In addition to the core courses, students must take at least three elective courses related to ELSI genomic themes:

Social History of Medicine History HS 211; Every Fall; May count as either a CA, or an H or I division class. T/TH 1 to 2:20PM

Medieval Medicine: Health and Disease in the Middle Ages History HS 399, Every Spring. H division class. MW 11AM to 12:20PM

Doctors, Medicine and Literature Russian RU 299 01, Fall of odd numbered years. May count as either a CA, or an H or I division class. T/TH 10:30 to 11:50PM, T Noon to 12:55pm.

Science and Human Values Philosophy PL 250, Spring of odd numbered years, H division class.

Moral Judgment Psychology 3XX, Every Summer online, S division class.

Leadership in the 21st Century. Business EB 299, Odd Springs online (3 cr), S division class

AND Executive Leadership Business 199, 1 cr, Spring, 3PM, Weds.

Certificate in Geographical Information Systems

Geographic Information System (GIS) and spatial reasoning are a mainstay knowledge base for working professionals in environmental science, resource management, local and regional planning, disease monitoring and evaluation, real estate, military planning, and social science research. The Juniata GIS certificate program is offered jointly by the Environmental Science and Studies and the Computer Science and Information Technology Departments. We have two tracks to prepare a student for a career in any of the GIS fields. The first track has a focus on Environmental Science. This track has more courses in field methods in GIS and spatial analysis. The second track has a focus on Information Technology. This track has more courses in programming and data mining. the certificate is open to students in all departments as well as Juniata alumni.

Requirements for GIS (18-21 credits):

We have designed this certificate based on looking at successful programs. We have tried to match core strengths of other successful programs while differentiating ourselves based on our key strengths. The core courses include

- Introduction to geographic information systems
- Topics in remote sensing and spatial analysis
- Quantitative methods

The ways we differentiate ourselves is through our strength in field data collection techniques for environmental sciences. We include tracks in Environmental Science and in Information Technology

The requirements of the certification are as follows:

Quantitative field intro (1 course) (4 credits): This section requires the student to have a quantitative introductory class in their field. The requirement of this course is that it has a lab or quantitative section where Excel or other spreadsheet or database program is used to compile and represent or analyze data. One course from the following:

- **Environmental Track**
 - ESS 100: Introduction to Environmental Science
- **IT Track**
 - IT 111: Principles of Information Technology, OR
 - CS 110: Computer Science I

Core Statistics or data analysis (1 course) (3-4 credits): One course from this section must be taken:

- **Environmental Track**
 - ESS 230: Environmetrics, OR
 - BI 305: Biostatistics
- **IT Track**
 - IM 241: Information Discovery

Core Geographic Information Courses (3 courses)(8 credits)

- Both Tracks:
 - ESS 330: Introduction to Geographic Information Systems (or Methods in Marine Science)
 - ESS 337: Advanced Topics in GIS and Remote Sensing

Field data collection component (1 course) (3-4 credits): This section is intended to have students exposed to the vagaries of field data collection. It is preferred that students collect spatially explicit data using GPS technologies or other spatially explicit survey methods. Database manage or other courses that explore the process of data collection will also meet this requirement.

- **IT Track:**
 - CS 370: Database Management/li>
- **Environmental Track: (Pick One From)**
 - ESS 399: Ecology of Fishes(3)
 - ESS 399: Forestry
 - ESS 399: Hydrology at the Station(3)
 - ESS 399: Wildlife Techniques(3)
 - BIO 399: Field and Stream: Grant & Muth(4)
 - ESS 350: Field Research Methods(4)
 - GL 240: Geological Field Meth. I(4)

Capstone or project requirement (1-4):

- **IT Track:** This will normally be a GIS related project done via an IT 307/308 and 380 or 480: Innovation for Industry course series, but it may be done as an independent study or project stemming from another course
- **Environmental Track:** This will normally be a GIS related project done via ESS 410 Senior Capstone class, but it may be done as an independent study or project stemming from another course

Table of Requirements

Environmental track	Information Technology Track	Requirement
ESS 100	IT 111/ CS110	Base Course
ESS 230 Environmetrics		
Or		
BI 305 BioStat	IM 241: Information Discovery	Data Analys
ESS 330: Introduction to Geographic Information Systems	ESS 330: Introduction to Geographic Information Systems	Basic GIS
ESS 337 Advanced Topics in GIS and Remote Sensing	ESS 337 Advanced Topics in GIS and Remote Sensing	Remote Sens
One from	CS 370 Database Management	Data Collect
ESS 399 Ecology of Fishes: (3)		
ESS 399 Forestry		
ESS 399 Hydrology at RFS: (3)		
ESS 399 Wildlife Techniques (3)		
BIO 399 Field and Stream: (4)		
ESS 350 Field Research Methods—(4)		
GL 240 Geological Field Methods. I (4)		

Senior Capstone or Other GIS project	I4I or other project with Spatial Data	Capstone
Total Credits		

Contacts:

Neil Pelkey, PhD.: Associate Professor Environmental Science and Studies and IT
 Email: pelkey@juniata.edu or (814) 641-3589

Dennis Johnson, PhD.: Professor and Chair Environmental Science
 Email: johnson@juniata.edu or (814) 641- 5335

Loren Rhodes, PhD.: Professor and Chair, Computer Science and Information
 Technology
 Email: rhodes@juniata.edu or (814) 641-3620

Student Finances

Student Financial Planning

Juniata College offers a wide array of student financial planning services, ranging from deferred payment plans to scholarship programs. The Office of Student Financial Planning provides substantial, diverse funding and planning opportunities for all families regardless of means.

Families may have unique circumstances that affect their ability to meet college expenses. While some families may have little interest in traditional forms of financial assistance, others require support from the many resources available from federal, state, and institutional programs. Student Financial Planning staff members are available to help identify sources of financial support, and to discuss funding resources and opportunities.

Sources of Aid

Generally, the resources available to provide assistance fall into three broad categories: scholarship and grant, loans, and work.

Scholarships and Grant

Scholarships and grants are commonly termed "gift" assistance and need not be repaid (unless so stipulated as a condition of the award).

Grants

Grants are usually provided to meet a student's financial need as established through the submission of the Free Application for Federal Student Aid (FAFSA). Please review the section titled, "APPLYING FOR FINANCIAL AID" for further information.

Scholarships

Scholarships are generally awarded in recognition of academic achievement, talent, or some other characteristic. Financial need may not necessarily be a selection requirement.

Competitive Scholarship programs:

Juniata offers an array of competitive scholarships that recognize the outstanding achievements of incoming students without regard to financial need.

Academic Scholarships at Juniata reward students who do well academically, but also contribute to their school and community by getting involved. For most scholarships at Juniata, all you have to do is apply to be considered!

The list of possible academic scholarships is listed below:

- **James Quinter Scholarships** – honors the College's first president
- **Calvert Ellis Scholarships** – honors the president who led Juniata in the post-World War II era
- **M.G. Brumbaugh Scholarships** – honors the College's third and fifth president
- **Elizabeth Baker Scholarships** – honors a philanthropist dedicated to the pursuit of peace
- **Juniata College Scholarships** – honors the College's learning philosophy, tradition and alumni
- **Phi Theta Kappa Transfer Scholarships** – Two scholarships are awarded annually to Phi Theta Kappa students who transfer to Juniata. Students who have active PTK membership at their current community college and at least a 3.85 GPA are eligible for consideration
- **Scholarships in Science, Technology, Engineering and Math (S-STEM) for Transfer Students** – In conjunction with the National Science Foundation, Juniata will award six scholarships worth up to \$10,000 to students who transfer to Juniata in their junior year from a strong two year college. The awards are competitive and are based on academic achievement, financial need, and commitment to student a STEM area. As part of the scholarship, each student will also receive a paid and mentored summer undergraduate research experience at Juniata.

- **Top Scholar's Award**

Other academic scholarships that are not awarded every year include the **W. Clay and Kathryn H. Burkholder Scholarship, Ronald L. Cherry Scholarship, Richard M. Simpson Scholarship** and **Larry Johnson Scholarship**.

Juniata College also offers **Heritage and Ray Day Scholarships** to students who show commitment to academic excellence, leadership and community service that culminate in a level of understanding among diverse groups.

"External" Scholarships

Many students receive scholarships that are awarded by agencies other than Juniata (Lion's Club, PTA, Rotary, etc.). Students are encouraged to explore these opportunities that often reduce the family's cost of education.

Loans

Loans permit students and parents to defer a portion of the cost of education over an extended period of time. The federal government, the College, and private agencies offer programs that seek to provide educational financing at reasonable rates. Further information is available from the Office of Student Financial Planning.

Student Employment

Juniata provides both on and off-campus student employment opportunities to help defray educationally related expenses. While the College cannot guarantee that every eligible student will secure employment, there has been an even balance between available positions and students interested in work. Further information about available positions may be found on the Arch.

Community Work Study

The Community Work Study Program places Federal Work Study-eligible students at community agencies across Huntingdon County for part-time employment in service to the community. Students earn minimum wage while aiding organizations, become more efficient with program/event planning and reach out into the community. Tutoring programs such as the Huntingdon Community Center After-School Program, the Salvation Army ARC of Learning Program and the Bethel AME After-School program

work with Huntingdon Co. youth and provide tutoring for K-12. There are also positions available with other agencies. Information, position descriptions, and applications will be available in the Office of Service Learning.

Eligibility for Financial Aid

Students must meet the following conditions to be considered eligible for most aid programs.

Enrollment Status

Normally students must be enrolled in a degree or certification program to be considered eligible for most College aid. (Exception: Half-Tuition Programs)

Semester Course Load

Most institutional aid requires the student enroll for twelve or more credits per semester. Students who enroll for half-time (six or more) credits may receive federal and state resources.

Citizenship

Many aid programs require that recipients be citizens, permanent residents, or certain stipulated refugee statuses. Exceptions include several institutional aid programs and student employment.

Off-Campus/ Study Away

Generally, students who participate in College affiliated programs (including internships, student teaching, and study abroad) are fully eligible for most forms of assistance. Participating students apply for aid in the usual manner.

Maximum Value for Institutional Scholarships, Grants, and Benefits

It is College policy that any combination of institutional aid cannot exceed the value of tuition, except in several unique scholarship categories.

Juniata's Conditional Guarantee

A student's commitment to attend Juniata is matched by a corresponding commitment from the College. The Conditional Guarantee assures you that College-sponsored aid will

remain unchanged for the student's four year of attendance.* Because of this you can plan and budget for each year with the expectation that College aid will not be reduced.

The following conditions must be met to maintain the provisions of the Conditional Guarantee:

- Students must meet acceptable standards of academic progress (see Catalog).
- Students must file renewal applications for aid by April 1.
- Significant changes to family or financial circumstances may result in changes to financial assistance.

Cost of Education Budget

Resident Students and Those Living in Off-Campus College Housing (2015/16)

Tuition
Room-Double
Room-Single
Board
Mandatory Fee
Books & Supplies
Personal Expenses
Transportation Expenses
Total (used to determine aid)
Total Direct Costs (paid to JC)

* Students from states other than Pennsylvania or Maryland will have their travel budgets increased in recognition of the additional transportation costs borne by students whose residence is geographically distant from Juniata. Contact the Office of Student Financial Planning for more information.

Commuting Students

Tuition
Living Expenses
Mandatory Fee
Books & Supplies
Personal Expenses
Transportation Expenses
Total (used to determine aid)
Total Direct Costs (paid to JC)

Applying for Financial Aid

Requirements and Timing

New students (freshmen and transfers) must be admitted to the College before financial aid can be awarded. New students should file applications for assistance by March 1 to ensure they are considered for all available funding. Non-degree students pursuing teacher certification should contact the Office of Student Financial Planning for additional information.

Continuing need-based aid recipients must reapply each year by April 1. Students who fail to meet the deadline date cannot be guaranteed that their funding will remain at levels consistent with the previous years. The FAFSA is required.

Applications

Students and their families may have to complete several applications to receive consideration for various financial aid programs. Forms generally fall into two categories: applications used to determine eligibility for need-based aid and loan applications.

Applications Which Determine Financial Need

Juniata College uses two forms to determine eligibility for assistance: The Free Application for Federal Student Aid (FAFSA), and the Institutional Data Form. Families should carefully review the following information to decide which application(s) should be filed.

New Freshman (Never Attended Post-Secondary Schools)

The FAFSA must be submitted no later than Feb 15th. Electronic applications must be filed through the www.fafsa.gov website. Families are strongly encouraged to secure a FSA User ID (username & password) to serve as your login to various U.S. Department of Education Systems, including the FAFSA. Your FSA ID confirms your identity when you access your financial aid information and electronically sign Federal Student Aid documents. You should never share your FSA ID with anyone. The FSA User ID can be created by going to <https://fsaid.ed.gov>.

Each student needs a FSA ID. For dependent students, the parent providing the income information on the Free Application for Federal Student Aid (FAFSA) will also need to register for a FSA ID.

New Transfer Students or Freshmen with Other Post-Secondary Attendance

The FAFSA (Free Application for Federal Student Aid).

Returning Juniata Students

Renewal reminders for the FAFSA will be sent to each student's email address beginning in December.

Loan Applications

Students are required to complete the Master Promissory Note (MPN) as the chief application for a Federal Direct Loan. The MPN will be completed only once for the student's entire borrowing history. (In subsequent years the financial aid award letter from the College will serve as the document used to preserve or adjust the loan value). Parents interested in borrowing the Parent Loan for Undergraduate Students (PLUS) follow similar procedures.

Financial Aid Standards of Satisfactory Academic Progress

All students (including international students) enrolled at Juniata College are subject to the academic standards of the College, which are printed in the College catalog. In addition, students receiving financial aid, in order to continue to receive financial aid, must meet other requirements as described in detail in this statement of Satisfactory Academic Progress.

The Higher Education Act of 1965 (HEA), as amended, mandates institutions of higher education to establish minimum standards of Satisfactory Academic Progress (SAP) for students receiving financial aid. Program Integrity Regulations, modifying these requirements, were issued October 29, 2010, with an effective date of July 1, 2011. In order to comply with these requirements, Juniata College has established the following definition or standard of Satisfactory Academic Progress for undergraduate students.

The federal programs governed by this regulation include Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work Study, Federal Perkins

Loan, Federal Direct Student Loans and Federal Direct PLUS loans. Specific guidelines for other financial aid programs, including Juniata funded awards are noted throughout the policy and summarized at the end of the document*.

To be considered as maintaining Satisfactory Academic Progress, both full-time and less than full-time students must meet the following standards:

Requirements

Pace

Students must successfully complete an average of 67% of their cumulative, attempted credit hours as transcribed by the Registrar's Office.

Qualitative Measure

All students must maintain a cumulative grade point average corresponding with the table below, as transcribed by the Registrar's Office.

Credits Attempted (Including Transfer Credits) Minimum Cumulative Grade Point Average

0-35.99	1.66
36-61.99	1.80
62-89.99	1.95
90 or more	2.00

Grade Level Progression

In order to advance to the next academic grade level for financial aid purposes, the following credit hours must be completed:

To advance to: You must complete:
Grade Level 2 — 24 credit hours
Grade Level 3 — 54 credit hours
Grade Level 4 — 87 credit hours

Special Notes

Generally, it takes 120 credit hours to obtain a Bachelor's Degree. To graduate in four years, a student must enroll for, and earn, an average of 15 credit hours per semester. Earning only 12 credit hours per semester (minimum for full-time) would extend graduation beyond the four year standard. Therefore, students who receive Juniata sponsored Merit scholarships and need-based grants should average at least 12 credits per semester. Also, certain financial aid resources, such as the Pennsylvania Higher

Education Assistance Agency and other state grants, require a minimum of 12 credits earned per semester and are only available for 8 semesters.

Maximum Time Frame

Under Federal regulation, the maximum time frame that a student may have to complete an undergraduate program is 150% of the published length of the educational program for a full-time student. Juniata College has chosen to make this measurement on a credit hour basis. In most cases, a student must have earned 120 credit hours to complete an undergraduate degree. Therefore, it is expected that all students will complete all degree requirements by the time the student has earned 180 credit hours. Transfer credits reflected on a student's transcript count as attempted and earned credit hours. Students who do not complete their program within this time frame can continue to attend, but they will not be able to continue to receive financial aid. All Juniata sponsored Merit scholarships and need-based grants are limited to 8 semesters of eligibility, unless the student has experience unusual or mitigating circumstances that prevented degree completion within 8 semesters.

Additional Undergraduate Degrees

Students pursuing a second undergraduate, baccalaureate degree, including Teacher Certification, are limited to 90 attempted credit hours of work between receipt of the first degree and completion of the second. Second degree students may not receive federal financial aid beyond 90 attempted credit hours of enrollment in the second undergraduate degree program.

Frequency of Progress Checks

The Office of Student Financial Planning will conduct the official check of Satisfactory Academic Progress at the conclusion of the academic year, following spring semester, regardless of whether the student received financial aid or not.

If a student fails to achieve Satisfactory Academic Progress, the student will be informed of this via letter or electronic mail from the Office of Student Financial Planning. Included in this communication will be information on the student's status, the effect of this status on the student's financial aid eligibility, and any actions the student must take. The notice will be sent to the student's most current addresses on file. It is the responsibility of the student to inform the College of a correct mailing address at all times. If sent by electronic mail, the student's Juniata College electronic mail address will be used for all such communications.

The Dean of Students Office will be notified of students who failed to achieve Satisfactory Academic Progress.

Appeal Process

Following the first semester in which the student does not meet the Satisfactory Academic Progress standard, the student will not be able to receive financial aid for the next period of enrollment unless the student successfully appeals.

The requirements of this Satisfactory Academic Progress policy can be appealed based on the following circumstances:

- Death or serious injury or illness of an immediate relative
- Student injury or illness which required medical intervention
- Significant, unanticipated family obligations
- Catastrophic loss (e.g. flood, fire, etc.)
- Other special circumstances.

The student's appeal must include:

- An explanation of why the student failed to make Satisfactory Academic Progress. In other words, explain how the circumstance prevented the student from performing up to his or her normal academic potential.
- A description of what has changed that will allow the student to achieve Satisfactory Academic Progress status in the coming semester.

To appeal the loss of Satisfactory Academic Progress status, the student should submit the information to the Juniata College Office of Student Financial Planning, along with any supporting documentation (e.g. death certificate, doctor's note, letter from academic advisor or other 3rd party). The Director of Student Financial Planning reserves the right to request additional information on a case-by-case basis.

Approvals/Financial Aid Probation

Students who successfully appeal are granted Financial Aid Probation status for one semester. The student will be notified by letter or by electronic mail to their Juniata email account of the results of the SAP appeal.

The student should carefully review the SAP appeal notification, which will outline the unique, individualized SAP requirements the student must meet in order to maintain eligibility for federal financial aid. For example, a student who has failed to meet the 67% pace requirement, may be told in the appeal notification that s/he must maintain a higher minimum pace on a term by term basis, as well as earn a certain minimum GPA each semester, in order to maintain eligibility for federal financial aid. The student must keep the appeal notification for future reference.

Academic Plan/Statement of Intent

A part of the appeal process can be the establishment of an academic plan/statement of intent designed to help the student regain Satisfactory Academic Progress standing. The Academic Plan/Statement of Intent can be part of the student's appeal. The academic

plan/statement of intent is worked out between the student, his or her academic advisor, and/or the Registrars' Office.

The academic plan/statement of intent is not required at the start of the probationary semester. But, if the student fails to regain Satisfactory Academic Progress status at the end of the probationary semester, the student must be successfully following the academic plan/statement of intent in order to continue to receive financial aid.

The academic plan/statement of intent must define how the student can regain Satisfactory Academic Progress status by a specific point in time.

Denials

If a SAP appeal is denied, the decision is final for the enrollment term specified by the student on the appeal form. A student may be able to re-establish eligibility on his/her own, for future semesters, by completing sufficient credit hours and/or improving his/her GPA such that s/he then meets the SAP requirements. Please contact The Office of Student Financial Planning if you have questions about reestablishing eligibility.

Financial Aid Probation

A student is considered to be on Financial Aid Probation during the first semester s/he receives federal financial aid under an approved SAP appeal.

Important - Please Note: A successful appeal of academic suspension is unrelated to financial aid suspension and does not result in reinstatement of a student's financial aid eligibility. Appealing one's financial aid suspension status is a separate process.

Miscellaneous

Repeated Courses

Some students repeat courses they have passed in order to raise their grade point averages (GPA). Be aware that repeating a course for which credit has been earned (a grade of "D-" or higher received), will not result in additional, earned (i.e. new) credit for financial aid/academic progress or degree requirement purposes. When repeating courses for which credit has already been earned, students should plan their class schedules carefully to ensure that they continue to meet SAP requirements.

Withdrawals

Courses for which a student receives a grade of "W" are included in the number of attempted hours, but do not count as earned credit hours for SAP purposes.

Transfer Credits

Transfer credits reflected on a student's Juniata academic transcript are counted as both

attempted and earned credit hours for SAP purposes. This includes college credits earned either as a full or part-time college student at another institution or through dual enrollment.

Other Grades

Courses for which Satisfactory or Unsatisfactory grades are received count as both attempted and earned credit hours for SAP purposes. Courses for which a student receives the grade of “AU” (audit) will not count as attempted or earned for SAP courses.

***Renewal of Juniata Scholarships and Grants**

Students receiving Juniata funding must earn an average of 12 credits per semester in order to have the award renewed, unless the student has experience unusual or mitigating circumstances that prevented him/her from completing the credits.

Juniata sponsored Merit scholarships and need-based grants are limited to 8 semesters of eligibility, unless the student has experience unusual or mitigating circumstances that prevented degree completion within 8 semesters.

Appeals

Students who fail to meet the progress standards noted above have several options. They may supplement credit earned by attending summer school; they may continue without aid; or they may petition for the reinstatement of aid. Appeals must be in writing and based on unusual, mitigating, or extraordinary circumstances which impeded their ability to maintain progress standards. (NOTE: Appeals granted by the Office of Student Financial Planning have no bearing on decisions made by the Student Academic Development Committee.)

Expenses

At a time when most higher education institutions' charges continue to outpace the general inflation rate, a Juniata College education remains affordable for students of appropriate academic ability. Despite the continued rise in the costs of services required for education, Juniata has managed to hold inevitable fee increases to moderate levels, often resulting in pricing a Juniata education below that of comparable institutions, increasing the real value of our educational product.

General Fee

Charges are based on a general fee covering most of the annual costs to a student:

	Resident Students	
Fall Semester	\$20,310	\$20,200
Spring Semester	\$20,310	\$20,200
Total	\$40,620	\$40,400

The general fee is applied to regular instructional costs: use of Juniata's library and instructional facilities; academic services; personal student services; and maintenance and other operational costs. The general fee for full-time students also covers many extracurricular expenses including: admission to all home athletic events and numerous campus social activities; most of the admission charges to designated, College-sponsored cultural programs; use of all recreational/athletic facilities; and subscriptions to the student newspaper (The Juniatian). A student paying the general fee may take a normal load of 12 to 18 hours per semester. When permission is given to register for work in excess of the normal program, either in a given semester or for the academic year, the overload fee is \$500.00 for the 19th credit hour and \$1280.00 for anything over up to 21 credits.

The yearly general fee for resident students also covers board charges and room rental for regularly announced periods when the dining hall and residence halls are open (see the College calendar). A limited number of students, with approval from the Dean of Students, may live off campus each year, but others are expected to reside on campus unless they live with parents and guardians and commute from home in the immediate area. Resident students will have several meal plan options from which they may choose. All freshmen are required to take the standard 21 meal plan during the first semester. Questions about meal plan options should be addressed to Student Services.

Matriculation

Matriculation: When a student has been accepted for admission as a degree-seeking student, a \$400 matriculation fee is to be paid by May 1. This nonrefundable fee reserves a space in the entering class.

Occasional Academic Fees

Auditing: The fee for auditing is \$810 per course, and is waived for students in good standing who are regularly enrolled in a full-time College program.

Overload: Students registering for more than 18 hours per semester are charged \$500 for the 19th credit hour and \$1280.00 for any credit up to 21. Courses extending over more than one semester are prorated. If the student withdraws from a course(s) following the drop/add period, this charge must still be paid.

Special Course Charges: Some courses have laboratory, studio, or special field experiences as significant parts of the course. A special fee of normally \$30 is assessed for these courses, with the exception of Biology and Chemistry. The fee for those courses is \$75. Other departments with courses which require a special course fee include: art, education, geology, music and physics. Some general education courses also require this fee. Students registering for off-campus student teaching must pay a \$50 fee.

Private Instruction in Music: Regularly enrolled students who wish to take private music lessons for academic credit will be charged \$780 for a two-credit, one hour per week lesson, or \$390 for a one-credit, thirty-minute per week lesson.

Private Instruction in Ceramics: Regularly enrolled students who wish to take ceramics lessons for academic credit may do so as part of their normal academic program. If lessons constitute an overload, the normal overload charge applies. Students who do not desire academic credit, or persons not regularly enrolled at the College, may take lessons for \$1000 per semester (one lesson per week).

Special Services Fees

Student Activity Fee: This fee provides funding to Student Government and the Juniata Activities Board. These organizations assist with support for student clubs, activities and organizations. This fee is assessed per semester. Full-time students will be charged \$85 and part-time students \$20 per semester.

Credentials: Fees for academic transcripts, co-curricular transcripts, and placement credentials will be covered by part of the student's matriculation fee. Up to 25 copies of each are free and a fee of \$5.00 each will be charged for subsequent documents.

Health Services: All full-time students will be charged a \$110 per semester College Health Center Fee. This fee entitles the student to unlimited visits to the Health Center and special health and wellness programming on campus. Prescription medications dispensed will be billed to the student at cost.

Medical Insurance Coverage: An Accident and Sickness Insurance plan is available and will be billed automatically to all full-time students. The annual premium for students is \$1498. Students may waive this charge by completing an online form and providing proof of coverage. Further information on this plan may be obtained by contacting the Business Office.

Technology Fee: All students will be charged a technology fee at the beginning of each semester. Resident students will be charged \$195 per semester; nonresident students will be billed \$85 per semester. The fee includes access to campus computing resources, including but limited to the Internet, shared file storage for classes, printing, copying, general lab computing, and cable television.

Vehicle Registration: All vehicles brought to campus must be registered with the Security Office. On-campus resident students will be charged \$35 per year, and off-campus resident and non-resident students will be charged \$25 per year.

Part-time Fees

Course: Non-resident students who do not participate in the College program and do not use facilities other than classrooms, libraries, or other academic facilities, are charged \$1635 per semester hour when taking less than 12 semester hours. For persons holding bachelor's degrees, the fee is reduced by one half.

Summer Session: Students enrolling in summer courses will be charged \$835 (Summer 2015) per credit unless they are participating in a program with special rates

Deposits

Student Security Deposit: Once a student enrolls at Juniata, \$250 of the previously-paid matriculation fee establishes the student security deposit. Assessments and fines for damages to or loss of College property and other obligations are deducted from the deposit. When the balance of the deposit falls below \$50, students are required to restore the deposit to its full \$250 amount. After graduation or other separation from the College, the unexpended balance is refunded by check and mailed to the student's home address.

Payment of Bills

The general fee is due and payable prior to the beginning of each semester. Fall and spring semester bills are due on August 10 and January 4, respectively. Financial settlement is required for all outstanding obligations. Students may be denied registration, room occupancy, and participation in extra-curricular activities without the necessary arrangements. Payment after the due date is subject to the late payment fee. Also, students cannot be granted honorable dismissal, end-of-term reports, transcripts of grades and credits, or diplomas until all College bills have been paid in full.

Monthly Payment Option: Students who wish to pay College bills on a monthly basis may use Tuition Management Systems. The interest-free, monthly payment option enables families to spread all or part of the annual expenses over equal, monthly payments. A small annual fee is charged. Low-interest monthly payment options, including an unsecured loan, a home equity credit line, and federally-backed loans, are also available. Students can contact Tuition Management Systems at 1-800-356-8329 or online at www.afford.com for more information on these programs. Also, the Office of Student Financial Planning can inform students of alternative financing strategies.

Credit Card/ACH: Students who wish to pay College bills by either credit card or direct ACH Deposits from a bank account may do so by contacting CashNet through the Arch or have the student grant you access to the online payment website. Any fees associated with these types of transactions are passed onto the student.

Credit Balances

Juniata will pay credit balances to students in a timely manner, usually within two weeks of the determination of the credit balance. Credits are deemed to be applied to bills in the order as indicated in the Student Financial Planning section of the catalog.

Late Fees

Late Payment: Any student who fails to pay his or her tuition, room, and board bill (or make proper arrangements with the Bursars Office) by the due date on the bill is charged a fee of 1.5% per month on past due balances.

Late Endorsement of Co-payee Checks: The College receives checks for tuition, room, and board made out to both the College and the student. The College may not use these funds until the check is endorsed by both the College and the student. The College will

notify the student when such a check is received. Failure to endorse the check in a timely manner (generally within one week of notice date) will result in a charge of \$5 for each subsequent week or part of a week.

Through an agreement with AES and other lender/guarantee agencies and the College, direct deposit of loan proceeds into the College's bank account is permitted. Students should authorize this method of disbursement by checking the appropriate box on their loan application or signing an authorization form available in Accounting Services.

Registration Late Fee: Any student who fails to register or submit a (POE) Program of Emphasis plan by the published deadline, may be assessed a late fee of \$50 for each incident.

Refund Policy

As the College has expenses of a continuing nature, usually incurred on an annual basis, it assumes that students, once enrolled, will remain for the semester. However, the College recognizes that individual circumstances, including serious illness or other emergency reasons, may dictate a withdrawal. Official notice with an explanation of the reason for withdrawal must be made to the Dean of Student Services. A case-by-case review of the particular circumstances will be made to determine refund eligibility (if any). The College uses a federally mandated refund procedure based on a percentage of semester completed to calculate charges and applicable credits for students separating from the College after the semester begins.

We are required by federal statute to determine how much financial aid was earned by students who withdraw, drop out, are dismissed, or take a leave of absence prior to completing 60% of a payment period or term.

For a student who withdraws after the 60% point-in-time, there are no unearned funds. However, a school must still complete a Return calculation in order to determine whether the student is eligible for a post-withdrawal disbursement.

The calculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or term. (Any break of five days or more is not counted as part of the days in the term.) This percentage is also the percentage of earned aid.

Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

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

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

If a student earned more aid than was disbursed to him/her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student's withdrawal.

Tuition and Room Charges & Board Charges: Tuition, room charges, and board charges are pro-rated from the first day of class of each semester and is based on the percentage of the semester which has expired. Tuition, room, and board charges will be assessed up to the 60% point. There will not be a refund after the 60% mark.

All students who separate from the College, after the start of classes, will be assessed an administrative fee of \$100.

The student security deposit will be retained for those students who have only temporarily separated. The deposit will be refunded if the student chooses not to return.

Financial Aid: The crediting of financial aid ceases for withdrawing students in the semester in which separation occurs. Federal regulations require that refunds be made in the same order as credited. Credits are applied to bills in the following order:

- Unsubsidized Federal Direct Loans (other than PLUS loans)
- Subsidized Federal Direct Loans
- Federal Perkins Loans
- Federal Direct PLUS Loans
- Federal Pell Grants for which a Return of funds is required
- Federal TEACH Grant for which a Return of funds is required
- Federal Supplemental Opportunity Grants for which a Return of funds is required
- Other assistance under this Title for which a Return of funds is required (e.g., LEAP)
- State Grants
- Juniata Grants and Scholarships
- Other payments

Summer Session, Occasional Academic and Part-time Fees: Refunds are calculated proportionately according to the above table.

Courses of Instruction

Accounting, Business, and Economics

Department Website:

<http://www.juniata.edu/departments/abe/>

Faculty:

- Professor Bradley Andrew - ext. 3378
- Assistant Professor Kathy Baughman -ext. 3602
- Professor Marlene Burkhardt - ext. 3663
- Associate Professor Ann Echols- ext. 3670
- Professor James Lakso - ext. 3121
- Professor Dominic Peruso (Chair) - ext. 3661
- Professor Randy Rosenberger - ext. 3662
- Assistant Professor Terrance Anderson - ext. 3735
- Assistant Professor Wei-Chung Wang- ext. 3542
- Professor Pat Weaver - ext. 3672

Background Information:

All business programs at Juniata College are crafted to give each student the tools to analyze, think, and perform. To achieve these goals, each student is provided with the opportunity to learn to use information to make decisions, work effectively with others, communicate effectively, and have experiences, like internships and study abroad options, to develop the ability to think and act broadly. The department makes available several opportunities for “real world” experiential learning.

Special programs, facilities, or equipment:

- Case-study based courses
- Hands-on labs for student entrepreneurs
- International experiences available
- Internships available
- JCEL Video Library - interactive database of over 600 video clips from entrepreneurs
- Presentations and extensive writing fully integrated into course work
- Projects for local, regional and even international firms
- Real investment portfolios that students manage

- Sill Business Incubator- professional and collaborative space for students to run their venture
- Students Of Business (SOB) club
- Student Seed Capital Fund - dollars for Juniata students to launch their own business while a student
- Tau Pi Phi - business honor society - with case competitions

Programs of Emphasis:

- Accounting
- Business Information Technology
- Economics
- Entrepreneurship
- Finance
- Human Resource Management
- International Business
- Management
- Marketing

Student Designed Programs of Emphasis (examples):

- Accounting/Environmental Studies
- Education and Management
- English and Business
- Computer Science and Management
- International Business/Foreign Languages
- Marketing/Communications
- Media Studies/Business

Secondary Emphasis:

- Requirements: 18 credits or six courses in related business field, one of the courses 300 level or above

Internship/Research Experiences:

- “Big Four” accounting firms
- Marketing and promotions firms
- Regional economic development organizations
- Minor league ice hockey and baseball organizations
- Health care organizations

Courses:

EB-101 Introduction to Business (Fall & Spring; Yearly; 3.00 Credits; S) A broad survey of business topics. The Emphasis is on developing a basic understanding of business concepts and practices, and basic analytical skills used in business.

EB-102 Introduction to Entrepreneurship (Spring; Yearly; 3.00 Credits; S) Students will explore the personal ramification of becoming an entrepreneur. They will generate ideas for new business start-ups and learn how to determine whether an idea represents a viable business opportunity. Students will develop their concepts as far as possible toward the actual startup venture. Prerequisite: EB101 or permission of the instructor.

EB-105 International Economic Issues (Fall & Spring; Variable; 3.00 Credits; S,I) Understanding international economics is increasingly important for private and public decision-makers. In a world of growing economic interdependence, the ability of policy makers to provide a stable environment for business is a key issue. Accordingly, this course develops the principle topics of international economics, including trade theory, the balance of payments, the cause and consequences of exchange rate movements, the flow of capital, currency crises and regional trade issues. The applied topics emphasized will be based on the most pressing current issues.

EB-131 Financial Accounting (Fall & Spring; Yearly; 3.00 Credits; S) Introduces fundamental principles and assumptions of accounting as they relate to transaction analysis and basic financial statements.

EB-140 Investing: Your Future (Fall & Spring; Yearly; 1.00 Credit; S) Saving too little can cost you a secure future. In this course you will learn to make informed judgments about how to save, how much to save, how to invest, what to believe, who to ask for advice, and how to choose among investments. Students with no investing knowledge but who are interested are especially encouraged to take this course.

EB-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

EB-201 The Management Process (Fall & Spring; Yearly; 3.00 Credits; S) Studies some of the primary functions of managers in organizing, and controlling. Introduces the basics of strategic management. Method of instruction combines lecture, in-class exercises, case analysis, and an experimental project. The experimental project asks students to actually perform as managers. Prerequisite: Sophomore or higher standing.

EB-202 Behavioral Analysis of Organizations (Fall & Spring; Yearly; 4.00 Credits; CW,S) The broad focus of the course is to examine how individuals come together to form a successful organization. The course is broken into three major sections: people, organizations, and leadership. The course emphasizes student involvement and engages students in a variety of in-class exercises, case analysis role playing exercises, small group exercises, and an off-campus class experience or two. One or more off-campus experiences are required for the course. Prerequisite: Sophomore standing.

EB-203 Introduction to Business Law (Spring; Variable; 3.00 Credits; S) An introduction to the American legal system as it applies to the business community. Emphasis is on basic legal concepts in contracts, real and personal property, agency and employment, and transaction of business through partnerships and corporations. Prerequisite: Sophomore standing.

EB-204 Legal Regulation of Business (Spring; Variable; 3.00 Credits; S) Examines the areas in which by statute the legislative branch of government regulates business. Topics include anti-trust law, bankruptcy, consumer protection, securities laws and the uniform commercial code. Prerequisite: Sophomore standing.

EB-207 New Venture Creation (Fall & Spring; Yearly; 3.00 Credits; S) Students will analyze business start-up successes and failures, develop their own new ideas for new ventures and learn how to determine when an idea represents a viable business opportunity. Students will pursue those opportunities as far as possible toward actual startup of the venture. Prerequisites: EB102.

EB-210 Quantitative Business Analysis (Fall; Yearly; 3.00 Credits; QM,S) This course introduces quantitative techniques for solving business problems and works to establish a link between data analysis and business decision-making. The course presents algebra, graphical methods, applied calculus, and descriptive statistics as tools to aid business decision makers. Prerequisites: High school algebra or pre-calculus.

EB-211 Business Statistics (Either Semester; Yearly; 3.00 Credits; QS,S) This course covers basic descriptive and inferential statistics, normal curve and z-score computations, and addresses hypothesis testing using Chi-Square, T-Test, ANOVA, and linear regression modelling.

EB-222 Principles of Macroeconomics (Fall & Spring; Yearly; 3.00 Credits; S) Macroeconomic conditions affect individuals and businesses in numerous ways: employment opportunities, the purchasing power of wages and salaries, the cost of borrowing money, sales, profits, and competitiveness against foreign businesses. This course develops the theories relevant to understanding the business cycle, inflation, unemployment, deflation, exchange rates and balance of payments problems. It also examines the options and tradeoffs governments face as they seek to provide a stable macroeconomic environment through monetary and fiscal policies. Case studies of the macroeconomic performance and policies of diverse countries provide a comparative orientation. Prerequisites: Sophomore, Junior, or Senior standing

EB-223 Principles of Microeconomics (Fall & Spring; Yearly; 3.00 Credits; S) The optimizing behavior of households and firms serves as the focal point in this study of market-based resource allocation. Supply and demand analysis, spending and saving decisions of households, production and employment decisions of firms, alternative market structures, and environmental economics are among the topics covered. Prerequisite: Sophomore, Junior, or Senior standing.

EB-232 Intermediate Accounting I (Fall; Yearly; 4.00 Credits; S) A comprehensive study and application of generally accepted accounting principles for asset valuation, income measurement, and financial statement presentation for business organizations. Prerequisites: EB131.

EB-233 Intermediate Accounting II (Spring; Yearly; 4.00 Credits; S) A continuation of the comprehensive study and application of generally accepted accounting principles for asset valuation, income measurement, and financial statement presentation for business organizations begun in Intermediate Accounting I. Prerequisite: EB232.

EB-236 Managerial Accounting (Fall & Spring; Yearly; 4.00 Credits; S,QM,CW) Emphasizes accounting concepts for the internal use of management in planning and control. Course focuses on spreadsheet applications to analyze management policies. Prerequisite: EB131.

EB-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

EB-300 Business in China I (Spring; Yearly; 2.00 Credits; I) This course will examine 1) the history of the Economic Reform that triggered the economic growth in 1988 in China; 2) the role that international trade has played that promoted the economic growth in China; 3) the civic life of China, particularly from the business perspective; and 4) the basic conversational Mandarin Chinese and Chinese business etiquette that help students get by in China. We will review basic economics concepts and introduce students to the fundamentals of economic theory. We will apply economic reasoning to think critically about the public policies, business decisions, and general tradeoffs that help explain the recent economic growth in China. Another objective of the course is to connect students with internship opportunities by physically visiting multinational enterprises in China and connecting with Juniata alumni in China. Students will gain a better understanding of China and better prepare those who want to start their careers in China. This course adds important value to the ABE department and the business curriculum as the course design is consistent with the college strategic plan with respect to China. Corequisite: EB301. Note: There are no refunds after drop/add ends.

EB-301 Business in China II (Summer; Yearly; 2.00 Credits; CA,I) This course will examine 1) the history of the Economic Reform that triggered the economic growth in 1988 in China; 2) the role that international trade has played that promoted the economic growth in China; 3) the civic life of China, particularly from the business perspective; and 4) the basic conversational Mandarin Chinese and Chinese business etiquette that help students get by in China. We will review basic economics concepts and introduce students to the fundamentals of economic theory. We will apply economic reasoning to think critically about the public policies, business decisions, and general tradeoffs that help explain the recent economic growth in China. Another objective of the course is to connect students with internship opportunities by physically visiting multinational enterprises in China and connecting with Juniata alumni in China. Students will gain a

better understanding of China and better prepare those who want to start their careers in China. This course adds important value to the ABE department and the business curriculum as the course design is consistent with the college strategic plan with respect to China. Corequisite: EB300.

EB-307 New Venture Start-Ups (Fall & Spring; Yearly; 3.00 Credits; S) Students will develop their new ventures beyond the conceptual and planning stages by establishing actual operations-purchasing, manufacturing, marketing, etc. to generate revenue. They will implement whatever support systems (accounting, human resources, inventory management, etc.) are needed. Prerequisite: EB207.

EB-320 Intermediate Microeconomics (Fall; Variable; 3.00 Credits; S) Microeconomics analyzes the behavior of individual economic units such as consumers and firms. Intermediate microeconomics builds on the topics covered in principles of microeconomics and principles of macroeconomics. While those courses were more intuitive, this course explores microeconomics with a deeper degree of rigor using mathematical models to predict economic behavior. Prerequisites include EB223 and EB222.

EB-321 Intermediate Macroeconomics (Fall; Variable; 3.00 Credits; S) Intermediate Macroeconomics builds upon the concepts developed in principles of microeconomics and principles of macroeconomics. Macroeconomics in general tries to understand the aggregate behavior of economies rather than that of individual economic actors, and in this course we will study and use models that help explain what has happened in the past and predict what will occur. Prerequisites: EB222 and EB223.

EB-332 Corporate Taxation (Fall; Variable; 3.00 Credits; S) This course is intended for undergraduates who desire to learn how the IRS code applies to corporations. Prerequisites: Junior or Senior standing.

EB-333 Governmental and Nonprofit Accounting (Spring; Yearly; 3.00 Credits; S) Governmental and Nonprofit Accounting is designed to provide an overview of fundamental concepts and practices used in accounting for activities of governmental and non-business organizations. After successfully completing the course, students will be familiar with recording financial transactions, preparing financial reports, budgeting, auditing, and analyzing the results for federal, state and local governments, colleges and universities, healthcare organizations and other nonprofits. Prerequisite: EB 233 Intermediate Accounting II.

EB-334 Advanced Accounting (Fall; Even Years; 3.00 Credits; S) Focuses on accounting theory and problems regarding such specialized topics as: partnerships, consolidated financial statements, governmental accounting, multi-national enterprises and corporate bankruptcy. Prerequisite: EB233.

EB-335 Auditing (Fall; Variable; 3.00 Credits; S) Emphasizes current auditing principles and the objectives of independent accounting firms. Particular attention is

placed on auditing procedures and the ethical and legal responsibilities of the auditor.
Prerequisite: EB233.

EB-336 Federal Taxation: Individuals (Spring; Even Years; 3.00 Credits; S) Examines the federal income tax structure and its relationship to individuals and sole proprietorships. Emphasis is placed on the preparation of the individual income tax return. Prerequisite: EB131.

EB-337 Cost Accounting (Either Semester; Yearly; 3.00 Credits; S) An analysis of the use of cost accounting systems to accumulate and allocate manufacturing costs. In order to support inventory valuation and emphasis is on solving real business problems. Prerequisite: EB236 and Junior or Senior standing.

EB-340 Investing Analysis (Fall & Spring; Yearly; 1.00 Credit; S) The course is meant to train portfolio managers. Students will maintain an online trading account and learn about fiduciary responsibility. They will assist portfolio managers by analyzing investments and with other tasks. This course prepares students to become portfolio managers. Prerequisites: EB140

EB-341 Product and Operations Management (Either Semester; Yearly; 3.00 Credits; S) Examines the necessary things business firms must do to efficiently convert inputs to outputs. The course is about equally divided between qualitative operations management theory and quantitative tools that have been developed to solve typically occurring problems in production/ operations. Prerequisites: EB201.

EB-342 Management Information Systems (Spring; Yearly; 3.00 Credits; S) The study of how computer technology is used to gather, store, organize, retrieve, and transmit information within and between organizations. Topics include the organizational and technical foundations of information systems, the contemporary tools and techniques for building systems, and the management of information system resources. Emphasizes current computer platform applications and techniques used in business. Prerequisites: EB201 (EB201 can be taken concurrently) and Junior or Senior standing.

EB-351 Marketing Management (Fall & Spring; Yearly; 3.00 Credits; S) Analyzes consumer behavior leading to selection of product as well as pricing, promotion and distribution strategies. Research projects help students apply concepts to the complexities of decision making in marketing. Prerequisite: EB201.

EB-355 Marketing Strategies (Spring; Yearly; 3.00 Credits; S) Examines in depth the development and implementation of marketing strategies, for businesses and not-for-profits, for domestic and international businesses. Prerequisite: EB351.

EB-357 Cyber Marketing (Either Semester; Yearly; 3.00 Credits; S,CW) This course examines the challenges of marketing in the Information Age. Information technology, as manifested in the Internet and other enabling technologies, creates a valuable marketing opportunity, and a great peril. As customers and competitors learn the power of real-time

information, companies must learn to compete in a world where location and other long-held advantages may be less important.

EB-361 Financial Management I (Fall; Yearly; 3.00 Credits; S) The management of business assets and liabilities and the concurrent creation of sources and the use of funds. Special attention is given to financial statement analysis and decisions involving working capital management. Prerequisite: EB131 and Junior or Senior standing.

EB-362 Financial Management II (Spring; Yearly; 3.00 Credits; QM,S) Special attention to long-term external sources of funds. Capital budgeting under uncertainty, security market processes, strategies for debt/ equity mix, and portfolio theory are covered. Prerequisite: Junior or Senior standing.

EB-371 Human Resource Management. (Fall; Yearly; 3.00 Credits; S) The early part of the course takes an in-depth look at the fundamental nature of the employer- employee relationship. The fundamental framework is then used to evaluate traditional aspects of Human Resource Management practice: Selection, training, recruitment, performance appraisals, and compensation. Class time involves some lecture, in-class exercises, guest speakers from industry, and case analyses. Prerequisites: EB202.

EB-377 Sports Management (Spring; Variable; 3.00 Credits; S,CS) Sports Management will explore the many business and socio-cultural aspects of the business of sports. Sport plays an increasingly significant role in our world as professional and collegiate sports attract more and more of our entertainment spending and sports personalities become more central and idolized in society. This exploration of the sports industry will connect well with other areas of business study: organizational behavior, strategy, human resource management, and marketing. Prerequisite: Junior standing.

EB-379 Bargaining and Conflict Management (Spring; Yearly; 3.00 Credits; S,CS) Bargaining and Conflict Management provides students with an opportunity to learn about bargaining and conflict-management theory. Students will have the opportunity to explore and apply this theory, and to examine aspects of bargaining style, in a variety of bargaining simulations. The course will also have an international component by utilizing international bargaining simulations as an instructional tool. Prerequisite: EB202.

EB-381 International Political Economy (Spring; Yearly; 3.00 Credits; S,I) The pursuit of wealth and power, profit and privilege, corporate growth and national security occurs in a global context. This course examines the business agendas and political priorities that find expression in the policy agreements and institutional agreements of the contemporary global economy. The course is conducted as a seminar and requires a substantial research project. Prerequisite: EB105.

EB-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offers special studies to meet the interest and demands of Students. Note: Students may take each ST: course for credit.

EB-407 Entrepreneurship (Fall; Yearly; 3.00 Credits; S) Examines the application of administrative and functional fields to small business situations. Special attention is given to the problems typical of the small business. Projects and local businesses may be used as cases. Prerequisites: EB307 or permission of the instructor.

EB-440 Portfolio Management I (Fall & Spring; Yearly; 1.00 Credit; S) Students manage the Juniata College student portfolio, making all investment decisions about policy, trading, and long term goals. They present a progress report to the public, benchmark and account for the investments, and defend their choices. Prerequisites: EB140 and EB340 or EB362 or permission of the instructor.

EB-441 Portfolio Management II (Fall & Spring; Yearly; 1.00 Credit; S) Students manage the Juniata College student portfolio, making all investment decisions about policy, trading, and long term goals. They present a progress report to the public, benchmark and account for the investments, and defend their choices. Prerequisites: EB140 and EB340 or EB362 or permission of the instructor.

EB-442 Portfolio Management III (Fall & Spring; Yearly; 1.00 Credit; S) Students manage the Juniata College student portfolio, making all investment decisions about policy, trading, and long term goals. They present a progress report to the public, benchmark and account for the investments, and defend their choices. Prerequisites: EB140 and EB340 or EB362 or permission of the instructor.

EB-443 Portfolio Management IV (Fall & Spring; Yearly; 1.00 Credit; S) Students manage the Juniata College student portfolio, making all investment decisions about policy, trading, and long term goals. They present a progress report to the public, benchmark and account for the investments, and defend their choices. Prerequisites: EB140 and EB340 or EB362 or permission of the instructor.

EB-463 Financial Markets & Institutions (Spring; Variable; 3.00 Credits; S,I) The role of credit and capital and the function of dollar and Euro bonds in today's internationalized financial markets are investigated empirically and assessed analytically in this course. Numerous economic theories relevant to understanding the behavior of various asset markets are developed, including portfolio and asset models of exchange rate determination and currency speculation. The costs and benefits of alternative government policies such as financial regulation and capital and foreign exchange controls are weighed. Prerequisite: EB222.

EB-464 Investments (Fall; Yearly; 3.00 Credits; S) The study of the basic concepts, analysis techniques and strategies for investing in portfolios of securities. Stocks, bonds, options and futures are examined as well as fundamental, technical and efficient market strategies. Prerequisites: EB 362.

EB-465 Financial Theory and Analysis (Spring; Variable; 3.00 Credits; S) Financial Theory & Analysis will be a finance elective aimed at juniors and seniors. EB465's purpose is to develop an understanding of traditional modern portfolio theory, recent

challenges to this orthodoxy, empirical knowledge of asset performance and how to apply this knowledge to specific contexts, i.e. creating an appropriate portfolio. Prerequisites: EB211 and EB362. MA220 may be used as a replacement for EB211 only.

EB-470 Distinction Seminar (Fall & Spring; Yearly; 1.00-4.00 Credits; S)

EB-480 Senior Seminar (Fall & Spring; Yearly; 3.00 Credits; S) A capstone course for POE in Business. Through the use of readings, case studies and simulations, students in the course will formulate corporate strategy and implement it in a competitive environment. How firms may gain and sustain competitive advantage with the formulated strategy will be examined. In addition, students will also be trained to craft business reports on corporate strategies. The evaluation of performance will mainly depend on the content and the quality of the business reports.

EB-490 Business Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; S) Develops students' skills, through practical experiences or field projects which require proposals for problem analysis and solution. The experiences and projects are provided by local businesses or other organizations and use technical and decision skills developed in students' areas of concentration. Note: Limited availability. May be repeated up to a total of 9 hours credit. Corequisite: EB495. Prerequisites: Permission and Jr. or Sr. standing.

EB-495 Business Internship Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; S) Requires students to reflect on the experience and/or pursue relevant research. Note: Limited availability. May be repeated up to a total of 6 hours credit. Corequisite: EB490. Prerequisites: Permission.

EB-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) This course allows departments to offer topics not normally taught to be offered. Prerequisites and title vary by section.

EB-TUT Business Teaching Assistant (Variable; Variable; 3.00 Credits; S)

Fine Arts

Department Website:

<http://departments.juniata.edu/art/>

Faculty:

- Professor Karen Rosell - ext. 3683
- Associate Professor Bethany Benson - ext. 3659
- Associate Professor Monika Maleska - ext. 3504
- Associate Professor Jennifer Streb (Chair and Curator of Juniata College Museum of Art) - ext. 3657
- Kathryn Blake (Director, Juniata College Museum of Art) - ext. 2691

- Assistant Professor Patricia Howard - ext. 3456

Background Information:

The Department of Fine Arts at Juniata is an integral part of the liberal arts experience. The department aims to promote the creation, study, interpretation, preservation, and enjoyment of the visual arts. Through studies in the Fine Arts, students develop a strong understanding of artistic creativity, expression, and aesthetic judgment. They learn how to research and analyze art critically, and how to explore the elements that compose a work of art and the manner in which those elements contribute to the creative expression of an idea. Students may focus in any one or a combination of three areas: Art History, Museum Studies, and Studio Arts. International opportunities include study in the UK, Germany, Spain, Italy, and France.

Special programs, facilities, or equipment:

- Carnegie Hall: college museum housing permanent collections and temporary exhibitions
- Darkroom
- Drawing and Painting Studio
- Ceramics Studio
- Digital Art Lab

Specific department policy:

Awarding credit for AP exam scores:

The department of art and art history will grant generic 100-level F credit to all students earning scores of 4 or 5 on their Advanced Placement exams. If students feel strongly that a particular AP class should exempt them from taking an introductory course, such as Survey of Western Art or Beginning Drawing for example, then they can make that case with the Chair or the appropriate member of the department.

Programs of Emphasis:

- Art History
- Museum Studies – Art History Focus
- Museum Studies - History Focus
- Studio Art - various tracks in 2-D and 3-D

Individualized Programs of Emphasis:

- Arts Administration
- Arts Management
- Art and Communication
- Art and Psychology
- Pre-Art Therapy

- Pre-Art Conservation
- Pre-curatorial Studies
- Art History and Anthropology
- Visual Arts

Secondary Emphasis:

- Requirements: 18 credits or six courses in related business field, one of the courses 300 level or above

Internship/Research Experiences:

- Abraham Lincoln Public Library and Museum (Springfield, IL)
- Allentown Art Museum (Allentown PA)
- Andy Warhol Museum (Pittsburgh, PA)
- Antique Clock and Watch Museum (Columbia, PA)
- B&O Railroad Museum (Baltimore, MD)
- Brandywine River Museum (Chadds Ford, PA)
- Denver Art Museum (Denver, PA)
- Falling Water Conservancy (Bear Run, PA)
- Fulbright Summer Institute at Trent University (Nottingham, UK)
- Gettysburg Battle Site and Memorial (Gettysburgh, PA)
- Hirshhorn Museum and Sculpture Garden (Washington, DC)
- Massachusetts Museum of Contemporary Art (North Adams, MA)
- Mattress Factory (Pittsburgh, PA)
- Metropolitan Museum of Art (New York, NY)
- Museum of Fine Arts (Houston, TX)
- National Holocaust Museum (Washington, DC)
- National Gallery of Art (Washington, DC)
- National Museum of Women in the Arts (Washington, DC)
- National Park Service at the Eisenhower Historic Site (Gettysburg, PA)
- Neue Pinakothek (Munich, Germany)
- Newark Museum (Newark, NJ)
- Palmer Museum of Art (State College, PA)
- Pennsylvania Military Museum (Boalsburg, PA)
- Rockefeller Archive Center (Sleepy Hollow, NY)
- Southern Alleghenies Museum of Art (Loretto, PA)
- The Grier School (Tyrone, PA)
- The Station Museum of Contemporary Art (Houston, TX)

Courses:

AR-103 Beginning Drawing (Variable; Variable; 3.00 Credits; F) This course will explore the fundamental concerns as well as representational methods and concepts. Using line, shape, form, volume, texture, and the effective spatial organization of these

elements, students will develop perceptual and technical skills to interpret form and space. Students will work with graphite and charcoal, pencil, ink, and other media. Note: A special fee for art supplies is assessed.

AR-104 Design and Color (Variable; Yearly; 3.00 Credits; F) The discipline of design is basic to all forms of visual art, including painting, drawing, photography, ceramics and illustration. This course is designed to acquaint the student with the basic elements of picture structure: composition, line, shape, value, texture, color, scale, proportion, tension, and balance. Note: A special fee for art supplies is assessed.

AR-107 3D Design (Variable; Variable; 3.00 Credits; F) The objective of this class is to familiarize students with the language, creation, and function of three-dimensional objects and visual culture. In order to develop an approach to the art making process, we will explore basic concepts of design and form, through the investigation of modern and traditional media. Additional topics will include visual tactics used by artists and designers both to evoke specific emotions and concepts. Students will create hands-on projects using materials such as plaster, wire, cardboard, wood, and fabric. Note: additional lab fees apply.

AR-110 Survey of Western Art (Fall & Spring; Yearly; 3.00 Credits; F,I) Introduces the major periods of western art history from its genesis to the present: Ancient, Egyptian, Greek, Roman, Early Christian, Byzantine, Early Medieval, Romanesque, Gothic, Proto-Renaissance, Renaissance, High Renaissance, Mannerism, Northern Renaissance, Baroque, Nineteenth Century, and Twentieth Century. Masterpieces from each epoch provide information about the cultures from which they derive, and highlight the individual achievements of outstanding artists.

AR-117 Intro to Sculpture (Fall; Variable; 3.00 Credits; F) The objective of this course is to introduce and familiarize you with basic concepts of the language, creation, craftsmanship, and function of sculpture. In order to begin and develop your approach to the art making process, we will explore design through investigations in shape, space, line, proportion, and color. These preliminary exercises will serve as the building blocks needed to understand and create more sophisticated sculptural forms. Students will create various sculptures from plaster, wood, metal, stone, and clay. Note: additional lab fees apply.

AR-125 Explorations in Clay (Fall; Yearly; 3.00 Credits; F) This course will introduce students to the basic techniques used to create functional, hand-built ceramics. Students will explore methods such as pinching, coiling, slumping, slabbing, etc.; wheel-throwing techniques will also be introduced. Demonstrations of each technique will be followed by an in-class study; the methods will then be linked to an assignment by which grades are determined. Students will participate in other areas of ceramics, such as loading and unloading kilns in addition to creative processes. Critical thought and discourse will occur during class over the course of the semester to encompass the elements and principles of design as well as function. Note: additional lab fees apply.

AR-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of art not currently included in the regular course offerings. Prerequisites will vary based on the course being offered. Special fees may apply.

AR-200 Beginning Painting (Fall; Yearly; 3.00 Credits; F) Introductory course which investigates perceptual and technical aspects of painting which build off of Drawing, 2D Design and Art History. Students work in oil paint, learn various support construction, mediums, traditional methods (including making and altering paint chemistry) and color theory. Demonstration, reading, lectures and slide presentations supplement studio sessions and outside projects. Materials are ordered for the student. Taking an introductory level drawing course prior to enrollment in Basic Painting is highly encouraged (but not mandatory). Note: Drawing courses from high school may provide adequate preparation. Please contact the course professor for more information. Note: An additional fee for art supplies is assessed.

AR-201 Introduction to Art Therapy (Variable; Variable; 3.00 Credits; F,S) Introduction to Art Therapy is designed to introduce undergraduates to the philosophical, pragmatic and historical bases of the human service field of art therapy, with emphasis on current applications in the field of art therapy. Art experiences, lectures, case studies and study of artistic productions will be utilized to explore the relationship between art and healing. A course fee is assessed.

AR-203 Digital Photography I (Fall & Spring; Yearly; 3.00 Credits; F) This course focuses on photography and the creation of digital imagery. Students will learn to operate a DSLR camera and complete projects utilizing a variety of photographic techniques and genres. Students will learn to express visual concepts through photography while utilizing specific techniques unique to the creation of digital photographic artwork. Final works will be exhibited electronically and in print. Students will also look at the work of contemporary photographers and prepare a presentation on one photographer. The course utilizes primarily Adobe Photoshop on a Mac platform. There is a special fee for course supplies and equipment. This course is offered yearly in the fall and every other year in the spring.

AR-204 Digital Art I (Fall & Spring; Yearly; 3.00 Credits; F) This course focuses on the creation of art through electronic processes. Design, composition, value, color, line, simple drawing and multiple imagery (collage, panorama, mosaic, and stop motion movie) will be explored through the use of computers, scanners and cameras. Final works will be exhibited electronically and in print. Students will learn to express their ideas creatively while utilizing techniques and software unique to the creation of digital artwork. Students will create a print portfolio using the schools printers and supplies. Students will also look at the work of contemporary visual artists working with digital arts. The course utilizes primarily Adobe Photoshop and Adobe Illustrator on a Mac platform. There is a special fee for course supplies and equipment.

AR-208 Beginning Photography (Fall & Spring; Yearly; 3.00 Credits; F) This foundational photography course does not assume any prior knowledge of black and

white materials or 35mm camera operation. It is designed to introduce students to basic principles of camera and darkroom equipment operation. Students will seek a fine balance between technical acquisition of the photographic skills (such as correct film exposure, film development, and paper processing) and the ability to implement them to communicate a personal vision. Emphasis will be placed on learning basic principles of photography and an ability to express this knowledge creatively through high quality black and white photographs. Students will be exposed to aspects of the history of photography and visual language in photography today. Note: A special fee for art supplies is assessed.

AR-211 The Art of Bookmaking (Variable; Yearly; 3.00 Credits; F) This course will introduce fiber to students at its most sophisticated and expressive, mode: Book Arts. Students will be taught basic book-making techniques as well as a brief history of visual communication (both functionally and aesthetically). Students will create projects that challenge traditional notions of the book within the visual arts. Students will participate in such activities as papermaking, sewing, stitching, and other techniques used to alter the idea of published material and written communication. Note: Additional lab fees apply.

AR-215 Ceramic Sculpture (Spring; Yearly; 3.00 Credits; F) Ceramic Sculpture is a course designed to introduce students to the basics methods of ceramics and the techniques of creating three-dimensional objects. Students will learn various hand-building and throwing techniques as well as the technical, historical, and cultural terminology associated with 3-dimensional design. Students will use these methods to create sculptural clay objects. Through this course students will focus on technical, cultural and contemporary concerns of clay and sculpture as they develop their own personal and artistic ways of working.

AR-225 Wheel Throwing (Fall & Spring; Yearly; 3.00 Credits; F) This course will introduce students to the techniques of the potter's wheel and expressive qualities of clay as an artistic medium as well as an essential commodity. Students will learn wheel-throwing techniques to incorporate form, function, and design with each project. Functional and sculptural objects will be explored, and specific objectives will be linked to each assignment by which grades are determined. Students will participate in other areas of ceramics, such as loading and unloading kilns in addition to creative processes. Critical thought and discourse will occur during class over the course of the semester. Note: additional lab fees apply.

AR-235 Empty Bowls Practicum.. (Fall & Spring; Yearly; 1.00-3.00 Credits; F) Students enrolled in AR235 will create functional bowls to be donated to the annual Empty Bowls event in order to raise money for Huntingdon County food banks. Prerequisite: AR225

AR-299 Special Topic (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of art not currently included in the regular course offerings. Prerequisites vary based on the course offering. Special fees may apply.

AR-300 Intermediate Painting (Spring; Variable; 3.00 Credits; F) This course is designed for advanced students to broaden their understanding of painting, refine techniques, visualize sophistication of concepts, and begin building a personal portfolio that reveals an attempt at a search for meaning/content, personal style, and individual expression. Students will build upon foundational painting skills acquired in introductory level painting by exploring color and tonal relationship through a variety of applications and techniques of the oil media. Students will also investigate descriptive and expressive possibilities in painting introduced through technical and conceptual painting problems designed to develop observational and conceptual awareness. Prerequisites: AR200 and Art POE or permission of the instructor. Note: A special fee for art supplies is applied.

AR-301 African-American Art (Either Semester; Variable; 3.00 Credits; CA,F,I,CW) Considers the work of African-American artists from the American colonial period to the present, seeking to understand the works of painting, sculpture and other media as the products of major cultural movements such as the New Negro Movement, Harlem Renaissance, and Civil Rights Movement, but also as the unique expressions of individual artists. Prerequisites: AR110. Note: A special course fee may apply.

AR-303 Intermediate Drawing (Variable; Variable; 3.00 Credits; F) This course is designed to expose students to many different drawing techniques using a variety of tools, media, support materials, and surfaces as applied to individual expression. This course will build upon skills acquired in Basic Drawing (AR103) by emphasizing observational concerns as well as representational methods and concepts, and by developing perceptual and technical skills. Through the use of line, shape, form, volume, texture, color and effective spatial organization of these elements, students will interpret and translate form and space. We will also be addressing content and conceptual concerns of drawing as a complete art form within itself and its place in contemporary art today. Prerequisites: AR103 or AR200. Note: A special fee for art supplies is assessed.

AR-305 Intermediate Ceramics (Spring; Yearly; 3.00 Credits; F) This course will expand upon the skills learned in Beginning Ceramics. More in-depth demonstrations and explorations of the techniques used in both making and decorating will be offered. Students will work more independently in their choice of hand-built and/or wheel-thrown techniques and will develop a stronger use of content within their work. Students will be involved in the entire ceramic process, from the use of raw materials to make clay and glazes through fundamental firing procedures. Prerequisites: AR125 or AR215 or AR225 or permission. Note: Additional lab fees apply.

AR-308 Intermediate Photography (Variable; Variable; 3.00 Credits; F) Building upon the experiences of Basic Photography, this course will concentrate on black and white photography; however, students will be encouraged to go beyond the boundaries of a conventional black and white print by incorporating a range of techniques, paper sizes, and alternative processes. Students will be exposed to the work of early and contemporary photographers through thematically structured lectures based upon significant historical and contemporary themes, concepts, and ideas. Students will be

expected to produce work with deeper content and individual expression. Prerequisite: AR208. Note: A special fee for art supplies is assessed.

AR-309 Italian Renaissance Art (Either Semester; Variable; 3.00 Credits; F,I,CW) Considers the art and architecture in Italy from 1250-1600, with special focus on the centers of Florence, Siena, Rome, Venice, Milan, and Naples. Duccio, Giotto, Ghiberti, Donatello, Michelangelo, Bramante, Leonardo, Raphael, and Titian are among the artists studied. Note: A special course fee may apply. Prerequisite: AR110.

AR-310 Baroque to Enlightenment (Either Semester; Variable; 3.00 Credits; F,I) This course examines the emergence of the Baroque in the 17th century through the Rococo and the impact of scientific reasoning in art and society in the 18th century. Students will learn how styles develop and change in Italy, Spain, France, the Netherlands, England, and America as a reaction to and against socio-political and aesthetic issues. Prerequisite: AR110.

AR-311 Ancient Art & Architecture (Either Semester; Variable; 3.00 Credits; F,I) Studies art and architecture from Prehistory through Ancient Rome, with particular emphasis on architecture and sculpture and their purpose in cultural and political activities. Course will draw from art historical and archaeological approaches. Prerequisites: AR110 .

AR-312 Medieval Art & Architecture (Either Semester; Variable; 3.00 Credits; F) This course concentrates on the arts and architecture of Europe from 300 to 1250. Works are drawn from the late Antique, Byzantine, Migratory, Carolingian, Ottonian, Romanesque, and Gothic periods. Special emphasis on the relationship between religious, economic, social and political forces and how they affected the arts of this era. Prerequisite: AR110.

AR-313 Northern Renaissance Art (Either Semester; Variable; 3.00 Credits; F,I) Study of the arts in Northern Europe (mainly Germany and the Netherlands) in the 15th and 16th centuries with a particular focus on the patronage of mercantile centers and courts. Artists to be considered include Campin, Van Eyck, Van der Weyden, Durer, Grunewald, Bosch, and Bruegel. Prerequisite: AR110.

AR-315 Women in Art (Either Semester; Variable; 3.00 Credits; CA,F,I,CS) A study of women artists and their artworks from a variety of approaches - aesthetic, historical, philosophical, social, economic, and political - this course seeks to understand, appreciate, and integrate the role and contributions of women into the history of western art. Prerequisite: AR110 and Sophomore, Junior, or Senior standing.

AR-316 19th Century Art (Either Semester; Variable; 3.00 Credits; F,I,CS) An in-depth study of nineteenth century painting and, to a lesser extent, sculpture, this course will examine Neoclassicism, Romanticism, Realism, Impressionism, and Post-Impressionism. Although the art of France will receive primary focus, the artistic achievements of other countries will be discussed as students gain an understanding of the stylistic principles

and historical contexts within which 19th century masterpieces were created.
Prerequisite: AR 110.

AR-318 American Art (Either Semester; Variable; 3.00 Credits; F) A survey from the colonial era to the present, the focus of this course will be an examination of American painting, while major monuments in sculpture will also be surveyed. General topics of study include: landscape, genre, the wilderness, the visionaries, the expatriates, the common man, the Eight, the avant-garde, politics, abstract expressionism, Pop art, Earth art and contemporary art. Prerequisite: AR110.

AR-322 Modern Architecture (Either Semester; Variable; 3.00 Credits; F,I,CS) This course traces major tendencies in American and European architecture from the late 18th century up through the 20th century. We will examine the roots of modern architecture in relation to culture and society and will focus on issues concerning style, technology, urbanism and regionalism to address the forces that have shaped modern architecture. Prerequisites: AR110.

AR-323 Wheel Throwing II (Variable; Yearly; 3.00 Credits; F) This course is designed to investigate more complex theories and techniques of wheel-thrown ceramics. Sophisticated and expansive projects will fuse personal investigation, aesthetic sensibilities, and technical skills as a means of expression. Students are encouraged to challenge constraints of the material as well as their comfort level - it is only through the process of trying that one can never truly fail. Prerequisites: AR225. Note: A special supply fee is assessed on this course.

AR-327 Environmental Art (Fall; Variable; 3.00 Credits; F) This class will deliver an in-depth exploration of environmental perspectives and how they engage an analysis of current environmental concerns as interpreted through artworks. An appreciation and understanding of the processes and products of various media utilized in artworks through practical applications will be emphasized. A broad study of environmental history encompassing societal issues, theories, artworks, and critical analysis (of content and aesthetics) will strengthen existing knowledge of the basic concepts of visual culture. Prerequisites: Take any 1 100 or 200 level art course.

AR-329 Early Modern Art (Either Semester; Variable; 3.00 Credits; F,I) This course surveys stylistic developments commencing in the late nineteenth century and culminating with Abstract Expressionism in the mid-twentieth century in painting and sculpture. We will address questions such as: what is modern art and when did it begin? What makes a work of art modern, and how is this art different from what preceded it? Through discussion, students will learn to recognize, understand, and appreciate the defining features of modern art in its early stages of development in Europe and America. Prerequisite: AR 110 Survey of Western Art.

AR-330 Modern to Contemporary Art (Either Semester; Variable; 3.00 Credits; CA,F,I) An exciting venture into the realm of the arts of our modern to contemporary world, this course surveys major artists and movements from post-World War II to the present.

Beginning with Pop Art and continuing through Post-Modernism and the global arts of today, we will examine artworks from a variety of media and incorporate key critical, philosophical, cultural, and theoretical writings. Pre-requisite: AR110 Survey of Western Art.

AR-340 Philosophy of Art (Either Semester; Irregular/On Demand; 3.00 Credits; F,H)
A study of the main theories about art in the western tradition, with particular attention to classical views as well as modernist conceptions and post-modern critical reactions.
Prerequisites: AR110 or permission of instructor.

AR-390 Museum Studies (Fall; Variable; 3.00 Credits; F,S) This course will provide a broad introduction to the field of museum work. Students will be introduced to the field of museum studies by looking at the history, philosophy, role, operation and multiple functions of museums in American society. Students will examine the political, social, business, legal and ethical issues that confront museum professionals. By the end of the semester students should be able to identify and apply a range of techniques, tools and material used in museum work, and critically discuss issues related to exhibition, education, collections management, and conservation, among other topics. Prerequisites: AR110.

AR-392 Museum Education (Either Semester; Variable; 3.00 Credits; F,CS) This course will study the history, theory, and practice of museum education. The class combines lectures, round table discussions, and design strategies for successful museum education programs for a variety of audiences. Students implement their learned skills through a series of programs that they design and implement for pre-selected groups. Prerequisites: AR110.

AR-399 Special Topics in Art (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of art not offered. Prerequisites vary based on the course offering. Special fees may apply.

AR-400 Advanced Painting (Spring; Variable; 3.00 Credits; F) This course is designed for advanced students to broaden their understanding of painting, and their refine techniques. This course will help students build a personal portfolio that conveys a search for meaning/content, personal style, and individual expression. Students will build upon painting skills acquired in introductory and intermediate level painting courses by investigating descriptive and expressive possibilities in painting. Painting abilities and techniques should be refined this semester, as well as sophistication of concepts. An emphasis will be placed on solving conceptual problems in painting in a context relevant to contemporary art. Prerequisites: AR200 and AR300 and Art POE or permission of the instructor. Note: A special fee for art supplies is assessed.

AR-403 Advanced Drawing Studio (Variable; Variable; 3.00 Credits; F) Offers the experienced student the opportunity to explore more complex problems of expression in drawing. Prerequisite: AR303.

AR-405 Advanced Ceramics (Spring; Variable; 3.00 Credits; F) This course will expand upon students existing knowledge of ceramics to encompass a larger understanding of the physical and conceptual qualities of clay in a more mature manner. Students are encouraged to challenge themselves by pushing the limits of the material in various stages of the ceramic process. In-depth investigations of ceramic artists and movements (both historical and contemporary) will develop students understanding of their own aesthetic decisions. Students will be involved in the entire process of making, from using raw materials to formulate clay and glazes through firing procedures. Prerequisite: AR305. Note: Additional lab fees apply.

AR-451 Capstone in 2D Studio Art I (Either Semester; Variable; 3.00 Credits; F) This course provides students with the time, focus, and experience to develop an art portfolio in preparation for entrance to graduate art programs or a career in visual arts. Students must have twelve credits of advanced courses (300 and 400 level) in one or more of the following art disciplines: Drawing, Painting, Photography, Ceramics, Sculpture (3-D arts) and Art history.

AR-452 Capstone in 2D Studio Art II (Spring; Yearly; 3.00 Credits; F) This course provides students with the time, focus, and experience to develop an art portfolio in preparation for entrance to graduate art programs or a career in visual arts. Students must have twelve credits of advanced courses (300 and 400 level) in one or more of the following art disciplines: Drawing, Painting, Photography, Ceramics, Sculpture (3-D arts) and Art history.

AR-453 Capstone in 3D Studio Art I (Fall; Yearly; 3.00 Credits; F) This course provides students with the time, focus, and experience to develop an art portfolio in preparation for entrance to graduate art programs or a career in visual arts. Students must have twelve credits of advanced courses (300 and 400 level) in one or more of the following art disciplines: Drawing, Painting, Photography, Ceramics, Sculpture (3-D arts) and Art history.

AR-454 Capstone in 3D Studio Art II (Spring; Yearly; 3.00 Credits; F) This course provides students with the time, focus, and experience to develop an art portfolio in preparation for entrance to graduate art programs or a career in visual arts. Students must have twelve credits of advanced courses (300 and 400 level) in one or more of the following art disciplines: Drawing, Painting, Photography, Ceramics, Sculpture (3-D arts) and Art history.

AR-455 Sr. Thesis in Art History (Spring; Yearly; 4.00 Credits; F,CW) Involves one full semester of research and writing. A thesis statement, bibliography, and outline are to be followed by a rough draft which is expected by mid-term. After revisions, the completed paper is due by the end of the semester. Students may choose to write about a specific work (or several works) of art, and relevant artists, styles, influences, etc. The thesis may be comparative, but it must be analytical. Prerequisite: Permission.

AR-456 Sr.Res.in Art History (Fall; Yearly; 2.00 Credits; F,CW) Involves one semester of intensive research, during which time a bibliography, thesis statement, and detailed outline are to be completed. Prerequisites: Minor in Art History (18 credits), a POE in Art History, and/or permission of the instructor.

AR-457 Sr.Thesis in Art History (Spring; Yearly; 3.00 Credits; F,CW) This course follows AR456: Senior Research in Art History. During this semester, students will use their research gathered in senior research to write a thesis. Students may choose to write about a specific work (or several works) of art, and relevant artists, styles, influences, etc. The thesis may be comparative, but it must be analytical. Prerequisite: AR456.

AR-480 Museum Practicum I (Fall & Spring; Yearly; 2.00 Credits; F) Provides a select number of students with an opportunity to organize, design, handle, and install exhibitions hosted by the Juniata College Museum of Art. Students will learn the mechanics of curatorial work, as well as exhibition preparation documentation, promotion and shipping. In addition to the hands-on aspect of the course, students will gain theoretical knowledge about curatorial work through a variety of reading and writing assignments. The course is designed to prepare students for internships at regional and national museums and for entrance into graduate programs in Museum Studies. Prerequisites: AR390 and permission.

AR-481 Museum Practicum II (Fall & Spring; Yearly; 2.00 Credits; F) Builds on skills acquired in Museum Practicum I. Provides further work experience and refines the student's curatorial skills. Students may be assigned independent projects as they relate to various aspects of scheduled exhibitions and will be responsible for helping instruct and assist the Museum Practicum I students. In addition to the hands-on aspect of the course, students will build on the theoretical knowledge gained in Practicum I through a variety of reading and writing assignments. Prerequisite: AR480 and permission.

AR-490 Art Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; F) Students will work under the supervision and guidance of a faculty member or internship sponsor. Internships may be in the fields of the fine arts, art history, or museum studies. Students may work as fine arts apprentices, museum interns, curatorial assistants, etc. Note: May be repeated to a total of 9 credit hours. Prerequisites: Permission and Jr. or Sr. standing. Corequisites: AR495.

AR-491 Art Internship (Variable; Variable; 1.00-9.00 Credits; F) Students will work under the supervision and guidance of a faculty member or internship sponsor. Internships may be in the fields of the fine arts, art history, or museum studies. Students may work as fine art apprentices, museum interns, curatorial assistants, etc. Note: May be repeated up to a total of 9 credit hours. Prerequisites: Permission. Corequisites: AR495.

AR-495 Art Research Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; F) Requires student to reflect on the experience and/or pursue relevant research. Corequisites: AR 490. Prerequisites: permission.

AR-498 Digital Photography II (Spring; Variable; 3.00 Credits; F) This course expands upon the skills learned in Art 203 or Art 208 and exposes students to more advanced skills in fine arts digital photography. Students will work on advanced projects, skills and the creation of a final portfolio. There will be a field trip. Note: a special fee for supplies, equipment and field trip will be applied. Prerequisites: Any ONE of the following courses: AR203 or AR208.

AR-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer topics not normally offered. Prerequisites and fees vary by title.

AR-TUT Art Teaching Assistant (Variable; Variable; 1.00-4.00 Credits)

Biology

Department Website:

<http://departments.juniata.edu/biology>

Faculty:

- Professor Randy Bennett - ext. 3719
- Professor Vince Buonaccorsi - ext. 3579
- Assistant Professor Jason Chan-ext 3738
- Professor Jeffrey Demarest - ext. 3578 emeriti
- Professor Douglas Glazier - ext. 3584
- Professor Jay Hosler - ext. 3720
- Professor Jill Keeney (Chair of Biology, David K. Goodman '74 Endowed Chair in Biology) - ext. 3577
- Professor Debra Kirchhof-Glazier - ext. 3574
- Assistant Professor Regina Lamendella- ext. 3553
- Associate Professor John Matter - ext. 3585
- Professor Norris Muth - ext. 3573
- Assistant Professor Elizabeth Mansberger - ext. 3636
- Adjunct Professor Beth Johnson
- Biology Assistant Research Professor Chris Grant - ext. 6686

Background Information:

Modern biology is a field that draws extensively on other disciplines such as chemistry, physics and computer science and requires strong quantitative and critical thinking skills. Biology is an extremely popular subject with Juniata students: approximately one third of all Juniata students have a Program of Emphasis that relates to biology one way or another. These students form a "critical mass" of high quality peers interested in all facets of biology. Their interactions contribute extensively to a first class experience in the cross-disciplinary nature of the subject, and the ethical and societal impact of many areas of biology contributes to the fullness of a liberal arts education. With biology as a focus, students are well prepared to pursue graduate studies in research or medicine, or

careers in the biological sciences, including sub-fields such as ecology, molecular biology, education or allied health.

Special programs, facilities, or equipment

-
- **Brumbaugh Academic Center**
Multichannel gas exchange system for metabolic measurements
Vertebrate Museum
Greenhouse
- **Raystown Field Station**
Spend a semester experiencing the Northern Appalachians where you'll take all your courses at the field station and live in lodges next to Shuster Hall.

Programs of Emphasis:

- Biology
- Biology Secondary Education

Individualized Programs of Emphasis: (for example)

- Molecular Biology
- Zoology

Internship/Research Experiences:

- Students have the opportunity to conduct research during the year and also during the summer.
- Many of our students present at regional and national meetings.
- Independent guided research opportunities with Juniata faculty and other faculty members at leading research universities around the country are available to all students.
- Students have the opportunity to participate in summer research internships at Juniata. Stipends for research students are provided on a competitive basis from several college endowments and through research grants awarded to individual faculty members.
- Research opportunities are tailored specifically for undergraduate participation. Such research opportunities exist during the academic year through the Biology Research course (BI 489).
- More details can be found at <http://www.juniata.edu/departments/biology/research.html>

Specific department policy:

Waitlist Policy for establishing a waitlist for 300 and 400 level Biology courses during the spring registration period.

1. First priority- Juniors (rising seniors)
2. Second priority - Sophomores (rising juniors)

Exceptions:

1. Freshmen (rising sophomore) with a Biology/Secondary Education POE wanting Biostats as a math course must take it by the end of the sophomore year. These students will be given special consideration if space remains after all first priority students are enrolled.
2. Students in the following 2+ or 3+ affiliated programs must fulfill courses requirements by the end of the sophomore year for 2+ programs and end of junior year for 3+ programs.

Students with the necessary prerequisites and that are applying to one of the accelerated (2+/3+) programs listed will be given special consideration if space remains after all first priority students are enrolled.

Awarding credit for AP exam scores: A student with an AP score of 4 or 5 will receive 3 Natural Science credits, but is not waived from taking BI-105, BI-106, BI-121 or BI-122

[Courses:](#)

BI-105 Biological Diversity and Ecology (Fall; Yearly; 3.00 Credits; N) The first of two introductory courses for students pursuing a program of emphasis in biology or in related areas such as biochemistry or environmental science. Topics covered include Mendelian genetics, evolution, ecology and the diversity of life.

BI-106 Functions of Cells and Organisms (Fall; Yearly; 3.00 Credits; N) The second course in the introductory biology series. This course is divided into two half semester modules: cell and molecular biology and the physiology and systems of plants and animals. Prerequisites: BI105 and CH105.

BI-121 Biology Lab I (Fall; Yearly; 1.00 Credit; N, QS) An introduction to laboratory science. The course consists of two modules, covering basic DNA analysis techniques and Ecology. Emphasis will be placed in each module on experimental design, development of rigorous laboratory and field skills, and use of technology. Note: A special fee is assessed. Corequisite: BI105.

BI-122 Biology Lab II (Spring; Yearly; 1.00 Credit; N, QS) An introduction to laboratory science. The course consists of two modules: 1) protein isolation and separation and 2) Ecology. Emphasis will be placed in each module on experimental design, development of laboratory skills. Note: A special fee is assessed. Prerequisites: BI105 and BI121.

BI-142 Sensory Biology (Spring; Even Years; 3.00 Credits; N) The Senses will cover basic themes in biology using different sensory modalities as model systems. The course will deal with the traditional five senses as well as ways in which other animals perceive the world. The Senses will outline the vital role sensory processing plays in evolution, alterations in cellular activity and gene expression, memory and behavior. This course is not recommended for students whose programs of emphasis are in the natural sciences. There are no prerequisites for this course.

BI-159 Natural History of Florida (Spring; Variable; 1.00 Credit) This course examines the diverse, unique ecosystems of Florida. A combination of lectures and discussions are supplemented by a week-long trip to Florida. We will explore Florida's ecosystems through first-hand experiences.

BI-189 Freshman Seminar (Spring; Yearly; 1.00 Credit; N,CW) The Freshman Biology Seminar will provide students with a small biology class in their first year and provide faculty advisors with an opportunity to interact with their freshman advisees on a weekly basis and gauge progress in the program. Students will read and discuss the philosophical and quantitative underpinnings of scientific inquiry and will apply writing skills acquired in their first semester of College Writing Seminar to communicating scientific ideas. Prerequisites: Biology POE. This course is required for all students intending to graduate with a POE in Biology.

BI-190 Human Biology (Fall; Yearly; 3.00 Credits; N) A non-majors approach to the biology of humans. The course covers the basic chemistry and biology of the human body, as well as how humans fit into the environment. Emphasis will be on applying information to current topics at the individual and societal levels. This course covers the biology requirement for the Social Work POE and is one of the courses included in the Genomics Certificate.

BI-199 BI Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer topics not normally taught. Prerequisites and Corequisites vary by title.

BI-199A Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-199B Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-199C Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-207 Dynamics Biological Processes (Spring; Yearly; 4.00 Credits; N) This course builds on the basic concepts covered in BI105 and BI106, with emphasis on signaling and energy balance and requirements of cells and biological systems. The course has both a classroom and a laboratory component. Required for students with a biology POE. Prerequisites: BI106 and CH106 and CH232.

BI-231 Microbiology I (Variable; Yearly; 3.00 Credits; N) Focuses on the structure, function, growth, genetics and ecology of viral, bacterial, and fungal microorganisms. Basic concepts are emphasized and topics important to the quality of human life are examined. Corequisite: BI 232. Prerequisite: BI106 and CH106.

BI-232 Microbiology Laboratory I (Fall; Yearly; 1.00 Credit; N) Presents procedures and experiments which demonstrate basic micro-biological concepts and techniques. Illustrates and augments the content of the lecture. Note: A special fee is assessed. Corequisite: BI231.

BI-268 Intro. to Human Anatomy (Summer; Yearly; 4.00 Credits; N) A study of the structural and functional anatomy of the human body. This course is designed for both non-biology majors and biology majors with an interest in the health professions. At the end of the course you will be able to identify and describe the major anatomical features and function of the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive systems.

BI-289 Frontiers of Biology (Fall; Yearly; 1.00 Credit) Seminar series, required in all Biology POE's in the Sophomore year, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Descriptions of independent research, internship and study abroad opportunities as well as reports by students and faculty on experiences in these programs will be presented. Prerequisite: BI189.

BI-290 Nutrition (Fall; Yearly; 3.00 Credits; N) This course covers basic principles and facts about nutrition, explores the role of nutrition in human health, and considers a range of societal and political issues surrounding food and nutrition in the U.S. and abroad. Prerequisites: So, Jr, or Sr. standing. Preference is given to students for whom Nutrition is a prerequisite for professional or graduate school.

BI-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the Biology department to offer topics not on the regular schedule. Prerequisites will vary based on topic.

BI-299A Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-299B Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-299C Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-300 General Ecology (Spring; Yearly; 3.00 Credits; N) Examines the interactions of living organisms with their physical, chemical and biotic environments. Special attention is given to the environmental, biological and historical factors affecting the distribution,

abundance, adaptation, and diversity of species in natural communities. This course deals with " ecological principles ", and as such complements the Introduction to Environmental Science course, which deals with environmental issues. Prerequisites: BI105 and BI121 or permission of the instructor. Corequisite: BI301.

BI-301 General Ecology Lab (Spring; Yearly; 1.00 Credit; N) Students work together as research teams to carry out original investigations on the ecology of local species and natural communities. Emphasis on ecological research design, data collection and analysis, and oral and written presentation of results. Frequent field trips are included. Note: a special lab fee is assessed and one field trip may require an additional fee. Corequisite: BI300.

BI-301CW General Ecology Lab (Spring; Yearly; 2.00 Credits; N,CW) Students work together as research teams to carry out original investigations on the ecology of local species and natural communities. Emphasis on ecological research design, data collection and analysis, and oral and written presentation of results. Frequent field trips are included. Note: a special fee is assessed and one optional field trip requires an additional fee. This section of general ecology lab contains added emphasis on writing to fulfill college writing requirements. Frequent field trips are included. Note: a special lab fee is assessed and one field trip may require an additional fee. Corequisite: BI300.

BI-305 Biostatistics (Fall; Yearly; 4.00 Credits; N, QS) This course deals centrally with quantitative and statistical methodology in the biological sciences. It includes experimental design and the conventions of generating, analyzing, interpreting and presenting biological data. Counts as a math course for graduate and professional school requirements. Prerequisites: BI106 or ESS100.

BI-305CW Biostatistics (Fall; Yearly; 5.00 Credits; N, QS, CW) This course deals centrally with quantitative and statistical methodology in the biological sciences. It includes experimental design and the conventions of generating, analyzing, interpreting and presenting biological data. Counts as a math course for graduate and professional school requirements. This writing intensive section requires the writing of an individual research report and one additional hour of class time to discuss writing in biology. Prerequisites: BI106 or ESS100.

BI-310 Physiology (Fall; Yearly; 4.00 Credits; N) A combined laboratory and lecture course which examines the function of cells, tissues, organs, and systems. Physical, Mathematical, chemical, and anatomical concepts are integrated to gain a comprehensive appreciation of the dynamics of living organisms. Students are introduced to the use of physiological instrumentation, experimental design, collection and statistical analysis of data, and preparation of scientific manuscripts. Laboratory experiments amplify and complement the lectures. Prerequisites: BI207 or permission and Junior or Senior standing.

BI-310CW Physiology (Fall; Yearly; 5.00 Credits; N, CW) A combined laboratory and lecture course which examines the function of cells, tissues, organs, and systems.

Physical, Mathematical, chemical, and anatomical concepts are integrated to gain a comprehensive appreciation of the dynamics of living organisms. Students are introduced to the use of physiological instrumentation, experimental design, collection and statistical analysis of data, and preparation of scientific manuscripts. Laboratory experiments amplify and complement the lectures. In addition, students taking this Writing version of BI310 receive additional instruction regarding writing in Biology and produce a well-researched paper on a topic in Physiology.

BI-316 Biochemistry & Molecular Biology II (Spring; Yearly; 3.00 Credits; N) A comprehensive approach to the study of cells, with emphasis on molecular techniques and understanding the primary literature. Analysis of the cell at the molecular level emphasizes a unity in the principles by which cells function. Prerequisites: BI207 and CH301.

BI-318 Developmental Biology (Fall; Yearly; 3.00 Credits; N) This course offers comprehensive investigation of the concepts and mechanisms of development, including gametogenesis, fertilization, pattern formation and organogenesis. The course examines classical and molecular approaches examining problems of development. Students are expected to present research from current literature in the field. Prerequisites: BI207.

BI-318CW Developmental Biology (Fall; Yearly; 4.00 Credits; N,CW) This course offers comprehensive investigation of the concepts and mechanisms of development, including gametogenesis, fertilization, pattern formation and organogenesis. The course examines classical and molecular approaches examining problems of development. Students are expected to present research from current literature in the field. This course is the CW version of BI318. In addition to the topic of Developmental Biology, students will receive instruction related to writing in the biological sciences and will be required to produce a well-researched paper on a topic in developmental biology. Prerequisites: BI207.

BI-321 Ecological Genetics (Spring; Variable; 3.00 Credits; N, QS) Ecological genetics is concerned with the genetics of ecologically and evolutionarily important traits, that is, traits related to fitness such as survival, growth, and reproduction. It is the study of the process of phenotypic evolution occurring in present-day natural populations. Basic and advanced concepts in population and quantitative genetics are covered, including measuring selection on phenotypic characters, with a focus on methods applicable to field studies of ecologically important traits. Mathematical and conceptual material are fully integrated and explained. Application to conservation, spread of invasive species, evolution of pesticide, herbicide, and antibiotic resistance, and environmental effects of genetically modified organisms used in agriculture will be covered. Lab period will be devoted to problem solving, discussion group, experimental manipulation and simulation studies, and independent student research projects. Prerequisites: BI105 and BI106 and BI305 or MA220.

BI-323 Mammalogy (Variable; Variable; 3.00 Credits; N) Examines the comparative biology of living mammals, including taxonomy, evolution, biogeography, ecology,

morphology, physiology and behavior. Special attention is given to conservation issues, the relevance of mammals in modern biological research, and field techniques for studying mammals. Prerequisites: BI105 or permission of the instructor.

BI-324 Ornithology (Variable; Yearly; 3.00 Credits; N) This course provides a comprehensive survey of the comparative biology, ecology, and behavior of birds with a special focus on issues pertaining to conservation and management. Laboratory activities focus on field identification of birds and research and monitoring techniques. Several field trips are possible with one possible 3 day trip to Assateague Island. Prerequisite: BI105.

BI-325 Plant Ecology (Fall; Yearly; 3.00 Credits; N) Primarily an ecology course, but also included is a significant amount of plant identification/classification and plant ecology. The ecology portion will cover the whole spectrum of this fast-growing field; from communities and ecosystems to theory and adaptation. Corequisite: BI326. Prerequisites: BI105 and Junior or Senior standing.

BI-326 Plant Ecology Lab (Variable; Yearly; 1.00 Credit; N) The first 10 weeks are devoted to laboratory work on the identification of the local entophyte flora. Students are required to make a personal collection representing a minimum of 8 families and are expected to become proficient in using a scientific manual. During the 5th and 6th week there is a mandatory all day field trip to collect forest data. An extensive paper on forest succession will be due by semester's end. Note: A special fee is assessed. Corequisite: BI325.

BI-327 Botany (Spring; Yearly; 4.00 Credits; N) This course will provide an in-depth examination of the biology of plants. In lecture and lab we will examine plant reproduction and development, morphology and physiology, evolution and biodiversity, and ecology and conservation. Particular attention will be paid to the aspects of plant biology that are unique to this branch of life and/or are of critical importance to human or other biotic interactions (e.g. photosynthesis, pollination, agriculture, etc.). Prerequisites: BI105. Note: A special course fee is applied.

BI-331 Microbiology II (Fall; Yearly; 3.00 Credits; N) Focuses on the structure, function, growth, genetics and ecology of viral, bacterial, and fungal microorganisms. Basic concepts are emphasized and topics important to the quality of human life are examined. Corequisite: BI332. Prerequisites: BI207 and Jr. or Sr. standing.

BI-331CW Microbiology II (Fall; Yearly; 4.00 Credits; N,CW) Focuses on the structure, function, growth, genetics and ecology of viral, bacterial, and fungal microorganisms. Basic concepts are emphasized and topics important to the quality of human life are examined. Corequisite: BI332. Prerequisites: BI207 and Jr. or Sr. standing.

BI-332 Microbiology Laboratory II (Fall; Yearly; 1.00 Credit; N) Presents procedures and experiments which demonstrate basic micro-biological concepts and techniques.

Illustrates and augments the content of the lecture. Note: A special fee is assessed.
Corequisite: BI331.

BI-337 Comparative & Evolutionary Psych (Spring; Yearly; 3.00 Credits; CS,N,S) (see PY 337)

BI-339 Organic Evolution (Spring; Yearly; 3.00 Credits; N) Presents the theory and facts of organic evolution through a review of modern and historical research on the subject. Major topics include population genetics, adaptations, evolutionary ecology, systematics, the fossil record, molecular evolution, ontogeny and phylogeny, macroevolution, co-evolution, human evolution, and sociobiology. Prerequisite: BI207 or BI300.

BI-339CW Organic Evolution (Spring; Yearly; 4.00 Credits; N,CW) Presents the theory and facts of organic evolution through a review of modern and historical research on the subject. Major topics include population genetics, adaptations, evolutionary ecology, systematics, the fossil record, molecular evolution, ontogeny and phylogeny, macroevolution, co-evolution, human evolution, and sociobiology. This course is the CW version of BI339. In addition to the topic of Evolution, students will receive instruction related to writing in the biological sciences and will be required to produce a well-researched paper on a topic in evolution. Prerequisites: BI207 or BI300 or permission of instructor.

BI-350 Invertebrate Zoology (Fall; Odd Years; 2.00 Credits; N) Focuses on the organizational plan, behavioral and ecological adaptation, diversity and economic importance of representative members of the major invertebrate phyla. Corequisite: BI351. Prerequisite: BI105 and BI121.

BI-351 Invertebrate Zoology Lab (Fall; Odd Years; 2.00 Credits; N) Illustrates and augments the content and concepts of the lecture through direct observation and/or dissection of selected representative organisms. Corequisite: BI350.

BI-353 Entomology (Fall; Even Years; 3.00 Credits; N) An introduction to the biology of insects. Emphasis is given to the systematic, structure, and ecology of the major insect orders and to selected families found in North America. Corequisite: BI354. Prerequisite: BI105.

BI-354 Entomology Lab (Fall; Even Years; 1.00 Credit) This lab will focus on insect collection, identification, behavior and ecology. Requires each student to contribute to preparation, identification, and presentation of a class collection of insects. Corequisite: BI353.

BI-360 Vertebrate Zoology (Fall; Yearly; 3.00 Credits; N) Focuses on the vertebrate animals of the Eastern United States. Collection, taxonomic identification and natural history are emphasized. Suggested corequisites: BI361. Prerequisites: BI105 and Ecology/Biology related POE.

BI-361 Vertebrate Zoology Lab (Fall; Yearly; 2.00 Credits; N) Frequent field trips, for observation and specimen collection are followed by exercises in identification, specimen preparation, and museum techniques to illustrate and augment the concepts and content of the lecture. Note: A special fee is assessed and one optional field trip requires an additional fee. Corequisite: BI360.

BI-362 Animal Behavior (Fall; Variable; 4.00 Credits; N) Behavior is a result of the nervous system interacting with the environment. Animal Behavior will explore the proximate and ultimate causes of behavior. Special attention will be paid to the role and function of the nervous system in behavior as well as the interplay between genetics and the environment. The lab portion of the course is a co-requisite and will explore basic experimental design for studying animal behavior in the lab and in the field. Prerequisites are BI 105 or with instructors permission. Corequisites: BI369.

BI-367 Comparative Anatomy (Fall; Yearly; 3.00 Credits; N) A study of the structural organization of the chordate animal. Each of the major organ systems is reviewed with attention to general pattern, comparative details in representative vertebrate groups, development, and structure-dependent function. Corequisite: BI368. Prerequisite: BI106 and BI122.

BI-368 Comp Anatomy Laboratory (Fall; Yearly; 1.00 Credit; N) Provides additional content to further illustrates the lecture. Emphasis is placed upon the dissection of selected representative vertebrates. Note: A special fee is assessed. Corequisite: BI367.

BI-370 Herpetology (Summer; Variable; 3.00 Credits; N) This course presents the biology of amphibians and reptiles from an evolutionary, anatomical and ecological perspective. Phylogenetic diversity of modern taxa will be presented, focusing on North American groups. Instruction will be in the form of lectures, discussions, laboratory activities and field trips to observe local herpetological species. Prerequisites: BI113. Note: A special course fee will be applied.

BI-380 Biology Research Methods (Fall & Spring; Yearly; 4.00 Credits; N,CW) Offered in multiple sections by faculty members in the Biology department for students interested in learning to conduct meaningful and responsible research. Students enroll in a section aligned with their research interest to generate novel data, while mastering the important components of research common to each of the diverse areas of Biology. Prerequisites: BI105, BI122, BI189, sophomore standing, permission.

BI-389 Biology Research Seminar (Fall; Yearly; 1.00 Credit) Lectures, discussions and student exercises covering such topics as ethics in research, writing effective research proposals and the effective written and oral communication of research results. Professional research and educational societies, government and private funding of research in the United States and other countries and career opportunities will also be discussed. Prerequisites: BI289. Corequisites: BI489. Graded S (satisfactory) or U (unsatisfactory).

BI-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offered at the discretion of the department to qualified students. Topic titles may vary from semester to semester and more than one may be offered per semester. Note: Students may take each ST: course for credit and a special fee is assessed. Prerequisite: permission of the instructor, or as indicated.

BI-399A Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer topics not normally taught. Prerequisites, corequisites and fees vary by title.

BI-399B Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-399C Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-399D Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-399E Special Topics (Variable; Variable; 3.00-4.00 Credits) Allows departments to offer subjects not normally taught. Prerequisites and fees vary by topic.

BI-417 Reproductive Biology (Fall; Even Years; 3.00 Credits; N) This course examines reproductive biology by integrating aspects of development, anatomy, cell biology, and hormone physiology with the behavior and ecology of vertebrates. Prerequisites: BI06.

BI-417CW Reproductive Biology (Fall; Even Years; 4.00 Credits; N,CW) This course examines reproductive biology by integrating aspects of development, anatomy, cell biology, and hormone physiology with the behavior and ecology of vertebrates. Prerequisites: BI06.

BI-432 Environmental Toxicology (Fall; Odd Years; 3.00 Credits; N) Broadly integrative in nature, this class examines the fate and actions of xenobiotic compounds in environmental systems and focuses on the potential for deleterious consequences in wildlife species and humans. Examines aspects of chemistry, cell biology and ecology in considering environmental contamination. Instruction includes lectures and student presentations/writing exercises. Prerequisites: BI-105 and one semester of chemistry or permission of the instructor.

BI-432CW Environmental Toxicology (Spring; Yearly; 4.00 Credits; N,CW) Broadly integrative in nature, this class examines the fate and actions of xenobiotic compounds in environmental systems and focuses on the potential for deleterious consequences in wildlife species and humans. Examines aspects of chemistry, cell biology and ecology in considering environmental contamination. Instruction includes lectures and student presentations/writing exercises. Prerequisites: BI106 or CH106 or permission of the instructor.

BI-450 Neurobiology (Spring; Yearly; 3.00 Credits; N) Neurobiology is a lecture course that addresses concepts ranging from the molecular biology of ion channels to signal integration and behavior. This course is experimentally based and will focus on the biophysics, chemistry, and mechanisms of signal production and integration in the nervous system. Particular attention will be paid to sensory systems and memory consolidation. In addition to lecture exams, students will gain valuable experience in scientific writing through the preparation of a review paper on a neurobiological topic of their choosing. Prerequisites: BI207 or PY238 or permission.

BI-450CW Neurobiology (Spring; Yearly; 4.00 Credits; N,CW) Neurobiology (W) is a lecture course that addresses concepts ranging from the molecular biology of ion channels to signal integration and behavior combined with a supplemental series of lectures to develop the students writing skills in Biology. This course is experimentally based and will focus on the biophysics, chemistry, and mechanisms of signal production and integration in the nervous system. Particular attention will be paid to sensory systems and memory consolidation. In addition to lecture exams, students will gain valuable experience in scientific writing through the preparation of a review paper on a neurobiological topic of their choosing. Prerequisites: BI207 or PY238.

BI-461 The Art & Science of Brewing (Spring; Yearly; 3.00 Credits; N) This is a synoptic study of brewing, integrating the science, technology and history while considering all of the many steps in the brewing process including, barley and malting, yeast biology, brewing herbs mashing, conditioning and beer styles. Class meetings consist of 2, 50 minute lectures and 1, 4 hour laboratory each week. Enrollment is limited and students are expected to request a reservation well in advance by contacting the instructor. Students must have passed their 21st birthday prior to attending the first class meeting. Note: A special fee is assessed. Prerequisites: Permission of the instructor. Students will be expected to have completed one semester each of biology and chemistry and two semesters of laboratory work in the natural sciences.

BI-489 Biology Research (Fall & Spring; Yearly; 1.00-6.00 Credits; N) Individual research projects directed by faculty members based on proposals submitted in BI 389, Biology Research Seminar. Attendance at a departmental journal club is expected. Presentation at a professional meeting is encouraged. May be repeated for up to 15 credits. Prerequisite: Permission of the instructor.

BI-490 Biology Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; N) Note: May be repeated up to a total of 9 hours of credit. Corequisite: BI 495. Prerequisite: permission and Jr. or Sr. standing.

BI-495 Internship Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; N) Requires students to reflect on the experience and/or pursue relevant research. Corequisite: BI 490. Prerequisite: Permission

BI-496 Bio.Instr.Workshop (Summer; Irregular/On Demand; 3.00 Credits) This course will introduce teachers to the practical use and underlying theory behind modern

biological instrumentation and technology. The subject matter will include some or all of the following; electrophoresis, microscopy, histology, physiology, human evolution, genetics, enzymology, luminology, etc.

BI-497 Bio. Instr/Bio. Teachers (Summer; Irregular/On Demand; 3.00 Credits; N) Teaching high school and middle school teachers how to use laptop computers with Vernier computer probes in activities from biology and chemistry with may include Boyle's Law, freezing point, pH titration, colorimetry, molar volume of a gas, foot pressure, enzyme activity, cell volume relationships, conductivity, and respiration.

BI-498 Bio. Instr/Bio. Teachers (Summer; Irregular/On Demand; 3.00 Credits; N) This course will introduce teachers to the practical use and underlying theory behind modern biology instrumentation and technology. The Subject matter will include electrophoresis microscopy, histology, human physiology, microbiology, human evolution, genetics, enzymology, limnology, etc.

BI-499 Senior Thesis (Either Semester; Yearly; 3.00 Credits; N,CW) This course is the culmination of an individual research project initiated in BI 489. Students will complete their projects by writing a paper describing their research. These papers will be of significant length and contain full documentation of the student's original research. The thesis will be presented orally to faculty and students at the yearly campus wide Juniata Student Research Symposium. Prerequisite: Permission of the instructor.

BI-499 Adv Bi Inst/Bi Tchrs (Summer; Irregular/On Demand; 3.00 Credits) The purpose of this course is to continue the study of instrumentation beyond the introductory levels of BI498. The teachers will develop advanced techniques for teaching the practical use and underlying theory behind modern biological instrumentation and technology. The subject matter will include: Electrophoresis, Microscopy, Histology, Human Evolution, Genetics, Enzymology, Limnology, etc. Prerequisites: BI498.

BI-TUT Biology Teaching Assistant (Variable; Variable; 1.00-4.00 Credits)

Chemistry

Department Website:

<http://departments.juniata.edu/chemistry/>

Faculty:

- Assistant Professor William Ames -ext. 3903
- Associate Professor Peter Baran - ext. 3560
- Assistant Professor Daniel Dries - ext. 3557
- Professor Richard Hark (Chair and Foster Professor)- ext. 3740
- Laboratory Teacher/Coordinator Amber Helsel-Ickes - ext. 3533
- Professor Paul Schettler (Dana Professor) - ext. 3567

- Assistant Professor John Unger- ext. 3565
- Assistant Professor Sharon Yohn- ext. 3718
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Background Information:

The chemistry department has a long-standing reputation for excellence in the undergraduate training of professional chemists. Juniata is ranked very high nationally in the number of chemistry graduates who have earned their Ph.D.'s according to the National Research Council. Our students are regularly accepted into top graduate programs and have made significant contributions to the field of chemistry. The chemistry department has been accredited by the American Chemical Society since 1936 and is proud to count four chemistry graduates who are members of the National Academy of Sciences. Our students are encouraged to develop interests across disciplines, especially given the increasing demand for scientists with broad expertise.

Special programs, facilities, or equipment:

- Modern, well-equipped von Liebig Center for Science
- Extensive opportunities to engage in research with faculty members
- Innovative "Integrated Chemistry" curriculum that incorporates all areas of chemistry into a cohesive program
- Students actively engaged in challenging laboratory activities
- Wealth of sophisticated instrumentation accessible to undergraduate students, including equipment for performing NMR, FTIR, Raman, LIBS, UV-Vis, GC-MS, LC-MS, CD, SEM (EDS/EDSB), single crystal X-ray diffractometry, electrochemical and fluorescence measurements
- Opportunities to study abroad at multiple exchange sites including Leeds, United Kingdom; Lille, France; Marburg, Germany and Guanajuato, Mexico
- Interesting course offerings such as *The Chemistry of Art* and *The Chemistry of Winemaking*
- Unique chance for undergraduate students to do research with laser-induced breakdown spectroscopy (LIBS) and have hands-on experience with X-ray crystallography.

Specific department policy:

Awarding credit for AP exam scores: A student with an AP score of 4 or 5 will receive 3 Natural Science credits, but is not waived from taking Chemistry prerequisites.

Programs of Emphasis:

- Chemistry
- Biochemistry
- Chemistry Secondary Education

Examples of Individualized Programs of Emphasis:

- Environmental Chemistry
- Geochemistry
- Physical Chemistry

Internship/Research Experiences:

- Most students engage in some form of research as early as their freshmen year
- Our students have the opportunity to do “research abroad” at places like University of SS. Cyril and Methodius in Trnava (Slovakia) or Fachhochschule Münster (Münster University of Applied Sciences in Germany).

Courses:

CH-118 Organic Chemistry Lab II (Fall; Yearly; 1.00 Credit; N) A continuation of CH116 with a focus on synthesis of various classes of organic compounds. Prerequisite: CH106 and CH116. Note: A special lab fee is assessed.

CH-120 Chemistry Seminar (Fall; Yearly; 1.00 Credit) This course is designed to begin the journey for Juniata College biochemistry and chemistry POEs from students of science to citizens of the scientific community. During the semester speakers will present topics which will help inform the students about the opportunities for research and collaboration within the departments of chemistry, biology and physics at Juniata College as well as at other institutions; both domestically and abroad. Additionally, an emphasis will be made on post-graduation career opportunities, and planning.

CH-142 Integrated Chemistry Prin. I (Fall; Yearly; 3.00 Credits; N) An introduction to the principles of chemistry, this course begins a two semester sequence that integrates information from all aspects of chemistry while focusing on the core principles of the relationships between energy, the structure of atoms and molecules, and atomic and molecular properties and reactivity. Topics include energy, reactions, atomic structure, elemental properties, bonding, and molecular properties. Corequisite CH143.

CH-143 Integrated Chemistry:principles-Lab I (Fall; Yearly; 1.00 Credit; N,QS) This semester will focus on learning good laboratory practices, primarily through the quantitative analysis of compounds. The quantitative analysis of materials and an understanding of reproducibility and bias are relevant to many fields, including medical analysis or the analysis of contaminants in the environment. This course will also teach you how to keep an excellent laboratory notebook, identify safety hazards in the lab, and complete data analysis and graphing in Excel. All of these tools will serve you well in a variety of careers. CH-142 is a corequisite of this course. A lab fee is associated with this course.

CH-144 Integrated Chemistry Principles II (Spring; Yearly; 3.00 Credits; N) An introduction to the principles of chemistry, this course completes a two semester sequence that integrates information from all aspects of chemistry while focusing on the core principles of the relationships between energy, the structure of atoms and molecules, and atomic and molecular properties and reactivity. Topics include thermodynamics,

equilibrium reactions, acid/base and redox reactions, kinetics and nuclear reactions.
Prerequisite 142, corequisite CH145.

CH-145 Integrated Chemistry Principles Lab II (Spring; Yearly; 1.00 Credit; N, QS)
This semester will focus on learning good laboratory practices, primarily through the quantitative analysis of compounds. The quantitative analysis of materials and an understanding of reproducibility and bias are relevant to many fields, including medical analysis or the analysis of contaminants in the environment. This course will also teach you how to keep an excellent laboratory notebook, identify safety hazards in the lab, and complete data analysis and graphing in Excel. All of these tools will serve you well in a variety of careers. CH-143 is a prerequisite for this course, and CH-144 is a corequisite. A lab fee is associated with this course.

CH-190 Chemistry Research (Fall & Spring; Yearly; 1.00-4.00 Credits; N) Individual research projects directed by faculty members. Prerequisite: Permission of the instructor.

CH-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary with topic.

CH-222 Inorganic Chemistry (Spring; Yearly; 4.00 Credits; N) CH 222 is a one semester course of Inorganic Chemistry that builds on chemistry knowledge acquired in CH 142 (Integrated Chemistry Principles I). The Inorganic Chemistry course is designed for all students having "chemistry" in their POE title but it will serve any student who wants to learn about "chemistry of elements" because it covers chemistry of all elements from the periodic table with exception of organic carbon chemistry. The class also introduces students to theoretical concepts such as molecular symmetry, molecular spectroscopy, and theory of complexes. Part of the class is a 4-hour laboratory session which introduces students into synthetic inorganic chemistry and characterization of inorganic compounds. Syntheses, reactivity, and characterization of main group element compounds and transition metals will be practiced.

CH-232 Introductory Inorganic Chemistry (Fall; Yearly; 4.00 Credits; N) The third course in the introductory chemistry sequence is designed for students with POE in chemistry or biology or with a pre-health career goal. Material includes basic principles of chemistry with emphasis on quantitative problem-solving. Topics include atomic and molecular structure, chemical bonding, thermodynamics, physical and chemical equilibrium, protolytic reactions, electrochemistry, chemical kinetics, and nuclear chemistry. The laboratory component provides students with hands-on learning of basic chemical principles, understanding of which is crucial for study of five fundamental chemistry subfields: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry. Experiments complement lecture topics to allow students the maximum possible learning experience. Prerequisites: CH105, CH116 or permission. Note: A special lab fee is assessed.

CH-242 Integrated Chemistry Organic (Fall; Yearly; 3.00 Credits; N) Students enrolled in CH-242 will become familiar with the fundamental concepts and nomenclature needed to understand and communicate organic chemistry. The course is further designed to teach the structure-function relationships that exist across many classes of organic and bio-organic systems, and therefore provide a foundation for further study in chemistry, biochemistry, biology, and medicine. Prerequisites: CH-144; Corequisites: CH-243

CH-243 Int. Chem. Org. Lab (Fall; Yearly; 1.00 Credit; N) This course will utilize some of the techniques learned in CH-145 (prerequisite) and carry out experiments illustrative of the reactions learned in CH-242 (corequisite). This semester will focus on spectroscopy, organic chemistry laboratory techniques and reactions, and characterization. This course will also reinforce good laboratory notebook skills and identification of safety hazards in the lab. A lab fee is associated with this course.

CH-247 Bioanalytical Chemistry (Spring; Yearly; 1.00 Credit; N, QS) Exploration of experimental techniques and topics that are pertinent to the careful analytical evaluation of biologically relevant chemistry. Prerequisites: CH243. Note: A special lab fee is assessed.

CH-250 Analytical Chemistry (Spring; Yearly; 4.00 Credits; N) Theory and practice of modern quantitative chemical analysis. Electronics, statistics, electrochemistry, spectroscopy, chromatography and hybrid methods are discussed and utilized. Prerequisites: CH232. Note: A special lab fee is assessed.

CH-252 Analytical Chemistry (Fall; Yearly; 4.00 Credits; N, QS) This course focuses on the methods that chemists use to identify and quantify compounds of interest and measure their physical properties. Classroom and laboratory time will be spent considering experimental design, measurement techniques, and validation of results in a variety of chemical contexts. Prerequisites: CH144, CH145. Note: A special lab fee is assessed.

CH-260 Intermediate Inorganic Chemistry (Spring; Yearly; 3.00 Credits; N) Builds on knowledge acquired in CH232. Students will learn about chemistry of main group elements, organometallic chemistry of s- and p block elements, d- and f- block chemistry, and organometallic compounds of d-block elements. Introduction to molecular symmetry, molecular spectroscopy, and theory of complexes are also covered. Intended for students whose primary interest is chemistry. Prerequisite: CH232. Corequisites: CH261.

CH-261 Intermediate Inorganic Chemistry Lab (Spring; Yearly; 1.00 Credit; N) Course introduces students to laboratory techniques in inorganic synthesis, planning of experiments, quantitative and qualitative evaluation of results of synthesis. Syntheses, reactivity, and characterization of main group element compounds and transition metals will be practiced. Note: A special fee is assessed. Corequisite: CH260. CH260 may be taken as a prerequisite with the permission of the instructor.

CH-262 Organic Chemistry (Spring; Yearly; 4.00 Credits; N) A continuation of the study of organic chemistry begun in CH 242 and CH 243. Special emphasis is placed on advanced aspects of structure and reactivity, with careful attention to the methodology and tools of synthesis. Topics include aromatic chemistry, enolate chemistry, pericyclic reactions, retrosynthetic analysis and various aspects of stereoselectivity. Prerequisites: CH 242 and CH 243.

CH-289 Chemistry Seminar (Fall; Yearly; 1.00 Credit; N) This one-credit seminar is designed as a forum to present students with knowledge of (1) departmental and college resources, including research and internship opportunities; (2) the wide range of post-baccalaureate programs available to students with bachelors' degree in chemistry or biochemistry; and (3) career opportunities and how to learn about them. Students normally take this sophomore year.

CH-290 Chemistry Research (Fall & Spring; Yearly; 1.00-4.00 Credits; N) Individual research projects directed by faculty members. Prerequisite: Permission of the instructor.

CH-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to teach special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary with topic.

CH-301 Biochemistry & Molecular Biology I (Fall; Yearly; 3.00 Credits; N) Focuses on the application of organic chemistry to biological systems. Protein structure and function, particularly in metabolism, is stressed. Prerequisite: CH250 and BI207, or permission of the instructor.

CH-310 Biochemistry (Spring; Yearly; 2.00 Credits; N) A survey of biochemistry for students with a POE in chemistry. Mechanistic and physico-chemical aspects of the subject will be emphasized. No biological background will be assumed. Prerequisite: CH305 or permission of the instructor.

CH-321 Organic Reactions (Fall; Yearly; 3.00 Credits; N) A continuation of the study of organic chemistry begun in CH105 and CH106. Special emphasis is placed on advanced aspects of structure and reactivity, with careful attention to the methodology and tools of synthesis. Prerequisites: CH106.

CH-334 Chemical Spectroscopy (Fall; Yearly; 2.00 Credits; N) Principles, methodology, and interpretation of nuclear magnetic resonance, mass, and infrared spectroscopy. Other types of spectroscopy, such as x-ray, will be presented in less detail. Prerequisite: CH106 and CH250 or permission of the instructor. Note: A special lab fee is assessed.

CH-338 Chemical Synthesis (Spring; Yearly; 2.00 Credits; N,CW) A laboratory course inorganic and inorganic synthesis and the characterization of synthetic products utilizing modern chemical instrumentation and techniques. Note: A special lab fee is assessed. Prerequisite: CH261, CH321 and CH334.

CH-340 Wine Chemistry (Variable; Variable; 2.00 Credits; N) This is a 2-credit course dealing with the theoretical study (1 credit) of chemical processes that are involved in wine formation and that influence appearance, flavor, and aroma of different wines including such topics as barrel aging and corkage, wine and health, wine faults, and wine laboratory practices and procedures associated with vineyard to bottling lifecycle of wine. An intensive hands-on component (4 hours a week) enabling authentic experience of wine-grapes growing, wine making and wine tasting is part of the course (second credit). Prerequisites: 2 semesters of college Chemistry or permission of the instructor. Must be 21 years of age or older.

CH-342 Integrated Chemistry Biochemistry (Spring; Yearly; 3.00 Credits; N) The fourth semester of the Integrated Chemistry series, this course pulls content from chemistry, biology, physics, mathematics, and history to provide an integrated view of biochemistry. Topics include the use of thermodynamics, equilibrium, non-covalent interactions, kinetics, separations, biomolecular structure, and genetics to probe and explain biological phenomenon. Prerequisite CH242.

CH-352 Physical Chemistry I (Fall; Yearly; 3.00 Credits; N) In this course students will investigate the physical characteristics and interactions of matter. Topics covered will include thermodynamics, kinetics, quantum mechanics, and molecular spectroscopy within the contexts of chemistry and biochemistry. In addition, molecular modeling techniques will be briefly introduced. Prerequisites: CH242, PC203 and MA230, or instructor's permission.

CH-354 Physical Chemistry II (Spring; Yearly; 3.00 Credits; N) In this course students will advance their understanding of physical chemistry concepts through primary literature sources and discussion. The course will focus on literature from the beginnings of thermodynamics and quantum mechanics as well as more modern research. Prerequisites: CH352, or instructor's permission.

CH-355 Physical Chemistry Lab (Spring; Yearly; 3.00 Credits; N,CW,Q) In this course students will gain hands on practice at obtaining data pertinent to physical chemistry through laboratory experiments. Experiments will be performed that highlight material from Physical Chemistry I (CH352). A significant component of each lab will involve molecular modeling. Prerequisites: CH352, or instructor's permission.

CH-362 Chemical Synthesis (Fall; Yearly; 2.00 Credits; N,CW) CH-362 is an advanced laboratory-based organic and organometallic synthesis class. Through the completion of two to three multi-component projects, students will gain a better understanding of the requirements of advanced laboratory research and will learn how to communicate as organic chemists. Overall, the course is designed to help students mature into skilled citizens of the scientific community. Prerequisites: CH-262

CH-372 Instrumental Methods (Spring; Yearly; 3.00 Credits; N) The primary tools that chemists use to characterize chemical species involve increasingly complex instrumentation. We will explore the principles and methodology of various types of

instrumental methods and will analyze data resulting from these techniques.
Prerequisites: CH252. Note: A special lab fee is assessed.

CH-390 Chemistry Research (Fall & Spring; Yearly; 1.00-4.00 Credits; N) Individual research projects directed by faculty members. Prerequisite: Permission of the instructor.

CH-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Advanced specialized topics in chemistry and related areas. Topic titles may vary from semester to semester. Note: abbreviated ST: (title); students may take more than one " ST: " course for credit. Offered at the discretion of the department to qualified students.

CH-401 Advanced Organic Chemistry (Spring; Even Years; 3.00 Credits; N) Discusses selected topics in organic chemistry with emphasis on general principles, including chemical bonding. Recent literature is used. Prerequisites: CH321 and CH305.

CH-406 Advanced Inorganic Chemistry (Spring; Odd Years; 3.00 Credits; N) Completes an introductory study of inorganic chemistry at an undergraduate level. Theoretical topics, like electronic structure (molecular orbital theory), molecular symmetry, theories about complexes, reaction mechanisms of complexes, catalysis, introduction to solid state chemistry, and a role of metals in life processes are covered. Students will become familiar with inorganic chemistry journals, SciFinder and the Cambridge Structural Database. Prerequisite: CH305.

CH-416 Biochemistry & Molecular Biology III (Fall; Yearly; 3.00 Credits; N) A seminar designed to integrate material covered in CH301 and BI316 with areas of current interest in biochemistry and related areas. Prerequisites: CH301 and BI316 or permission of the instructor.

CH-418 Advanced Biochemistry (Fall; Yearly; 3.00 Credits; N) Advanced Biochemistry is the third semester of the Biochemistry and Molecular Biology (BMB) curriculum for Biochemistry POEs, expanding the content of the previous two semesters. Stressing techniques and instrumentation, the course is comprised of student-led learning modules, which are created around the primary literature with the help of the instructor. Topics may include metabolism, systems biology, or genomics. Prerequisite CH342.

CH-432 Comprehensive Chemistry (Spring; Yearly; 1.00 Credit; N,Q) CH432 is a senior level problem oriented integrative review of chemistry using an advanced, general chemistry text and the texts used in prerequisite courses. The course consists of student self-study, followed by weekly exams. Students prepare short write-ups of answers to missed questions and make class presentations of these write-ups. In addition, a comprehensive oral examination and standardized written exam are required. Prerequisites: Permission of the instructor.

CH-490 Chemistry Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; N) See the chapter, " Special Programs " under Internships in the catalog. Note: May be repeated up

to a total of 9 hours of credit. Corequisite: CH495. Prerequisite: Permission and Jr. or Sr. standing.

CH-491 Special Topics (Either Semester; Variable; 1.00-4.00 Credits) Allows departments to offer topics not normally taught. Prerequisites and corequisites vary by title.

CH-492 Senior Writing Seminar (Fall; Yearly; 2.00 Credits; CW,CS) Designed to provide practice in the writing skills necessary for practicing chemists. Students who are registered for CH494 will prepare a proposal for the research project they will undertake for that course. Students not registered for CH489 will write a review of an area of current interest in chemistry to include projections of future directions in that field. Students will prepare oral presentations for a professional audience and posters for a general audience based on the proposals or reviews. Prerequisites: Chemistry POE or permission of the instructor.

CH-493 Senior Thesis (Spring; Yearly; 2.00 Credits; CW) Designed for students who are carrying out senior research; students will write a senior thesis describing their work, part of the requirements for graduating with a distinction in chemistry, and prepare an oral presentation of their work. Prerequisites: CH492. Corequisites: CH494

CH-494 Chemistry Research (Fall & Spring; Yearly; 1.00-4.00 Credits; N) Individual research projects directed by faculty members. Prerequisite: Permission of the instructor.

CH-495 Chemistry Research/Sem. (Fall & Spring; Yearly; 2.00-6.00 Credits; N) Requires students to reflect on the internship experience and /or pursue research related to the placement. Corequisite: CH 490. Prerequisite: permission.

CH-TUT Chemistry Teaching Assistant (Variable; Variable; 1.00-3.00 Credits) See catalog.

Communication and Theatre Arts

Department Website:

- Communication - <http://departments.juniata.edu/comm/>
- Theatre Arts - <http://departments.juniata.edu/theatre/>

Faculty:

- Professor Lynn Cockett (Communication)- ext. 3549
- Professor Grace Fala (Communication)- ext. 3467
- Professor Donna Weimer (Chair)- ext. 3462
- Assistant Professor Sarah Worley, (Communication)- ext. 3168
- Assistant Professor Kate Clarke (Theatre) - ext. 3447
- Assistant Professor Neal Utterback (Theatre) - ext. 3494

Background Information:

The Department of Communication and Theatre Arts offers a diversity of educational experiences in language, communication, media, and the performing arts. Our learning outcomes are to think clearly and creatively, write and speak persuasively, read with intelligence and imagination, and gain insight into audiences. Such skills and knowledge enable students to pursue a wide variety of exciting career paths and graduate study.

Special programs, facilities, publication or equipment:

- Bailey Oratorical Program
- Visiting Artist Program in Theatre (Juniata Visiting Artist Collective)
- Theatre Productions (fall and spring)
- Cyclops (student theatre)
- Soap Box Speeches Events
- Communication and Media Club
- Lamda Pi Eta National (Communication Honor Society)
- Conflict Mediation with The Baker Institute Mediation Services
- Service Learning Projects
- Honors Seminar and Research
- Digital Media Projects
- Faculty-Student Research

Programs of Emphasis:

- Communication
- Health Communication
- Integrated Media Arts
- Theatre Performance
- Communication + Conflict Resolution

Individualized Programs of Emphasis:

- Multimedia Arts
- Communication/Philosophy
- Communication/Technical Writing
- Communication/Theatre Arts
- Communication/Digital Media
- Communication/Science Writing
- Digital Media and Video Productions
- Political Communication
- Multimedia Communication
- Health Comm/Writing

Secondary Emphasis:

- Communication - Secondary Emphasis
- Theatre Performance - Secondary Emphasis

Internship/Research Experiences:

- Florentine Films with Ken Burns
- White House, Washington, DC
- Federal Drug Investigation Commission
- Public Records, Huntingdon County Courthouse
- C-SPAN, Washington, DC
- National Public Radio, Washington, DC
- Johns Hopkins Medical Center
- Rachel Ray Productions
- New York NBC Television Production
- 'Ally McBeal' and 'Weeds' Production
- Intercultural Programming, Juniata College

Courses:

THE COMMUNICATION CORE:

CM 101 First Year Seminar

CM 130 Introduction to Human Communication

CM 132 Message Analysis

CM 133 Mass Media and Society

CM-101 First Year Seminar (Fall; Yearly; 1.00 Credit; H) This one credit course is an introduction to the department and its offerings in terms of areas of study, practicum, internships, and programs abroad. Opportunities with our communication club and honor society are also explored. Together we explore areas of research, teaching, and the professional & graduate school opportunities that you need to know, as you choose your POE, plan your course of study and plan for your future. Overall, we hope to inspire you to find the joy and challenge we as a department experience in the study of communication. This course is for first year and sophomore students who have already declared Communication as their POE or who are genuinely considering Communication as a POE or secondary emphasis.

CM-130 Introduction to Human Communication (Either Semester; Yearly; 3.00 Credits; S) Surveys the fundamental tenets of human communication through application. This course is concerned with how and why we speak, listen, respond, and strategize through the uses of verbal and nonverbal symbol systems.

CM-132 Message Analysis (Either Semester; Yearly; 3.00 Credits; H,CS) The study of rhetoric investigates the art of persuasion. The course introduces the basic rhetorical concepts and language we need to make sense of the sea of messages we swim in. The course aims to sharpen your ability to reason, reflect, send, perceive and discern

messages in a variety of contexts. Upon completion of this course students understand several humanistic perspectives toward communication and are able to apply the basic tools of rhetorical analysis. Students have an increased awareness of the ways in which our symbolic behaviors shape our social lives.

CM-133 Mass Media and Society (Either Semester; Yearly; 3.00 Credits; H,CS) An examination of the convergence of mass media (print, radio, television, sound, film, and internet) which serve our most common public interests. The focus is on the four primary functions to inform, to entertain, to persuade, and to transmit culture. Students have a better understanding of the tension between media as business and its social responsibility to its citizens.

CM-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by topic.

CM-200 Art of Public Speaking (Either Semester; Yearly; 3.00 Credits; CS,H) Seeks to develop and improve fundamental principles and methods of selecting, organizing, developing, and communicating a line of reasoning and evidence for constructive influence in speaking situations. Students make three formal presentations, analyze messages, and improve their listening skills. Prerequisites: Sophomore, Junior, or Senior standing.

CM-220 Group Communication (Spring; Yearly; 4.00 Credits; H,CS) This course is designed to improve communication with others in small group task and problem-solving situations. Working with a community partner students propose, plan and carry out a service project. We explore ways of developing communication strategies for group decision making, for leadership, and for managing interpersonal conflict, as well as presentations skills. This course takes a balanced approach to understanding and using communication theories, as well as offering practical experience using those skills for working in small groups. By the end of the semester students understand the group experience in terms of shared leadership of working cooperatively with diverse group members; and the necessity for ethical choices. Prerequisite: CM130.

CM-230 Interpersonal Communication (Either Semester; Yearly; 3.00 Credits; H,CS) Introduces students to the various theories and styles of one-on-one communication. It emphasizes the transactional approach in the study of the communication process as it occurs in interpersonal relationships. It explores interaction as a way by which we come to know ourselves and each other.

CM-261 CM Studies in Germany I (Spring; Variable; 1.00 Credit; I,H) This course is a short-term study abroad class that meets for one hour a week in the spring semester to prepare for a 10-day trip to Germany in May. We will cover an array of communication topics including public speaking, intercultural and group communication, as well as journalism and PR/marketing related topics. The cost for the trip will include travel,

hotel, food and fees. Estimated cost for the course is approximately \$3,000. Corequisite: CM262.

CM-262 CM Studies in Germany II (2.00 Credits; I,H) This course is a short-term study abroad class that meets for one hour a week in the spring semester to prepare for a 10-day trip to Germany in May. We cover an array of communication topics including public speaking, intercultural and group communication, as well as journalism and PR/marketing related topics. The cost for the trip will include travel, hotel, food and fees. Estimated cost for the course is approximately \$3,000. Corequisite: CM261.

CM-289 Communication Practicum (Fall & Spring; Yearly; 1.00-2.00 Credits; F,H) A Practicum in Communication encourage students to: (1) develop skills in analyzing and delivering public presentations; (2) assess, interpret and analyze demographic data among diverse audiences; (3) understand speech communication in a variety of contexts; (4) appreciate public address from a historic perspective; and (5) participate actively in the communication field. This course is repeatable up to 4 credits.

CM-290 The Metaverse (Fall; Yearly; 3.00 Credits; H,CW,CS) This introductory course focuses on how information technologies shape the way we think and organize ourselves. In studying the technology of the book, social media and the metaverse, students explore change and technology as central to the decision making of leaders. Prerequisites: CM133 or IT110 or IT111. Cross listed as IT290.

CM-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by topic.

CM-300 Professional Presentations (Spring; Yearly; 3.00 Credits; CS,H) Designed for students to improve and polish their speaking skills for effective presentations in professional settings. It is a performance course with emphasis placed on structure, audience adaptation, style of presentation (oral report and manuscript reading), with the use of PowerPoint and/or Smart Board. Videotaping is used to help speakers understand the relationship between their speaking behaviors and responses of listeners. Prerequisites: CM200.

CM-320 Qualitative Research Methods (Fall; Yearly; 3.00 Credits; S) Introduces students to the practice of qualitative research methods--including participant observation microanalysis, interviewing and content analysis-- in communication and the social sciences. Specific methods will vary by semester. Prerequisites: CM130 or CM230 or CM220 or CM405.

CM-330 Media Analysis (Spring; Yearly; 3.00 Credits; H,CW,CS) Designed to explore analytical approaches applied to a variety of media, including advertising, television sitcoms, new shows, propaganda, film, music and architecture, in order to ascertain the persuasive messages inherent in each artifact. By examining the rhetorical choices revealed by each method of criticism, we can better understand the structure of message

design, the medium and in larger sense the cultural values that shape both. Prerequisites: CM132 or CM133.

CM-340 Intercultural Communication (Either Semester; Yearly; 3.00 Credits; H,I) This course examines symbolic patterns of communication as they relate to issues of diversity. Interactive skills needed to open channels of communication between and among people of diverse backgrounds are analyzed and developed. A multi-cultural approach to the study of human communication serves as a basis for exploring issues of diversity that include but are not limited to race, gender, class, ability, orientation, religion and ethnicity.

CM-365 Organizational Communication (Either Semester; Variable; 3.00 Credits; H,S,CW) Examines the strategic uses of communication by individuals in organizations and by organizations as a whole in the pursuit of organizational goals. Provides students with a theoretical vocabulary to analyze communication in organizational settings in order to understand processes such as social networks, leadership, and power. Focuses on personal and organizational ethics in workplace communication. Prerequisites: CM130 and CM230 and CM220.

CM-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by topic.

CM-400 Communication Philosophy (Variable; Variable; 3.00 Credits; H,CS) Topics in communication philosophy examine the relationship between thoughts, words, and actions. The study of rhetoric will be the basis for each course as it applies to specific contexts: health care, public discourse, diversity, conflicts and debates, political campaigns, and family dynamics. Prerequisites: CM130 and CM230.

CM-400A Health Communication (Spring; Odd Years; 3.00 Credits; H) Explores how communication functions to promote health, the important role of information in health care, the development of communication campaigns to promote health awareness, alternative and multicultural approaches to health care, the promotion of ethical health communication, and the use of new health communication technologies. Prerequisites: CM130 and CM230.

CM-400B Storytelling (Variable; Variable; 3.00 Credits; H,CS) This performance course gives students the opportunity to examine the oral traditions of the language through the art of reading, writing, listening, watching and telling stories. Stories are at the heart of the human experience. They form the foundation for many academic disciplines. Stories help us to understand our own beliefs, values traditions and civilities. This course aims to strengthen our appreciation and understanding of storytelling, old and new.

CM-400C Advanced Interpersonal Communication (Fall; Variable; 3.00 Credits; H,CS) This course develops the theories and applications of interpersonal communication by

focusing on various perspectives of communication with creativity; conflict in interpersonal relationships; listening; and language appreciation. Students are expected to analyze and discuss specific conversational patterns that are both experienced and observed. How these patterns form and transform the conversational dynamic of an interpersonal relationship is explored. Prerequisites: CM130 and CM230.

CM-400D Rhetoric of Coming Out (Variable; Variable; 3.00 Credits; H) This course aims to explore diverse uses of rhetoric applicable to the coming out process. Cultural, social, political, physical, institutional, and financial constructs of the closet are studied in an effort to understand and appreciate the coming out process. Rhetorical constraints, functions, and strategies involved in the construction and deconstruction of the closet, both perceived and real, and of coming out the closet are illuminated. While various perspectives of rhetoric are covered, a classical perspective is most closely examined and applied.

CM-400E Listening (Variable; Variable; 3.00 Credits; H,CS) This course invites the students into an exploration of transactional communication by focusing on message reception. How is a message received? What interrupts reception? How can we determine if and when a message has been transmitted? How are messages interpreted? Specifically, we will study diverse perspectives of the listening process. This includes the study of (1) the pragmatics of listening; (2) the epistemology of listening; (3) the aesthetics of listening; and (4) the ontology of listening. Listening is viewed primarily as an expression and extension of creativity. We also examine and develop the relationship between listening and leadership. Prerequisites: CM130 and CM230.

CM-401 Senior Seminar (Fall; Yearly; 1.00 Credit; H) Senior Seminar in Communication is an opportunity to refine your understanding of your communication POE and experiences and their application to the professional world of business or graduate school. Students will reflect on their communication expertise, prepare resumes and interviewing techniques, network with alums in communication, and communicate their expertise. This course intends to make explicit the strong knowledge base acquired and to explore the opportunities available in the field of communication. Prerequisites: Senior standing.

CM-405 Communication Studies (Variable; Variable; 3.00 Credits; H,CS) These courses examine the theories, skills, and research methods involved in the exploration of communication from a social scientific perspective relevant to specific contexts. The context determines the course content and pedagogical approach. Courses included but are not limited to Family Communication, Community Identity and the Workplace, Public Relations, Gender Communication, and so forth. Prerequisites: CM130 and CM230.

CM-405A Women, Work & Identity (Fall; Variable; 3.00 Credits; S) Women. Work. Identity. These three words are related in a complex web that many of us struggle to untangle for our entire working lives. In this course, we identify and name the components of the relationships among these words--all in the context of the unique

perspective that the communication discipline offers. Prerequisites: CM130 or CM230 or CM220 or CM365 or permission of the instructor.

CM-405B Nonverbal Communication (Fall; Variable; 3.00 Credits; S) " I know you are lying to me! " " You talk with your hands a lot. " If you have ever said or thought one of these things, then theories of nonverbal communication may interest you. Students in this course learn about the use of space, body language, and vocal (but not verbal) communication. A major course project requires students to analyze videotapes of people communicating in natural situations. Prerequisites: CM130 or CM230 or CM220 or CM365 or permission of the instructor.

CM-420 Media Studies (Variable; Variable; 3.00 Credits; H,CS) Courses examine mediated persuasion both in its theory and criticism. They focus on theories of rhetoric that have influenced our modern understanding of media and communication technologies. Areas of application such as public address, communication technologies, digital media, politics, and mass media form the emphasis. Depending on the emphasis the subtitle changes after the title Media Studies. Prerequisites: CM132 or CM133.

CM-420A Hollywood Films (Variable; Variable; 3.00 Credits; H,CW) In this course we explore one visual medium: film. Film is understood as symbolic form, which is meant for an audience. A rhetorical perspective insists on the presence of an audience which is not necessarily of interest in all types of film study but will be crucial in our discussions. We relate theories, methods of production, and criticism to our work but it is not limited to them. This course is an opportunity for students to explore what films mean and why they are such an important cultural phenomenon. Prerequisites: CM132 or CM133.

CM-420B Media Violence (Variable; Variable; 3.00 Credits; H,CW) This media studies course introduces students to basic issues and research surrounding media violence. We take a hard look at media violence and its scholarly research in order to understand the intricacies of both our fascination and repulsion for all of the media's manifestations of violence. Cross-listed in Communication and Peace and Conflicts Studies, this course asks students to critically analyze media violence while integrating current media research into our understanding of violence as a presence in our lives and what we can or should do about it. Prerequisites: CM132 or CM133.

CM-420C Digital Media Studies (Variable; Variable; 3.00 Credits; H) We know we can connect with a friend studying abroad on a 24/7 basis and when we do research on the WWW, the materials, location, time and distance are irrelevant. This course lets us extend our vision to a serious study of how global business, politics and social relations are changing by these various processes of instant connection and perpetual contact. Digital Media are at the heart of this revolution in communication. Necessarily we want to pay attention to the digital divide and the continuities of our lives as these communication changes occur. In looking at the big picture, the scope of these changes is necessarily global, challenging, complex and fast. Hang on to your seats!! Prerequisites: CM132 or CM133.

CM-420D Truth and Lying (Variable; Variable; 3.00 Credits; H) This media studies course introduces students to the theories of rhetoric to understand the question, who can we trust? We pay special attention to the classical period of Rhetoric and the Rhetoric of the 20th century. Rhetoric has been transformed through media. Despite these transformations, rhetoric has always been considered of first importance for the ethical practical conduct of our everyday lives. How we present or lives our beliefs, attitudes, and commitments is indeed the concern of when we lie and who we can trust in our personal and public lives. Prerequisites: CM132 or CM133.

CM-420E Digital Storytelling (Variable; Variable; 3.00 Credits; H,F) Digital stories derive their power in weaving images, music, narrative and voice together, and thereby giving deep dimension and vivid color to characters, situations, experiences, and insights. This course offers students the opportunity to experiment with narratives and their visualization using digital media technologies as a vehicle to tell stories creatively with a clear point of view and audience awareness. Prerequisites: CM133 or 1 of the following courses, CM290 or IT110 or AR404.

CM-490 Communication Internship (Variable; Variable; 2.00-9.00 Credits; H) Communication students may apply their acquired skills and knowledge to on-the-job internships for a semester during their junior or senior year for a total of 9 credit hours. Television stations, radio stations, newspapers, magazines, public relations, advertising agencies and human relations in health organizations are all possible placements. You not only work as full-time members of a business team, but also evaluate and document your growth in a work journal and prepare a portfolio of presentations or publications. Corequisite: CM495. Prerequisite: Communication core and Jr. or Sr. standing.

CM-495 Communication Internship Research (Variable; Variable; 2.00-6.00 Credits; H) In addition to the on-the-job experience provided by the internship, students are required to pursue research related to their placement. An in-depth research paper or presentation is completed during the semester. Corequisite: CM490. Prerequisite: Communication core and Jr. or Sr. standing

CM-497 Honors Seminar (Variable; Variable; 3.00-6.00 Credits; H,CS) Designed to serve as a capstone course for students who emphasize Communication in their POE. The students will be expected to examine communication theories and research methods relevant to a topic, theme, issue, or problem that has served as an area of special interest throughout the previous two years of study. Students must have Senior standing, have a POE in Communication and meet the 3.40 GPA requirements.

CM-498 Honors Research (Either Semester; Yearly; 3.00-6.00 Credits; H,CS) Designed to serve as a capstone course for students who emphasize Communication in their POE. The students will be expected to examine communication theories and research methods relevant to a topic, theme, issue, or problem that has served as an area of special interest throughout the previous two years of study. Students must have Senior standing, have a POE in Communication and meet the 3.40 GPA requirements.

CM-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by topic.

CM-TUT Communication Teaching Assistant (Variable; Variable; 1.00-3.00 Credits) This tutorial provides a structure for the experience of teaching in Communication and reflection on classroom dynamics.

Cultural Analysis

Cultural Analysis(CA)

Faculty:

Assistant Provost Lauren Bowen - ext. 3123

Interdisciplinary Colloquia (IC) and (CA)

Students will need to choose one course from a listing of courses known as Interdisciplinary Colloquia (IC) and one course from a listing known as Cultural Analysis (CA). In the IC course, faculty from different disciplines work with students in a team-taught and interdisciplinary setting to tackle a significant topic while developing writing, discussion, close reading, and critical thinking skills. The CA courses focus on some aspect of culture or offer an introduction to a culture by using both scholarly and primary texts from that culture and are also committed to developing writing skills.

The IC and CA courses require sophomore standing and above and can be taken in any order or even at the same time. The Interdisciplinary Colloquium and Cultural Analysis requirement will be waived for students who successfully complete a world language course beyond the 210 level in the target language and a semester or more of study abroad in the target language and culture. Please note that the credits (7 to 8 credits) need to be earned elsewhere to earn the needed 120 for graduation.

CA-108 Intensive Arabic I (Summer; Yearly; 6.00 Credits; CA,I,H) This summer immersion program takes place in Fhs, Morocco, at the Ibn Ghazi Arabic Institute (IGIA). IGAI provides language instruction in Modern Standard Arabic for beginning, intermediate, or advanced speakers. Placement for students with prior knowledge of Arabic will be determined at the beginning of the program by IGAI.

CA-199 Special Topics (Fall & Spring; Yearly; 1.00-4.00 Credits) Allow department to offer topics not normally offered. Prerequisites and corequisites vary by title.

CA-208 Intensive Arabic II (Summer; Yearly; 6.00 Credits; CA,I,H) This summer immersion program takes place in Fhs, Morocco, at the Ibn Ghazi Arabic Institute (IGIA). IGAI provides language instruction in Modern Standard Arabic for beginning,

intermediate, or advanced speakers. Placement for students with prior knowledge of Arabic will be determined at the beginning of the program by IGAI.

CA-214 Cinderella (Fall; Yearly; 3.00 Credits; CA) Surveys the historical and cultural origins and pathways of the Cinderella story. Students use folk-tale research to identify the thematic content of the Cinderella story, explore its reach, and understand its ubiquity in American popular culture. The course includes a major project for which students conduct library research in order to write an original Cinderella based in a culture for which we do not have an extant copy. Prerequisites: EN110 or EN109 or EN199B.

CA-217 China Today I (Spring; Yearly; 1.00 Credit) The course, which meets weekly Spring Break and then includes a two-week trip to China, teaches students to analyze culture in contemporary China. Students will analyze cultural products such as film, literature, art, and architecture both before departure and during the trip to China. The course will culminate in a circa. 10-page research paper on some aspect of the culture of China today. Corequisites: CA218.

CA-218 China Today II (Summer; Yearly; 3.00 Credits; CA,I,CW) The course includes a two-week trip to China. It teaches students to analyze culture in contemporary China. Students will analyze cultural products such as film, literature, art, and architecture both before departure and during the trip to China. The course will culminate in a circa. 10-page research paper on some aspect of the culture of China today. Corequisites: CA217.

CA-227 Archaeoastronomy (Spring; Variable; 3.00 Credits; CA,N) An exploration of the role of astronomy and astronomers in early human cultures through an analysis of the scientific, historical, and social contexts in which these cultures existed. After a review of the principles of celestial mechanics as applied to the motion of the sun, moon, planets, and stars through the sky, we will study in depth the practice of astronomy in three ancient cultures, including their calendars, architecture, religion, and myths.

CA-228 Maya Astronomy (Spring; Variable; 1.00 Credit; CA,I) Traveling in a wide circle around and through the Yucatan Peninsula, the course will explore a variety of ruins, museums, and artifacts with the goal of understanding how the Classic Maya culture incorporated astronomy into their daily lives through their architecture, political systems, religious practices, and calendar system. Lectures on Maya history, archaeoastronomy, calendars, hieroglyphs and architecture will be presented during the evenings. Prerequisites: CA227.

CA-229 Japan: Arts & Religion I (Spring; Variable; 1.00 Credit; I,H) Full program runs Spring 2014-June 4 2015. Students will spend two weeks in Japan after the end of spring semester. The course fee is \$4000, split evenly between Spring and Summer terms. In order to receive CA credit, you must complete both classes. Coreq. CA 230.

CA-230 Japan: Arts & Religion II (Summer; Variable; 2.00 Credits; CA,I,H) Full program runs Spring 2014-June4 2015. Students will spend two weeks in Japan after the end of spring semester. The course fee is \$4000, split evenly between Spring and

Summer terms. In order to receive CA credit, you must complete both classes. Coreq. CA 229.

CA-250 **Gambian Culture** (Spring; Yearly; 3.00 Credits; CA) All students participating in the KSAC program in The Gambia must enroll in the KSAC Gambia Culture Course. It is a three-credit language and culture course which consists of lectures and discussions with various speakers and excursions that are meant to expose students to Gambian culture and society in a significant way. Throughout the semester, students are required to take part in cultural activities, site visits, excursions, (including trips which last several days), and listen to guest lecturers. A key part of the KSAC Culture Course is Wolof language instruction.

CA-258 **Leading Cultural Change** (Spring; Yearly; 3.00 Credits; CA,S) Cultures are predisposed to change and at the same time resistant to it. Cultural behaviors, traditions, activities, policies, and processes are influenced through change. This course is designed to promote understanding of the role of change in cultures at both micro- and macro-system levels and how culture can be modified through innovation, invention, and change. Essentially, students will learn the knowledge and skills necessary to be effective change agents within cultures. Using selected models of argument development, students will incorporate this information into class discussions, write a major paper, and deliver a presentation on an issue related to their specific area(s) of study.

CA-270 **Infectious Disease & Society** (Either Semester; Yearly; 3.00 Credits; CA) This course focuses in infectious disease from different cultural perspectives. We discuss case studies across time and region, exploring how pathogens have shaped cultural landscapes, and how cultural perceptions affect infection. We study different cultures (modern and historical) to see how they react to an epidemic and use infection's threat. We end with a cultural analysis of AIDS. Prerequisites: Sophomore, Junior, or Senior standing.

CA-299 **Special Topics** (Fall; Variable; 1.00-4.00 Credits; CA) Allows departments to offer topics not normally taught.

CA-310 **Beyond Tolerance** (Fall & Spring; Yearly; 3.00 Credits; CA) This course will present both theories and practices of multiculturalism in the United States. Through the Beyond Tolerance Workshops, film, texts and class activities students will analyze stereotypes, power, privilege and personal views of American cultures and subcultures. Students must have Sophomore standing to take this class.

CA-316 **Clash of Cultures I** (Summer; Yearly; 0.00 Credits) Students will participate in a two-week archaeological dig at a French and Indian War fort site. Students will analyze recovered artifacts, conduct historical research, and learn how such interactions changed Native American and European cultures on Pennsylvania's colonial frontier. Through the lens of archaeology, this course examines how European colonization in Pennsylvania during the seventeenth and eighteenth century brought cultures into conflict. Co-requisite: CA317 in the Fall semester.

CA-317 Clash of Culture II (Fall; Yearly; 4.00 Credits; CA,S,H) This course focuses on the interpretive value of archaeological and historical research pertaining to cultures brought into conflict due to the European colonization of Pennsylvania; examining the French and Indian War as it is known through film, literature, and popular culture compared with the artifacts derived from archaeological excavation (co-requisite CA 316) and historical records. Prerequisites: EN110 or EN109.

Education

Department Website:

<http://departments.juniata.edu/education/>

Faculty:

- Associate Professor Kathy Jones (Chair) - ext. 3654
- Professor Fay Glosenger (Dilling Professor of Early Childhood Education) - ext. 3645
- Professor Sarah DeHaas (Martin G. Brumbaugh Professor of Education) - ext. 3641
- Associate Professor Kathleen Biddle - ext. 3411
- Paula Beckenbaugh, Director of Clinical Experiences - ext. 3633
- Associate Professor Valerie Park - ext. 3668
- Christine Breene, Co-Director ECE Center - ext. 3400
- Claire Miller, Master Teacher, ECE Center - ext. 3402

[Juniata College Education Department Mission Statement](#)

Known for commitment to the highest quality liberal arts education, Juniata College is a community of learners whose mission is to provide an engaging personalized educational experience that empowers students to develop the skills, knowledge, and values that lead to a fulfilling life of service and ethical leadership in the global community. As an integral part of the Juniata community, the Education Department's mission is to prepare highly qualified educators and human service professionals who are confident to face challenges, dedicated to improving education, sensitive to diverse learners, and committed to helping all students and families reach their goals. Faculty and staff value mutual support, the active pursuit of both cooperative and individual achievement, and the free and open exchange of thought among peoples from diverse cultures. The Juniata community and the Education Department nurture the intellect and values that permit our students to realize their full potential as life-long learners, contributors to society, informed citizens, and caring and responsible adults.

NOTE: Teacher certification programs are subject to changes in state and federal regulations. Entrance to a certification program may include requirements over and above those of the College. Students may apply for formal admission to a certification program after they have done the following: earned at least 48 credits of college level study that includes six semester hours of college level English composition and literature, and six

credits of college level mathematics, and successfully passed the exams, and met the GPA guidelines specified by the Pennsylvania Department of Education. Title II of the Higher Education Act of 1998 requires that each year all institutions publicize the pass-rate for students who complete a certification program on a yearly basis. Please see the Education Department website for certification requirements and the most current Title II information. The Juniata College Education Department Student Handbook provides current information on all certification requirements.

Special programs, facilities, or equipment:

- Affiliation with a number of public school projects and community initiatives to provide students with independent field experiences
- Juniata Early Childhood Education & TIU 11 Early Intervention Center Inclusion Program
- Strong focus on special education and working with students with diverse needs is infused throughout the program
- Study Abroad opportunities that include courses in education and field experiences in local schools

Programs of Emphasis:

- PreK-4th Grade students: Multiple field experiences in early childhood and public school settings start in the freshman year and continue over four years of study
- Students pursuing secondary education (Grades 7-12) certification also experience many practicum experiences in local secondary settings usually starting in the freshman year
- Students interested in secondary education certification will have a primary academic (discipline based) advisor and an education advisor. Secondary Education Certification areas: Social Studies, English, Spanish*, French*, German*, Mathematics, Biology, Chemistry, Earth & Space Science, General Science, Physics, and Environmental Education*
- Fields marked above with an asterick* are K-12 certification and an additional test is required for certification. See your Education advisor or the Certification Officer.

Field Experience:

- Multiple field experiences in early childhood and public school settings start in the freshman year and continue over four years of study
- Two-semester practicum sequence: preprofessional semester leads to a semester of full-time student teaching placement with the same cooperating teacher

Courses:

English

Department Website:

- English - <http://departments.juniata.edu/english/>

Faculty:

- Assistant Professor William Dickey - ext. 3723
- Professor Peter Goldstein- ext. 3460
- Professor Mark Hochberg - ext. 3492
- Assistant Professor Hannah Bellwoar- ext. 3437
- Assistant Professor Amy Mathur (Chair)- ext. 3690
- Assistant Professor Amanda Page- ext. 3983
- Instructor Carol Peters (Director of College Writing Seminar and Writing Center) - ext. 3501

Background Information:

The Department of English offers a diversity of educational experiences in language, professional writing, and literature. The department aims to teach students to think clearly and creatively, to write evocatively and persuasively, and to read with intelligence and imagination. Such skills and knowledge will enable students to pursue not only a wide variety of exciting career paths but graduate study as well.

Special programs, facilities, publication or equipment:

- Unlock Your Voice
- Lift Ev'ry Voice
- Service Learning Projects
- Honors Seminar/ Research
- The Juniatian

Programs of Emphasis:

- English
- English Secondary Education
- Professional Writing

Individualized Programs of Emphasis:

- History and English
- Environmental Policy/English
- Literature and Art
- Nineteenth Century Studies
- Medieval Studies
- American Culture

Secondary Emphasis:

- Requirements: At least 18 credits of courses in respective emphasis.

Internship/Research Experiences:

- White House, Washington, DC
- Federal Drug Investigation Commission
- Pittsburgh Zoo: Public Relations
- C-SPAN, Washington, DC
- National Public Radio, Washington, DC
- Johns Hopkins Medical Center
- Chicago Jazz Radio Station
- Philadelphia News Reporting
- New York NBC Television Production

Specific department policy:

Awarding credit for AP Exam scores: A student with an AP score of 4 or 5 will receive three General Elective Non Department credits, as it will not equate to an English elective.

Courses:

EN-100 English I (Fall; Yearly; 3.00 Credits) In this class, students will explore different types of academic writing and learn to view writing as a multiple-step process. Students will work to improve their critical reading and analytical writing skills and will develop familiarity with academic conferencing and revision strategies. Assignments will cover a range of rhetorical modes which may include narrative, informative, analytical, and journal writing. Students will explore the constraints of multiple audiences, individual voice, and writing purpose. This class is designed to prepare students for their entry to college writing but is not equivalent to a first year writing seminar including EN 110: College Writing Seminar.

EN-108 Year Long CWS I (Fall & Spring; Yearly; 4.00 Credits; C) Students will develop their reading, writing, and analytical skills. CWS will introduce students to the diverse modes of thought and communication that characterize the college experience. Individual conferences, peer reading, revision of writing and portfolio assessment are some of the essential elements in this process-oriented approach to college work. This two-semester sequence gives extended attention to these skills. This is part I. Students must complete EN108 and EN109 to receive credit for CWS.

EN-109 Year-Long CWS II (Fall & Spring; Yearly; 3.00 Credits) Students will develop their reading, writing, and analytical skills. CWS will introduce students to the diverse modes of thought and communication that characterize the college experience. Individual conferences, peer reading, revision of writing and portfolio assessment are some of the essential elements in this process-oriented approach to college work. This two-semester sequence gives extended attention to these skills. This is part I. Students must complete EN108 and EN109 to receive credit for CWS.

EN-110 College Writing Seminar (Fall & Spring; Yearly; 4.00 Credits; C) In CWS, students will develop their reading, writing, and analytical skills. CWS will introduce students to the diverse modes of thought and communication that characterize the college experience. Individual conferences, peer reading, revision of writing and portfolio assessment are some of the essential elements in this process-oriented approach to college work. Note: This course does not satisfy a distribution requirement. Corequisite: IT100. Carol Peters is Director of the College Writing Seminar.

EN-120 Forms of Literature (Fall; Yearly; 3.00 Credits; H) An introduction to the study of literary forms, including poetry, drama, short story, novel, novella, and essay. Students will read texts from a wide variety of genres and historical periods, to examine how literary forms developed and gain/lost popularity over time. Students will learn the vocabulary and technique of literary analysis.

EN-122 Interpreting Pop Lit (Fall; Yearly; 3.00 Credits; H) Utilizing Harry Potter, The Hunger Games, World War Z, and other popular works of fiction for class, this introductory course will engage students in the fundamental terms and approaches needed to analyze, appreciate and discuss works of fiction at the college level. Students will study introductory elements of literary theory, emphasizing using various social and theoretical perspectives, as a means of learning how to identify cultural and literary meaning within texts.

EN-145 Peer Tutor Training (Fall & Spring; Yearly; 1.00 Credit; H) Peer tutor training is designed to provide an academic experience that will prepare students to serve as tutors. Students will focus on communication skills, learning styles, need analysis, and tutoring strategies. Prerequisite: EN110.

EN-155 The Short Story (Fall & Spring; Yearly; 3.00 Credits; H) An examination of the modern short story form, its development in the mid-19th century to its variety today in such writers as Borges, Barthelme, and Oates.

EN-162 Women and Literature (Fall; Even Years; 3.00 Credits; H) Studies literature by and about women; looks at the rich history of women's literature and the variety of traditional and non-traditional approaches women have used to describe their experience, from poetry, plays, and novels to letters and diaries; explores the effect of culture on women's writing.

EN-163 Science Fiction (Spring; Yearly; 3.00 Credits; H) Science fiction-the attempt to make sense of this world through the creation of others-is the quintessential literary genre of the 20th and 21st centuries. This course studies the scope of modern science fiction, from aliens to post-nuclear societies, from time travel to advanced technology. Looks at the most up-to-date authors, as well as some of the classics.

EN-170 World Literatures (Spring; Yearly; 3.00 Credits; H,I) Studies works of African, Asian, Latin American, South American, Caribbean and Native American literature. Discussions focus on ways literature reveals cultural perspectives and philosophies.

EN-181 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Only editors chosen by the instructor may receive 3 credits.

EN-182 Writing Practicum (Fall & Spring; Yearly; 1.00-2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Only editors chosen by the instructor may receive 3 credits.

EN-188 Bad Literature (Fall; Variable; 3.00 Credits; H) Theodore Sturgeon, science fiction writer of the mid-twentieth century, famously said: " 90% of everything is crap. " He was right, too: there's a lot of crap out there. And we'll be reading some of it in this class. But-what do we mean when we say literature is " crap " ? Isn't it just a matter of taste? And if it isn't, how can we tell crap from genius? And who decides? And if 90 percent of everything is in fact crap, does the crap serve any useful function in society? All of these questions and many more, as we enter the wonderful world of bad literature.

EN-191A Unlock Your Voice (Fall; Even Years; 1.00 Credit; H) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program.

EN-191B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program.

EN-192A Unlock Your Voice (Fall; Even Years; 1.00 Credit; H) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program.

EN-192B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program.

EN-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topics. Prerequisites vary by title.

EN-199A Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer topics not normally taught. Prerequisites and fees vary by title.

EN-199B Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer topics not normally taught. Prerequisites and fees vary by title.

EN-200 History of the Language (Fall; Yearly; 3.00 Credits; H,I) Like other languages, English is not monolithic, and it is always on the move. This course examines how English functions now, both in its Standard form and in many of its varieties around the world; how its sounds and structures have changed from its Proto-Indo-European beginnings; and what major factors have influenced those changes. Prerequisites: EN110 or EN109.

EN-204 English Colloquium (Fall; Yearly; 1.00 Credit; H) The English Colloquium prepares students for academic expectations in the English department and introduces them to professional opportunities within the discipline. This colloquium is intended for students with English, Secondary Education/English or Professional Writing POEs, individualized POEs with foundation in literature or writing, or students with secondary emphases in English. Pre-requisites: sophomore standing, one EN course beyond EN110, or instructor's permission.

EN-207 Heaven or Hell on Earth (Spring; Even Years; 3.00 Credits; H) In this course we will examine the ways in which specific novels, short stories and films explore various perspectives on nightmarish or ideal societies through alternative political and social ideologies. The class will introduce various literary theories (including Marxism, approaches to feminism and New Historicism) as well as the genre and history of utopian and dystopian literature. V for Vendetta, Sir Thomas More's Utopia, Plato's Atlantis writings, Children of Men and other works will be covered during the semester. Prerequisites: EN110 or EN109.

EN-212 Sports Literature (Spring; Odd Years; 3.00 Credits; H) Students will consider ways in which sports literature written over the last eighty years reveals the developing and shifting American ideologies concerning subjects such as race, gender, sexuality, and justice, over that same time period. Students will also develop an understanding of the genres and purposes in various forms of sports literature, including newspaper articles, magazine feature articles, short stories, and novels. Prerequisite: EN110 or EN109.

EN-213 Zombie Nation (Fall; Odd Years; 3.00 Credits; CA,H) In this course, students will read a variety of novels and review media that inspires and reflects our cultural fixation with zombies. Through critical thinking, analysis, and discussion, students will explore the intersections between fictional zombies and actual cultural practices that reflect the mindlessness of a zombie culture.

EN-215 Boys Will Be Boys (Spring; Odd Years; 3.00 Credits; H) This course explores the experiences of men and boys as represented through works of fiction and analyzed via cultural, economic and social contexts. The course considers "maleness" as a social construct and how perceptions within American society influence men's actions and the ways in which they perceive themselves, other men, women, and social situations.

EN-236 Dirty Books (Fall; Yearly; 3.00 Credits; H,CW) An examination of works of literature that have been labeled obscene. Using examples from the comedy of Aristophanes to the poetry of Allen Ginsberg, the course looks at why and how serious writers deploy scandalous and offensive elements in their work.

EN-237 Constructing Identities (Fall; Even Years; 3.00 Credits; CA) Applying various cultural and theoretical perspectives, students will view and read works from Quentin Tarantino, Christopher Nolan, Kurt Vonnegut, Salman Rushdie, David Foster Wallace and others to examine ways that consumerism, technology, social institutions and other facets of modern culture and society shape identities and influence the human condition. Prerequisites: EN110 or EN109.

EN-238 Unnatural Acts (Fall; Yearly; 3.00 Credits; H) From the Puritans to tree-huggers, America has been divided between those who see Nature as moral and liberating, and those who see society as the taming of savage, godless wilderness. This course will examine that tension in writers from Hawthorne and Melville to Faulkner.

EN-239 Bloody Murder (Spring; Yearly; 3.00 Credits; H) The United States has always been a violent nation, and American writers have used that violence to explore questions of justice, truth, and human nature. This course will examine the portrayal of violence in writers from Poe to Cormac McCarthy.

EN-244 British Literature to 1600 (Spring; Variable; 3.00 Credits; H) Studies major works of the Old and Middle English periods and the Renaissance, including the Canterbury Tales, morality plays, various accounts of King Arthur, Gawain, and some early works of Shakespeare, with emphasis on how the social and historical contexts in which these works were created shaped literary meaning. Prerequisite: EN110 or EN109.

EN-250 African American Literature (Fall; Odd Years; 3.00 Credits; CA,H) A survey of African American literature from the mid-18th century to the present, with emphasis on both the vernacular/oral and written traditions of African American literature and attention to the historical and cultural contexts in which the literature was created. Readings include folktales, slave narratives, autobiographies, poetry, stories, novels, essays, sermons and speeches, hymns and spirituals, as well as blues and gospel music and works by such writers as Frederick Douglass, W.E.B. Dubois, Zora Neale Hurston, Langston Hughes, Richard Wright, James Baldwin, Gwendolyn Brooks, Toni Morrison, Alice Walker, Amiri Baraka, and others. Prerequisites: EN110.

EN-251 Slave Narratives (Spring; Odd Years; 4.00 Credits; H,CW) The personal autobiographies of American slaves are the foundational works of the African American literary tradition, and they have influenced generations of American authors. Originally written as a means of promoting the abolition of slavery, contemporary writers have taken this historical form and transformed it to reflect upon the past and engage with problems of the present. Neo-slave narratives are a reminder that, as Faulkner writes, "The past is never dead. It's not even past." In this course, we will read a variety of original slave narratives and put them in dialogue with contemporary fictionalized slave

narratives. In doing so, we will explore topics such as the boundaries between fact and fiction, the political uses of literature, the afterlife of slavery, and many others. First-year students require instructor's permission.

EN-253 Literature of the Jazz Age (Spring; Even Years; 3.00 Credits; H) Called the "Jazz Age" by F. Scott Fitzgerald, the 1920s were marked by great cultural change. In response to the trauma of the First World War, the "lost generation" broke traditional social barriers while embracing radically new forms of art. Beginning in 1920 (the year both women's suffrage and prohibition were passed as constitutional amendments) and concluding with the 1929 stock market crash that signaled the start of the Great Depression, we will examine the role of the Harlem Renaissance in inspiring and sustaining domestic and expatriate American modernism. With special emphasis on the interplay of art, music, and literature, this class will examine the literature of the Jazz Age across genre "and racial" boundaries, concluding with two contemporary works that evaluate the lasting significance of this era on American culture.

EN-255 Passing Narratives (Fall; Even Years; 3.00 Credits; CA,H) Passing narratives investigate how the boundaries of identity can be reimaged. Most often depicting racial passing (when a person "passes for" someone of another race), these narratives also can be about performing another gender or sexual identity. In this course, we will examine a variety of texts that treat different forms of passing. Beginning with a slave narrative in which a black woman "passes" as a white man to escape slavery, we will trace the evolution of this trope through American literature and film. From traditional passing novels that use the form to protest racial injustice to recent texts that challenge continued discrimination against other marginalized groups in contemporary culture, we will explore topics such as biological essentialism vs. the social construction of identity; authenticity and performance; social and legal forms of identity categorization and boundary maintenance; the role of literature in social reform; and many others.

EN-258 Funny Pages (Variable; Variable; 3.00 Credits; H) Everyone loves comedy--even college professors. But comedy isn't just pratfalls and punchlines. It's a distinctive literary form with its own conventions, traditions, and variety of approaches. There's wit, parody, farce, satire, black comedy, and all the things in between. In this course we'll look at some of the greatest comedy ever written (and filmed, too), all brought to you by the greatest humorists the English language has ever produced--the British.

EN-262 Unhappily Ever After (Spring; Odd Years; 3.00 Credits; H) Deaths. Betrayals. Loves lost. Falls from grace. These calamities, and those that suffer them, have captivated dramatists, novelists, philosophers, and theoreticians since the first tragedy was staged in ancient Athens over 2,500 years ago. This course will explore how literary cultures have understood and expressed notions of tragedy in different historical periods. By examining the ways in which we inflict and endure suffering, we will consider how literary tragedy informs our understanding of the human condition.

EN-271 Medical Writing (Spring; Variable; 3.00 Credits; H,CW) Focuses on some of the tools and basic knowledge needed to produce as well as critique writing in the

medical field. The course will familiarize students with medical databases, terminology, and common practices in medical writing, and will cover several common genres. The course will also work with rhetorical approaches to different audiences and will consider the issue of health literacy. Prerequisites: EN110.

EN-272 Introduction to Professional Writing (Fall; Yearly; 3.00 Credits; H,CW) Covers types of writing used in the professional and business world, with attention to deciding when to use which type, or whether to use writing at all. Also concentrates on effectively addressing different audiences. In addition, the course will cover use of graphics, from basic concepts through effective design and adjusting to audience and situation. Prerequisite: EN110 or EN109.

EN-273 Visual Literacy (Spring; Even Years; 3.00 Credits; H) This course explores how visuals and text are used for purposes of identification, information, and persuasion. It looks at many visual modes such as comics, ads, maps, graffiti, film, art, scientific images, and web sites. Students have the option to create arguments using only text, only images, or a combination of both. prerequisite: EN110 or EN109.

EN-274 Beyond Grey's Anatomy (Spring; Yearly; 3.00 Credits; CA,H) An examination of representations of medicine in popular culture using rhetorical and cultural studies approaches. Students will study topics such as cancer, HIV/AIDS, pregnancy, and brain scans as they are represented in print, TV, and film. Prerequisite: EN110.

EN-281 Writing Practicum (Fall & Spring; Yearly; 1.00-2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Only editors chosen by the instructor may receive 3 credits.

EN-282 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Only editors chosen by the instructor may receive 3 credits.

EN-283 The Graphic Novel (Fall; Odd Years; 3.00 Credits; H) Once dismissed by critics as insufficiently " literary, " the significance of the graphic narrative in contemporary literature can no longer be denied (even by stodgy academics). Though all types of graphic narratives often referred to by the misleading label " graphic novel, " this exciting combination of words and pictures comes in many different genres. In this class, we will examine graphic narratives across genres to explore the range of possibilities this form offers through careful literary and visual analysis. In addition to attentive close reading, we will put each work of fiction or nonfiction into its appropriate historical and cultural contexts using both literary and historical scholarship. Authors may include

Alison Bechdel, Jaime Hernandez, Alan Moore, Josh Neufeld, Mat Johnson, and others. Topics will include contemporary revisions of the superhero, the strengths and limitations of visual and textual representation, stylistic differences between texts, the use of graphic narrative to relate history and/or contemporary events, how the graphic memoir creates new avenues for self-representation, the loss of the "auteur" in collaborative works, diversity in the graphic narrative marketplace, and many others.

EN-291A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program.

EN-291B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program.

EN-292 Crossing the Border (Spring; Even Years; 4.00 Credits; H,CW) This class will examine the many meanings of "border crossing" in 20th and 21st century literature about immigration to the United States. Using critical race theory, this class will put works of fiction and autobiography in historical context to better investigate the influence of immigration law on U.S. national literature. Beginning with short texts from the turn of the twentieth-century, we will focus primarily on contemporary works dealing with the post-1965 (or "new wave") immigrant experience. Authors may include Chimamanda Ngozi Adichie, Edwidge Danticat, Junot Diaz, Jhumpa Lahiri, Guillermo Gsmez-Peña, Chang-rae Lee, Karen Tei Yamashita, and others. Topics will include: "American Dream" mythology, social mobility, generational conflict, acculturation and assimilation, hyphenated identity, nativism, barriers to full citizenship, and more. Prerequisites: EN110 or EN109.

EN-292A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program.

EN-292B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program.

EN-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

EN-300 Modern Theories of Grammar (Spring; Even Years; 3.00 Credits; H,CW) This course examines how it is that we are grammatical creatures and what it means to have and use this talent. The course focuses on describing our knowledge of the structure of English sentences from various theoretical perspectives and also looks at how we, as individuals and as a species, have come to control such a flexible and creative system of communication. The course includes a final research project relating the course material

to the students' disciplinary interests. Note: This is not a remedial course in Standard English grammar. Prerequisite: EN110 or EN109.

EN-301 Young Adult Literature (Fall; Even Years; 3.00 Credits; H) Students will read & analyze a variety of literature from the Young Adult Lit category. Students will engage in class discussions and make presentations based on individual research.

EN-303 Poetry Writing (Fall; Yearly; 3.00 Credits; H) An intensive workshop in poetic technique, plus extensive writing of poetry for class discussions and criticism. Emily Dickinson said: " If I feel physically as if the top of my head were taken off, I know this is poetry. " Whether you are a novice or an experienced poet, this course will teach you to take off the top of people's heads. Prerequisite: EN110 or EN109.

EN-305 Fiction Writing (Spring; Odd Years; 3.00 Credits; F,H) Concentrates on the techniques of fiction, extensive writing of fiction, and the development of creative and critical approaches to fiction. Prerequisites: EN110 and EN155.

EN-306 Creative Nonfiction Writing (Fall; Even Years; 3.00 Credits; H,CW) An experience in creating forms of non-fiction prose ranging from analytical essay to the familiar essay to satire. First-year students need the instructor's permission to enroll. Prerequisite: EN110 or EN109.

EN-307 Mythology in Film (Spring; Variable; 4.00 Credits; H) This course will explore how film communicates the myths of a various societies to its members. By combining theoretical approaches to myth with film analysis, we will explore the ways in which cinema both influences and reflects the way we think, what we value, fear, and aspire to achieve. Focusing on some of the most prevalent themes in this genre, students will be introduced to Classical and contemporary adaptations of myths and their historical and cultural contexts, examining how those narratives provide meaning today via cinema.

EN-311 Professional News and Feature Writing (Spring; Odd Years; 3.00 Credits; H,CW) This advanced writing course introduces students to the genres and techniques of journalism. Students will write a number of news and feature stories. The writing process involves interviewing, note taking and other forms of data gathering on campus and local news events, creating multiple story drafts and participating in peer-editing workshops: work culminates in a portfolio of stories written throughout the semester. Students need not plan to become professional media writers to benefit from the course. Prerequisite: EN110.

EN-312 Literature of Revenge (Fall; Odd Years; 3.00 Credits; H) Students will examine the various functions revenge plays in human culture by tracing its role as a literary device from the bloodbaths of popular Greek tragedies to the more psychological retaliation of contemporary works. Engaging in a focused study of the historical and cultural influences that have shaped human notions of revenge over centuries, students will contemplate the often complicated distinctions humans make between perceptions of retribution and justice. Prerequisite: EN110 or EN109.

EN-315 Technical Writing (Spring; Yearly; 3.00 Credits; H,CW) An examination of writing for the real world: as such it concentrates equally on content and practice. The course builds around various document designs and ways to present those designs in expressions appropriate to audience and purpose. Prerequisites Sophomore, Junior or Senior standing. While sophomores are allowed to register they may be removed from the course if the demand by upperclassmen is high.

EN-341 Shakespearean Drama (Spring; Yearly; 3.00 Credits; H) Examines historical moments, cultural perspectives, and theatrical constructs that shaped the writing, acting, and reception of Shakespeare's comedies, tragedies, and history plays. Prerequisite: EN110 or EN109.

EN-370 The Contemporary Novel (Spring; Yearly; 3.00 Credits; H,CW) The course covers the novel in English over the past twenty years, focusing on novels by writers such as Sherman Alexie, Junot Diaz, Alison Bechdel, and Mat Johnson. These authors will be put in dialogue with an earlier text as a means of exploring the role of literary influence in contemporary fiction. Each of these pairings will ask if the contemporary work is a remix, a revision, a corrective, or a reimagination of a classic precedent. This course explores the use of traditional and innovative narrative strategies, as well as the social, cultural, and aesthetic values conveyed by those strategies. First-year students need the instructor's permission to enroll. Prerequisite: EN110 or EN109.

EN-372 Contemporary Poetry (Fall; Even Years; 3.00 Credits; CA,H) Contemporary poetry speaks to us right there and now, whether in a personal cry of emotion or in a piercing cultural commentary. This course studies representative poets from our own age, with emphasis on the social context of the times. Different poets are discussed each time the course is taught, but every year you'll actually get to meet one of them up close and personal, as part of our Pennsylvania Poet series. Prerequisite: EN110 or EN109.

EN-376 Writing Across Media (Spring; Yearly; 3.00 Credits; H,CW) Writing across the Media is a combination of both theory and practice in internet communication. On the practical side, students will work with some of the common genres developing on the web, such as wikis and blogs. Theory includes interaction of visual and textual material, as well as the effect of interactivity, both document-to-reader and reader-to-document, on writing and communication. Prerequisites: EN110 or EN109.

EN-377 Interactive Media Writing (Fall; Even Years; 3.00 Credits; H,CW) Electronic media and mobile technologies play an increasingly important role in today's written communication landscape. Students who understand visual, digital communication and who have robust writing skills will have a competitive advantage in the coming decades. In this course, students will develop those skills through audio, video, and game design projects. Students will write, record, and edit audio and video projects, and combine these interactive media skills to create an alternate reality game, a game which uses multimedia storytelling to deliver an interactive narrative to a real audience. Prerequisites: EN110 or EN109.

EN-378 Video Production Writing (Fall; Odd Years; 4.00 Credits; H,CW) Writing for Video Production is a course that combines contemporary rhetoric, creative inquiry, design thinking, media authorship, self-reflection, and social engagement. Students complete directed writing such as journal entries, scripts, storyboards, and shotlists in concert with video production, facilitating an integrated process of thinking, creating, and problem solving. Prerequisite: EN110 or EN109.

EN-379 Professional Editing (Fall; Odd Years; 3.00 Credits; H) This course provides a broad understanding of editing and its role in document development, publication, and use. Students will learn to edit effectively on a range of editing tasks and documents. These skills will prepare students for a variety of professional editing positions. Prerequisite: EN110 or EN109.

EN-381 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Only editors chosen by the instructor may receive 3 credits.

EN-382 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). The course instructor and/or the department supervisor will determine credit limits. Prerequisites: EN181, EN182, EN281, EN282 and EN381. Only editors chosen by the instructor may receive 3 credits.

EN-385 Queer Literature (Spring; Odd Years; 3.00 Credits; CA,H) By applying queer theory frameworks to a variety of texts, we will examine literary representations of LGBTQ identity. Readings will include works by James Baldwin, John Rechy, Audre Lorde, Leslie Feinberg, Tony Kushner, and others. Topics will include: biological essentialism vs. the social construction of gender and sexual identity; authenticity and performance; social and legal forms of identity categorization and boundary maintenance; the role of literature in social reform; and more.

EN-388 Heroes and Villains (Spring; Variable; 3.00 Credits; H) Heroes-yay! Villains-hiss! All our lives we've learned to think in terms of good guys and bad guys. But why do we think in those categories? And what exactly do we mean by good guys and bad guys? And should we even be in the business of separating good guys from bad guys? This course will take a detailed look at heroes and villains in literature, movies, and television, and ask you to think about the whole duality, and what it means for the stories we tell.

EN-391A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the instructor.

EN-391B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the Instructor.

EN-392A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the instructor.

EN-392B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffee house to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the Instructor.

EN-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offers special studies to meet the interests and demands of students. past examples include " Terry Pratchett " and " Renaissance Drama " . Note: Students may take each ST: course for credit.

EN-410 Literary Theory (Spring; Even Years; 3.00 Credits; H) This course will examine various theoretical approaches to literature which have come to prominence over the last 25 years. Movements such as structuralism, deconstruction, hermeneutics, reader response and speech act theory, feminism, Marxism, Freudianism, and the new historicism and pragmatism will be studied from the perspectives of both their philosophical foundations and their application to the practical criticism of Texts. Prerequisites: EN110 or EN109 and 2 of the following: EN155 or EN170 or EN242 or EN243 or EN244 or EN245 or EN246.

EN-481 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level of participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). Prerequisites: EN181 and EN182 and EN281 and EN282 and EN381 and EN382. Only editors chosen by the instructor may receive 3 credits.

EN-482 Writing Practicum (Fall & Spring; Yearly; 2.00 Credits; H) Students may receive credits for writing, editing, photography, or layout design for the Juniata. Credit hours to the level or participation (based on number of contributions and attendance) and position (reporter, designer, photographer, editor). Prerequisites: EN181 and EN182 and EN281 and EN282 and EN381 and EN382 and EN481. Only editors chosen by the instructor may receive 3 credits.

EN-490 English Internship (Variable; Variable; 2.00-9.00 Credits; H) English students may apply their acquired skills and knowledge in on-the-job internships of a semester during their Junior or Senior year for a total of 9 credit hours. Television stations, radio stations, newspapers, magazines, public relations and advertising agencies are all possible placements for the Juniata interns, who not only work as full-time members of the business's team but also evaluate and document their growth in a journal and prepare a

portfolio of presentations or publications. Prerequisites: Permission of the instructor and Jr. or Sr. standing. Corequisite: EN495.

EN-491A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the instructor.

EN-491B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffeehouse to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the Instructor.

EN-492A Unlock Your Voice (Fall; Even Years; 1.00 Credit) A Coffeehouse to Celebrate Literature by Women Writers. Students who participate in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the instructor.

EN-492B Lift Ev'ry Voice (Fall; Odd Years; 1.00 Credit) A Coffeehouse to Celebrate Black History Month. Students in this practicum will head teams of volunteers to produce all aspects of the program. Prerequisites: Permission of the Instructor.

EN-493 English Research Seminar (Fall & Spring; Yearly; 2.00 Credits; H) This course is a seminar-style introduction to advanced research methodology in literature and linguistics for senior English POEs. Enrolled students will work simultaneously with the course instructor and a thesis advisor from within the English department in order to develop a thesis plan and to begin its execution.

EN-495 English Internship Research (Variable; Variable; 2.00-6.00 Credits; H) In addition to the on-the-job experience provided by the internship, the students is required to pursue research related to the placement. An in-depth research paper or presentation is completed during the semester and turned in for a possible 3 credit hours. Prerequisites: Permission of instructor and Jr. or Sr. standing. Corequisite: EN490.

EN-496 Senior Research Capstone (Variable; Yearly; 2.00-4.00 Credits; H)

EN-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer subjects not normally taught. Requisites vary by title.

Environmental Science and Studies

Department Websites:

<http://departments.juniata.edu/environmental/>

Core Faculty:

- Professor Dennis Johnson (Chair) - ext. 5335
- Professor Neil Pelkey - ext. 3589
- Associate Professor Uma Ramakrishnan - ext. 3436
- Assistant Professor George Merovich - ext. 3954
- Lecturer Chuck Yohn (Director, Raystown Field Station) - ext. 3572

Mission Statement:

The mission of the Department of Earth and Environmental Sciences is to prepare students for a successful post-graduate career in one or more earth and environmental science fields, and instill values of responsible environmental citizenship in all students who interact with our programs. We do this in accordance with the overall mission of Juniata College.

Background Information:

The Environmental Sciences and Studies (ESS) Department strives to train Juniata College students to solve problems related to Environmental system and to understand how these problems influence aesthetic, economic, natural resource, environmental, intellectual, and ethical issues facing society. ESS students have the opportunity to choose from curricula offered by the department including: (1) environmental economics, (2) environmental science, (3) environmental studies, and (4) wildlife conservation. Environmental science focuses on the scientific study of the relationship between humans and the natural world; Environmental studies examines that relationship from a social science and humanities perspective and Wildlife conservation focuses on an understanding and protection of biodiversity. Environmental Economics uses the tools of economics, finance, and psychology to help solve pollution and natural resource harvesting problems.

Special programs, facilities, or equipment:

- The Raystown Field Station: 365 acres of land available for college use, provides students with environmental research and education opportunities
- Shuster Hall at the Raystown Field Station: a new "green" building, made with 40% recycled materials and energy-efficient design, as a teaching tool and classroom
- Field station residence programs in all semesters (including summer).
- Coastal Marine Science, Semester in India
- Geographic Information Systems (GIS) computer lab
- Multiple Global Positioning System (GPS) units
- Remote Field Course, summer course in Southwestern Desert
- "Hands on experience" starting at the introductory level, through numerous local field trips exploring spectacular geologic sites in the Appalachians
- Extended field trips (2 to 7 days) associated with several upper-level courses

- Remote Field Course in the American Southwest, taught collaboratively with faculty in Biology, Environmental Science and Studies, Anthropology, and Physics
- Student run farm
- Experimental Forest
- GIS Certificate Program

Programs of Emphasis:

- Environmental Economics
- Environmental Science
- Environmental Studies
- Wildlife Conservation

Examples of Individualized Programs of Emphasis:

- Environmental Policy
- Marine Science
- Water and Conflict

Secondary Emphasis:

Take 4 courses from the required courses below:

- Introduction to ESS (ESS-100)
- Water Resources I (ESS-209)
- Natural Resource Management (ESS-324) or Conservation Biology (ESS-325)
- Environmental Economics(ESS-305) or Environmental Law (ESS-337)

Plus take 2 courses from the optional course below:

- BI-105, Biological Diversity & Ecology + BI 121, Biology Lab
- BI-300, General Ecology
- HS-262, North American Environmental History
- GL-100, Introduction Physical Geology
- ESS-324, Natural Resource Management or ESS-325, Conservation Biology
- ESS-305, Environment Economics or ESS-337, Environmental Law
- ESS-401, Senior Capstone
- GL-202, Historical Geology

6 courses are required for the secondary emphasis.

GIS Certification program:

Geographic Information System (GIS) and spatial reasoning are a mainstay knowledge base for working professionals in environmental science, resource management, local and

regional planning, disease monitoring and evaluation, real estate, military planning, and social science research. The Juniata GIS certificate program is offered jointly by the Environmental Science and Studies and the Computer Science and Information Technology Departments. We have two tracks to prepare a student for a career in any of the GIS fields. The first track has a focus on Environmental Science. This track has more courses in field methods in GIS and spatial analysis. The second track has a focus on Information Technology. This track has more courses in programming and data mining. The certificate is open to students in all departments as well as to Juniata alumni.

Requirements for GIS (18-21 credits):

We have designed this certificate based on looking at successful programs. We include tracks in Environmental Science and in Information Technology. The requirements of the certification are as follows:

A. Quantitative field intro (1 course) (4 credits): This section requires the student to have a quantitative introductory class in their field. The requirement of this course is that it has a lab or quantitative section where Excel or other spreadsheet or database program is used to compile and represent or analyze data.

One course from the following:

Environmental Track ESS100 Introduction to Environmental Science

IT Track: IT111 Principles of Information Technology or CS110 Computer Science I.

B. Core Statistics or data analysis (1 course) (3-4 credits): One course from this section must be taken:

Environmental Track: ESS 230 : Environmetrics or BI 305 Biostatistics

IT Track: IM 241: Information Discovery

C. Core Geographic Information Courses (3 courses)(8 credits)

Both tracks:

- ESS 330: Introduction to Geographic Information Systems (or Methods in Marine Science)
- ESS 337 Advanced Topics in GIS and Remote Sensing

D. Field data collection component (1 course) (3-4 credits): This section is intended to have students exposed to the vagaries of field data collection. It is preferred that students collect spatially explicit data using GPS technologies or other spatially explicit survey methods. Database manage or other courses that explore the process of data collection will also meet this requirement.

IT Track:

♣ CS 370 Database Management

Environmental Track: (Pick One From)

- ESS 399 Ecology of Fishes—(3)
- ESS 399 Forestry
- ESS 399 Hydrology at the Station—(3)
- ESS 399 Wildlife Techniques (3)
- BIO 399 Field and Stream: Grant & Muth—(4)
- ESS 350 Field Research Methods—(4)
- GL 240 Geological Field Meth. I (4)

E. Capstone or project requirement (1-4):

IT Track: This will normally be a GIS related project done via an IT 307/308 and 380 or 480: Innovation for Industry course series, but it may be done as an independent study or project stemming from another course.

Environmental Track: This will normally be a GIS related project done via ESS 410 Senior Capstone class, but it may be done as an independent study or project stemming from another course.

Contacts:

Neil Pelkey, PhD.: Associate Professor Environmental Science and Studies and IT
Email: pelkey@juniata.edu or (814)641-3589

Dennis Johns, PhD.: Professor and Chair Environmental Science
Email: johnson@juniata.edu or (814)641- 5335

Loren Rhodes, PhD.: Professor and Chair, Computer Science and Information
Technology
Email: rhodes@juniata.edu or (814) 641-3620

Sample Internship/Research Experiences:

- Kenai Peninsula, Alaska
- Dept. Fish and Wildlife, Oregon
- Department of Environmental Protection, Pennsylvania
- Game Commission, Pennsylvania
- Army Corps of Engineers
- Regional Math/Science Center, Frostburg State University, Maryland
- Coastal Marine Science Semester in India
- Mangrove Restoration in India Funded by the UN Development Programme
- Most students complete at least one original research or external internship experience.

- In recent years, students have completed internships with the US Geological Survey, National Museum (Smithsonian), PA Department of Environmental Protection, PA Department of Transportation, National Parks Service, and numerous private sector firms.

Courses:

ESS-100 Environmental Systems I (Spring; Yearly; 3.00 Credits; N) This course introduces students to the concept of systems, reviews ecological systems and then goes on to human systems as these impact the environment. The course will explore the two forces that are at the core of most environmental impacts (climate change, ozone depletion, air and water pollution, and a loss of biodiversity) will be explored as will the fundamental attributes of agriculture, food, soil and water. Throughout, the influence of culture, society, ethics and science on the environmental problems will be discussed. Prerequisites: None.

ESS-110 Environmental Systems II (Spring; Yearly; 3.00 Credits; N,CW) This course is part of a 2-course series designed for freshmen in Environmental Science and Studies. The course introduces students to the concepts of environmental systems and sustainability, review ecological systems and human impact the environment. Students will be introduced to scientific writing - reviewing journal articles; use of bibliographic software; experimental design and hypotheses testing; data analysis and interpretation of results. Environmental problem-solving and use of EXCEL data sheets will also be covered. Prerequisites: ESS POE.

ESS-189 Writing in ESS (Spring; Yearly; 1.00 Credit; CW) ESS189 is designed to introduce freshmen to writing in the sciences, acquire the basic skills and knowledge required to write in the field. Scientific papers often use a standard format that allows researchers to present information clearly and concisely. This style is essential because scientists expect to be able to replicate the study. Students will be taught to critique the different components expected in a scientific paper, and learn to prepare papers in the accepted standard fashion.

ESS-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer topics not normally scheduled. Prerequisites, corequisites, and fees vary by title.

ESS-211 Water Lab Practicum (Fall & Spring; Yearly; 1.00 Credit; N) This is a tutorial to learn basic methods of water quality analysis. Students work in conjunction with commercial water lab, conduction analyses for a local township. Prerequisite: Enrollment is by permission only.

ESS-219 Agroecology (Fall & Spring; Yearly; 1.00 Credit; N) This course will explore alternate production systems in agriculture as ecological systems.

ESS-224 Wildlife Management (Spring; Variable; 3.00 Credits; N) Wildlife management incorporates the science and management of wild animals, both rare and

common species. Threatened species may require particular knowledge of population structure and processes for effective management, while common species may need control or might be exploited as novel production products. Prerequisites: ESS100 and BI105 and BI121. A special course fee is assessed.

ESS-230 Environmetrics (Spring; Yearly; 3.00 Credits; N, QS) This course is a survey of the various visual, statistical, and modeling approaches commonly used in the analysis of environmental data. The course covers: (1) visual literacy from exploratory data inquisition to poster creation; (2) elementary group comparison such as t-test and ANOVA and their non-parametric analogs; (3) basic systems modeling; and (4) regression modeling techniques based on the generalized linear model framework. Prerequisites: Sophomore standing and permission of the instructor.

ESS-235 Environmental Reading (Fall; Yearly; 1.00 Credit; N, CW) This class will explore 2-3 classic and/or modern works in environmental studies and natural history. The writers list includes: Aldo Leopold, Annie Dillard, Dan Daggett, Saul Alinski, Wangari Maathai, Gifford Pinchot, Bill McKibben, Mary Kingsley, Ian McHarg, Wendel Berry, Andrew Lytle, Ester Boserup, Roderick Nash, Vandana Shiva, Rose Reuter, Barry Lopez, Bernd Heinrich and others.

ESS-269 Art As Sustainable Development (Spring; Yearly; 3.00 Credits; F, I) Taught in India. Art as a Sustainable Development: Pottery, Beadwork, Leatherwork, and Sculpture (3 Units). Where: Various locations (Auroville, Mahabalipuram, and Kodiakanal). Local coastal industries in India are comprised of a wide variety of artisanship. When: February. Subjects: The arts of coastal India include pottery, beadwork, stonework, leatherwork, and jewelry. This course will provide the opportunity to work with the artists who train local people and produce these works for sale. This will cover introductory classes in these arts. The student will also visit the production factories and cottage industries where these products are produced for market. The student will also compare the economic structure of villages where the artisan communities operate with nearby villages dependent primarily on either agriculture or industry. This comparison will give the students clear perspective on the role of art in sustainable development. Students wishing to further their study in any of these fields may negotiate more time in the studios. Instructors: Angad Vohra (Pottery & Sculpture), Meena (Painting), Gillian (Beadwork & Leatherwork), Francois Grenier (Stonework). Prerequisite: ESS100.

ESS-299 Special Topics (Variable; Variable; 1.00-3.00 Credits; N) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites, corequisites, and fees vary by title.

ESS-300 Envir. Problem Solving (Fall; Yearly; 4.00 Credits; S, N) Students will practice and gain experience in solving actual environmental problems by putting academic theory to work in real world situations. Students will learn to work effectively in interdisciplinary teams comprised of both environmental scientist and environmental studies students. This course serves as preparation for senior research and internships. Prerequisite: ESS100.

ESS-301 Environmental Methods (Either Semester; Yearly; 3.00 Credits; N) This course deals with a variety of environmental issues and problems. This includes the causes and the scientific and social backgrounds needed to understand them. It also introduces the student to the roles of scientists and engineers in dealing with them. The course involves both quantitative and qualitative assessments. Prerequisites: ESS100 and 1 year of chemistry or permission of the instructor.

ESS-305 Environmental Economics (Spring; Yearly; 3.00 Credits; S) This course will cover the basics of microeconomic analysis as it applies to the environmental decision making and environmental policy with respect to pollution abatement, resource harvesting, and sustainability analysis. The course will also explore the strengths and weaknesses of economic models of human behavior. Finally, the course explores the growing concern of sustainable and resilient economies. Prerequisites: ESS100 and EB105 or EB223 or permission of the instructor.

ESS-309 Econometrics (Spring; Yearly; 2.00 Credits; N,Q) A first course in econometrics with forays into regression, optimization, and modeling. Prerequisites: Introductory economics course.

ESS-310 Water Resources I (Spring; Yearly; 3.00 Credits; QM,N) This course provides the student with a working overview of the hydrologic cycle, providing the student with the basic concepts of all aspects of hydrology. Particular emphasis is placed on the integrative nature of ecosystems within the watershed, including the interdependencies and driving forces of energy, the atmosphere, the hydrosphere, and the land, and the biosphere. Prerequisites: ESS100.

ESS-320 Environmental Monitoring (Spring; Yearly; 4.00 Credits; N) This course develops skills in monitoring the environment, with a strong focus on water quality monitoring (both chemical and biological) in a variety of habitats. Environmental site assessment will also be conducted. A weekend-long field trip is required. Prerequisite: ESS 100 and ESS-200 or permission.

ESS-324 Natural Resource Management (Spring; Variable; 3.00 Credits; N) This course provides a comprehensive coverage of local, regional, national, and global resource and environmental issues from population growth to wetlands to sustainable agriculture and natural resource policies and legislation. It considers renewable and non-renewable resources such as water, land, soil, air, wildlife, and their associated habitats. Prerequisites: ESS100 and BI105 and BI121. A special course fee is assessed.

ESS-325 Conservation Biology (Fall; Yearly; 3.00 Credits; S,N) Conservation Biology encompasses biology, politics, ethics, economics and anthropology. The major course objective is the exploration of conservation complexities--important for successful conservation efforts. Other objectives are to gain an understanding of extinction, community conservation, population genetics and demography. This course has a required weekend field trip with a fee added for the trip. Prerequisites: ESS100 or BI105.

ESS-328 Limnology (Fall; Yearly; 4.00 Credits; N) An ecology/environmental science course covering inland aquatic environments (lakes and streams). A balanced study of both physical-chemical and biological aspects, it is an appropriate upper level addition to a variety of POE's in natural sciences. Take BI105 and BI121 and ESS100 or permission of the instructor.

ESS-330 Geographical Information Systems (Fall & Spring; Yearly; 4.00 Credits) This course is an introduction to a Geographical Information System (GIS), and the course objective is that students gain a basic, partial understanding of GIS concepts, technical issues, and applications using Arc View GIS. It encourages thinking in spatial context. A diverse array of hands-on computer applications and projects are used to understand how geographical data can be analyzed spatially. Students explore analysis techniques in a problem basis learning approach using small team projects. Note: A special course fee is assessed. Prerequisite: ESS100.

ESS-337 Environmental Law (Spring; Yearly; 3.00 Credits; S) This course will examine the major environmental laws in the United States and major Supreme Court cases covering these statutes. The status covered will be National Environmental Policy Act (NEPA), The Clean Water Act (CWA), The Clean Air Act (CAA), The Endangered Species Act (ESA), Federal Insecticide Fungicide and Rodenticide Act (FIFRA), and The Toxic Substances Control Act (TOSCA), The Forest Land Policy and Management Act (FLPMA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Superfund Amendment and Reauthorization Act (SARA). Prerequisites: PS101 and ESS100.

ESS-340 Forestry (Fall; Variable; 3.00 Credits; N) This course provides a comprehensive survey of the discipline of forestry and forest ecology with special emphasis on tree identification, timber mensuration, and forest management issues in central Pennsylvania. Prerequisites: ESS100.

ESS-350 Field Research Methods (Fall; Yearly; 3.00 Credits; N) Field Methodologies is intended for students interested in gaining experience in conducting field based ecological or environmental research. Students will be lead through the process of investigation, including the generation of research questions, research planning and design, analysis of data, and presentation methods, while giving them the opportunity to conduct independent projects. This is not a techniques/equipment training course; it will fulfill the independent study requirement of the ESS POE. This course will be particularly useful to students considering a field based senior research project. A course in statistics or ecology is highly recommended. Prerequisites: ESS100.

ESS-355 Ornithology (Summer; Yearly; 3.00 Credits; N) This course provides a comprehensive survey of the comparative biology, ecology, and behavior of birds with a special focus on issues pertaining to conservation management. Laboratory activities focus on field identification of birds and research and monitoring techniques. Prerequisites: BI113 or 1 college level organismal or ecology courses. Note: A special fee is applied. Course will run from June 1st to June 30th.

ESS-361 Field Methods in Marine Systems (Spring; Yearly; 4.00 Credits; N,Q) Taught in India. This is the methods portion of the course including field techniques, quantitative methods, and a scientific writing seminar. The student requirements will be a short paper, four section quizzes and a final exam Prerequisites: GL111 and ESS100. Permission of instructor required.

ESS-362 Island Ecosystems (Spring; Yearly; 3.00 Credits; N) Taught in India. This course will introduce the students to island ecosystems from both applied and theoretical viewpoint. The course will run in the Andaman Islands in India. The topics covered will include island fauna, island flora, reef ecosystems, and a ridge to reef view of these complex biotas. Prerequisites: GL111 and ESS100.

ESS-363 Upland Process and Estuaries (Spring; Yearly; 3.00 Credits; N) Taught in India. This course will introduce students to estuaries and upland processes. About 50% of the course will be on site with the discussion and activities intended to give a very close view of the processes, ecology, and issues in coastal watersheds and estuaries. Prerequisites: GL111 and ESS100 and permission of instructor.

ESS-364 Culture, Class and Gender (Spring; Yearly; 3.00 Credits; CA,S,I,CW) Taught in India. This course will cover issue of gender and other disadvantaged groups in coastal management. Fishing villages' area often composed of people who are ethnically, religiously, or class wise distinct from upland populations. Women furthermore also have culturally distinct roles in the resource harvesting, production, and processing of natural resources. Course takes place in India. Prerequisites: Permission of the instructor and permission of the Center for International Education and ESS100. A trip fee is applied. The course will begin with 2 weeks in India in January and then proceed with weekly writing workshops for the remainder of the semester.

ESS-365 Sustainable Development (Summer; Variable; 3.00 Credits; I,N) This course is a combination of sustainable agriculture, sustainable forestry, coastal fisheries, very low impact living, and ecotourism. We will travel from Chennai to Pondicherry, then to the foothills of the Western Ghats, onward to the coastal port of Kochi in Kerala, and finally to the ecotourism resorts in Kovalam. Prerequisites: SO, JR, or SR standing.

ESS-375 Sustainability (Fall; Yearly; 3.00 Credits; N,CW,CA) Taught at Raystown Field Station. Students study sustainability, considering the triad of environment, economics and society, with a systems-view, connecting cultural practices to the concept of limits. Energy and Policy and topics focusing on the challenges of cultural change will be studied in depth with lecture, discussion, writing, simulations, field trips and integration with the Sense of Place seminar. Note: Special fees may apply to this course. Prerequisite: ESS100. Corequisites: PACS180 and ESS232 and ESS380.

ESS-377 GIS Advanced Topic (Fall; Variable; 4.00 Credits; N,QS) This course will explore: Spatial decision support systems, Hot spot modeling for home range, disease and crime, Intermediate Image analysis, Habitat classification from multispectral and hyperspectral imagery. Prerequisites: ESS310 or ESS330 or permission of the instructor.

ESS-380 Sense of Place Seminar (Fall & Spring; Yearly; 3.00 Credits; CA,CW) Taught at Raystown Field Station. This is the "cornerstone" of the Sense of Place semester, managed by one faculty, but comprised of a series of modules taught by various faculty and guest speakers. Module topics cover a range of environmental, ecological, and societal issues connecting to the region. Students will be expected to journal their experiences at RFS as well as complete other writing assignments. Note: There is a course fee assessed. Prerequisites: ESS100 or permission of the instructor.

ESS-399 Special Topics (Variable; Variable; 3.00 Credits) Topics vary from year to year. They will focus on one or more special environmental skills, methods, approaches or technologies. A laboratory fee will be assessed.

ESS-400 Senior Capstone I (Fall; Even Years; 3.00 Credits) The Senior Capstone course is intended to provide a real-world, project-based experience working on an advanced-level project. The student teams utilize skills they have acquired in their academic career to evaluate and provide potential solutions to realistic environmental tasks. The project will be chosen each semester based on needs and opportunities in local agencies to provide an advanced project that can be done in one semester. Prerequisite: ESS200 and Senior Standing or permission of the instructor.

ESS-401 Senior Capstone II (Spring; Yearly; 3.00 Credits; N,S) This course is the second semester of the Senior Capstone. It is intended to provide a real-world, project-based experience working on an advanced-level project. The student teams utilize skills they have acquired in their academic career to evaluate and provide potential solutions to realistic environmental tasks. The project will be chosen each year based on needs and opportunities in local agencies to provide an advanced project that can be done in one year. Prerequisites: ESS100 and ESS400 and Junior or Senior standing or permission.

ESS-410 Water Resources II (Spring; Odd Years; 3.00 Credits; QS,N) This is an advanced hydrology course aimed at furthering the students' understanding of the complex interactions of the hydrologic cycle. Particular emphasis will be placed on mathematically modeling the process including precipitation, runoff, infiltration, soil moisture and stream flow. Prerequisites: ESS310 and MA130

ESS-450 Environmental Research (Fall & Spring; Yearly; 1.00-6.00 Credits; S) An independent research experience that includes the preparation of a research proposal. Students present research results during weekly meetings with instructor. A research paper is the end point of the research experience. Presentation of results at national meetings is encouraged. May be repeated for up to 15 credits. Prerequisite: ESS100 and ESS300 and permission of the instructor.

ESS-460 Coastal Zone Management (Spring; Yearly; 3.00 Credits; S) Taught in India. This course will cover the current legal status, international treaties, state and central government coastal zone management regulations, and the history and current status of conflict and the attempts to overcome that conflict in India. This includes shrimp

farming, over fishing, pollution, shipping, oil spills changes in beach morphology and coastal topography from weirs dams, etc. Prerequisites: GL111 and ESS100.

ESS-490 Environmental Science and Studies Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; N) Note: May be repeated up to a total of 9 hours of credit. Prerequisite: Permission and Jr. or Sr. Standing. Corequisite: ESS495.

ESS-495 Env.Sci.Res./Seminar (Either Semester; Yearly; 2.00-6.00 Credits; N) Requires students to reflect on experience and/or pursue relevant research. Corequisite: ESS 490. Prerequisite: Permission. May count as F,I,S,H, or N depending on emphasis of internship.

ESS-499 Special Topics (Variable; Variable; 3.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

ESS-TUT ESS Teaching Assistant (Variable; Variable; 1.00-3.00 Credits; N)

Geology

Department Website:

<http://departments.juniata.edu/geology/>

Faculty:

- Professor Mathur (Chair) - ext. 3725
- Professor Mutti - ext. 3601
- Associate Professor Powell - ext. 3602

Background Information:

Geology is the science that explores the dynamic processes and history of the earth. Juniata's geology students gain skills necessary to enter a wide variety of professional arenas, including: environmental services and consulting, geotechnical engineering services, state and federal agencies, mineral and petroleum exploration, natural resource management, planetary science, education, and natural hazards management and mitigation. Upon completion of undergraduate degrees, many Juniata geology students continue their education through graduate studies, while others enter directly into professional careers.

Special programs, facilities, or equipment:

- "Hands on experience" starting at the introductory level, through numerous local field trips exploring spectacular geologic sites in the Appalachians
- Extended field trips (2 to 7 days) associated with most upper-level courses

- Remote Field Course in the American Southwest, taught collaboratively with faculty in Biology, Environmental Science and Studies, Anthropology, and Physics
- Hydrogeological investigations at Juniata's 665-acre Raystown Field Station
- Exceptional collections of minerals, fossil, and rock specimens
- Analytical scanning electron microscope (SEM) with cathodoluminescence
- Research quality petrographic and stereo-zoom microscopes with photographic and digital imaging capabilities
- Automated powder x-ray diffractometer
- Fluid inclusion analysis laboratory
- Ion chromatograph and portable spectrophotometer for water quality analysis laboratory, operated cooperatively with Chemistry and Biology departments
- Rock, fossil, microfossil, and mineral preparation laboratories.
- Extensive field supplies including Brunton compasses, rock sampling equipment, safety gear, camping supplies for large groups, and college-supplied vans

Programs of Emphasis:

- Geology
- Earth and Space Science/Secondary Education
- Environmental Science, with emphasis in geology
- Environmental Geology

Secondary Emphasis:

- Requirements: 18 credits in geology, those credits having been selected in consultation with a geology professor as one of the student's advisors. At least 7 of these credits must be completed in regularly taught geology courses at the 300 level or above.

Internship/Research Experiences:

- Most students complete at least one original research or external internship experience.
- In recent years, students have completed internships with the US Geological Survey, National Museum (Smithsonian), NASA, PA Department of Environmental Protection, PA Department of Transportation, National Parks Service, and numerous private sector firms.
- Recent original research projects have focused on: geochemical investigations of the Juniata River watershed, Paleozoic litho- and biostratigraphy of eastern North America, sedimentary petrology of syntectonic sandstone and conglomerate, and fluid inclusion microthermometry of sulfide-bearing mineral deposits.

Courses:

GL-100 Intro to Physical Geology (Fall & Spring; Yearly; 3.00 Credits; N) An introduction to the principles and methods of geology. Emphasis is placed on the

geologic forces at work in our physical environment. Topics covered include internal processes such as volcanism, earthquakes, mountain building and the flow of groundwater as well as external processes such as landslides, flooding, erosion and landscape formation. Emphasis is given to the interaction of human activities with these physical processes as well as the processes themselves.

GL-100A Environmental Geology (Fall & Spring; Yearly; 3.00 Credits; N) Student perceptions of what constitutes geology have shifted. Contemporary students need to be made aware that geology IS the study of the physical environment of the earth and that a central part of what geologists do entails an exploration of how humans and the built environment both affect and are affected by the earth's physical/environmental system. While our previous title and description for this course, Introduction to Physical Geology, carried these implicit understandings, we find it important now to draw students' attention explicitly to the environmental character of our study of Earth.

GL-101 Physical Geology Lab (Fall & Spring; Yearly; 1.00 Credit; N) Gives students the opportunity to do geology in the laboratory and field. Concepts and methods covered in the lecture are reinforced. Specifically covered are mineral and rock identification, map interpretation and study of examples of earth processes from maps and in the field. Note: Some field trips are required and a special fee is assessed. Corequisite or Prerequisite: GL 100.

GL-110 Death and Destruction by Nature (Spring; Yearly; 3.00 Credits; N) The course explores the processes that lead to large natural disasters. The primary goal is to give students the background information to understand the importance of earth processes and how these processes can relate to their lives.

GL-111 Oceanography (Fall; Yearly; 3.00 Credits; N) A survey of the physical, chemical, biological and geological environments of the ocean. Included are sea floor topography, composition and circulation of sea water and the life existing in the oceanic environments. Field experience is offered and a special fee is assessed.

GL-116 Sustainable Ag in Pa (Spring; Variable; 1.00 Credit; N) This is a largely experiential course exploring the food production system through visits to local natural foods producers, CSA farmers, producers of locally grown organic food for the urban market and to conventional farms for contrast. An overview is provided into issues of soil amendments, methods of pest control, feedlot and pastured meat and dairy production, and cheese-making. Students will discuss with farmers their zeal, their economic and social objectives, and their challenges. A sizable lab fee is assessed to cover multiple field trips, and includes registration for the Farming for the Future Conference of the Pennsylvania Association for Sustainable Agriculture. The course includes multiple REQUIRED weekend field trips.

GL-126 Environmental Geochemistry (Variable; Variable; 3.00 Credits; N) This course will introduce fundamental geologic process through a geochemical lens. Basic geochemical reactions involving water-rock interactions at both high and low

temperatures will be considered. The class will focus on the environmental problems in atmosphere and continents. Prereq: CH114.

GL-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) An examination of an area not regularly studied in the departmental offerings. Examples have been Geomorphology, Petroleum Geology, and Case Studies in Environmental Geology. Note: abbreviate ST: (title) students may take each ST: Course for credit.

GL-202 Historical Geology (Spring; Yearly; 3.00 Credits; N) Reviews the geologic history of North America. Stress is on the principles and methods of interpreting geologic history. The physical development of continents, mountain chains, and ocean basins is discussed as well as the evolution of life. Prerequisite: GL100.

GL-210 Mineralogy (Fall; Yearly; 4.00 Credits; N) Emphasizes the recognition of minerals in hand-specimens and by instrumental analysis. The understanding of their classification, crystal structure, chemical compositions, physical properties and stability relations is stressed. Note: One laboratory per week. A lab fee is assessed. Prerequisite: One semester of chemistry.

GL-213 Minerals, Economics, Politics and Law (Either Semester; Odd Years; 3.00 Credits; I) Introduces mineral deposits and examines the distribution and exploitation. Explores historical patterns in mineral resource utilization and considers the extractive industries in the context of economic patterns and government policies. Emphasizes the potential for conflict resulting from the uneven distribution and exploitation of mineral wealth. Note: some field trips are required. (A Peace and Conflict Studies course.) Note: this course does not fulfill the distribution requirement in science.

GL-215 Energy, minerals and Society (Fall; Variable; 3.00 Credits; N) Energy, Minerals, and Society. Twenty-first century societies run on the twin nutrients of abundant energy and the mineral resources needed to fashion technological devices. While both energy and mineral commodities are subject to wildly oscillating demand as economies alternately flourish and falter, the global demand for all such commodities has shown inexorable growth since the onset of the industrial era. Globalization has increased this rate of growth. But, extraction and use of resources invariably alters landscapes and releases pollutants into the environment. How adequate are supplies? How can they be used with minimal adverse impact? To what extent can impacts be managed by use of alternative energies, by recycling, by conservation? These topics are the focus of Energy, Minerals and Society.

GL-240 Geological Field Methods I (Fall; Yearly; 4.00 Credits; N,CW) The course is an introduction to the geology of the Appalachians through teaching geologic methods in the field. The course will focus on developing field practice and using the information collected in the field to construct a scientific document. The course is composed of 8 local fieldtrips and 1 extended fieldtrip as well as many classroom exercises. Prerequisites: GL100 and GL101. Corequisite: GL202. Note: A special course fee will be applied.

GL-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) An examination of an area not regularly studied in the departmental offerings. Examples have been Geomorphology, Petroleum Geology, and Case Studies in Environmental Geology. Note: abbreviate ST: (title). Students may take each ST: course for credit.

GL-300 Petrography (Spring; Yearly; 4.00 Credits; N) The petrographic examination of rocks in hand specimen and under the microscope. Identification of the principal types of igneous and metamorphic rocks and discussion of their chemical and mineralogical characteristics and tectonic setting is emphasized. Note: one laboratory per week, one or two major field trips are required, and a special fee is assessed. Prerequisite: GL 210.

GL-304 Paleobiology of Invertebrates (Fall; Odd Years; 4.00 Credits; N) Basic principles of paleontology and functional morphology of extant and extinct invertebrates are covered. These include identifying fossils and understanding their morphology and preservation in order to interpret ancient environments. Note: One laboratory per week and field trips are required and a special fee is assessed. Prerequisites: GL202 or BI113.

GL-305 Hydrogeology (Fall; Odd Years; 3.00 Credits; N) The study of the natural occurrence of water. Topics include: the hydrologic cycle, precipitation, stream flow, soil moisture, ground water occurrence, aquifer flow and testing chemical characteristics, contamination, development and management of ground-water resources. Note: Includes a field experience and a special fee is assessed. Prerequisites: GL100 and GL101 and MA130 and 2 chemistry courses.

GL-307 Geophysics (Fall; Even Years; 3.00 Credits; N) This course is an introduction to how geophysical data can be used to address academic and applied problems in geology. Emphasis is placed on the concepts behind acquiring geophysical data and use of the information for interpretation. Seismology, magnetism, heat and gravity are the main concepts covered. Prerequisites: GL202. MA130 may be taken as prerequisite or corequisite. There are two field trips run over the weekend where students get to use the equipment in the field and reduce the data. A special fee is assessed.

GL-310 Structural Geology (Spring; Yearly; 3.00 Credits; N) The study of the deformation of the earth's crust. Field relationships, form, symmetry, and geometry of earth structures are stressed. Concepts of kinematic and dynamic analysis are presented so students are better prepared to interpret the origin of earth structures. Note: one laboratory per week, one or two extended field trips are required and a special fee is assessed. Prerequisite: GL202.

GL-325 Intro to Soil Science (Spring; Variable; 4.00 Credits; N) Introduction to Soil Science is a comprehensive overview of soils, their characteristics, their origins, their importance to agriculture, construction and waste disposal, and of the factors that contribute to maintenance of soil quality or to its degradation in use. Theoretical concepts will be supported by laboratory and field study of soils, soil forming processes, and soil-water-rock-biotic interactions; training will be provided in techniques of field sampling

and characterization of soils. A special lab fee is assessed. Prerequisites: GL100 & GL101 & CH105.

GL-350 Geol. Research Methodologies (Spring; Yearly; 2.00 Credits) Aims to elucidate the science research process and the science infrastructure to the student. The course introduces students to research practice, analysis and writing. The course also requires students to prepare a research proposal. Students will also discuss more theoretical aspects of research: epistemology, the scientific method, multiple working hypotheses, erecting and testing hypotheses, and the scientific infrastructure. This course is designed for junior level geology students. Prerequisites: Permission of the instructor.

GL-389 Geology Professional Seminar (Spring; Yearly; 1.00 Credit) Provides guidance and preparation to Junior Geology students in relation to their post-Juniata plans. Topics include resume writing, strategies involved in a job or graduate school search, preparation for credentialing exams, preparation for interviews, and networking. Prerequisite: Junior or Senior standing.

GL-399 Special Topics (Either Semester; Variable; 1.00-4.00 Credits) An examination of an area not regularly studied in the departmental offerings. Examples have been Geomorphology, Petroleum Geology, and Case Studies in Environmental Geology. Note: abbreviate ST:(title). Students may take each ST: course for credit.

GL-400 Petrology of Igneous and Metamorphic Rocks (Spring; Even Years; 4.00 Credits; N) Analyzes the processes of magma generation and crystallization under equilibrium and disequilibrium conditions in the context of igneous phase equilibria and geologic setting. Considers the re-crystallization of pre-existing mineral assemblages in the metamorphic environments and examines metamorphic conditions by interpretation of facies assemblages and petrogenetic grids. Note: one laboratory per week; a major field trip is required and a special fee is assessed. Prerequisite: GL 300.

GL-401 Sedimentology (Fall; Even Years; 4.00 Credits; N) Focuses on the origin of sediments and sedimentary rocks. Included are sedimentary processes, depositional environments, post-depositional influences and sedimentary rock classification. Principles and methods of study including petrographic analysis are emphasized. Note: one laboratory per week, field trips are required, including a weekend trip, and a special fee is assessed. Prerequisites: GL202 and CH114.

GL-405 Principles of Stratigraphy (Spring; Odd Years; 4.00 Credits; CW,N) Includes the description of sedimentary rocks in the stratigraphic column, methods of correlation, interpretation of the origin of rock units and the historical and philosophical development of the geologic time scale. Note: one laboratory per week, field trips are required and a special fee is assessed. Prerequisite: GL202.

GL-440 Geological Field Methods II (Spring; Variable; 4.00 Credits; N) The course covers advanced geologic mapping of the Appalachians. It will focus on constructing geologic maps and cross-sections to develop an understanding of the rock record,

geologic time, and the processes by which geologists reconstruct ancient tectonic and sedimentary events. The course is field based. Prerequisites: GL 240. Note: A special course fee will be applied.

GL-450 Geological Research (Fall & Spring; Yearly; 1.00-6.00 Credits; N) The field or laboratory investigation of a specific geologic problem. Methodology and principles of interpretation are necessary for the successful completion of the course and a final report must be submitted. Note: listed as Research: (title); may be taken multiple times for credit. Prerequisite: permission.

GL-490 Geology Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; N) See the chapter, " Special Programs " under Internships. Prerequisite: Permission and Jr. or Sr. standing. Corequisite: GL495.

GL-495 Internship Research/Seminar (Fall & Spring; Yearly; 1.00-6.00 Credits; N) Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: GL 490. Prerequisite: permission.

Health Communication

Faculty: Interdisciplinary (BI, CS, CM, EN, PL, PY, SO)

Professor: Dr. Grace Fala

Fala@juniata.edu Ext. 3467

Background Information:

Health Communication is the study of communication as it relates to health professionals and health education. It includes the study of provider-client interaction as well as the diffusion of health information through public health campaigns.

Special programs, facilities, or equipment:

- Students studying health communication have opportunities to conduct internships in health care, interview a variety of health care professionals, and facilitate service learning projects in the community. Relevant study abroad opportunities are also available.

Programs of Emphasis:

- Health Communications

Individualized Programs of Emphasis:

- Student Designed POEs related to health communication have included medical communication, biology and communication, health care and communication, and so forth.

Secondary Emphasis:

- There are no secondary emphases in Health Communications at this time.

Internship/Research Experiences:

Internship examples from former Juniata Students

- Activities Director, Healing Hands Physical Therapy, Pisataway, NJ
- Human Resource Assistant, JC Blair Memorial Hospital, Huntingdon, PA
- Marketing & Event Coordinator, Morrison's Cove, Martinsburg, PA
- Public Relations Assistant, Rehabilitation Hospital , Altoona , PA
- Public Relations Assistant, Tyrone Hospital , Tyrone , PA
- Fund Raising & Event Coordinating, WIC Program, Mount Union , PA

Courses:

History

Department Website:

<http://departments.juniata.edu/history/>

Faculty:

- Associate Professor Alison Fletcher - ext. 3547
- Professor David Hsiung (Knox Professor) - ext. 3534
- Professor David Sowell (Chair) - ext. 3535
- Associate Professor Douglas Stiffler - ext. 3538
- Professor Belle Tuten (Long Professor) - ext. 3536
- Professor James Tuten - ext. 3548

Background Information:

The department offers a core of survey courses and builds this base with other courses emphasizing the social, economic, political, and cultural aspects of the past. Our strengths are in European, Latin American, Asian and U.S. studies. The department provides sound preparation for a wide variety of vocational interests, including those of historian, teacher, and lawyer, as well as those in business and government. In addition to traditional survey courses, the department offers selected in-depth studies (e.g., seminars on The Sixties, and The Great War).

Special programs:

- **Skulldiggers:** This Club for students interested in history is officially chartered with Student Government and has engaged in a number of activities including: field trips, hosting speakers and bringing order to the archival material in the Juniata College museum.
- **Phi Alpha Theta:** The Department is a member of this national history honorary society and regularly sends students to regional conferences.

Programs of Emphasis:

- History
- History and Museum Studies
- Social Studies Secondary Education Certification
- History- Secondary Emphasis

Individualized Programs of Emphasis:

- Elementary Education/History
- History and English
- History and Geology
- History and Politics
- History and Biology

Internship/Research Experiences:

- Local Attorneys
- National Park Service
- B&O Railroad Museum
- National Gallery
- Rockefeller Archive Center
- Huntingdon County Historical Society
- Pennsylvania State Archives
- Smithsonian Institution

Specific department policy:

Awarding credit for AP Exam scores: A student with an AP score of 4 will receive 3 General Elective Non-Department credits, as it will not equate to history elective.

A student with an AP score of 5 will see the Department Chair for review to determine what credit will be awarded. May receive general elective credit or a direct equate to a Juniata Course.

Courses:

HS-104 European History to 1550 (Fall; Yearly; 3.00 Credits; H,I) This course traces the history of Europe from the late Roman Republic to the Protestant Reformation. Attention is given to political, social, and religious developments during the period.

HS-106 European History Since 1550 (Spring; Yearly; 3.00 Credits; H,I) This course begins with the aftermath of the Protestant Reformation and traces European history through the Enlightenment, Age of Revolution, and the nineteenth and twentieth centuries.

HS-109 China and Japan to 1800 (Fall; Yearly; 3.00 Credits; H,I) Introduces students to the major themes in the histories of China and Japan from antiquity to about 1800. Special emphasis will be paid to the religious and philosophical foundations of Confucian civilization. \$110 course fee for overnight trip to New York City, Washington, DC or Philadelphia for visit to a major art museum. Trip fee includes Asian dinner, transportation & accommodations.

HS-110 China & Japan Since 1800 (Variable; Variable; 3.00 Credits; H,I) This course is an introduction to the histories of China and Japan since about 1800. We will survey Chinese history in the late imperial period, before examining how Western imperialism, war, and revolution changed China in the late nineteenth and early twentieth centuries. We will consider how Japan emulated the West in the nineteenth century in order to build itself into a modern imperialist power. Interrelationships between China, Japan, Korea, Vietnam and the Western powers will be stressed. No prerequisites. Note: \$75.00 course fee for trip to Washington, DC to visit the Asian art collections of the Freer and Sackler Galleries, Smithsonian Institution.

HS-115 United States to 1877 (Fall; Yearly; 3.00 Credits; H) Concentrates on the broad sweep of U.S. history from colonial beginnings through Reconstruction using a variety of perspectives and sources.

HS-116 The U.S. Since 1877 (Spring; Yearly; 3.00 Credits; H) This course uses original documents, novels, and other sources to explore the interrelationships between domestic and foreign affairs and to examine the consequences of actions taken at the national and local level.

HS-121 The Sixties (Either Semester; Variable; 4.00 Credits; H,CW) The Sixties were a period of remarkable change with lasting cultural, political, and social consequences. The course uses documents, films, and music to examine topics such as the civil rights movement, the youth movement, the Viet Nam war, and the emergence of conservative politics. Students develop writing, reading, and speaking skills in a supportive learning environment. First semester freshman students only.

HS-151 World Civilizations to 1500 (Fall; Yearly; 3.00 Credits; H,I) This course will trace the development of world civilizations from the earliest human settlements to the Age of World Exploration in the 15th century.

HS-152 World Civilizations From 1500 (Spring; Yearly; 3.00 Credits; H,I) This course will trace the development of world civilizations from the 16th century to the present.

HS-199 Special Topics (Fall; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

HS-200 The Great War (Variable; Yearly; 3.00 Credits; I,H,CW) This class is a social, cultural, and political history of the First World War. While the course will examine the different combatants and theaters of the war, we will focus on the perspective of Britain and the British Empire, as we seek to understand what it was like for soldiers and civilians to live through the war. No prerequisites.

HS-201 Samurai Legends & Lives (Variable; Variable; 3.00 Credits; CA,H,I) In this course, students analyze the ways in which the mythic images of the samurai warriors of Japan have been constructed in both Japan and the West. Students will read medieval Japanese war tales, administrative and legal documents, memoirs and reminiscences, puppet plays, and view films to understand how these ideas and images were created, and changed, through time. Prerequisites: Take EN110 or EN109.

HS-204 Australia/New Zealand (Either Semester; Variable; 3.00 Credits; I,H) This course is a comparative introduction to the history of New Zealand and Australia. We will begin the course by studying the indigenous people of the region: Australian Aborigines in Australia and Maoris in New Zealand, before moving to think about the arrival of white settlers. During the semester, we will pay particular attention to the process of colonization and dispossession, race and gender relations, the search for national identity, popular culture, and politics in the two countries.

HS-211 Social History of Medicine (Either Semester; Variable; 3.00 Credits; CA,H,I) This interdisciplinary course focuses upon medicine and health care from different cultural, historical, political, and social perspectives. It explores the primary features that have shaped medicine and health in the Americas. In exploring understandings of human illness and health care; it examines the role of science in health care; the history of medicine and the professionalism of medicine and health care delivery.

HS-213 History of Ireland (Fall; Variable; 3.00 Credits; H) This course is an introduction to the history of Ireland, beginning with an overview of the early history. We will then explore the Tudor revolutions, English colonialism, the influence of religion on Irish identities, Irish Republicanism and home rule movements, the partition of Ireland, the creation of the Irish Republic, and the " troubles " in the North. No prerequisite.

HS-215 Rome: Republic to Empire (Spring; Variable; 3.00 Credits; H) People through history have imagined Rome in different ways, and it conjures up lots of different images for us: civilization; barbarism; conquest; freedom; slavery; technology; virtue and vice. In this course we will explore the period between the founding of Roman civilization and the year 325 A.D., examining what the Romans thought and said about themselves and what they mean to us today.

HS-221 Gender and Sexuality (Spring; Yearly; 3.00 Credits; H) In this introduction to the critical study of gender and sexuality, we will examine the ways in which gender and sexuality have been fundamentally reorganized since the 18th century. Focusing mainly, but not exclusively, on Britain and the United States, we will use history, literature, and theory to deepen our understanding of these transformations.

HS-249 Public History (Spring; Variable; 3.00 Credits; H) This course provides a general introduction to the practice of history beyond a classroom's walls and for the public's benefit. Students will create public history projects that address such questions as " What kind of stories, and whose, should the historian tell? How do we tell them? Which historical materials are worth saving, and why? " Field trips are required.

HS-262 North American Environmental History (Spring; Odd Years; 3.00 Credits; H) This course examines human relationships with natural ecosystems over time, changing ideas of nature and how such actions and ideas change the environment and human society.

HS-264 Latin American Society and Culture (Either Semester; Variable; 3.00 Credits; H,I,CW) This course provides a historical overview of Latin American society and culture. It focuses upon the development of colonial societies, the establishment of independent governments, and the major economic, social, and political characteristics of nineteenth and twentieth century Latin America. Throughout, attention will be directed toward the understanding of " human tradition " of the past and present inhabitants of the region.

HS-272 Early North America (Spring; Odd Years; 3.00 Credits; H,CW) This course examines the history of North America from about 1500-1750 by examining native peoples, African slaves, and the rival empires of England, France, Spain, the Netherlands, and Russia. Students will work extensively with primary sources, those materials created during this time period, as well as with scholarly articles and books.

HS-277 History of Food (Fall; Yearly; 3.00 Credits; H) This course will take a transnational view of the history of food from the Middle Ages to the twenty-first century. We will examine food as a part of human experience including its roles as sustenance, commodity, cultural artifact, signifier of identity, and art. While the early emphasis of the course will be on the Atlantic World and the global exchange of foods and cooking techniques, particular attention will be on the United States' regional cuisines and food movements. The course will use scholarly texts, films, field-trips and will require some cooking and tasting of food on some evenings. Prerequisites: Sophomore Standing.

HS-293 Sophomore Colloquium (Spring; Yearly; 2.00 Credits; H,CW) This colloquium exposes students to employment opportunities available to them through the study of history. It focuses upon the development of the skills necessary for success in the history classroom. The Sophomore Colloquium is designed for students with strong interest in history, including education students and students with secondary emphases in history.

Pre-requisites: sophomore standing and two courses in History or permission of the instructor.

HS-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offers supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Note: Students may take each ST: course for credit.

HS-302 Crime/European History (Spring; Yearly; 3.00 Credits; H,I,CW) Law is a creation of society, and works to enforce social and moral rules. In this course we will explore how crime and punishment were defined and carried out in Europe and the United States from Roman times to present. The course will take students through a series of case studies, beginning with Roman and Germanic law and ending with an examination of the fictive U.S. court case of the Speluncean Explorers. In the meantime we will explore definitions of crime, theories of just and unjust punishments, the development of state-sponsored justice, and the invention of rehabilitation. The course will be entirely discussion-based. Prerequisites: HS104 or HS151.

HS-305 The American Revolution (Spring; Even Years; 4.00 Credits; H,CW) Examines the social, political, economic and ideological origins and consequences of the American Revolution. Students will use different historical perspectives and techniques to analyze critical issues such as organizing resistance, winning independence, and stabilizing the revolution.

HS-306 People's Republic of China (Spring; Yearly; 4.00 Credits; I,H,CW) This course is an upper-level seminar on the history of the Chinese Communist Party and the People's Republic of China. This is a College Writing course (CW), so a principle aim of the course is to instruct students in the techniques of writing papers in history. Work in the course will culminate in a term paper on a topic in 20th-century Chinese History. To that end, considerable effort will be spent in introducing students to tools and strategies for understanding the English-language historiography of Modern China. Some prior knowledge of Chinese history and civilization is recommended.

HS-309 Civil War and Reconstruction (Fall; Yearly; 3.00 Credits; H,CW) Examines the political, social, military, economic and ideological origins and consequences of the Civil War and Reconstruction. The course looks deeply into several important questions. What caused the Civil War? Why was the Union victorious? Why did the war proceed as it did? What was the nature and legacy of reconstruction? What does this period in our history mean to us now? Prerequisites: HS115 or HS116 and SO, JR, or SR standing.

HS-311 20th Century American Wars (Variable; Variable; 3.00 Credits; H) Examines individual perceptions of war's purpose and meanings and the changing patterns of personal experience in combat. This course also studies the methods of mobilizing the nation for war, the home front experience, and the role of technology in altering the nature of war. Little time will be spent discussing tactics or the technical processes of war-making. Prerequisites: HS116.

HS-312 The New South: 1877-1990 (Spring; Variable; 3.00 Credits; H) This seminar will cover the years 1877-1900 and explore the themes on the cultural, political, economic and social history of the U.S. South. Among the important questions covered in the class are: What is the South? How did the South change through significant events such as the Populist movement, the rise of Jim Crow, the Great Depression, the second World War, economic development, and the Civil Rights movement. We will ask how the South's arts, especially music, reflect its history and culture. Prerequisites: HS116 or permission of the instructor.

HS-314 Medieval Medicine (Spring; Yearly; 3.00 Credits; H,CW) Despite our popular understanding of the European middle ages as a dirty, disease-ridden, hopelessly backward period, the sources show us quite a different picture. Although a lack of understanding of the means of genetic change and the cause of viral and bacterial disease caused medieval people to understand the human body very differently than we do, that system was not without its logic and efficacy. This course will explore the human body and its diseases in the middle ages through a series of connected readings that introduce the body as a conceptual system and medieval science's attempts to understand it. We will then look at the growing field of genomic research as a way of understanding and comparing our modern systems of understanding the body.

HS-322 Women's Lives-Medieval Europe (Spring; Odd Years; 3.00 Credits; H,CW) What could medieval women do? What was it like to be a nun? Who were witches? There are many interesting questions to ask about women in the middle ages, their choices and their experiences. In this three-hour course we will address them through firsthand accounts from biographies, personal diaries, and literature. Prerequisite: HS104 or permission of instructor.

HS-323 Social Violence in Latin America (Variable; 3.00 Credits; H,I) Focuses on the changing nature of social violence as a means of viewing the broad panorama of Latin American social history, particularly social tensions that reveal critical periods of transition. Theoretical frameworks for understanding social violence introduce the topic. Prerequisite: HS264 or permission of instructor. (A Peace and Conflict Studies course).

HS-325 The U.S. Since 1945 (Either Semester; Variable; 3.00 Credits; H) Covers the social, political and economic history since the Second World War. Themes include: the Cold War, suburbanization, the rise of consumer society, and more. Prerequisite: HS116.

HS-326 Modern China (Spring; Yearly; 3.00 Credits; H,I) China over the past hundred years has played a major role in global affairs and is positioned to remain a dominant presence well into the 21st century. This course examines the rise of modern China focusing on its transition from a traditional Confucian state to a potent economic and political power.

HS-333 Slavery in the Americas (Spring; Even Years; 3.00 Credits; CA,H,I) This course offers a survey of slavery in the America's, from its beginnings in the early 1500's till its final abolition in the late 1880s. During this period an estimated 11-15 million

people were enslaved in the America's, most of them in Brazil and the Caribbean. This course, run as a seminar, will examine multiple aspects of the experience of slaves in the America's. Prerequisites: HS115 and HS264 or permission of the instructor.

HS-335 *Filming the Dark Ages* (Variable; Variable; 3.00 Credits; CW) This course will examine the portrayal of the middle ages in Britain and continental Europe in American and European films. The middle ages have caught at the imagination of many filmmakers in the twentieth century, but these filmmakers have often presented conflicting and confusing views of the period. Their views have helped to shape our modern perception of what the middle ages were all about - but at the same time, the films say much more about our time than they say about the past. Prerequisites: Take one 100 or 200 level history course.

HS-348 *Contemporary Latin America* (Fall; Odd Years; 3.00 Credits; H,I) Examines the political culture of contemporary Latin America. It pays special attention to the problems of democratization of a traditional authoritarian region and to barriers to social and economic progress. Prerequisite: HS264 or PS102 or permission.

HS-363 *Southern Africa* (Fall; Variable; 3.00 Credits; I,H) This course is a survey of the history of southern Africa from the 17th century to the present that highlights the social, cultural, and economic dynamics of both African and settler societies. While the course encompasses the broader region of southern Africa, most of the readings will be drawn from the history of South Africa. We will focus our attention on specific themes, including race and ethnicity, gender, resistance to apartheid, and reconciliation. No prerequisites.

HS-367 *Women in Africa* (Fall; Variable; 3.00 Credits; CA,H,I) This course will provide students with an understanding of women in sub-Saharan African cultures, their history, traditions, diversity, resilience and adaptability. To do this we will be looking at social structure, kinship networks, economic systems, gender relations, ethnicity and ethnic conflicts, traditional religion, the HIV/AIDS epidemic and other health issues.

HS-399 *Special Topics* (Either Semester; Variable; 1.00-4.00 Credits) Provides supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Note: Students may take each ST: course for credit.

HS-400 *Crimes Against Humanity* (Fall; Variable; 4.00 Credits; I,H) This course explores the emergence, evolution, varieties, underlying causes, and means of confronting and coming to terms with genocide and other crimes against humanity. During the course of the semester, we will examine a range of historical contexts and we will also confront tough questions about ethics, resistance, and responsibility. Prerequisites: Junior or Senior standing. Sophomores require permission.

HS-492 *History Internship/Need Paperwork* (Fall & Spring; Yearly; 2.00-9.00 Credits; H) (see the chapter, Special Programs under Internships.) Prerequisite: Permission. and Jr. or Sr. standing. Corequisite: HS495.

HS-493 The Historian's Craft (Fall; Variable; 4.00 Credits; H,CW) This course is a seminar-style introduction to historiography and a forum in which senior history students complete part or all of their senior thesis. Students taking the course are expected to work simultaneously with the course instructor, as well as a thesis advisor from within the history department. Students may select a member of the faculty outside the department as a secondary advisor if that complements their thesis topic. Students who elect to write a year-long thesis take HS496 in the Spring semester after taking HS493. Students from other departments who take the course will be expected to complete a paper of comparable length to a senior thesis under the supervision of the course instructor. Prerequisites: One 300 level history course and Senior status.

HS-495 Senior History Research/Seminar (Fall; Yearly; 2.00-4.00 Credits; H) Serves as a capstone experience that synthesizes materials from history and other disciplines into a substantial written thesis. The senior seminar can be done as an independent study or in conjunction with an internship. When completed the thesis is presented at a public oral defense. Prerequisite: Completion of all core courses and/or permission of instructor.

HS-496 Senior History Research/Seminar II (Spring; Yearly; 3.00 Credits; H) If a student needs to work further on the senior thesis, this will allow three further hours of study. Prerequisites: HS493 and Senior standing.

HS-499 Special Topics (Variable; Variable; 1.00-3.00 Credits) Allows departments to offer topics not normally taught. Prerequisites and corequisites vary by topic.

HS-TUT History Teaching Assistant (Variable; Variable; 1.00-3.00 Credits; H)

Information Technology and Computer Science

Department Website:

<http://departments.juniata.edu/itcs/>

Faculty:

- Professor Marlene Burkhardt (ABE and IT)
- Professor Gerald Kruse (Mathematics and Computer Science)- ext. 3595
- Professor Loren Rhodes (Endowed Chair) - ext. 3620
- Professor William Thomas - ext. 3621
- Professor Donna Weimer (Communication) - ext. 3462
- Associate Professor John Wright - ext. 3592
- Instructor Joel Pheasant (Director to Technology Solutions Center) - ext. 5334
- Instructor Ryan Gibboney (Integrated Media Arts) - ext. 3575

Background Information:

The **Information Technology** program prepares students to be leaders in the field of Information Technology. The common characterization of an information technologist is as the “user’s advocate” in the computing world. Information technologists approach technology from the user’s point of view rather than from the technology’s point of view and tend to think of technology and computing as powerful tools for solving problems rather than ends in themselves. IT students tend to care more about how people use computers for solutions than about how computers work “under the hood.” Information Technology complements existing programs in Business, Computer Science, and Communication, and can be combined with widely varied programs such as Theatre with Integrated Media Arts, Environmental Science with the GIS certificate and Biology with the Genomics Leadership certificate.

The **Business and Information Technology** program combines key elements of the IT program and Business from the Accounting Business and Economics department.

The program in **Computer Science** develops problem solving and analytical skills through the study and implementation of algorithms, systems design and software development on modern computation platforms and provides for students to skills that adapt well to the fast changing technologies of today and the future. The Computer Science program is recommended for those students considering graduate work in the technology fields.

The **Integrated Media Arts** program is a flexible interdisciplinary POE combining areas in IT, Communication, and Arts that prepares student for work in varied media production careers. Students can focus their programs in the creative, critical analysis or technology management aspects of digital media.

Special programs, facilities, or equipment:

- State-of-the-art IT classrooms
- Advanced teaching labs that include networking, multimedia, telecommunications, UNIX and virtual servers
- Teaching/Learning Technologies Center
- Innovations for Industry work room, with team laptops and servers for student and client projects
- Access to, and budget for, cutting-edge software to support student projects across the curricula
- Professional digital video editing suites, digital audio production systems, and digital arts systems
- Cross-disciplinary programs
- Webex teleconferencing software
- Most major program languages used in industry and research such as Java, C++, C#, Python, Perl, PHP, HTML, XML, Scheme, OpenGL, Ruby, etc.
- Professional media software: Adobe Creative Cloud suite of Design, Photoshop, Flash, InDesign, Illustrator, Dreamweaver, ProTools

- International exchange opportunities in Germany, France, Czech Republic, Ireland, Hungary, England, and Australia.

Programs of Emphasis:

- Information Technology
- Business and Information Technology
- Computer Science
- Integrated Media Arts (Digital Media)

Secondary Emphasis:

- Requirements for IT: 24 or more credits from the core list of courses.
- Required for Computer Science: 24 or more credits from the CS core list of courses.
- Required for Computer Programming: 20 credits from CS core list.

Internship/Research Experiences:

- Avail Technologies (PA)
- Concurrent Technology Corp. (PA)
- Computer Science Corp. (NJ)
- comScore (VA)
- Ellucian (Datatel) (VA)
- Digital Solutions, Inc. (PA)
- GE/NBC (NY)
- Mutual Benefit Group (PA)
- National Drug Intelligence Center (PA)
- PA State House of Representatives (PA)
- Pennsylvania Power & Light (PA)
- Sarasota Memorial Hospital (FL)
- UPMC (PA)

The Interdisciplinary CORE courses required for the Information Technology POE

- IT 110 Principles of Information Technology or IT 111 Principles of IT Science or IM 110 Principles of Digital Media
- MA 116 Discrete Structures
- CS 110 Computer Science I
- IT 210 Info Tech Systems
- Accounting, Business and Economics elective
- CM 200 Art of Public Speaking
- CS 240 Computer Science II
- IT 290 metaverse
- CM 300 Professional Presentations or EN 315 Technical Writing

- IT 306 Software Engineering
- IT 325 Network Design
- IT 350 Security Engineering
- IT 376 Database Design
- IT 307 Project Management
- IT 308/380/480 Innovations for Industry

The CORE courses required for Computer Science POE

- IT 110 or IT 111 Principles of IT
- CS 110 Computer Science I
- CS 220 Computer Organization
- CS 240 Computer Science II
- CS 255C C++ Programming
- CS 300 Software Engineering
- CS 305 Software Models
- CS 315 Algorithms and Analysis
- CS 370 Database Management Systems
- IT 305 Innovations for Industry I
- MA 116 Discrete Structures
- MA 130 Calculus I
- MA 220 Intro to Probability and Statistics
- CS-320 Operating Systems
- CS-362 Languages and Translation
- CS 480 Computer Science Seminar

The CORE courses required for Integrated Media Arts POE

- IT 110 or IT 111 Principles of Information Technology
- IM 100 First Year Seminar
- CS 110 Computer Science I
- CM 133 Mass Media & Society
- AR 110 Survey of Western Art
- AR 104 Design + Color or AR 103 Drawing
- AR 203 Digital Photography I or AR 204 Digital Art
- AR 329 Early Modern Art or AR 330 Modern to Contemporary Art
- CM 290 The metaverse
- CM 300 Professional Presentations
- IM 241 Info. Discovery and Arch
- IT 310 Hypermedia/ Social Media
- IM 275, 276 Integrated Media Arts Lab

The CORE courses required for Business and IT POE

- IT 110 Principles of Information Technology or IT 111 Principles of IT Science or IM 110 Principles of Digital Media

- EB 101 Introduction to Business
- EB 131 Financial Accounting
- CS 110 Computer Science I
- EB 201 The Management Process
- EB 202 Behavioral Analysis Org.
- EB 210 Quantitative Bus. Analysis or MA 130 Calculus I
- IT-210 Information Technology Systems
- CM-200 Art of Public Speaking
- EB 203 Intro to Business Law or EB 204 Legal Regulation of Bus.
- EB 105 Int. Economic Issues
- EB 236 Managerial Accounting
- EB 357 Cyber Marketing
- IT-307 Project Management
- IT-308 Innovations for Ind. I
- IT-341 Web Design
- IT-290 The Metaverse
- EB 480 Senior Seminar
- IT-375 Managing Advanced Technology

IT-100 Information Access (Fall & Spring; Yearly; 1.00 Credit; C) This competency-based course is designed to acquaint incoming students with the campus information technology, its network and computer applications needed for many courses at Juniata. In addition, research methods and formal citation using college library resources are covered. Web-based materials, short projects, and written assignments are used to demonstrate competency in numerous areas. Corequisite: EN110.

IT-110 Principles of Information Technology (Fall & Spring; Yearly; 3.00 Credits; S) This course provides a context for further study in information technology. Topics include an overview of the fundamentals of information systems, current and emerging technologies, business applications, communications and decision making, and the impact of these systems on business, government, and society. This course will also emphasize the development of both writing and speaking skills through application of the concepts that define the course. Students who have passed IT111 or IM110 may not take this course.

IT-111 Principles of IT Science (Fall & Spring; Yearly; 3.00 Credits; N) An introduction to concepts of information and the " Information Age ". Students will develop an understanding of basic computing and information systems principles and the social implications of information and information technology. The course also provides an overview on the creation, organization, analysis, storage, retrieval, and communication of information. The instruction incorporates both collaborative and action learning experience. (Students who have passed IT110 may not take this course. The meeting time reflects half of the time of the class, where the rest is on line and completed by assignments). IT111 is equated to IM110 and IT110. If you've taken IM110 or IT110 and then register for IM110 it will show as a repeat for you.

IT-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

IT-210 Information Technology Systems (Fall; Yearly; 4.00 Credits; N) This course introduces students to three core areas in Information Technology: networks, database and web. The course progresses through two phases during its study of modern IT environments. Initial study includes all the necessary components of today's IT system environment and its use in business. Secondly, students use a server based database development environment to create an IT system. Prerequisites: CS110. MA116 strongly recommended.

IT-260 Human Computer Interaction (Spring; Yearly; 3.00 Credits; S) To users of any system, the interface is what they see and think of as the computer. Interaction with a computer can be better defined in terms of interface, as any part of the computer system that the user comes in contact with, either physically, perceptually, or conceptually. Human interaction with computers can be studied, designed, evaluated, with the goal being to produce usable products from a human-centric perspective. Prerequisites: CS110.

IT-290 The Metaverse (Fall; Yearly; 3.00 Credits; H,CW,CS) This introductory course focuses on how information technologies shape the way we think and organize ourselves. Studying the technology of the book, the world wide web and the metaverse, students isolate the critical issues of change central to the decision making of leaders in Information Technology. Prerequisites: CM132 and IT110 or IT111. Cross listed as CM290.

IT-298 Info. Tech Practicum I (Fall & Spring; Yearly; 1.00-4.00 Credits; S) Credit option for students who are applying their classroom theory from the department by working on information technology or digital media projects on campus or off-campus. Credit hours and level (298, 398 or 498) are dependent upon the extent of the project and will be determined by the professor. Available by permission only.

IT-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

IT-306 Software Engineering (Spring; Yearly; 3.00 Credits; N) See CS300. Prerequisite: CS240.

IT-307 Project Management (Fall & Spring; Yearly; 3.00 Credits; S,CW,CS) This course reviews and applies project management processes and techniques such as project life cycle, project selection methods, work breakdown instructions, network diagrams, cost estimates, and more. prerequisites: IT210 and Jr or Sr standing or permission of the instructor. Corequisite: IT308.

IT-308 Innovations for Industry I (Fall & Spring; Yearly; 1.00 Credit; S) This lab will require a team of students to function as a project development team for an IT- related business. The students will be exposed to many aspects of systems analysis, design, development and implementation, as well as project management tools and techniques. Students will be required to learn in a just-in-time mode using on-demand educational resources. Prerequisites: IT210 and Jr or Sr standing or by permission of the instructor. Corequisite: IT307. Note: This course will have appointed class times for projects other than the times listed on the schedule.

IT-310 Social Media (Spring; Odd Years; 3.00 Credits; F) Explores the principles of communication in electronically mediated environments and the ways in which multimedia software and hardware can be employed effectively in professional and educational environments. The course deals extensively with digital video techniques, including operation, production, filming, editing and streaming. Working in teams, students will produce a series of products throughout the semester. Prerequisites: IT110 or IT111 or IM110. Corequisite: CM133.

IT-325 Network Design & Management. (Spring; Yearly; 4.00 Credits; N) Focuses on the concept of the foundations of a network in both design and support. The OSI reference model will be examined along with techniques for supporting current technologies that align with each other. Emphasis will be placed on protocols, topologies and traffic analysis. Prerequisites: CS240 or IT210.

IT-330 Geographical Information Systems (Fall & Spring; Yearly; 4.00 Credits; N) (See EES330). A software fee is assessed.

IT-341 Web Design (Fall; Yearly; 2.00 Credits) A study of modern web design along with an examination of markup and scripting languages (e.g., HTML, JavaScript), page, image and multimedia formats, and the techniques in developing and managing a web site. Page design, graphical user interfaces, interactive techniques and the importance of e-commerce are also emphasized. Prerequisites: CS110 or permission.

IT-342 Web Programming (Fall; Yearly; 2.00 Credits) A study of the modern web programming environment, including introduction to Web 2.0 and Web 3.0, HTML, XHTML, and JavaScript. The class will address client side scripting as well as server side technology, and accessing a database. These technologies will be combined to create an active, dynamic web page. Prerequisites: CS240. Co-requisites: IT341.

IT-350 Security Engineering (Spring; Variable; 3.00 Credits; N) This course will focus on the area of computer security. Included will be information on attacks, prevention, as well as protection from non-malicious threats. It will look at network as well as web based security. A focus will be on creating secure computer environments from the ground up, not as an afterthought. Prerequisites: IT210 and junior standing or permission of the instructor.

IT-351 Security Engineering Lab (Spring; Yearly; 1.00 Credit) This course is a laboratory course with hands-on activities to supplement the instruction given in the IT350, Security Engineering course. The lab activities will center on digital forensics, hacker exploits and protection techniques, penetration testing and vulnerability analysis. Co-requisite IT350.

IT-375 Managing Advanced Technology (Either Semester; Variable; 3.00 Credits; S,N) This course will help students develop an ability to manage advanced technology for competitive advantage. Organizational issues associated with identifying, developing, and implementing advanced technology will be discussed. Specific topics to be addressed include developing a new technology, technology transfer, commercialization of new technology, technology strategy, organizational design to complement new technology, and the impact of technology on human resources. Prerequisites: IT110 and Junior standing or permission of the instructor.

IT-380 Innovations for Industry II (Fall & Spring; Yearly; 4.00 Credits; S) See IT308. This course will have appointed class times for projects other than those listed on the schedule. A continuation of IT308. Prerequisites: IT307 & IT308 and senior standing.

IT-398 Information Technology Practicum II (Fall & Spring; Yearly; 1.00-4.00 Credits; S) Credit option for students who are applying their classroom theory from the department by working on information technology or digital media projects on campus or off-campus. Credit hours and level (298, 398 or 498) are dependent upon the extent of the project and will be determined by the professor. Available by permission only.

IT-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

IT-480 Innovations for Industry III (Fall & Spring; Yearly; 4.00 Credits; S) See IT300. This course will have appointed class times for projects other than those listed on the schedule. A continuation of IT380. Prerequisites: IT380 and senior standing.

IT-490 Information Technology Internship (Fall & Spring; Yearly; 2.00-9.00 Credits) See Internship in the catalog. Corequisite: IT495. Prerequisite: Jr. or Sr. standing.

IT-495 IT Internship Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits) See Internship in the catalog. Corequisite: IT490.

IT-496 Information Technology Seminar (Fall & Spring; Yearly; 1.00 Credit; S) Discusses current advances in information technology not otherwise covered in our program such as, but not limited to, networking, artificial intelligence, societal issues. In addition, this course allows senior students to plan an individual research project to be completed in IT497. Prerequisites: Junior or Senior standing and IT210 or CS240.

IT-497 Information Technology Research (Fall & Spring; Yearly; 3.00-5.00 Credits; S,CW) Allows students to carry out the independent technology research project as designed in IT496. Prerequisites: IT496.

IT-498 Information Technology Practicum III (Fall & Spring; Yearly; 1.00-4.00 Credits; S) Credit option for students who are applying their classroom theory from the department by working on information technology or digital media projects on campus or off-campus. Credit hours and level (298, 398 or 498) are dependent upon the extent of the project and will be determined by the professor. Available by permission only.

IT-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer topics not normally taught. Prerequisites vary by title.

IT-TUT IT Teaching Assistant (Variable; Variable; 1.00-4.00 Credits) Teachers Assistant

International Studies

Department Website:

<http://departments.juniata.edu/is/>

Core Faculty:

- Professor Bradley Andrew (Economics) (Chair) - ext. 3378
- Associate Professor Alison Fletcher (History) - ext. 3547
- Associate Professor Michael Henderson (French) - ext. 3497
- Professor Emil Nagengast (Politics) - ext. 3650
- Professor James Roney (Russian) - ext. 3495
- Professor David Sowell (History) - ext. 3535

Associated Faculty:

- Professor Jack Barlow (Politics) - ext. 3651
- Professor David Hsiung (History) - ext. 3534
- Associate Professor Douglas Stiffler (History) - ext. 3538
- Professor Henry Thurston-Griswold (Spanish) - ext. 3499
- Professor Belle Tuten (History) - ext. 3536

Background Information:

An awareness of international issues and the ways in which people understand and fail to understand one another requires an appreciation of the complex interactions between the economic, social, political, and cultural variables that affect human existence. At Juniata, the International Studies Program involves a unique, interdisciplinary combination of common experiences, individualized areas of concentration, language study, study abroad

and a cooperative research colloquium for seniors. Because International Studies is by nature interdisciplinary, the courses below represent a small sample of the courses available to students. International courses from several departments may be taken as part of an International Studies POE.

[Program of Emphasis:](#)

- International Studies

[Individualized Programs of Emphasis:](#)

- International Political Economy
- International Studies, German and Spanish
- International Studies and Russian
- International Studies and French
- International Studies and Business

[Internship/Research Experiences:](#)

- Mennonite Economic Development Association
- Foreign Agricultural Service

[Courses:](#)

IS-104 Ideas & Power in the Modern World (Spring; Yearly; 4.00 Credits; H,I,CW) An integrative examination of human experience with an emphasis on language, gender, race and literature and the ways in which different cultures understand human reality. This course may fulfill a Humanities or International or Social Science distribution.

IS-105 World Regional Geography (Either Semester; Yearly; 3.00 Credits; I) A survey for the world's major cultural realms. Included are geographic setting, resources, environmental restrictions, historical and cultural traditions, industrial and agricultural development, economic base and trends, population distribution and political subdivisions.

IS-106 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topics. Prerequisites vary by title.

IS-200 Politics & Culture of Modernization (Either Semester; Yearly; 4.00 Credits; IC) Examines the process of globalization and modernization and the changing political and cultural ideas which have accompanied them using various media and materials from different cultures to ask who we are, where we are and how we got there. Prerequisites: EN110 or EN109 or EN199B and Sophomore, Junior or Senior Standing.

IS-400 Senior Seminar in International Studies (Fall; Yearly; 3.00 Credits; H,I) Provides students who have recently returned from study abroad with a common focus for the

exchange of ideas about diverse international experiences. Annual topics will be chosen from international politics, literature, and culture. Intensive classroom discussions of the weekly readings will allow each student to contribute to the collective learning process, regardless of their individual areas of concentration. Prerequisites: Senior status, study abroad and/or IS104 or permission of the instructor.

Mathematics

Department Website:

<http://departments.juniata.edu/math/>

Faculty:

- Professor John Bukowski (Chair) - ext. 3591
- Associate Professor Henry Escudro - ext. 3596
- Professor Gerald Kruse - ext. 3595
- Associate Professor Kimberly Roth -ext. 3593
- Professor Catherine Stenson - ext. 3736
- Professor Benjamin Sunderland - ext. 3590

Background Information:

Mathematics is arguably the most fundamental of all academic disciplines. Often called the universal language, mathematics underlies a great part of the physical sciences and also has important connections to computer science, philosophy, economics and business, music, and many other fields. At the same time, mathematics can be regarded as high art, well worth studying for its stark beauty alone. Contrary to beliefs that it is a static discipline, mathematics is currently in a period of explosive growth in its internal development and its applications, and in the use of technology to enhance and extend our understanding. At Juniata, we strive to equip our students to appreciate and participate in this exciting evolution. To this end, we are fortunate to enjoy close ties with the departments of Information Technology and Computer Science, Physics, and Accounting, Business, and Economics. Just as important, we have a close working relationship with the Education Department to support a strong preparation for teaching mathematics at the secondary level.

Special programs, facilities, or equipment:

- Variety of mathematical software including Maple and Mathematica, the statistical packages Fathom, Minitab, and SPSS, and typesetting program LaTeX.
- Opportunity to attend occasional Mathematics Colloquium
- Opportunity to participate in events of Null Set (math club), including attendance at regional undergraduate mathematics conferences.

Programs of Emphasis:

- Mathematics
- Mathematics and Secondary Education

Individualized Programs of Emphasis:

- Mathematics and Physics
- Mathematics and Computer Science
- Biochemistry and Applied Mathematics
- Chemistry and Mathematics
- Mathematics and Finance
- French and Mathematics

Secondary Emphasis:

- Requirements for a secondary emphasis in Mathematics are available and can be found at <http://departments.juniata.edu/math/poes.html>

Internship/Research Experiences:

- MASS program at Penn State University
- Summer Research experience for undergraduates at various universities

Specific department policy:

Awarding credit for AP Exam scores:

- for a score of 4 or 5 on the Calculus AB exam. If the student accepts the AP credit, he/she may then schedule Calculus II if so desired, but may NOT take Calculus I for (additional) credit.
- for a score of 4 or 5 on the Calculus BC exam. We award credit for Calculus I, plus two additional credits of general 200-level mathematics. If the student accepts the AP credit, he/she may then schedule Calculus II if so desired, but may NOT take Calculus I for (additional) credit.
- for a score of 4 or 5 on the Statistics exam. We award three credits of general 100-level mathematics with the QS designation.

Courses:

Many of the mathematics courses use mathematical software such as Maple and statistics software such as Minitab to facilitate computation and aid mathematical reasoning.

MA-100 Precalculus (Fall & Spring; Yearly; 3.00 Credits; N,QM) This course is designed for students who need a structured review of precalculus mathematics. Topics covered include solving equations and inequalities, graphing, and analysis of functions, including polynomial and rational functions, exponential and logarithmic functions and trigonometric functions. Integrates the use of the software package Maple in classroom

demonstrations and homework assignments. This course cannot be included in a mathematics POE. Prerequisites: High school algebra and trigonometry.

MA-103 Quantitative Methods (Fall & Spring; Yearly; 3.00 Credits; Q) This course prepares students to be quantitatively literate citizens in today's world. By learning to think critically about quantitative issues, students will be able to make responsible decisions in their daily lives. Problems are analyzed and solved using numerical, graphical, statistical, and algebraic reasoning. Technology is used to help visualize data and facilitate calculations, as well as to present quantitative output and verbal arguments.

MA-116 Discrete Structures (Fall; Yearly; 4.00 Credits; N,Q) Introduces mathematical structures and concepts such as functions, relations, logic, induction, counting, and graph theory. Their application to Computer Science is emphasized.

MA-130 Calculus I (Fall & Spring; Yearly; 4.00 Credits; N,QM) An introduction to calculus including differentiation and integration of elementary functions of a single variable, limits, tangents, rates of change, maxima and minima, area, volume, and other applications. Integrates the use of computer algebra systems, and graphical, algebraic and numerical thinking.

MA-155 The Heart of Mathematics (Spring; Yearly; 3.00 Credits; N) The goal of this course is to give non-mathematics students the hands-on experience of doing mathematics. Topics include infinity, higher dimensions, chaos, and probability. The emphasis will be on the process of doing mathematics: generating examples, looking for patterns, making conjectures, and proving these conjectures. May not be taken if you have completed MA130.

MA-160 Linear Algebra (Fall & Spring; Variable; 3.00 Credits; N,QM) An introduction to systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues, and applications.

MA-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of mathematics not currently included in the regular course offerings.

MA-208 Symbolic Logic (Fall; Yearly; 3.00 Credits; N,H) See description for PL208.

MA-210 Foundations of Mathematics (Fall; Yearly; 3.00 Credits; CW) An introduction to the logical and set-theoretic basis of modern mathematics. Topics covered include propositional and predicate logic; induction; naive and axiomatic set theory, binary relations, mappings, infinite sets and cardinality; finite sets and combinatorics; and an introduction to the theory of computability. Students will learn to read and to express mathematical ideas in the set-theoretic idiom. Prerequisites: MA160 or MA116 or PL208 or MA208 or permission of the instructor.

MA-220 Introduction to Probability & Statistics (Fall & Spring; Variable; 4.00 Credits; N,QS) An introduction to the basic ideas and techniques of probability theory and to

selected topics in statistics, such as sampling theory, confidence intervals, and linear regression. Prerequisite: MA130.

MA-230 Calculus II (Fall & Spring; Yearly; 4.00 Credits; N,QM) Expands the treatment of two-space using polar and parametric equations. Emphasizes multivariable calculus, including vectors in three dimensions, curves and surfaces in space, functions of several variables, partial differentiation, multiple integration, and applications. Prerequisite: MA130.

MA-233 Integrals Series & Differential Equations (Fall; Yearly; 2.00 Credits; N) Integration, Taylor and Fourier series, and an introduction to differential equations, with applications and the use of the software package Maple. (Course meets four times per week and concludes at midterm.) Note: A student may receive credit for MA233 or MA235, but not for both. Prerequisite: MA130.

MA-235 Calculus III (Fall; Yearly; 4.00 Credits; N,QM) A continuation of the calculus sequence. Topics include methods of integration by Simpson's Rule, applications, Taylor and Fourier series; introduction to ordinary differential equations; integration in polar, cylindrical, and spherical coordinates; differential and integral vector calculus. Prerequisites: MA230.

MA-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of mathematics not currently in the regular course offerings. Prerequisites: Vary depending on course offering.

MA-303 Mathematical Modeling (Fall; Yearly; 3.00 Credits; N,QM,CW) How to use mathematics to model "real-world" problems. Modeling topics range from population dynamics to economics to the nuclear arms race. Mathematical tools range from calculus to curve fitting to computer simulation. How to make a little bit of mathematics go a long way. Note: MA160 is recommended. Prerequisite: MA130 and experience with programming and Minitab.

MA-316 Combinatorics (Fall; Even Years; 3.00 Credits; QM,N) Advanced counting: what they didn't teach you on Sesame Street. An introduction to graphs, trees, and enumeration techniques with applications to computer science and biology. Prerequisites: MA116 or MA210 or MA220 or permission of the instructor.

MA-320 Probability & Statistics (Spring; Even Years; 3.00 Credits; N,QS) Topics in mathematical statistics including discrete and continuous random variables, expectations, mean, variance, moment generating functions, multivariate distributions, correlation, and independence, all leading to an efficient study of the binomial, Poisson, gamma, chi-square, and normal distributions. Note: MA235 is recommended. Prerequisites: MA220 and MA230.

MA-325 Statistical Consulting (Variable; Variable; 2.00 Credits; N,QS,CW) The participating students will receive some training during the semester in consulting on

statistical problems and will be expected to staff the Statistics Center and to assist in collaborative efforts with faculty and/or staff on projects. This provides the student with both real work experience in the field of statistics and a project based learning experience. May be taken multiple times for credit. Prerequisites: MA220 or BI305 or PY214 or EB211.

MA-335 Differential Equations (Spring; Yearly; 4.00 Credits; N,QM) Theory and application of ordinary differential equations. Emphasis on modern qualitative techniques, with numerical and analytical approaches used when appropriate. Contains a brief introduction to partial differential equations. Prerequisites: MA130, MA230 and MA235 or MA233.

MA-340 Numerical Analysis (Spring; Even Years; 3.00 Credits; N,QM) Theory and application of numerical approximation techniques. Topics included are numerical error, root-finding, interpolation and polynomial approximation, numerical differentiation and integration, and differential equations. Prerequisites: MA160, MA130 and CS110 or permission. (Also listed as CS340.)

MA-350 Topics in Geometry (Spring; Odd Years; 3.00 Credits; N) Examines the history and development of geometry with an axiomatic development of Euclidean geometry leading to an investigation of hyperbolic and elliptical non-Euclidean geometries. The roles of these discoveries in the history of mathematics are emphasized. Prerequisites: MA210 or PL208 or MA208.

MA-355 Nature of Mathematics (Spring; Odd Years; 1.00 Credit) An introduction to the history and philosophy of mathematics. Briefly traces the historical development of mathematics from its Oriental and Greek origins to modern times. Surveys the different philosophies of mathematics and provides some insight into the current crisis in the foundations of mathematics. Corequisite: MA350. Prerequisite: MA210 or PL208 or MA208.

MA-360 Abstract Algebra (Spring; Even Years; 3.00 Credits) Investigates the algebraic properties of the real numbers and their generalizations. Emphasis on group theory, with introductions to integral domains, rings, fields and vector spaces. Prerequisites: MA160 and MA210.

MA-365 Number Theory (Fall; Odd Years; 3.00 Credits; N) An investigation of topics in Elementary Number Theory including divisibility, primes, congruence, congruence equations, quadratic residues and quadratic reciprocity, arithmetic and multiplicative functions, Diophantine equations, and other topics selected according to interest. Prerequisites: MA210 or permission of the instructor.

MA-370 Real Analysis (Spring; Odd Years; 3.00 Credits; N) Focuses on functions of a real variable, sequences, limits, continuity, differentiation and the derivation of standard theorems of the differential calculus. Prerequisites: MA210 and MA230 and MA235.

MA-375 Complex Analysis (Fall; Even Years; 3.00 Credits; N) Algebra and geometry of the complex numbers, analytic functions, complex integration, Taylor and Laurent series, residue theory, physical applications, and other topics as time allows. Prerequisites: MA235.

MA-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) An introduction to one of the branches of mathematics not currently included in the regular course offerings, such as number theory, history of mathematics, chaos and fractals, topology, graph theory, mathematical logic. Prerequisites: Vary depending on course offering. Note: abbreviated ST: Students may take each ST: course for credit.

MA-480 Mathematics Seminar I (Fall; Yearly; 1.00 Credit; N) A discussion-based study of current mathematical literature and modeling problems. Students will both apply their previous mathematical knowledge and explore new topics. In addition, students may use this course as preparation for an individual research project to be completed in MA485. A junior taking this course may repeat it as a senior as MA481. Prerequisites: junior or senior standing, MA160, MA210 and MA235 or permission of the instructor.

MA-481 Mathematics Seminar II (Fall; Yearly; 1.00 Credit; N) See MA480. Prerequisite: MA480.

MA-485 Mathematics Research (Fall & Spring; Yearly; 3.00-5.00 Credits; N) Allows students to pursue a program of directed original research in pure or applied mathematics. Required of candidates for distinction in mathematics POE. Prerequisites: MA480.

MA-490 Mathematics Internship/Needs Paperwork (Fall & Spring; Yearly; 2.00-9.00 Credits; N) Placement with an organization applying mathematical techniques such as statistical analysis, operations research, actuarial mathematics, or systems analysis. Designed to afford the student an opportunity to apply analytical and technical skills developed in the POE. Prerequisites: POE in Mathematics, permission and Jr. or Sr. Standing. Corequisite: MA495.

MA-495 Internship Research/Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; N) Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: MA490. Prerequisite: permission.

MA-TUT Mathematics Teaching Assistant (Variable; Variable; 1.00-3.00 Credits; N)

Music

Department Website:

<http://departments.juniata.edu/music/>

Faculty:

- Lecturer Kathryn Beck (horn)
- Lecturer Janet Berlin (clarinet)
- Lecturer Evelyn Bookhammer (cello)
- Lecturer Jody Butte (bassoon)
- Lecturer Jordan Canner (jazz ensemble)
- Lecture, Ben Firer (orchestra, trombone/euphonium/tuba)
- Lecture, Gabriel Gould (composition/arranging)
- Lecturer Nora Hamme (violin and viola)
- Lecturer Cathy Herrera (flute)
- Lecturer Mark Hunsberger (percussion)
- Lecturer tba (bass)
- Lecturer Emily Karosas (violin and viola)
- Professor James Latten (Director of Instrumental Music; percussion) - ext. 3471
- Lecturer Phil Loewen (saxophone, jazz improvisation)
- Lecturer Herbert McKinstry (trumpet)
- Lecturer Janice Mianulli (voice)
- Lecturer Stanley Mullen (guitar)
- Lecturer Cathy Scafidi (piano)
- Professor Russ Shelley (Chair, Director of Choral and Vocal Studies) - ext. 3473
- Lecturer Kevin Sims (percussion)
- Lecturer Joey Wenda (oboe)

Background Information:

The Department of Music provides opportunities for students to further one's performance skills, from beginners through advanced levels, and improve their understanding of music as a form of creative expression. Departmental courses and ensembles offer students the chance to perceive the subtleties of musical expression, to approach music as a reflection of the cultures in which it is found, to perform some of the greatest literature in our artform, and to develop new, lifelong friendships. The department is very popular, serving over 450 musicians each semester. Juniata does not offer a POE or secondary emphasis in Music. Our emphasis is non-vocational, high-quality musical experiences and training.

Special programs, facilities, or equipment:

- Concert Choir: performs a variety of choral music. Performances include on-campus programs, an annual international extended tour, weekend tour, and recording.
- Choral Union: develops choral skills in a supportive environment. One major on-campus performance per semester.
- Wind Symphony: Our premier wind and percussion group performs a variety of literature for wind band, concert band, and chamber wind ensembles. Selected players participate in one or more full orchestra pieces with our college orchestra,

- Honors Brass Quintet, Honors Woodwind Quintet, and/or Honors Saxophone Quartet. One concert per semester.
- Concert Band: performs a variety of standard and new band selections. One concert per semester.
 - Orchestra: performs standard string orchestra and full orchestra literature. Selected players participate in Honors String Quartet.
 - Chamber Ensembles: vary from semester to semester; offshoots of the Wind Symphony, orchestra, and the private studios. In the past, this has included flute choir, clarinet choir, horn quartet, and cello choir.
 - Jazz Ensemble: performs works in a big band setting, including swing standards, ballads, fusion, funk, and Latin charts. An outgrowth of the concert wind bands program.
 - Percussion Ensemble: an innovative group of ensembles that performs traditional and contemporary literature for traditional percussion, mallet percussionists, hand drumming, and our Steel drum/PVC Pipe Ensemble.

Programs of Emphasis:

- Juniata does not offer a POE or secondary emphasis in Music

Courses:

MU-111A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for 1 credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students typically supply their own instruments. Violins and violas may be available for rental. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students usually provide their own instruments, although some instruments may be available for sign-out. No previous experience necessary. Private lessons carry additional fees. Studio music fees

are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. No previous experience necessary. All instruments are supplied by the College, but purchase of music, sticks, or mallets may be required. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Pianos are available for practice in the music building. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students supply their own instruments. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students supply their own instruments. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique ,

expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students typically supply their own instruments although instruments may be available for sign-out on a limited basis. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students supply their own instruments. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) Private improvisation instruction, primarily in jazz styles. Individualized curriculum, based on needs and abilities of each student, will include scales, chords, and real-time usage of those elements in improvising. Also, basic instruction in one or more of these areas may be added by instructor if deemed necessary and only as directly related to student's development as an improviser: biographies and styles of famed improvisers, ear training, transcribing, and jazz styles/history. Studio music fees are not refunded after drop/add. Enrollment for one credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. Students provide their own instruments. No previous experience necessary. Private lessons carry additional fees. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) Private studio lessons help improve musicians' sound quality, intellectual understanding, technique, expression and creativity. Enrollment for 1 credit provides a weekly 30 minute private lesson; two credits provide a weekly 60 minute private lesson. No previous experience necessary. Private lessons carry additional fees. Studio music fees are not refunded after drop/add. Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-111M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F) This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-112A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111A.) Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (See MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-112M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-113 Guitar Class I (Fall & Spring; Yearly; 1.00 Credit; F) The fundamentals of guitar playing are taught in small groups one hour per week. Beginning through intermediate classes emphasize songs, movable chords, blues and standardized forms in the plectrum and finger picking styles. Students must supply their own instruments.

MU-114 Guitar Class II (Fall & Spring; Yearly; 1.00 Credit; F) (see MU113).

MU-115 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) Students study and perform a wide variety of ensemble music on percussion instruments, in various percussion-only pieces as well as wind band, orchestral, and/or jazz ensemble settings. Music assignments are based on student interest and ability, and are individually assigned to further develop ensemble playing abilities and musicianship. Rehearsals and concert emphasize the communicative aspects of music, culturally correct practices and techniques in percussion, and the development of the tools that are necessary to produce a high quality ensemble experience. Individual practice outside of full rehearsals is expected. NOTE: Percussion ensemble students enroll in MU115 their first semester of membership, then MU116, then MU117, etc.

MU-116 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-117 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-118 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-119 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-120 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-121 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-122 Practicum: JC Percussion (Fall & Spring; Yearly; 1.00 Credit; F) See MU115.

MU-127 Sight Singing (Either Semester; Yearly; 1.00 Credit) Builds skills necessary for successful sight singing and tonal memory/ear training.

MU-131 Voice Class I (Fall & Spring; Yearly; 2.00 Credits; F) For students with no previous formal training in voice. Two fifty minute class sessions per week plus individual work with instructor as needed.

MU-132 Voice Class II (Fall & Spring; Yearly; 2.00 Credits; F) (see MU131).

MU-133 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) One of two wind bands at Juniata. This ensemble performs a variety of level III-IV concert band literature as well as occasional woodwinds-only and brasses-only pieces, to develop ensemble playing abilities, explore significant and newer quality wind literature, improve members' musicianship, and experience the communicative aspects of music. Note: Concert Band students enroll in MU133 their first semester, MU134 their second semester, etc.

MU-134 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-135 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-136 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-137 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU138.

MU-138 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-139 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-140 JC Concert Band (Fall & Spring; Yearly; 1.00 Credit; F) See MU133.

MU-141 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) Orchestra performs a wide variety of music for both string ensembles and full orchestra chosen to develop musicianship and ensemble. Rehearsals and concerts emphasize the development of musical skills necessary to create a high quality performance experience for both players and audience. Requirements include attendance at a weekly sectional rehearsal and the full ensemble rehearsal in addition to individual preparation. Field trips to hear excellent performances by professional string artists may be offered. Note: Students enroll in MU141 their first semester, MU142 their second, etc.

MU-142 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (see MU141)

MU-143 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141).

MU-144 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141).

MU-145 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141)

MU-146 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141).

MU-147 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141)

MU-148 Orchestra (Fall & Spring; Yearly; 1.00 Credit; F) (See MU141).

MU-153 Guitar Class III (Fall & Spring; Yearly; 1.00 Credit; F) (see MU113).

MU-154 Guitar Class IV (Fall & Spring; Yearly; 1.00 Credit; F) (see MU113).

MU-163 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) Performs a wide variety of Jazz ensemble music chosen to develop ensemble playing abilities and musicianship. Rehearsal and concert emphasize the communicative aspects of music and the development of the tools that are necessary to produce a high quality ensemble experience. Practice outside of full rehearsals is required. NOTE: Jazz ensemble students enroll in MU163 their first semester of membership, then MU164, then MU165, etc. Winds must also be enrolled in MU 133-140 or MU 191-198.

MU-164 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-165 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-166 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-167 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (See MU163).

MU-168 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-169 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-170 Jazz Ensemble (Fall & Spring; Yearly; 1.00 Credit; F) (see MU163)

MU-171 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) Performs larger choral works to develop vocal ability, sight reading, diction skills, and musicianship. One major on-campus performance per semester. Note: Choir members enroll in MU171 their first semester of membership, then MU172, MU173, etc.

MU-172 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (see MU171)

MU-173 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (see MU171)

MU-174 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (see MU171)

MU-175 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (see MU171)

MU-176 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (see MU171)

MU-177 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (See MU171)

MU-178 Choral Union (Fall & Spring; Yearly; 1.00 Credit; F) (See MU171).

MU-181 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) Performs a variety of choral music chosen to develop vocal ability, sight-reading, multi-lingual diction skills, and musicianship. Performances and projects include on-campus programs, spring tour, recording, and weekend tour. Members selected through audition. Rehearsals are MWF 12:00pm-12:55pm. Individual and group practice outside of rehearsal is required. NOTE: Concert Choir members enroll in MU181 their first semester of membership, then MU182, MU183, etc. Sections are registered for by whether you are taking the trip or not. Section A is no trip and the extra fee is not charged. Section B is with the trip and has the extra trip fee.

MU-182 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-183 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-184 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-185 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-186 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-187 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-188 Juniata Concert Choir (Fall & Spring; Yearly; 1.00 Credit; F) (see MU181).

MU-189A Instrumental Lessons Woodwinds (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble. These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189B Instrumental Lesson Violin/Viola (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble. These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of

MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189C Instrumental Lessons Brass (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189D Instrumental Lessons Percussion (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189E Instrumental Lessons Piano (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189G Instrumental Lessons Guitar (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189H Instrumental Lessons Flute (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189I Instrumental Lessons Cello (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189J Instrumental Lessons Clarinet (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189K Instrumental Lessons Studio Jazz (Fall & Spring; Yearly; 1.00 Credit) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189 enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-189L Instrumental Lessons Bass (Fall & Spring; Yearly; 1.00 Credit; F) One credit. 30 minute private lesson every other week (or, 2 students per lesson weekly). MU189

enables students in one of our 4 major instrumental ensembles to also enroll in lessons with the appropriate studio instructor. Corequisite (no exceptions): Enrollment in college Wind Symphony, Concert Band, Percussion Ensemble, or Orchestra, however, lessons are not a requirement for membership in an ensemble). These lessons do not fulfill FISHN requirements; for FISHN-eligible lessons enroll in MU111 et al. instead. If ensemble course is dropped this course must be dropped too. Corequisites: One of MU115-MU122 or one of MU133-MU140 or one of MU141-MU148 or one of MU191-MU198, and instructor's permission.

MU-191 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) Our wind symphony is the premier instrumental ensemble for winds at Juniata. The ensemble performs a variety of wind band literature chosen to develop ensemble-playing abilities and musicianship, as well as occasional chamber pieces for sections or heterogeneous groups. Rehearsals and concerts emphasize the communicative aspects of music and the development of the tools that are necessary to produce a high-quality ensemble experience. NOTE: Wind symphony members enroll in MU191 their first semester of membership, then MU192, MU193 etc.

MU-192 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-193 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-194 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-195 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-196 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-197 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-198 J.C. Wind Symphony (Fall & Spring; Yearly; 1.00 Credit; F) (see MU191).

MU-199 MU Special Topics (Variable; Variable; 1.00 Credit) Allows departments to offer topics not normally taught. Prerequisites, corequisites, and fees vary by title.

MU-210 Musical Improvisation (Variable; Variable; 1.00 Credit; F) This course will present the basics of musical improvisation technique. Basic jazz music theory (scales, chords) and brief historical coverage of famed improvisers (Ella, Bird, Trane, Miles, et al.) will also be included. Extensive in-class student demonstrations of improvisation skills will be expected. Practice/goal oriented jam session time outside of class is expected, 5 hours per week is recommended.

MU-211A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) See MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111K) Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (See MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-211M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or

songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-212A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (See MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-212M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-241 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-242 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-243 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-244 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-245 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-246 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-247 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-248 A Cappella Ensembles (Variable; Yearly; 2.00 Credits; F) Students hone their musicianship through a variety of a cappella ensemble works specifically designed to build one-on-a-part skills. Multiple ensemble combination opportunities are created within the class. Emphasis is placed on individual preparation. Prerequisites: MU171 or MU181 or MU281.

MU-299 MU Special Topics (Variable; Variable; 1.00 Credit) Allows departments to offer topics not normally taught. Prerequisites, corequisites, and fees vary by title.

MU-311A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (see MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-311M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-312A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (see MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-312M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work. Prerequisites: take MU111M and MU112M and MU211M and MU212M and MU311M.

MU-411A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see 111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (see MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-411M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work. Prerequisites: Take MU111M and MU112M and MU211M and MU212M and MU311M and MU312M.

MU-412A Woodwind Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111A). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412B Violin/Viola Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111B). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412C Brass Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111C). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412D Percussion Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111D). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412E Piano Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111E). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412F Voice Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111F). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412G Guitar Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111G). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412H Flute Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111H). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412I Cello Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111I). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412J Clarinet Studio (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (See MU111J). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412K Studio Jazz Improvisation Lessons (Fall & Spring; Yearly; 1.00-2.00 Credits; F) (see MU111K). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412L Bass Studio (Fall & Spring; All Years; 1.00-2.00 Credits; F) (see MU111L). Instructor will contact you. If you haven't heard from them by the 4th day of classes, you may email them.

MU-412M Composition/Song Writing (Fall & Spring; Yearly; 1.00-2.00 Credits; F)
This course is one-on-one studio instruction in the craft of composition and/or songwriting. Instruction focuses on traditional classical/concert music, but can also include other genres as needed including, pop, folk, rock, and jazz. Topics include notation, orchestration, idiomatic writing for instruments and voices, musical form, and score study. Short term assignments are given throughout the semester, culminating in a more substantial work.

MU-495 Senior Recital I (Fall & Spring; Yearly; 2.00-4.00 Credits; F) Individual instrumental or vocal lessons for students preparing a Senior Recital. Senior status and permission of instructor and Music Department Chairman required. The Senior Recital shall be presented at the end of the second semester of study and shall consist of 45-60 minutes of memorized literature, demonstrating the highest level of technical and musical accomplishment. Senior Recital carries normal studio per credit fees.

MU-496 Senior Recital II (Fall & Spring; Yearly; 2.00-4.00 Credits; F) The continuation of MU495, Senior Recital I. (see MU495). Prerequisite: MU495.

MS-101 Music Fundamentals (Variable; Yearly; 3.00 Credits; F) Designed to teach students the basic tools and elements of music and its notation. Students learn to become literate in the fundamentals of music (reading and writing music notes, intervals, scales, chords, rhythms, structure...) and apply that knowledge to composition (e.g. a group project composing a brief "percussion" ensemble piece) and basic piano skills. Discussions of the importance of music in society and in education. Listening skills are developed over the course of the semester.

MS-110 Survey of Western Music (Fall; Yearly; 3.00 Credits; F) Uses the historical development of "Western" music literature as the basis for forming a better understanding of the art of music. Listening skills are developed over the course of the semester.

MS-112 Introduction to Aesthetic Experience (Spring; Odd Years; 3.00 Credits; F) Introduces the aesthetic experience as a phenomenon of the human condition. Emphasizes an understanding of what the aesthetic experience is and learning to maximize the experience through perception of how the elements of an art work interact. Students learn to take from art what it uniquely offers.

MS-125 Musical Acoustics (Variable; Variable; 4.00 Credits; F,N) This course and its lab covers concepts of physics as applied to music. Topics include sound and resonance, pitch and tuning systems, psychoacoustics, anatomy of the ear, workings of musical instruments, electronic music fundamentals and literature, a review of musical notation, and aural recognition of intervals and pitches. Students will design and build a musical instrument, and participate in a performance.

MS-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

MS-230 History of American Popular Music (Variable; Variable; 3.00 Credits; F) This course covers popular music in America, from Revolutionary War era through modern practices. Units on mainstream pop, jazz and its ancestors, early town bands, musicaltheatre, country, the fragmentation of the market in the 1960's, and other topics are included. Students complete various presentations and readings on auxiliary topics affecting the development of mainstream pop music. Prerequisites: MS110.

MS-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

MS-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Provides supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Note: abbreviated ST: (title). Students may take each ST course for credit.

Non-Departmental

Faculty:

- Professor Debra Kirchoff-Glazier - ext. 3574
- Instructor Darwin Kysor (Career Services) - ext. 3350
- Associate Professor James Borgardt (Remote Field Course) - ext. 6600
- Professor Ron McLaughlin - ext. 3680
- Instructor Julie Woodling (Instruction Librarian) - ext. 3454
- Instructor Jessica Maxon (Community Service) -ext. 3365

While many interdisciplinary courses are found among the College's department offerings, some are taught outside that structure. They may be used in constructing a Program of Emphasis.

Courses:

ND-102 Introduction to Library Research (Fall & Spring; Yearly; 1.00 Credit; H) This one hour, one semester course is designed to teach students the fundamentals of library research, from the basic organization of materials through the analytical process of determining useful and appropriate research materials. This course will be taught every semester by the library staff, and there is no pre-requisite.

ND-199 ND Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows departments to offer courses not normally taught. Prerequisites and fees vary by course titles.

ND-201 Community Engagement (Fall & Spring; Yearly; 1.00 Credit; S) Students enrolled in this class will integrate service in the community with individual reflection and classroom discussion. Work completed in the community will help students gain an understanding of the agencies that operate in the greater Huntingdon area and the services they provide. Additionally, students' presence in the community facilitates development of strong partnerships between the college and the public. In the classroom, students will be challenged to consider their volunteer experiences with respect to relevant local and global issues. Students will gain exposure to different cultural and economic institutions, explore what it means to be an active citizen, develop a sense of civic and social responsibility, and learn how they might incorporate service into other facets of their lives. May be repeated to a total of 4 credits with the permission of the instructor. Graded S (satisfactory) or U (unsatisfactory).

ND-203A Urban Immersion (Spring; Yearly; 1.00 Credit) Students enrolled in this class will participate in a service-learning trip to explore urban issues through various service and educational experiences. Involvement in trip activities will help students develop a foundation of knowledge about the importance of civic and community engagement. Online lessons and orientation sessions preceding the trip will facilitate development of learning objectives and provide background information related to the region in which the group will serve. The service experience will be complemented by discussion and reflection before, during, and after the trip. Applications accepted in fall. Associated fees vary by trip. Note: This course requires 25 hours of out of class time per semester.

ND-203B Spring Break Alternative (Spring; Yearly; 1.00 Credit) Students enrolled in this class will participate in a service-learning trip to explore social, cultural, political and/or environmental issues through various service and educational experiences. Involvement in trip activities will help students develop a foundation of knowledge about the importance of civic and community engagement. Online lessons and orientation sessions preceding the trip will facilitate development of learning objectives and provide background information related to the region in which the group will serve. The service experience will be complemented by discussion and reflection before, during, and after the trip. Prerequisite: Course fee plus air fare, if necessary, will be charged. Applications accepted in fall and spring. Note: This course requires 25 hours of out of class time per semester.

ND-203C Cultural Learning Tour (Spring; Yearly; 1.00 Credit) Students enrolled in this class will participate in a service-learning trip to explore social, cultural, political and/or environmental issues through various service and educational experiences. Involvement in trip activities will help students develop a foundation of knowledge about the importance of civic and community engagement. Biweekly meetings in spring semester will facilitate development of learning objectives and provide background information related to the region in which the group will serve. The service experience will be complemented by discussion and reflection before, during, and after the trip. Applications are accepted in fall. Associated fees vary by trip. Note: This course requires 25 hours of out of class time per semester.

ND-204 Viticulture in CE I (Spring; Yearly; 1.00 Credit; I,N) This is a 1-credit course which is a co-requisite for Viticulture and Enology in Central Europe II. Full program (Viticulture and Enology in Central Europe I & II) runs Spring? " Summer of the same year. The spring course prepares students theoretically for a trip to Central Europe teaching them about history and political situation of countries to be visited as well as giving them theoretical knowledge about growing grape vines, making wine, and chemical processes behind wine making. Co-Requisite: ND205.

ND-205 Viticulture in CE I (Spring; Yearly; 2.00 Credits; I,N)

ND-260 Remote Field Course I (Summer; Yearly; 2.00 Credits) This course is a 16 day module format field experience in south western Colorado and southeastern Utah. Students will complete a selection of modules in one or more of the following areas: anthropology, ecology, environmental science and studies or geology. Four faculty, one from each of these disciplines, will supervise the different modules. All students will also complete integrated, interdisciplinary modules. Summer school offering only. Prerequisites: Differs for each module and permission of instructor.

ND-261 Remote Field Course II (Summer; Yearly; 2.00 Credits) This course is a 16-day module-format field experience in Southwestern Colorado and southeastern Utah. Students will complete a selection of modules in one or more of the following areas: Anthropology, ecology, environmental science and studies or geology. Four faculty, one from each of these disciplines, will supervise the different modules. All students will also complete integrated, interdisciplinary modules that are different than the modules students took in ND260. Summer school offering only. Prerequisites: Differs for each module and ND260 and permission of instructor.

ND-262A Astronomy and Meteors Mini Labs for Remote Field Course (Summer; Yearly; 0.00 Credits) Astronomy and astrogeology, including the study of meteorites, continue to play a fundamental role in both our cultural and scientific evolution. Students will visit the famous Lowell Observatory in Flagstaff, AZ, and two craters in north east Arizona. Corequisites: ND260 or ND261 or IC207. Note: A special course fee is assessed.

ND-262B Lake Powell Lab Mini Labs for Remote Field Course (Summer; Yearly; 0.00 Credits) We will spend three days boating on Lake Powell while discussing and studying the results of the Glen Canyon Dam, including exploring the controversy from a view of water supply, economic and environmental impacts. Corequisites: ND260 or ND261 or IC207. Note: A special course fee is assessed.

ND-262C The Atomic Age (Summer; Yearly; 0.00 Credits) On July 16, 1945 the world changed with the explosion of the first atomic bomb at the Trinity site, near Socorro, New Mexico. This module will visit a number of sites in New Mexico and Arizona which have played a seminal role in the " atomic age " . Corequisites: ND260 or ND261 or IC207.

ND-262D Moab's Natural Wonders Mini Labs for Remote Field Course (Summer; Yearly; 0.00 Credits) Moab offers a wealth of natural beauty, including Arches National Park and the Colorado River. Students in this module will learn about fluid flow during a one-day rafting trip on the Colorado. We'll visit Arches National Park and examine some of its well-known features, such as the physical blueprint of the arches and Balanced Rock, from a physics perspective. Corequisites: ND260 or ND261 or IC207. Note: A special course fee is assessed.

ND-262E Southwestern Geology-RFC (Summer; Yearly; 0.00 Credits) During this module we cover the following topics : observe various types of volcanic activity in the area and think about origins, describe and sketch various rock structures in the field, collect interesting igneous rocks, and read and understand topographical maps and how they can express regional geology. Corequisites: ND260 or ND261 or IC207.

ND-262F Scenic Lands (Summer; Yearly; 0.00 Credits) Snow-covered rugged mountain peaks, reaching nearly 13,000 feet in elevation. A break-neck deep gorge with more tight bends and twist than a Quentin Tarantino movie plot. Stone arches immense yet delicate. A labyrinth of colorful mesas and needle-like buttes. The southwest corner of Utah contains a diversity of spectacular scenery that has to be seen to appreciate. During this module we will visit four of the most scenic areas in the southwest and explore the natural forces that formed and sculpted them. Additionally, we will investigate how the governmental agencies that oversee and regulate each area protect and manage these natural wonders. Corequisites: ND260 or ND261 or IC207.

ND-262G Biodiv. S.W. Ecosystems (Summer; Yearly; 0.00 Credits) This module reveals the biotic diversity of unique desert ecosystems of southeastern Arizona - the Sonoran Desert and Chihuahuan Desert. This module examines the plant and animal associations and adaptations exhibited in this arid environment. This region contains arid desert flats, rocky canyons, creeks, alpine meadows and talus slopes. We will investigate the plant and animal diversity of the Chiricahua and Dragon Mountains through hands-on exploration. We will traverse a range of elevations; from desert flats (4,000 ft.) to mountain peaks (nearly 9,000 ft.).

ND-262H Moab Rock Art (Summer; Yearly; 0.00 Credits) During this module, Students learn to identify and interpret styles of rock art at a variety of spectacular sites. These sites range in period from the Archaic (5500 BC to 1 AD), the Anasazi (1 AD to 1275 AD), Fremont (450 AD to 1250 AD), the Formative Period (1 AD to 1275 AD), and Ute (1200 AD to 1880 AD). Corequisites: ND260 or ND261 or IC207.

ND-262I Species Interaction (Summer; Yearly; 0.00 Credits) This module takes place in and around the Canyon lands and Arches National Parks outside of Moab, UT. We will collect data that differentiates a sympatric assemblage of lizards in the region. Collared (*Crotaphytus collaris*), side-blotch (*UTA stansburiana*), tree (*Urosaurus ornatus*), whiptail (*Cnemidophorus tessellatus*), and plateau lizards (*Sceloporus undulatus*) will be characterized based on several ecological and physiological parameters. We will also explore the biodiversity and conservation/land-use issues of this region. Ancillary ventures will include a trek to the base of Mount Peale (12,721 ft.) and the Matheson Wetland Preserve. Corequisites: ND260 or ND261 or IC207.

ND-262J Dinosaurs (Summer; Yearly; 0.00 Credits) The Southwest contains some of the best dinosaur fossil sites in the world, and we take advantage of this, by visiting the Cleveland-Lloyd Quarry, sites in the Moab, UT area that contain extraordinary dinosaur footprints, Mill Canyon dinosaur quarry and the dinosaur display at College of Eastern Utah Prehistoric Museum. Corequisites: ND260 or ND261 or IC207.

ND-262K Interpret Past/Present (Summer; Yearly; 0.00 Credits) We will explore the prehistoric and present indigenous cultures, agriculture, religion, social and political organization. We will visit ruins ranging from Mesa Verde National Monument (maintained by the National Park Service) to the Ute Mountain Tribal Park on the Ute Mountain reservation. We will also participate in a one- half day work project for the Ute Mountain Tribe. We will contrast the ruins seen at Mesa Verde and the Ute Mountain Tribal Park with reconstructed ruins we will visit in New Mexico. We will also observe and discuss contemporary American Indian economic problems and strategies. Corequisites: ND260 or ND261 or IC207.

ND-262L Anasazi Culture/Eviron. (Summer; Yearly; 0.00 Credits) edge of the Cedars, Hovenweep, Butler Wash and the Horsecollar Ruins: A closer look at Anasazi Culture and Environments. Corequisites: ND260 or ND261 or IC207.

ND-262M Ecotonal Transitions (Summer; Yearly; 0.00 Credits) This module compares the two sides of the Grand Canyon-the South Rim (an arid ecosystem at 6,300 ft. elevation) and the North Rim (a ponderosa pine dominated habitat at 8,200 ft. elevation). We will examine the plant and animal associations that differentiate both sides of the Canyon. This module involves hiking into the Grand Canyon-while not overly strenuous, does require a certain degree of physical fitness. The trip from the South Rim to the North Rim of the Canyon takes us through arid flatlands of the Colorado Plateau.

ND-262N Southwest Geology (Summer; Yearly; 0.00 Credits) Module for remote field course.

ND-262O Alien Abduction (Summer; Yearly; 0.00 Credits) When asked, many people express a belief in the notion that alien life forms have visited the earth. Further, some people believe not only that aliens have visited earth, but that they have been abducted by aliens for various purposes. We will examine the psychological foundation for these beliefs while visiting Roswell, NM, site of one of the most famous alien sightings. Corequisites: ND261 or ND262 or IC206.

ND-262P Erosion and Land Use (Summer; Yearly; 0.00 Credits) During this module we cover the following topics: observe various types of glacial deposits and landforms, appreciate the erosional importance of water in arid climates, examine relationships between geology, climate and land use, and identify unstable landforms.

ND-262Q Altitude and Cognition (Summer; Yearly; 0.00 Credits) There have been a number of case histories of climbers who have experienced rapid changes in altitude that report confusion, amnesia and other cognitive difficulties. We will focus specifically on alterations of working memory performance due to altitude. We will climb into the San Juan National Forest and reach an altitude of 13,000 feet above sea level. Once at the top, we will measure our performance on several classic working memory tasks. Corequisites: ND261 or ND262 or IC206.

ND-262R Sex Effect on Navigation (Summer; Yearly; 0.00 Credits) There are a number of old wives tales about how both men and women navigate in their environment, including men never ask for directions and women get lost easily. We will investigate these old wives tales in more detail, by systematically examining how both sexes perform on real world navigation tasks. We will visit the Fiery Furnace in Arches National Park. This area of "infant arches" is, in fact, an excellent example of a real world maze. The following day, we will wander around the downtown area of Moab, asking for directions to assess the differences in how men and women give directions. Corequisites: ND261 or ND262 or IC207.

ND-262S Living in Sacred Spaces (Summer; Yearly; 0.00 Credits) During this module, students will learn how Historic and contemporary Sinagua, Hopi, Tewa, Navajo, and New Age tourist societies adapt to and live in a harsh desert climate. They will learn through exploring subsistence strategies, agriculture, and architecture at several different sites. No additional fee required.

ND-262T Agriculture Over 3000 Years (Summer; Variable; 0.00 Credits) During this 4 day module, we'll be exploring museums as educational resources and discover the impact of agricultural change over 3000 years. Over the first two days, come explore the New Mexico Farm and Ranch Museum and the Amerind Foundation Museum and learn about setting up exhibits, and explore the agricultural artifacts dating back 3000 years. Are there lessons to learn from the past? On the third day we'll head to the Sonora Desert Museum and wrap up on the fourth day with the Casa Grande Ruins before arriving at the Grand Canyon. Evenings will be spent hiking and camping with the biology module.

ND-262U Capturing the Canyons and Traveling Highway 12 (Summer; Variable; 0.00 Credits) During this three day module (after the Grand Canyon), we will be traveling to Little Antelope Slot Canyon, visit the Glen Canyon Dam and camp at Bryce Canyon. The second day we'll hike Bryce Canyon, enjoying both the sunrise and sunset in this spectacular canyon, staying there the second night too. On the third day, we'll travel Highway 12 (on our way to Moab), named one of America's Highways for its scenic beauty. It is lined with education placards and lots of hidden gems - we'll stop along the way at various spots -(but, as a group, we'll plan the stops). Ultimately, each student will create a virtual " field trip, " using PhotoStory or i-Photo. Narration of the sites should be included (you'll need your computer, a camera, and the USB cord or firewire to download pics and or video for this module).

ND-262V Visitor Centers and Movies As Educational " resources " -- Have ?westerns " Influenced Our View of the West? (Summer; Variable; 0.00 Credits) This module will include two day trips. One to Dead Horse State Park, called the Grand Canyon of Utah and the site of many movies. It also includes a small, but beautiful visitor?s center with interactive displays for all ages. We'll be hiking some of the trails and checking out why this location is a popular site for movies. The second trip will be to the Moab Museum of Film & Western Heritage and will focus on the use of movies and their impact as educational resources and how they shaped out image of the west and Native Americans.

ND-262X Earth, Air, Fire, Water (Summer; Yearly; 0.00 Credits) The Colorado Plateau is a beautiful but harsh land, leaving bare to view the record of a a tumultuous geologic history and a landscape that challenges the ingenuity of those who would dwell there. This module visits pueblo, cliff, and contemporary sites where dwellers have dealt in diverse ways with extremes of wind and weather, lack of water for livestock and crops, a landscape with poor and limiting soils, and sometimes hostile neighbors. This module explores the strategies that residents have used in trying to make the most of what the Earth has to offer. Must be concurrently enrolled in IC 207 for which a special fee is levied.

ND-290 Rural Health Care Issues (Spring; Yearly; 1.00 Credit) Health professionals from both conventional and alternative medicine in Huntingdon will introduce students to their practices, the education involved, and the pros and cons of practicing in a small town. Students will be exposed to the integrative model of health care, will have an opportunity to network with practitioners, and will be encouraged to consider a future practice in Huntingdon.

ND-295 Rural Health Rotations (Spring; Yearly; 2.00 Credits) Students with a sincere interest in rural health care shadow a range of practitioners, participate in a field trip to an intergrative health center, and do class activities and assignments that enhance their understanding of the health care system. This course is graded. Open to a maximum of 12 students. Corequisite: ND 290. Prerequisite: permission of the instructor.

ND-298 Transitions (Spring; Yearly; 1.00 Credit) Faculty, staff, alumni, and guests will provide expertise and advice designed to help students understand and prepare for

successful transitions. The process of transition (loss of what is familiar and known) will be discussed utilizing models of behavior within social systems and personal experiences. Case studies will examine: changing career goals; adjusting to cultural differences; the transition from life as an undergraduate to life as a graduate student; work life unreadiness; lifestyle adjustments such as financial independence, rural to urban, and changing relationships.

ND-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer courses not normally taught. Prerequisites vary by title.

ND-306 Commonwealth Student Assistance Program- Undergraduate Program (Either Semester; Yearly; 2.00 Credits) The Commonwealth Student Assistance Program (SAP) course will provide an in-depth theoretical and practical course of study, designed to identify risk factors that inhibit and become barriers to students in the middle/high school settings. Juniata students will be introduced to different behaviors associated with mental health, drug and alcohol and family issues that they will encounter while working with adolescents in the education system. POE's in the Social Sciences, Education and Health fields who have an interest with working with adolescents are encouraged to take this course. Must have Junior or Senior status.

ND-308 Science Olympiad Leadership (Spring; Yearly; 1.00-3.00 Credits) Offers the opportunity for active participation in the planning, designing, and implementation of the Science Olympiad State Competition held at Juniata each year. Register with permission of instructor.

ND-399 Special Topics (Variable; Variable; 2.00-9.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

ND-490 ND Intern/Needs Paperwork (Spring; Yearly; 2.00-9.00 Credits) See the chapter, " Special Programs " under " Internships " in the catalog. Corequisite: ND495. Prerequisite: Permission and Jr. or Sr. Standing.

ND-495 Internship Seminar (Variable; Variable; 4.00-6.00 Credits) Required of all students doing an internship. Emphasis is on readings and discussions of materials relevant to the internship experience. Corequisite: ND490.

ND-TUT ND Teaching Assistant (Variable; Variable; 1.00-3.00 Credits) See catalog.

ND.SS-100 Career Planning (Fall & Spring; Yearly; 1.00 Credit; S) Examines theories of occupational choice and career development and provides the learner with the opportunity to become more aware of his/her interests, values and capacities as they relate to the career decision making process. Prerequisites: Freshman or Sophomores only.

ND.SS-205 The 21st Century Career Search (Fall & Spring; Yearly; 1.00 Credit)
Students will be provided an overview of job, career and graduate/professional school search techniques. They will learn to write professional and effective resumes portfolios and other job search correspondence while also enhancing interpersonal skills to be used at job fairs, interviews and other professional settings. Prerequisites: Junior or Senior standing.

ND.SS-214 Statistics for Social Science (Fall & Spring; Yearly; 4.00 Credits; S, QS) An introduction to descriptive and inferential statistical techniques used in the social sciences. Primary emphasis is placed on learning to choose and interpret appropriate techniques for various kinds of data. Prerequisites: Sophomore, Junior, or Senior standing.

ND.SS-215 Social Science Research Methods (Spring; Yearly; 4.00 Credits; S) An analysis of the procedures, strengths and limitations of collecting and interpreting data from the perspectives of the social sciences with an emphasis on surveys, experimental designs and observational techniques as used in a variety of human service agencies. Prerequisite: ND.SS214.

ND.SS-TUT ND.SS Teaching Assistant (Variable; Variable; 1.00-3.00 Credits) See catalog.

Peace and Conflict Studies

Department Website:

<http://departments.juniata.edu/pacs/>

Faculty:

- Dr. Polly Walker, Director - ext. 3461
- Professor Celia Cook-Huffman - ext. 3465
- Assistant Professor Dave Ragland - ext 3680

Senior Fellows:

- David Drews, Professor Emeritus, Juniata College
- Kai Erikson, Professor Emeritus, Yale University
- Ron McMahan, University of Colorado
- Andrew Murray, Institute Director Emeritus
- Myra MacPherson, Author

Background Information:

The Peace and Conflict Studies Program is directed and supported by The Baker Institute for Peace and Conflict Studies. The Program is an interdisciplinary inquiry into the

human problems of war and deeply rooted conflict, and peace as a human potential. Courses in the PACS program systematically explore how and why humans resort to violence to resolve conflicts, and examines how peace and cooperation might be institutionalized through peacebuilding, conflict transformation and the study of human behavior and social institutions.

[Special programs, facilities, or equipment:](#)

- The Oller Center for Peace and International Programs provides seminar and meeting rooms for PACS students and houses special library and multimedia collections related to war, peace and conflict resolution.
- Support is available for students to attend special conferences and training workshops related to peace studies and nonviolence.
- The program supports a rich array of visiting speakers and practitioners. Past speakers have included ambassadors, heads of state, Nobel Peace Prize winners, admirals, generals, activists, revolutionaries, and victims of war. Arrangements are made for PACS to have personal discussions with visitors to the program.
- Select PACS students have an opportunity to serve with faculty, staff and trustees on the Baker Institute Advisory Board, where they have an equal voice in planning program activities.
- Students have an opportunity to work directly as mediators and/or trainers in community conflict situations.

[Programs of Emphasis:](#)

- Peace and Conflict Studies
- Conflict Resolution and Communications

[Examples of Individualized Programs of Emphasis:](#)

- World Politics and Conflict Studies
- Peace and Environmental Studies
- Social Conflict Studies
- Political Peace Making
- International Conflict Resolution

[Secondary Emphasis:](#)

- Requirements: PACS 105, PACS 110, plus at least 12 credits selected from PACS courses.
- Women and Gender Studies

[Internship/Research Experiences:](#)

- Special internships are available for PACS students in New York and Washington. Some organizations with which PACS students have interned include: The United Nations NGO Committee on Disarmament; The Committee

- on East West Accord; Bread for the World; The Washington Center for Research on Women and The American Friends Service Committee..
- Funds are available to support student-initiated research, especially in reference to the Senior Thesis. Previously, students have done research in New Zealand, the Galapagos Islands, India, Ireland and several countries in Central and South America.

Courses:

PACS-105 Introduction to Conflict Resolution (Either Semester; Yearly; 3.00 Credits; S) A survey of the field of conflict, this course explores the causes and consequences of social conflict. Theory and case studies are used to understand interpersonal disputes, the intricacies of groups in conflict and international issues and crisis. Emphasis is given to understanding the basic theoretical concepts of the field and developing basic conflict resolving skills.

PACS-108 Mediation (Spring; Yearly; 1.00-3.00 Credits; S) Students learn the basic model of mediation and the theoretical framework that guides its use. Role-plays and simulations will be used to prepare students to serve as mediators in a variety of contexts. Students will be trained to use a co-mediation model to resolve interpersonal and small group conflicts.

PACS-110 Introduction to Peace & Conflict Studies (Either Semester; Yearly; 3.00 Credits; I) A survey of the literature, issues and people that make up the field of Peace and Conflict Studies. The course looks at the language and the methodologies that have developed around the academic inquiry into war and deep-rooted conflict as human problems and peace as a human potential.

PACS-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer topics not normally taught. Prerequisites vary by title.

PACS-202 Behavioral Analysis of Organizations (Either Semester; Yearly; 4.00 Credits; S,CW) (See EB202).

PACS-205 Conflict Intervention (Spring; Yearly; 3.00 Credits; S) The course explores the roles third parties play in managing and resolving conflicts. Students become familiar with both the central components of intervention design and the nature and structure of third party roles ranging from managers as mediators to conflict intervention in community disputes, or third party intervention in international disputes. The focusing questions of the course center on issues of how and when third parties can effectively and ethically intervene in conflicts productively. Research, case studies, and simulations are used to explore the answers of these questions and to increase students understanding of how third parties affect the course of conflict Prerequisites: PACS105

PACS-235 Tolstoy (Spring; Yearly; 3.00 Credits; CA,H,I,CW,CS) (See RU235).

PACS-239 Nuclear Threat (Spring; Variable; 4.00 Credits; CA,H,N,CW) This course examines the development and ramifications of nuclear weapons. Students will learn the basic physics upon which these devices operate, and explore moral issues that arose in the interactions of communities impacted by their construction, use and testing, including the perspective of scientists, government officials, and affected citizenry. Current concerns regarding nuclear weapons will be studied as well.

PACS-241 Dostoevsky (Spring; Variable; 3.00 Credits; CA,H,I) Examines the writings of Dostoevsky in light of the social problems of his day and his personal search for truth and God in a world increasingly dominated by scientific materialism. Particular emphasis will be placed on Bakhtin's thesis that Dostoevsky invented a new form of the novel as well as on the darker sides of Dostoevsky's messianism and possible anti-semitism.

PACS-275 Art and Activism in Latin America (Fall; Variable; 3.00 Credits; H,I,CS) This course will study art-understood in a generic sense to include the visual arts, literature, film and music-that denounces social injustice and seeks to trigger fundamental reforms in Latin American societies. Known as arte comprometido or committed art in Latin America, the texts that will be analyzed treat topics such as political violence, economic exploitation, racism, and machismo. The class will be conducted in Spanish. Prerequisites: SP210.

PACS-281 Model United Nations (Fall; Yearly; 1.00 Credit; S,I) In this course students analyze and critique global governance systems, with a focus on the United Nations. They also research specific countries and U.N. committees as well as compete in a collegiate level Model United Nations competition in Washington D.C.. Students plan and facilitate the high school conference that the Juniata College Model UN association organizes in the Fall. Students may fill this role in a variety of ways (i.e. chairmen, assistants, technology, administrative). Students in this course must also pay a fee to help cover the cost of attending the conference. Students in this course must also pay a fee to help cover the cost of attending the conference.

PACS-282 Model United Nations (Fall; Yearly; 1.00 Credit; S,I) Students research specific countries and U.N. committees as well as compete in a collegiate level Model United Nations competition in Washington D.C.. Students plan and facilitate the high school conference that the Juniata College Model UN association organizes in the Fall. Students may fill this role in a variety of ways (i.e. chairmen, assistants, technology, administrative). Students in this course must also pay a fee to help cover the cost of attending the conference. Prerequisite: PACS281.

PACS-283 Model United Nations (Fall; Yearly; 1.00 Credit; S,I) Students will fill leadership positions in preparing for both the National MUN and Juniata's High School MUN competitions. Students also research specific countries and U.N. committees as well as compete in a collegiate level Model United Nations competition in Washington D.C.. Students plan and facilitate the high school conference that the Juniata College Model UN association organizes in the Fall. Students may fill this role in a variety of ways (i.e. chairmen, assistants, technology, administrative). Students in this course must

also pay a fee to help cover the cost of attending the conference. Prerequisites: PACS281 and PACS282.

PACS-284 Model United Nations (Fall; Yearly; 1.00 Credit; S,I) Students will fill leadership roles in creating research briefs on assigned countries, as well as chairing committees for planning and executing the High School Model United Nations. Students also research specific countries and U.N. committees as well as compete in a collegiate level Model United Nations competition in Washington D.C.. Students plan and facilitate the high school conference that the Juniata College Model UN association organizes in the Fall. Students may fill this role in a variety of ways (i.e. chairmen, assistants, technology, administrative). Students in this course must also pay a fee to help cover the cost of attending the conference. Prerequisites: PACS281 and PACS282 and PACS283.

PACS-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) An examination of an area of study not regularly included in departmental offerings. Prerequisites vary with topics.

PACS-300 Anthropology of War & Peace (Fall; Yearly; 3.00 Credits; S) A study of the incidence and nature of cooperation, competition, and conflict in human cultures. Evidence will be drawn from archaeological, ethnological and ethological data. Prerequisite: AN151 or PACS110.

PACS-305 Gender and Conflict (Fall; Yearly; 3.00 Credits; S,I,CW) Examines how an understanding of gender issues is critical to understanding, assessing, and effectively addressing many conflicts. The course takes an interdisciplinary look at conflicts ranging from the differing experiences of women and men in conflict to interconnections between masculinity, femininity, security and warfare. An analysis of the ways in which gender issues cause and escalate conflicts is paired with discussions of how to address, challenge wage and/or resolve gendered conflicts. Prerequisites: Sophomore, Junior, or Senior standing.

PACS-306 The American Revolution (Spring; Yearly; 3.00 Credits; H) See HS305

PACS-308 Nonviolence: Theory & Practice (Either Semester; Variable; 3.00 Credits; S,H,CW) A study of the theory and practice of non-violence, this course explores both the theoretical development of nonviolence and the use of nonviolence as a means for waging and resolving conflict. The course explores nonviolence theory as it applies to issues of social change, alternative defense, and personal transformation, using writings from political, sociological, feminist, religious and philosophical perspectives. Prerequisite: Sophomore standing recommended.

PACS-311 20th Century American Wars (Spring; Yearly; 3.00 Credits; H) (See HS311)

PACS-323 Social Violence in Latin America (Spring; Yearly; 3.00 Credits; H,I) (see HS323)

PACS-332 International Law & Human Rights (Fall; Yearly; 3.00 Credits; S,I) (See PS332)

PACS-335 Tolstoy (Spring; Yearly; 4.00 Credits; CA,H,I,CW,CS) (See RU335)

PACS-340 Dostoevsky (Spring; Yearly; 4.00 Credits; H,I,CS) (See RU340)

PACS-348 Contemporary Latin America (Spring; Yearly; 3.00 Credits; H,I) (See HS348)

PACS-375 Art and Activism in Latin America (Fall; Variable; 3.00 Credits; H,I,CS)
This course will study art-understood in a generic sense to include the visual arts, literature, film and music-that denounces social injustice and seeks to trigger fundamental reforms in Latin American societies. Known as arte comprometido or committed art in Latin America, the texts that will be analyzed treat topics such as political violence, economic exploitation, racism, and machismo. The class will be conducted in Spanish. Prerequisites: SP250 or SP255 or by permission of the instructor.

PACS-379 Bargaining and Conflict Management (Spring; Yearly; 3.00 Credits; S,CS)
Bargaining and Conflict Management provides students with an opportunity to learn about bargaining and conflict management theory. Students will have the opportunity to explore and apply this theory, and to examine aspects of bargaining style, in a variety of bargaining simulations. The course will also have an international component by utilizing international bargaining simulations as an instructional tool. Prerequisite: EB202 or PACS202.

PACS-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PACS-405 Conflict Transformation (Spring; Odd Years; 3.00 Credits; S,I,CW) Course explores the possibilities for achieving justice, reconciliation, and sustainable peace in societies where protracted ethnic and political conflicts have had a devastating impact economically, politically and socially. The course examines the root causes of such conflict and their impact on political structures and human community, along with strategies for moving forward towards coexistence and reconciliation. There is a particular focus on how the practices of peace building and conflict transformation seek to mobilize people and resources to transform unjust structures and relationships. Specific attention is given to the key issues of security, identity, justice and reconciliation. Prerequisites: PACS105 or PACS110 or PACS205 or permission of the instructor.

PACS-450 Senior Capstone (Fall; Yearly; 3.00 Credits; S,H) Serves as a capstone experience asking students to synthesize material from PACS courses. Students will work collaboratively on a faculty student research project, conducting research for the literature review, analyzing and interpreting data and presenting findings in a final paper. Prerequisites: 18 credits of PACS courses or permission of the instructor.

PACS-455 PACS Honors Thesis (Either Semester; Yearly; 3.00-6.00 Credits; H) Designed to serve as a capstone for students who emphasize PACS in their POE. The student will be expected to produce a major research paper which examines in depth a topic, theme, issue, or problem that has served as an area of special interest for the student throughout the previous two years of study. Prerequisite is Senior standing. PACS105 and PACS110 and a minimum of 4 200+ level PACS courses.

PACS-465 Self, Identity, & Conflict (Fall; Yearly; 3.00 Credits; S) This course explores the socially constructed nature of the Self, as well as its concrete and historical manifestation within the economic and political transformations that have occurred since the middle ages. Issues explored include the historical development of the Self, national identity, and the way identities are deployed in violent conflicts and war. Prerequisites: PACS105 and PACS110 and Junior or Senior standing. Sophomores require permission of the instructor.

PACS-490 Peace & Conflict Studies Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; I) An opportunity which requires students to relate theory and practice to a working environment and to reflect upon that experience. Students are supervised by the Washington Center and placed in a Washington office which deals directly with peace and/or international relations issues. Corequisite: PACS 495. Prerequisite: Permission and Jr. or Sr. Standing.

PACS-495 PACS Intern. Res. Sem. (Fall & Spring; Yearly; 2.00-6.00 Credits; I) Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: PACS490. Prerequisite: permission.

PACS-TUT PACS Teaching Assistant (Variable; Variable; 1.00-4.00 Credits; S) See catalog

Philosophy

Department Website:

<http://departments.juniata.edu/philosophy/>

Faculty:

- Professor Xinli Wang (Chair) - ext. 3642
- Associate Professor Wade Roberts - ext. 3418
- Associate Professor Janet Lewis - ext. 3682

Background Information:

As the oldest discipline and the womb of all knowledge, philosophy is the activity of critically and rationally examining the reasons behind the most fundamental presuppositions of human lives through thinking about thinking (Aristotle) and self-examination (Socrates). The Department seeks to engage students in rational and critical

thinking about their total life experience: logic, ethics, aesthetics, methods of knowing, and levels of being and, accordingly, to prepare students to lead examined lives. Hence, in addition to fairly standard introductory and advanced courses, the department develops offerings of special interest to students in such diverse areas as natural sciences, social sciences, and humanities. The study of philosophy develops students' abilities and skills of general problem solving, communication, persuasive powers, and writing. Hence, much of what is learned in philosophy can be applied in virtually any intellectual endeavor (graduate studies and professional school) and any job. More specially, philosophical training is indispensable for any serious thinkers in humanities and social sciences.

Special programs, facilities, or equipment:

- Philosophy club
- Opportunity for studying philosophy abroad in one of the college exchange partners, such as the University of Leeds in England, the University of Otago and the University Waikoto in New Zealand, or the University of Newcastle in Australia

Programs of Emphasis:

- Philosophy
- Philosophy and Religion
- Philosophy, Politics and Economics

Individualized Programs of Emphasis in Philosophy and Another Area of Study:

For the students who want to take some substantial portion of philosophy courses either to enhance their existing POE in any area of study or just for their intellectual enjoyment, in addition to fairly standard introductory courses, the department develops offerings of special interest to students in such diverse areas as religious studies, politics, physics, biology, chemistry, psychology, environmental science and studies, economics and business, and peace and conflict studies.

- Philosophy/mind
- Psychology/Philosophy
- Peace and Conflict Studies/Philosophy
- Politics/Philosophy
- Biology/Philosophy
- Physics/Philosophy
- Chemistry/Philosophy
- History/Philosophy
- Communications/Philosophy

Secondary Emphasis:

- Requirements: total 18 credits (at least 15 credits in some special cases) in philosophy, among them, (a) two at advance level (either the 300-level or some specified 200-level courses); (b) one in logic; (c) one in history of philosophy.

Courses:

PL-101 Introduction to Philosophy (Either Semester; Yearly; 3.00 Credits; H) Provide students with the background and conceptual tools necessary for more advanced study in the subject. At the discretion of instructor, the course could be an examination of some fundamental philosophical problems such (such as the meaning of life, reality, knowledge, freedom, and morality) or a survey of historical development of Western Philosophy, from Ancient Greek to modern Philosophy.

PL-103 Life, Death, and Meaning (Either Semester; Variable; 3.00 Credits; H) The course will explore the meaning of life and death. Our primary concern will be with death, one's own inevitable personal death as it figures in human life and in contributing, or perhaps even detracting from, the meaningfulness of such a life. It will give you a deeper philosophical understanding of the meaning of death, and consequently the meaning of life, which will ultimately bring you into true being and authentic existence.

PL-105 Introduction to Logic (Either Semester; Yearly; 3.00 Credits; H) An analysis of practical reasoning skills, including a systematic approach to informal arguments and the meaning of everyday claims. Aristotelian logic, Venn Diagrams, propositional logic and symbolic logic are included.

PL-106 Introduction to Ethics (Either Semester; Yearly; 3.00 Credits; H) Examines the historically valid ethical approaches to problems, i.e., pragmatic, relativistic and absolute and the application of such methods to contemporary ethical dilemmas, e.g., abortion, terrorism, euthanasia and capital punishment.

PL-115 Human Nature (Either Semester; Yearly; 3.00 Credits; H) An introduction to philosophy through an examination of seven theories of human nature: Plato, Marx, Freud, Sartre, Hobbes, Skinner, and Christianity.

PL-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PL-205 Ancient Philosophy (Fall; Odd Years; 4.00 Credits; H,CW) This course is a historical survey of ancient Greek philosophy which will cover representative figures (including the major pre-Socratics, Plato, Aristotle and important authors/movements from the Hellenistic period, such as Epicurus, Stoicism and Skepticism).

PL-208 Symbolic Logic (Fall; Yearly; 3.00 Credits; N,H) An introduction to the basics of first-order logic: the concept of artificial language, techniques for symbolizing ordinary languages and arguments, formal inference systems (either truth- free method or

natural deduction), and other advanced topics in first-order logic. The primary intended audience is students in the symbolic sciences (computer science, mathematics, linguistics and philosophy). It has no prerequisites beyond high school algebra.

PL-221 American Political Thought (Fall; Variable; 4.00 Credits; S,H,CW) (see PS221)

PL-222 Western Political Thought (Spring; Variable; 4.00 Credits; H,S) See PS222.

PL-230 Business Ethics (Spring; Yearly; 3.00 Credits; H) Asks the student to examine his/her personal values relative to those professional values of the business world. In particular, students will examine the claims of society, government, labor, management as they impact upon the individual who contemplates a career in the business world. Issues such as safety in the work place, the right to privacy, the obligations of the corporation to its employees, its customers and to society itself will be covered.

PL-235 Ethics of Health Care (Fall; Odd Years; 3.00 Credits; H) This course is a seminar style course in 'professional ethics'. It will explore the various codes, value assumptions and dilemmas faced by those who practice the health care professions. Specific topics (or dilemmas) will be determined by each class, based upon the specific POEs of the enrolled students.

PL-241 Philosophy of Love (Either Semester; Variable; 3.00 Credits; H) A philosophical examination and reconstruction of the concept of erotic/romantic love in Western culture, with particular attention to its historical development and critical analysis by modern and contemporary philosophers and thinkers.

PL-245 Chinese Philosophy (Spring; Even Years; 4.00 Credits; CA,H,I) The course will focus on the mainstream of the development of Chinese philosophy in the past two thousand years, namely, classical Confucianism and Taoism. prerequisites: Sophomore, Junior, or Senior standing.

PL-250 Science and Human Values (Either Semester; Variable; 3.00 Credits; H) This course examines the reciprocal influence between science and social values, from the perspective of the humanities. It asks, " What good is science? " Through selected readings and discussion, students consider how everyday life is shaped by scientific innovation and technology, just as society provides a framework of cultural values for science.

PL-255 Philosophy of Religion (Spring; Yearly; 3.00 Credits; H) A critical investigation of some of the main concepts of religion and theology. The course focuses on problems in the definition of religion, the idea of God, the nature of religious experience, the relation of faith and reason and the meaning of religious language.

PL-260 Philosophy of Science (Spring; Odd Years; 3.00 Credits; H) Lays out some central philosophical problems raised by natural sciences. The possible topics to be discussed: Is science rational and objective? Does science really make progress? If so, in

what sense? How to distinguish science from pseudo- science. Is science superior knowledge to other types? What is a good scientific explanation? Could we ever know about unobservable physical entities and events? Is it ever legitimate to regard a scientific theory as true?

PL-265 Environmental Ethics (Fall; Even Years; 3.00 Credits; H) As the life-support system for everyone, the environment is unquestionably of high value. Yet decisions about its care and its uses evoke controversy. This course explores contrasting viewpoints and practices that impact the earth and its plant and animal life. Through readings, projects, and critical discussion of cases, students apply ethical theories to selected contemporary issues.

PL-299 Special Topics (Either Semester; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PL-304 Existentialism (Fall; Odd Years; 4.00 Credits; H,CW) Philosophers such as Kierkegaard, Nietzsche, Heidegger and Sartre are studied as an introduction to existentialist thought. Theistic and atheistic types are considered, as is significance of existentialism as a contemporary philosophy. Prerequisites: Any Philosophy course or Permission of instructor.

PL-305 Modern Philosophy/Minds (Fall; Even Years; 4.00 Credits; CA,H,CW) Selections from the founders of the twin pillars of modernity, i.e., Modern Philosophy (F. Bacon, Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, and Kant) and Modern Science (Copernicus, Spinoza, Galileo, Pascal, Newton and Boyle) are studied with emphasis on the philosophical foundation of modern mind. Prerequisite: any philosophy course or the instructor's permission.

PL-308 Hegel to Nietzsche (Either Semester; Variable; 4.00 Credits; H) This course will provide students with an overview of nineteenth-century philosophy, beginning with the tradition of German Idealism and proceeding through thinkers such as Kierkegaard, Marx, Schopenhauer and Nietzsche. Prerequisite: Take 1 course from the PL department.

PL-310 Contemporary Political Philosophy (Either Semester; Variable; 4.00 Credits; S,H,CW) This course will focus on important political orientations and figures in the twentieth/early twenty-first century. Instructors may also focus on specific topics which have driven recent debates in contemporary political philosophy, including distributive justice, the normative foundations of liberalism/democracy or the tension between state sovereignty and international law (among others). Prerequisites: Take 1 course from the PL department or permission of the instructor.

PL-312 Twentieth Century Philosophy (Either Semester; Variable; 4.00 Credits; H) This course will provide an introduction to important figures/movements within twentieth century philosophy, including logical positivism, the linguistic turn, phenomenology,

existentialism, postmodernism and pragmatism. Prerequisite: Take 1 course from the PL department.

PL-314 Philosophy of Physics (Either Semester; Irregular/On Demand; 3.00 Credits; H,N) (See PC314 description)

PL-318 Knowledge, Truth and Skepticism (Either Semester; Variable; 4.00 Credits; H) The course is a study of the nature of human knowledge and justification of beliefs with special attention to three conceptually related topics: the nature and value of knowledge and the nature and structure of epistemic justification, the nature of truth, and the challenges from skepticism and influential responses to it. Prerequisites: Take any 1 Philosophy course.

PL-321 Philosophy of Language & Communication (Either Semester; Variable; 4.00 Credits; H) Become acquainted with the primary works of the major thinkers in the philosophy of language (Frege, Russell, Wittgenstein, Searle, Austin, Grice, Davidson, Kripke, Quine) and communication (Locke, Gadamer, and Habermas), and understand their positions on key philosophical issues that dominated in the analytic tradition in the 20th century, such as competing theories of meaning and reference, pragmatics and speech acts, and different models of linguistic understanding and communication. Prerequisite: Take 1 course from the PL department.

PL-335 Advanced Ethical Theory (Either Semester; Variable; 4.00 Credits; H) This course will provide students with an introduction to advanced topics in contemporary moral theory, including debates in metaethics as well as the discussion of specific normative frameworks (such as virtue ethics, consequentialism, deontology and the ethics of care/feminist ethics, among others). Prerequisites: One prior Philosophy course or permission of the instructor.

PL-340 Philosophy of Art (Either Semester; Variable; 3.00 Credits; F,H) A study of the main theories about art in the western tradition, with particular attention to classical views as well as modernist conceptions and post-modern critical reactions. Prerequisites: AR110 or permission of instructor.

PL-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PL-450 Senior Thesis (Variable; Variable; 3.00 Credits; H) Students will engage in independent research and write a substantial final paper which evidences sustained engagement with the secondary literature on a topic selected in consultation with faculty members. This course is designed as a capstone experience. Prerequisite: Senior standing.

Philosophy, Politics, and Economics

Core Faculty

- Professor Jack Barlow (Politics) (Program Director)
- Associate Professor Xinli Wang (Philosophy)
- Assistant Professor Bradley Andrew (Economics)

Associated Faculty:

- Professor James Lakso (Economics)
- Professor Janet Lewis (Philosophy)
- Associate Professor Emil Nagengast (Politics)
- Assistant Professor Dennis Plane (Politics)

Background Information:

A liberal arts education aims to provide students with the tools to understand the world as it has been and as it will be. Juniata 's program in Philosophy, Politics, and Economics combines the perspectives of three core liberal arts disciplines that offer powerful tools for understanding. By working across traditional disciplinary boundaries, students are encouraged to question their own assumptions, to become independent in their quest for knowledge, and to form the pattern for a lifetime of learning. The program aims to enable students to be thoughtful citizens of the 21st century world, and to prepare them for careers in business, government, or education. Students take a core group of courses in each department, develop a concentration in one area, and participate in two interdisciplinary seminars.

Special programs, facilities, or equipment:

- Study abroad at: Masaryk University , Brno , Czech Republic
- Catholic University of Lille , France
- BCA Strasbourg , France
- University of Leeds , UK

Programs of Emphasis:

- Philosophy, Politics, and Economics

Internship/Research Experiences:

- Internships through Educational Programs Abroad, London , England
- Economic Development Internships through JCEL
- Washington Semester Program

Courses:

PPE-200 Sophomore Seminar (Either Semester; Yearly; 1.00 Credit; H,S) An introduction to the PPE program emphasizing the complimentary character of the three component fields. Students will read and discuss one or more works that invite

consideration from the perspectives of each of the three disciplines. Faculty members from each department will contribute to the course.

PPE-450 Senior Seminar (Spring; Yearly; 3.00 Credits; H,S) Designed as a capstone experience for seniors with a Program of Emphasis in Philosophy, Politics, and Economics. In consultation with the instructor, students will select research areas that reflect their interests as well as skills and knowledge acquired in their undergraduate careers in the course of their research, students will practice, and further refine, their literature research, critical thinking, and writing skills Prerequisites: Senior standing with a POE in Philosophy, Politics and Economics.

Physics

Department Website:

<http://departments.juniata.edu/physics/>

Faculty:

- Assistant Professor Mary Atchley - ext. 3580
- Associate Professor Matthew Beaky - ext. 3550
- Professor James Borgardt (Woolford Professor)- ext. 6600
- Lecturer Mark Pearson, Laboratory Instructor/Equipment Coordinator - ext. 3722
- Emerti Professor Norman Siems - ext. 3582
- Professor James White, (Chair and Book Professor) - ext. 3545

Background Information:

Any quantitative study of those aspects of the universe that can be sensed or measured ultimately will require use of physics. Physics deals with the fundamental quantities of space and time, energy and matter, as well as charge and other basic quantifiable aspects of our world. Physicists discover relationships governing the transfer of energy between material substances, for example, and deal with the structure of matter from the smallest quarks to the largest clusters of galaxies. The study, therefore, becomes fundamental to a deeper understanding of subjects such as chemistry, biology, astronomy, and engineering. A preeminent example of using physics knowledge and skills to further humankind's understanding of nature is 1970 graduate, Dr. William Phillips, who shared the 1997 Nobel Prize in Physics for cooling and trapping atoms with laser light.

Special programs, facilities, or equipment:

- Observatory with 16-inch computerized telescopes, as well as electronic imaging capabilities
- Quantum Optics laboratory with multiple laser systems (extended cavity diode, adjustable-cavity helium neon, nitrogen, and Nd:YAG lasers), rubidium and cesium spectroscopy equipment, and optical tweezers

- Electronics laboratory provides bench equipment for each student, as well as microcontrollers
- Two gamma-ray vehicular radiation portal monitors
- Society of Physics Students (SPS) chapter named outstanding chapter in their zone every year running since 1998
- Member of National Undergraduate Research Observatory
- Dual Physics/Engineering Degree Program with Columbia University, Clarkson University, Penn State, and Washington University at St.Louis
- Affiliation with Penn State Center for Nanotechnology Education and Utilization.

Program of Emphasis

- Physics
- Engineering Physics
 - a. Option 1: 3-2 Engineering
 - b. Option 2: 4-year Engineering Physics
 - c. Option 3: Physics/Secondary Education

Individualized Programs of Emphasis include:

- Physics/Mathematics
- Physics/Computer Science
- Physics/Information Technology
- Physics/Pre-Med
- Physics/Peace and Conflict Studies
- Physics/German (or other foreign languages)
- Physics/Religious Studies
- Physics/Philosophy

Secondary Emphasis:

- In order to claim a secondary emphasis in physics, a student must successfully take:
 - Mathematics through Calculus III
- All of the following physics courses:
 - PC 202 - Introductory Physics I (3) and PC 206 - Physics Laboratory (1)
 - or PC 204 - University Physics (4)
 - PC 203 - Introductory Physics II (3)
 - PC 207 - Physics Laboratory II (1)
 - PC 300 - Modern Physics Lab (3)*
 - PC 301 - Theoretical Modern Physics (3)
- Two additional physics courses, at least one of which must be at the 300 or 400 level

*The Department may waive the Modern Physics Lab requirement if the student is taking P-Chem Lab as part of a Chemistry POE, and they are taking two or more additional physics courses at the 300 or 400 level beyond PC 301.

Internship/External Research Experiences include:

- Pacific Northwest National Laboratory
- Thomas Jefferson National Accelerator Facility in Virginia
- National Institute of Standards and Technology in Gaithersburg, MD
- Research REU (Research Experience as Undergraduates) sites such as Cornell University, Baylor University, Ohio State University, University of Rochester, SUNY at Stony Brook, Coe College, Harvard-Smithsonian Center for Astrophysics, and The College of Wooster.

Courses:

PC-120 Astronomy (Fall; Yearly; 3.00 Credits; N) An exploration of how mankind's understanding of the universe has evolved and is still developing. Early astronomy, planets sun, stellar evolution, and galaxies are covered with emphasis on mankind's confrontation with the unknown. The present day fascination with pulsars, quasars, extra-solar system planets, and black holes are discussed.

PC-125 Musical Acoustics (Variable; Variable; 4.00 Credits; N,F) This course covers concepts of physics as applied to music. Topics include sound and resonance, pitch and tuning systems, psychoacoustics, anatomy of the ear, workings of musical instruments, electronic music fundamentals and literature, a review of musical notation, and aural recognition of intervals and pitches. Students will design and build a musical instrument, and participate in a performance.

PC-189 Physics Seminar I (Fall; Yearly; 1.00 Credit) Seminar series, required of all freshmen Physics/Physics-Engineering POEs, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Discussions regarding specific career opportunities and preparation for graduate studies will also be an integral part of the seminar series.

PC-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Entry level treatment of a variety of academic/practical experiences in physics such as Microcontroller Electronics and Physics Phun Night Practicum. Note: Students may take each ST: course for credit.

PC-200 General Physics I (Fall; Yearly; 3.00 Credits; N,QM) An algebra-based introduction to the basic principles of mechanics (including periodic motion, fluid static's and dynamics), heat and thermodynamics, molecular theory and wave motion (including acoustics). Note: a working knowledge of algebra and trigonometry is required. Corequisite: PC206.

PC-201 General Physics II (Spring; Yearly; 3.00 Credits; N,QM) An algebra-based introduction to basic principles of electricity, magnetism, electromagnetic waves, and optics. Additional topics may include atoms and molecules, nuclear physics, relativity

and solid state physics. Note: a working knowledge of algebra and trigonometry is required. Corequisite: PC207. Prerequisite: PC200.

PC-202 Intro Physics I (Fall; Yearly; 3.00 Credits; N,QM) A calculus-based introduction to the basic principles of mechanics (including periodic motion, fluid statics and dynamics), heat and thermodynamics, molecular theory and wave motion (including acoustics). Corequisite: PC206 and either MA130 or MA230.

PC-203 Intro Physics II (Spring; Yearly; 3.00 Credits; N,QM) A calculus-based introduction to basic principles of electricity, magnetism, electromagnetic waves and optics. Additional topics may include atoms and molecules, nuclear physics, relativity and solid state physics. Corequisite: PC207. Prerequisites: Take PC-202 or PC-204 and MA-130.

PC-204 University Physics (Fall; Yearly; 4.00 Credits; N,QM) A calculus-based introduction to the basic principles of mechanics (including periodic motion, fluid, statics and dynamics), heat and thermodynamics, molecular theory and wave motion (special relativity). This course includes an integrated introductory laboratory experience. This course is designed to be taken by students interested in a POE in Physics or Engineering Physics. Note: a special fee is assessed. Corequisite: MA130 and PC189.

PC-206 Physics Lab I (Fall; Yearly; 1.00 Credit; N) An introductory laboratory experience designed to accompany PC200 and PC202. The individual experiments will correlate with the beginning courses. Involves computer acquisition of data for some experiments. Note: A special fee is assessed. Corequisites: PC200 or PC202.

PC-207 Physics Lab II (Spring; Yearly; 1.00 Credit; N) An introductory laboratory experience designed to accompany PC201 and PC203. The individual experiments will correlate with the beginning courses. Involves computer acquisition of data for some experiments. Note: A special fee is assessed. Corequisite: PC201 or PC203.

PC-209 Electronics (Spring; Variable; 3.00 Credits; N) An introduction to the theory and application of analog and digital electronics, starting with basic AC and DC circuits. The unit explains the principles of operation of the power supply, amplifier, oscillator, logic circuits, micro controllers, and other basic circuits. An associated laboratory component allows construction of and measurements on the circuits under consideration. Note: a special fee is assessed.

PC-239 Nuclear Threat (Spring; Variable; 4.00 Credits; CA,N,H,CW) This course examines the development and ramifications of nuclear weapons. Students will learn the basic physics upon which these devices operate, and explore moral issues that arose in the interactions of communities impacted by their construction, use and testing, including the perspectives of scientists, government officials, and affected citizenry. Current issues and concerns regarding nuclear weapons will be studied as well. Prerequisites: Sophomore, Junior or Senior standing.

PC-289 Physics Seminar II (Fall; Yearly; 1.00 Credit) Seminar series, required of all sophomore Physics/Physics-Engineering POEs, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Discussions regarding specific career opportunities and preparation for graduate studies will also be an integral part of the seminar series. Prerequisites: PC189.

PC-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Entry level treatment of a variety of academic/practical experiences in physics such as Musical Acoustics and Physics Phun Night Practicum. Note: Students may take each ST: course for credit.

PC-300 Modern Physics Lab (Fall; Yearly; 3.00 Credits; N,CW) The origin and progress of physics in the 20th century, including relativity and quantum theory with applications in atomic and molecular physics, nuclear physics, elementary particles and possibly some solid state physics. Note: A special fee is assessed. Prerequisites: MA230 and PC203. Corequisite: PC301.

PC-301 Theoretical Modern Physics (Fall; Yearly; 3.00 Credits; N) Same as PC300 without the lab. The origins and progress of Physics in the 20th century, including relativity and quantum theory with applications in atomic and molecular physics, nuclear physics, elementary particles and possibly some solid state physics.

PC-307 Advanced Physics Lab (Spring; Yearly; 3.00 Credits; N,QS,CW) Provides laboratory projects at the intermediate level. A series of projects is offered which best meet the educational needs of the student. Prerequisite: PC300. Special fee assessed.

PC-314 Philosophy of Physics (Spring; Variable; 3.00 Credits; H,N) Explores philosophical issues in physics emphasizing problems of space, time, motion and difficulties concerning scientific explanation, causation and laws of nature. Topics may include the nature of geometrical knowledge, philosophical impact of relativity theory; absolute versus relative conceptions of space and time; problems of measurement, experimentation and testing hypothesis; and philosophical issues raised by quantum mechanics and/or other physical theories. Prerequisites: Sophomore standing or permission.

PC-320 Engineering Mechanics I: Statics (Fall; Variable; 3.00 Credits; N) A problem-solving approach to applied mechanics involving equilibrium of co-planar and non-planar force systems, analysis of frames and trusses, friction, centroids and moments of inertia. Prerequisite: PC202 or PC204.

PC-321 Engineering Mechanics II: Dynamics (Spring; Variable; 3.00 Credits; N) A problem-solving approach to applied mechanics involving the kinematics and kinetics of particles and rigid bodies. Techniques involving Newton's laws, work-energy and impulse momentum are presented and used extensively. Prerequisite: PC320.

PC-340 Mathematical Methods in Physics (Variable; Yearly; 3.00 Credits; N) An introduction to the mathematics used in advanced physical science courses. The emphasis

is on early exposure to mathematical techniques and their applications rather than on rigorous derivation. Topics include series analysis, complex variables, theory, matrix mechanics, ordinary and partial differential equations, vector and tensor analysis, and Fourier series. Prerequisites: PC203 and MA230.

PC-350 Thermodynamics (Spring; Variable; 3.00 Credits; N) An intermediate level course treating the concept of temperature and its measurement, the concepts of heat and work, the laws of thermodynamics, applications of these concepts to physical systems, the elements of statistical mechanics and as many topics of current concern as time allows. Prerequisites: MA235 and PC301.

PC-389 Physics Seminar III (Fall; Yearly; 1.00 Credit) Seminar series, required of all junior Physics/Physics-Engineering POEs, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Discussions regarding specific career opportunities and preparation for graduate studies will also be an integral part of the seminar series. Prerequisites: PC289.

PC-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Intermediate to advanced level treatment of a variety of areas within physics such as solid state physics, astrophysics, general relativity, and medical physics. Note: Students may take each ST: course for credit.

PC-402 Quantum Mechanics (Fall; Odd Years; 4.00 Credits; N) This course continues the discussion of the Schrodinger Equation, the particle-in-a-box, the harmonic oscillator, angular momentum, the hydrogen atom, and electron spin started in PC300 and/or CH305, but at a level that is mathematically much more detailed and proceeds from the postulates of quantum mechanics in a logical manner. With this beginning, the course then focuses on more complex problems such as the behavior of multi-electron atoms and molecules. Issues of the meaning of measurement such as embodied in the EPR paradox, the Bell Inequality, and the interpretation of associated experiments are also discussed. The course is heavily problem oriented requiring a strong mathematical background. Additional mathematics background such as PC340 and/or MA335 is suggested in addition to the formal prerequisites of MA235 and PC300 or CH305.

PC-410 Mechanics (Fall; Variable; 4.00 Credits; N) A study of classical mechanics including Newtonian, Lagrangian and Hamiltonian approaches. Emphasis is placed on developing the student's ability to analyze physical problems involving particles, systems of particles and rigid bodies. Insight is provided into a variety of techniques for solving such problems. Prerequisites: PC203 and PC340.

PC-430 Optics (Spring; Variable; 3.00 Credits; N) The wave theory of light as applied to interference, diffraction, polarization, and image formation. Major emphasis on Fourier techniques. Study of geometrical optics, quantum optics, and radiometry as time permits. Prerequisites: PC300 or PC301.

PC-450 Physics Research I (Fall & Spring; Yearly; 1.00-4.00 Credits; N) An opportunity for the student to do an independent research project under the guidance of a faculty member. Note: listed as Research: (title); may be taken multiple times for credit. Prerequisite: permission.

PC-451 Physics Research II (Fall & Spring; Yearly; 1.00-4.00 Credits; N) An opportunity for students to do a more advanced independent research project under the guidance of a faculty member. Prerequisite: permission.

PC-489 Physics Seminar IV (Fall; Yearly; 1.00 Credit) Seminar series, required of all senior Physics/Physics-Engineering POEs, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Discussions regarding specific career opportunities and preparation for graduate studies will also be an integral part of the seminar series. Prerequisite: For Seniors with Physics or Engineering Physics POEs and PC389.

PC-490 Physics Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; N) See chapter, "Special Programs" under internships. Note: may be repeated up to a total of 9 hours of credit. Corequisite: PC495. Prerequisite: permission and Junior or Senior standing.

PC-491 Electricity & Magnetism (Fall; Variable; 4.00 Credits; N) A study of electromagnetic phenomena, including electrostatics, electric fields in matter, magnetostatics, magnetic fields in matter, introductory electrodynamics including Maxwell's equations, and electromagnetic waves, potentials, and fields. Corequisite: PC340. Prerequisite: PC203.

PC-495 Internship Seminar/Research (Fall & Spring; Yearly; 2.00-6.00 Credits; N) Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: PC490. Prerequisite: permission.

PC-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer titles not normally offered. Prerequisites vary by course.

PC-TUT PC Teaching Assistant (Variable; Variable; 1.00-6.00 Credits) See Catalog.

Politics

Department Website:

<http://departments.juniata.edu/politics/>

Faculty:

- Professor Jack Barlow - ext. 3651
- Professor Emil Nagengast (Chair)- ext. 3650
- Associate Professor Dennis Plane - ext. 3644

Background Information:

Politics is among the oldest of the Western liberal arts. It traces its origins to Greek city-states of the classical period, and specifically to the city of Athens and the figure of Socrates. Even today, Socrates' tragic confrontation with the authority of the city informs Western ideas of individualism and community. Politics is everywhere in human life, and this department takes a comprehensive view of its subject matter. Juniata's Politics Department provides professional training within a liberal arts framework. We prepare students for careers in government, business, journalism, and many other fields as well as graduate school or law school.

Special programs, facilities, or equipment:

- Study abroad programs
- Washington Semester Program
- Washington Center Program

Programs of Emphasis:

- Politics
- International Politics
- Philosophy, Politics, and Economics

Individualized Programs of Emphasis:

- History and Politics
- Environmental Science and Politics
- Politics and Literature
- Peace & Conflict Studies/Politics

Secondary Emphasis:

- Students take PS 101 Intro to American Government, PS 102 Intro to International Politics, PS 222 Western Political Thought and any three (three or more credit) additional Politics courses at the 200 level or above.

Internship/Research Experiences:

- Federal Trade Commission
- United Nations Association of the United Kingdom (London)
- Chesapeake Bay Foundation
- Environmental Protection Agency

Courses:

PS-101 Introduction to American Government (Fall & Spring; Yearly; 4.00 Credits; S)
An introduction to the theory and practice of American government. The course surveys

the underlying structure of American politics, its economic, cultural and legal foundations and the daily practice of politics, e.g. groups, parties, and the mass media. Students are asked to develop an account of American politics and to assess the principal features of political life in the United States according to the standards they have framed.

PS-102 Introduction to International Politics (Fall & Spring; Yearly; 4.00 Credits; S,I) Analyzes the principles and practice of international relations and the foreign policy of the United States, political, diplomatic, military and economic.

PS-122 Politics in Literature (Spring; Variable; 3.00 Credits; H,S) An introduction to the themes and analytical framework of political philosophy through a careful reading of works of literature. Such political themes as the relation of the individual to society, gender issues and the legitimation of authority will be addressed.

PS-196 Politics of Race and Gender (Variable; Variable; 3.00 Credits; S) This course examines the politics of race and gender as they relate to American politics. It examines how citizens and politicians are influenced by race and gender when formulating political attitudes, participating in elections, and formulating public policy. This class entails considerable student participation and discussion of contemporary political events.

PS-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the departments to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PS-206 The Culture War (Spring; Yearly; 3.00 Credits; CA,S) Some believe that American society is divided against itself in a culture war over the definition and application of American culture to public policy. In this cultural conflict, traditionalists are pitted against progressives in a struggle over the core values of American society. This clash is manifested in public policy debates about issues including abortion, school prayer, gay rights, stem-cell research, medical marijuana, and school choice. This course examines the evidence for the existence of a Culture War in American Politics. It explores the extent to which these two subgroups of American society are battling to define! American political culture and how these groups use their preferred definition of American culture to influence public policy. This summer course is an on-line course and will be accessed through Moodle. (You do NOT need to be on campus to take this course). All assignments will be completed via the Internet.

PS-216 State & Local Government (Spring; Even Years; 3.00 Credits; S) Examines the organization, operation, and problems of American state and urban governments. Emphasis is placed on the services these governments provide, the conflicts they may manage, and the major economic and political trends affecting America's state and local governments. Prerequisite: PS101.

PS-218 Public Policy & Admin. (Spring; Yearly; 3.00 Credits; S) An introduction to the study of public policy and its administration. The course explores the ways which power, knowledge and institutions shape adoption and evolution of public policies in western

democracies. Focusing on various policy areas, the course also surveys the public bureaucracies that administer these policies, examining what government agencies do and why they do it, and assesses alternatives to public bureaucracies. Prerequisite: PS101.

PS-221 American Political Thought (Fall; Variable; 4.00 Credits; H,CW) Reviews the development of political thought in America from the pre-Revolutionary period to the present. The course focus is on the analysis of primary sources, such as the Federalist Papers. Special attention is given to the tension between equality and individual liberty in our democratic system. Prerequisite: PS101 or PS102.

PS-222 Western Political Thought (Spring; Yearly; 4.00 Credits; H,S) Surveys selected works of political philosophers from Plato to Nietzsche. The course will focus on enduring questions of political thought including the nature of the good life and the best regime, the relationship between freedom and authority, and the tension between liberty and equality. Prerequisites: PS101 or PS102.

PS-230A Political Party Conventions (Variable; Variable; 1.00-2.00 Credits; S) This course is an experiential education opportunity that takes place in the city that hosts either the Democratic National Convention or the Republican National Convention. It takes place every four years during presidential election years in the late summer or early fall. Each student decides whether he or she wishes to attend the program associated with the Democratic Party or the Republican Party. It is an intense, two-week seminar that features presentations by leading academics and practitioners about the presidential election, including the nomination campaign, the national party conventions, and the general election. The seminar also features site visits, fieldwork assignments, and small group discussions focused on these experiences and the course readings. The seminar culminates in the public events that comprise the Democratic National Convention or the Republican National Convention. Requires consent of the instructor and pre-payment of required course fees.

PS-230B Presidential Inauguration (Spring; Variable; 1.00-2.00 Credits; S) This course is an experiential education opportunity that takes place in Washington, D.C. every four years during the inauguration of the president. It is an intense, 10-day seminar that features presentations by leading academics and practitioners about the presidency and presidential elections; site visits to embassies, government agencies, think tanks, media outlets, etc.; and small group discussions focused on these experiences and the course readings. The seminar culminates in the public events that comprise the presidential inauguration. Requires consent of the instructor and pre-payment of required course fees.

PS-230C Inside Washington, D.C. (Spring; Variable; 1.00-2.00 Credits; S) This course is an experiential education opportunity that takes place in Washington, D.C. It is an intense, two-week seminar that features presentations by leading academics and practitioners about politics and the media, congressional elections, and presidential/congressional relations. The seminar includes site visits to embassies, government agencies, think tanks, media outlets, etc. with the aim of providing first-hand opportunities to witness government decision-making in action, as well as the efforts

others on The Hill who try to influence government outcomes. The seminar also includes small group discussions focused on these experiences and the course readings and, when available, participation in the public events that comprise the swearing-in of the newly elected Congress. Requires consent of the instructor and pre-payment of required course fees.

PS-230D Top Secret (Summer; Yearly; 1.00 Credit; S) This course is an experiential education opportunity that takes place in Washington, D.C. It is an intense, week-long academic seminar. Students explore the inner workings of the U.S. national security landscape with nationally recognized journalists, politicians, political analysts, and scholars as your guides. The course expands knowledge of American and international politics through on-site visits to such places as Capitol Hill, executive agencies, embassies, think tanks, and media organizations. Students engage in and network with nationally and internationally recognized public officials and business professionals to develop a sense of civic engagement and enhance leadership skills. Requires consent of the instructor and may require pre-payment of required course fees.

PS-241 European Politics (Spring; Odd Years; 3.00 Credits; S,I) Examines the modern history, political culture, institutions and policies of the major West European states. Britain, France, West Germany and the European Communities are compared along with selected other countries. The major problems confronting these are highlighted. Prerequisite: PS101 or PS102.

PS-242 Politics of Developing Nations (Fall; Yearly; 3.00 Credits; S,I) Draws an analytical framework and provides an in-depth study of political, economic and social development in non-western societies. Selected countries or groups of countries from Asia, the Middle East and Africa are used as case studies. Prerequisites: PS102 or permission.

PS-243 U.S. Foreign Policy (Fall & Spring; Variable; 3.00 Credits; S,I) Examines U.S. Foreign Policy from the Monroe Doctrine to the New World Order. Special emphasis is given to the tension between isolationism and globalism in this century. The course will focus on contemporary issues such as: the relationship with the UN, the U.S. as a global policeman, and the role of human rights as an American priority. Prerequisite: PS102.

PS-249 Senegambia I (Spring; Yearly; 1.00 Credit; I,S) This course will meet 1 hour per week in spring semester. A requirement of the course is to participate in a three week summer trip to West Africa. During the spring semester we will examine the history and contemporary politics and economics of the Senegambia region. At the conclusion of the spring semester we will spend 3 weeks exploring the political culture and society of the Gambia and Senegal in West Africa. There is a fee for the trip to Africa. Corequisite: PS250.

PS-250 Senegambia II (Spring; Yearly; 3.00 Credits; CA,I,S) See PS249. Corequisite: PS249. Students must complete PS249 and PS250 to receive CA credit. A course fee is applied.

PS-289 Politics and the Media (Fall; Variable; 4.00 Credits; S,CW) This course has two components. First, it looks at the interaction of politics and the media in the context of the United States. Students will learn about how politicians use the media and about how the media covers politics. Second, it is designed to help students hone their research and writing skills. The class involves extensive class discussion, applications of course materials to contemporary coverage of American politics in the media, and instruction about research and writing. Students will be required to pay close attention to the interaction of politics and the media during the course of the semester.

PS-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offers supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Note: Students may take each ST: course for credit.

PS-2YR Completion of Two Years At: Participating International Programs: Muenster, Lille, Bockholt, Lincoln, Marburg (Variable; Variable; 45.00 Credits)

PS-305 Politics in Film (Fall; Yearly; 4.00 Credits; H,F) This course is designed as an introduction to the study of political ideas as presented in motion pictures. We will look both at the direct representation of political ideas or points of view (especially through satire), and at the way Hollywood has shaped our ideas about the political process. Because film is very much a 20th century medium, we will look with special care at the two defining political events of this century, the crisis of Western democracy following World War I, and the Cold War.

PS-311 Constitutional Interpretation: Powers of Government (Fall; Yearly; 4.00 Credits; H) An examination of the three branches of government, their constitutional powers, and the limitations on those powers as interpreted by Supreme Court. Special attention is given to the areas of delegated and concurrent powers. The operation of the Supreme Court and the Federal court system are also reviewed. Prerequisites: PS101 or permission.

PS-312 Constitutional Interpretation: Civil Rights (Spring; Yearly; 4.00 Credits; H,CW) Examines citizen's rights and liberties which the Constitution protects against infringement by the government. Those freedoms enumerated in the Bill of Rights are reviewed as well as the right to privacy, due process, and equal protection. Prerequisites: PS101 or permission.

PS-313 Congress and Presidency (Fall; Odd Years; 4.00 Credits; S,CW) Examines the intellectual and constitutional foundations of Congress and the Presidency, and the evolution of their powers and responsibilities. The course also explores how, through cooperation and confrontation, the institutions make decisions about war and peace, spending, and taxation. Prerequisite: PS101.

PS-318 Parties, Elections & Campaigns (Either Semester; Variable; 3.00 Credits; S) Examines the role political parties and elections play in democratic theory and practice in the U.S. Topics include party systems in the U.S., history, party organization,

comparisons with parties in other countries, electoral competition, and elite mass linkages. Contemporary issues such as campaign finance, campaign strategy, and the role of the mass media are also explored. Prerequisite: PS101.

PS-320 TPJ: Political Philosophy/Jurisprudence (Fall; Variable; 3.00 Credits; H) Examines specific topics in the area of political philosophy and law. Topics will include " Foundations of American Constitutionalism, " " African-American Social and Political Thought, " " Liberalism, " and " Shakespeare's Politics. " Students may take each course for credit.

PS-323 State Legislative Process (Fall; Yearly; 3.00 Credits; S) A study of the State Legislative and Legislative Process. Students will examine the State Legislature as an institution in all of its aspects and those factors which comprise and affect the legislative process. The course requires the written analysis of actual legislation and the drafting of legislative proposals. Prerequisite: PS101.

PS-330 TPP: Topics in Public Policy (Fall; Variable; 3.00 Credits; S) Examines the formation and implementation of public policy by an in-depth focus on a single policy area. The course will investigate a particular policy area for the semester, such as environmental policy or health care policy. Policy study will include analysis of interest groups, public opinion, congressional committees and federal agencies. Research and analytical exercise will be emphasized. Prerequisite: PS101.

PS-332 International Law & Human Rights (Fall; Odd Years; 3.00 Credits; S,I,CW) A study of the historical evolution of International Law and its role and importance in the international system. In addition, the course will examine the issue of human rights, and the political factors that affect the extent to which human rights can be defined and protected by the international community. Prerequisite: PS102. (A Peace and Conflict Studies course).

PS-340 Topics in International Politics (Spring; Yearly; 3.00 Credits; S,I) Examines international politics in light of a specific topic or issue. The topics include themes such as: Global Environmental Politics, Nationalism, and Competing World Ideologies.

PS-346 African Politics (Spring; Yearly; 3.00 Credits; I,S,CW) This course examines some of the factors that explain the political problems that plague Africa. Topics include: colonialism, human rights, corruption, ethnicity and pan-Africanism. Prerequisite: PS102.

PS-348 Contemporary Latin America (Spring; Variable; 3.00 Credits; S,I) (See HS348)

PS-349 Senegambia III (Spring; Yearly; 1.00 Credit; I,S) This course will meet 1 hour per week in spring semester. A requirement of the course is to participate in a three week summer trip to West Africa. During the spring semester we will examine the history and contemporary politics and economics of the Senegambia region. At the conclusion of the spring semester we will spend 3 weeks exploring the political culture and society of the

Gambia and Senegal in West Africa. There is a fee for the trip to Africa. Corequisite: PS350. If PS249 and PS250 are completed they will count as CA. PS349/350 will not.

PS-350 Senegambia IV (Spring; Yearly; 3.00 Credits; I,S) See PS249. Corequisite: PS349. Students must complete PS249 and PS250 to receive CA credit. A course fee is applied.

PS-389 TWC: Washington Special Topics (Fall & Spring; Yearly; 1.00-4.00 Credits)
This course is for students participating in the Washington Center's internship program in Washington, D.C. Each student will select one of several courses offered by the Washington Center upon acceptance into the program. The title of this Special Topics course will vary according to the course the student enrolls in through the Washington Center.

PS-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offers supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Examples include Religious Revivalism in the Third World, Race, Religion and Gender in American politics and Nationalism in Europe. Note: abbreviated ST:(Title); students may take each ST: course for credit.

PS-490 Legal & Public Affairs Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; S)
An opportunity to apply concepts and theories learned in class and readings to a practical situation. Selected students work with chief administrative officers in State College and Huntingdon, police departments, environmental departments, legal offices or in the Court House. Note: may be repeated up to a total of 9 hours credit. Corequisite: PS495.
Prerequisite: permission and Jr. or Sr. Standing.

PS-491 Washington Interns (Fall & Spring; Yearly; 2.00-9.00 Credits; S) See the chapter, " Special Programs " in the catalog under " Internships. " Corequisite: PS495.
Prerequisite: permission.

PS-492 Harrisburg Legislative Interns (Spring; Yearly; 2.00-9.00 Credits; S) A unique opportunity to experience the legislative process. Placements are made to the research staffs of various committees (e.g., Banking and Commerce, Education, Judiciary, Local Government and Urban Affairs) of the Pennsylvania House of Representatives. Committees are selected on the basis of student interests and needs in the Legislature. Corequisite: PS495. Prerequisite: Permission and Sophomore, Junior or Senior standing.

PS-495 Politics Res/Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; S) Required of all students holding internships. The emphasis is on readings and discussions of materials relevant to the intern ship experience, e.g., professional behavior, ethical conduct, confidentiality, etc. Students produce a major research paper on a topic selected by the student in conjunction with the internship supervisor and the course instructor. Note: may be repeated up to a total of 6 hours credit. Corequisite: PS490 or PS491 or PS492.
Prerequisite: Minimum GPA of 2.50 and good academic standing required for internship

eligibility. Development of internship proposal must occur a minimum of six weeks prior to start of internship. Prerequisite: 2.50 GPA, Permission and Jr. or Sr. standing.

PS-497 Honors Research I (Fall; Yearly; 3.00 Credits; S) Designed to offer exceptional students the opportunity to engage in an extensive undergraduate thesis or research project. Selected students will be invited by the faculty of the department to propose a subject of special interest to the students; working closely with at least one member of the department, students will develop and complete a research project in the first semester and present the results as a publishable paper in the second. Available by permission.

PS-498 Honors Research II (Spring; Yearly; 3.00 Credits; S) Designed to offer exceptional students the opportunity to complete the research paper started in PS497. Prerequisite: PS497.

PS-499 Senior Seminar (Spring; Yearly; 3.00 Credits; S) Intended as a capstone experience in the discipline and designed to engage students in their final year in the comprehensive study of a major question or issue confronting the discipline of political science. Prerequisites: PS101 or PS102 or PS122 and senior standing and three additional Political Science courses or departmental permission.

PS-TUT Political Science Teaching Assistant (Variable; Variable; 1.00-3.00 Credits; S) See Tutorial in the catalog.

Psychology

Department Website:

<http://departments.juniata.edu/psychology/>

Faculty:

- Professor Phillip Dunwoody - ext. 5333
- Professor Mark McKellop (Chair)- ext. 3647
- Professor Ron McLaughlin - ext. 3681
- Professor Kathy Westcott - ext. 3656
- Professor David Widman - ext. 3576

Background Information:

The department's purpose is to provide exposure to the content, methodology, and theoretical developments associated with the "study of behavior." The department is oriented toward the empirical, scientific study of both human and non-human organisms. Courses in psychology are intended both for students desiring a general background and for those considering graduate work in the area. The offerings deal with behavior at all levels of analysis, from the smallest unit to the largest units of psychology. The department supports student research and encourages interdisciplinary study and internship experiences.

Special programs, facilities, or equipment:

- Human and Rodent behavioral research laboratories
- Discipline specific software for psychological research
- Human interaction lab
- Human physiological recording equipment
- Virtual V-CAVE environment

Programs of Emphasis:

- Psychology

Individualized Programs of Emphasis:

- Adolescent Behavioral Services
- Biopsychology
- Studies in Human Behavior
- Neuroscience
- Group and Individual Behavior
- Animal Behavior
- Cognitive Science
- Individual & Organizational Behavior

Secondary Emphasis:

- PY 101 Introduction to Psychology
- ND.SS.214 Statistics for Social Sciences (or equivalent)
- Four other psychology courses, two of which must be at the 300 or 400 level.

Internship/Research Experiences:

- Outpatient Clinics
- Developmental services
- Youth camps
- Correctional institutes
- Hospice
- High schools
- Institutional research
- Behavioral Health Services
- Laboratory based experiments in rat learning and conditioning
- Laboratory based experiments in human evolutionary psychology
- Laboratory based experiments in priming and working memory
- Survey based research into political attitudes and decision making
- Survey based research into organizational healthcare and worker attitudes and perceived access to programs.

Specific department policy:

Awarding credit for AP Exam scores: Awarding credit for AP Exam scores: If a student has a score of 4 or 5 on the AP Psychology exam, he/she will be awarded credit for PY 101. Introduction to Psychology. This course is worth 3 PY credits and carries the "S" designation. The student is free to enroll in other departmental courses that have PY 101 as a prerequisite.

Courses:

PY-101 Introduction to Psychology (Fall & Spring; Yearly; 3.00 Credits; S) An overview of the content and methodology in the field. Topics such as the history of psychology, physiological psychology, learning and memory, perception, motivation, child development, personality and social foundations are considered

PY-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites and fees vary by title.

PY-203 Abnormal Psychology (Spring; Yearly; 3.00 Credits; S) A brief consideration is given to the historical approaches to " mental illness, " followed by a consideration of present day classification, diagnostic measures, and therapy. Emphasis throughout is upon experimental data as applied to the various disorders. Prerequisite: PY101.

PY-205 Social Psychology (Spring; Yearly; 3.00 Credits; S) The study of human interaction and interpersonal relationships, including selected areas of current research and theory such as social perception, interpersonal communication, attitude formation and change, conformity, aggression, and interpersonal attraction. Prerequisite: PY101.

PY-207 Human Sexuality (Fall; Yearly; 3.00 Credits; S) Examines human sexuality from psychological and cultural perspectives. Topics include the physiology of sexual functions, conception and contraception, sexual behavior through the life span, sexual intercourse, sex and society, sex and the law, and sex and morality. Prerequisite: PY101.

PY-238 Biopsychology (Fall & Spring; Yearly; 3.00 Credits; S,N) Focuses on neurobiology and neuroanatomy as they relate to sensory processes, motivation, reinforcement, learning, and memory. Prerequisites: PY101 or BI105 or permission.

PY-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PY-302 Moral Judgment (Spring; Yearly; 3.00 Credits; S) This course will cover basic issues relevant to understanding and evaluating moral judgment. We will compare prescriptive models of human judgment (how people ought to make moral judgments) with descriptive models of human judgment (how people actually make moral

judgments). Prescriptive models will be rooted in moral philosophy (e.g., utilitarianism). Descriptive models will be rooted in psychology and will focus on the relative roles of automaticity, intuition, and conscious reasoning. Descriptive accounts of morality will also address how intuitive moral foundations differ as a function of political ideology and the implications for public policy formation. Applications of prescriptive and descriptive moral theories will include a variety of applications, including genomics and bioethi.

PY-303 Learning & Conditioning (Fall; Yearly; 3.00 Credits; S) Explores the issue of how we are changed by experience, using primarily a behaviorist perspective, applied to animal and human data. Both theory and applied applications of theory will be considered. Prerequisite: PY101.

PY-304 Cognitive Psychology (Fall; Yearly; 3.00 Credits; S) Explores an array of issues in human memory, primarily from a cognitive/information processing point of view. Major emphasis is on using research data to formulate answers to both theoretical and applied questions. Prerequisite: PY101.

PY-305 Measurement Theory (Fall; Even Years; 3.00 Credits; S) Emphasizes the theory, design, and evaluation of psychological tests. Special attention is paid to topics such as validity and reliability, practical issues involved in administration, scoring and interpreting selected psychological tests. Prerequisite: PY101 and ND.SS214.

PY-309 Research Methods in Psychology (Fall & Spring; Yearly; 4.00 Credits; S,CW) Examines issues in research design. A variety of topics are used to provide students experience with the design and execution of experiments as well as with the interpretation of research findings and the written presentation of research. Prerequisites: Take PY101 and ND.SS214 or MA220.

PY-321 Health Psychology (Spring; Yearly; 3.00 Credits; S) Course will examine empirical findings from disciplines of psychology, medicine, and public health. Course topics include research methods, stress and social support, health behavior and primary prevention, management of chronic/terminal illnesses, gender and cultural issues in health, and psychoneuroimmunology. An underlying theme will be to dispel health-related myths and fads that are so prevalent in the popular media. Prerequisites: PY101.

PY-340 Research in Psychology (Fall; Yearly; 2.00 Credits; S) Allows students to become involved in an ongoing research program. Students will be required to read primary literature from the specific field of investigation and become involved in execution of an ongoing experiment. Students will be expected to perform the activities relevant to the experiment, assist in the analysis of the data, and write an APA style paper based on the results of the experiment. Prerequisites: PY101 and permission. Repeatable up to 3 times.

PY-341 Research in Psychology (Spring; Yearly; 2.00 Credits; S) =See PY340 description.

PY-350 Developmental Psychology (Fall; Yearly; 3.00 Credits; S) This course is designed to integrate core topics in the discipline of developmental psychology with current key issues in society. Consequently, students will have the opportunity to analyze scientific literature and make connections to current, everyday life issues. Additionally, students will have the opportunity to explore developmental theory and its connection to public policy, known as " best practices " in parenting and education and consider developmental theory's influence on current trends in our broader society. Prerequisites: PY101 or ED120 or ED130.

PY-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Occasional offerings in which a group of students and a professor explore an area of specialized interest in a seminar format. Recent offerings have been: " Multicultural Psychology and Psychology of Gender " . Note: Students may take each ST: course for credit.

PY-401 Comparative Psychology (Spring; Odd Years; 3.00 Credits; S,N,CS) Comparative Psychology examines the continuity of behavioral and psychological mechanisms between nonhuman animals and humans suggested by evolutionary theory. Attention is paid to the comparison between human and nonhuman animals on traditionally human characteristics, including self-recognition, language, culture, tool use, and several other characteristics. Prerequisites: PY101 or BI105 and Junior or Senior standing or permission of the instructor.

PY-402 Evolutionary Psychology (Spring; Even Years; 3.00 Credits; S,N,CS) This course uses the lens of modern evolutionary theory to understand human behavior. We will look for the influence of human evolutionary history on several modern human behaviors including, among others, dating and marriage, aggression, altruism, child-rearing, and behavioral differences between the sexes. Prerequisites: PY101 or BI105 and Junior or Senior standing or permission of the instructor.

PY-403 Judgment & Decision Making (Spring; Yearly; 3.00 Credits; S) This course is designed to provide students with an introduction to the methodological skills and topics necessary for conducting, understanding, and applying research in judgment and decision making. Assignments include written and oral reports. You should gain a better understanding of the capabilities and limitations of human judgment through this course. Prerequisites: PY101.

PY-404 School Psychology (Spring; Yearly; 3.00 Credits; S) This course serves as an introduction to the discipline of school psychology. Specifically, our primary focus will be on the application of psychological principles to improve learning for all students. Emphasis will be placed on research-based models of prevention that help to improve outcomes for individual students and classrooms as well as overall schools and schools districts. Core topics will include systems-based service delivery, assessment, learning theory, effective interventions, culturally competent practice, effective instruction, data-based decision making, and collaborative consultation. Prerequisites: PY101.

PY-406 Advanced Stats for Psychology (Fall; Odd Years; 4.00 Credits; S,Q) An examination of statistics useful in social science research that builds on the base provided by Statistics for Social Science. Techniques that are examined include factorial analysis of variance, multiple correlation and regression. Students not already acquainted with the computer are introduced to SPSS. Prerequisite: ND.SS214.

PY-409 Clinical Psychology (Fall; Yearly; 3.00 Credits; S) Provides an overview of the scientific discipline of clinical psychology. This course examines the historical foundations of clinical psychology and scientific methodologies utilized by behavioral scientists. In addition, this course examines the process of psychological assessment and the major theoretical models of psychological therapy: behavioral/cognitive, psychodynamic/psychoanalytic, and existential/humanistic. Discussion of legal and ethical issues will occur throughout the course. Prerequisites: PY203 and PY309.

PY-410 Agression and Prejudice (Spring; Yearly; 3.00 Credits; S,CS) This is an upper level seminar course limited to juniors and seniors. The course focus is on primary source readings from social psychology and political psychology that address the breadth of the human condition from compassion and empathy to political extremism and genocide. Topics include prejudice (racism, sexism, etc.), authoritarianism, social dominance, compassion, humanitarianism and human values.

PY-411 Psychology and the Law (Spring; Yearly; 3.00 Credits; S) This course explores the interface between psychology and the legal system. Students will be given an introduction to the legal decision-making process and how it differs from scientific methods of inquiry. Following the introduction, this course will emphasize how psychological theories can enhance our understanding of the legal system and how the legal system can be informed by psychological science. Prerequisites: PY101.

PY-415 Capstone in Psychology (Fall; Yearly; 3.00 Credits; S,CS) The purpose of this course is to assess the skills students acquire during their undergraduate career in the Psychology Department. Students will be expected to produce a written professional work. Prerequisites: PY101 and PY309 and ND.SS214 and Senior standing.

PY-450 Senior Research in Psychology I (Fall; Yearly; 2.00 Credits; S) Emphasizes the design and execution of an individual research project on a topic chosen in consultation with faculty. Students are expected to become conversant with the relevant primary literature, design and conduct the research, perform appropriate statistical analyses and present a final paper in APA style. Prerequisite: PY309 and permission.

PY-451 Senior Research in Psychology II (Spring; Yearly; 2.00 Credits; S) See PY450.

PY-490 Psychology Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; S) See the chapter, " Special Programs " under Internships in the catalog. Corequisite: PY495. Prerequisite: permission and Jr. or Sr. standing.

PY-495 Psychology Int. Sem. (Fall & Spring; Yearly; 2.00 Credits; S) Requires students to reflect on the internship experience and /or pursue research related to the placement. Corequisite: PY490. Prerequisite: permission.

PY-499 Special Topics (Variable; Variable; 2.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

PY-TUT Psychology Teaching Assistant (Variable; Variable; 1.00-5.00 Credits) See catalog.

Religious Studies

Department Website:

<http://departments.juniata.edu/religion/>

Faculty:

- Professor Don Braxton (Good Professor) - ext. 3530
- Professor Bob Miller (Rosenberger Professor)- ext. 3629
- Associate Professor Susan Prill (Chair) - ext. 6673

Background Information:

Religious Studies is a secular, interdisciplinary program. It approaches a socially defined phenomenon such as “religion” and brings to bear upon this phenomenon the methodological orientations of the human, social, and natural sciences.

Courses are designed around methodological and topical criteria. For example, the course RL 110 “What is Religion?” is an introduction to the anthropology of religion looking at the physical and biological context of religious behavior, the psychological and social dynamics governing the formation of religious belief and behavior, and the artifacts produced by religion such as statuary, ritual spaces, and texts. By contrast, a course such as RL 360 “Sikhism” is a topical introduction to a specific cultural domain, namely the history and development one religious tradition. Our program fosters both specific specialization in various domains of competence and general theories and methods for the study of religion.

Programs of Emphasis:

- Religious Studies
- Philosophy & Religious Studies

The POE will consist of a minimum of 49 credit hours and the senior thesis for 4 credits. All students must take our three introductory courses to be offered at least once a year:

RL 110 What is Religion?

RL 120 World Religions

Either RL 202 (Old Testament) or RL 203 (New Testament)

All students must complete a 4-credit hour senior thesis under the guidance of the designated instructor for the year of their graduation. The remainder of the POE must be distributed according to this template of 8 courses. Of these, at least 4 have to be at the 300 or 400 level

One course from the following list of Philosophy Department offerings:

PL 115: Human Nature

PL 201: Plato and Aristotle

PL 245: Chinese Philosophy

PL 255: Philosophy of Religion

PL 304: Existentialism

Two courses from the following list of History Department offerings:

HS 104: Middle Ages 500-1300

HS 105: Modern Europe to 1815

HS 151: World Civilization to 1500

HS 152: World Civilization from 1500

HS 206: China and Japan to 1800

HS 235: Islam: Origins and Modernity

All students must complete one year of college-level foreign language study in one language. No limits are placed which language is chosen or how the student meets this requirement.

[Secondary Emphasis:](#)

- 18 credit hours
- All students must complete RL 110, RL 120, either RL 202 or RL 203

- Other courses of the student's choosing with at least 2 of them at the 300 or 400 level.

Courses:

RL-110 What Is Religion (Fall; Yearly; 4.00 Credits; H,CW) This course serves as an introduction to religious studies. It engages some of the most important questions which preoccupy students of world religions. How do religions work? What kinds of issues does religion address?

RL-115 Viking Religion (Variable; Variable; 1.00 Credit; H) This course introduces to the student the religion of the Vikings through literature, archeology, and historical portraits. It explores the uses and misuses of Viking lore in current culture.

RL-120 World Religions (Either Semester; Yearly; 3.00 Credits; H,I) An introduction to most of the major religious traditions of the world (Hinduism, Buddhism, Judaism, Christianity, Islam) and a few of the smaller religious traditions (such as Zoroastrianism and Sikhism). This course also examines how our own beliefs and attitudes affect our understandings of religion.

RL-140 Jesus Through the Ages (Either Semester; Variable; 3.00 Credits; H) This course examines the different ways in which Jesus, the most talked about man in history, has been portrayed throughout Christian history and seeks to understand why he has been described so differently. The purpose of this course is not to determine which beliefs about Jesus are true, but rather to understand how and why those beliefs differ and why they matter so much to so many. This course studies the New Testament (especially the gospels), early church controversies over the divinity and humanity of Jesus, the modern debate over the "historical Jesus," newly discovered ancient gospels, and the portrayal of Jesus in movies. (This course is a seminar, restricted to freshman and sophomores.)

RL-170 Origins of Evil (Either Semester; Variable; 3.00 Credits; H) Introduces the student to traditions of religious thought on the experience of evil and suffering in one or more of the following manifestations: so-called natural evils such as death, predation, disease, and natural disasters; moral evils such as racism, sexism, militarism. Explores the psycho-social origins of violence.

RL-199 RL Special Topics (Variable; Variable; 1.00-4.00 Credits) An examination of an area of study not regularly included in the departmental offerings. Titles will vary. Students may take each special topics course for credit.

RL-202 Old Testament As History and Literature (Spring; Yearly; 4.00 Credits; H,I) An introduction to the historical-critical reading of the Old Testament against the background of the history, politics, religion, literature, and culture of the ancient Middle East. This course studies how these Israelites texts were written and how their literary qualities shape their religious meanings.

RL-203 New Testament As History and Literature (Fall; Yearly; 4.00 Credits; H,I) An introduction to the historical-critical reading of the New Testament against the background of the history, politics, religion, literature, and culture of the ancient Mediterranean world. This course studies how these early Christian texts were written and how their literary qualities shape their religious meanings.

RL-210 Sacred Landscapes (Either Semester; Variable; 3.00 Credits; H) This course explores the relationship between the experience of geography and religious ideology. We take various environments-mountainous, oceanic, desert, forest, plains-and try to connect the religious thoughts of their inhabitants to the geography.

RL-230 Religions of India (Either Semester; Yearly; 4.00 Credits; H,I,CW) An introduction to religions originating in or having a major impact on India, including Hinduism, Jainism, Buddhism and Islam.

RL-241 Cyborg Salvation (Variable; Yearly; 4.00 Credits; H) This course introduces the student to the transhumanist movement, a technology-driven philosophy that seeks to drive the evolution of the species toward its " next stage " A core question of the course is whether this is a new, " upgraded " religion or a replacement for traditional religious hopes. Various proposals for human-technology hybridizations will be explored.

RL-246 Modern Culture and Religion (Spring; Yearly; 3.00 Credits; H) Studies religious themes in modern culture as reflected in literature, philosophy, ethics, science, religion, etc. Focus is on the most recent issues of religion and culture.

RL-263 The Divine Feminine (Spring; Variable; 3.00 Credits; I,H) While the majority of religious people worldwide are women, their experiences and practices do not receive the same level as attention from academics as those of men. This class looks at women's religious experiences and the veneration of female divinities by both men and women.

RL-270 Sinners and Saints (Either Semester; Variable; 3.00 Credits; H) This course surveys the genre of religious biographies and human fascination with demonic characters. We analyze self-reports of religious lives and how those testimonies construct demonic forces.

RL-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

RL-311 Bring Out Your Dead (Either Semester; Variable; 3.00 Credits; CA,H) Introduces the student to the ideologies, rituals, sociology, and psychological mechanisms involved in dealing with the dead and dead bodies. The course covers mortuary rituals, the preparation and treatment of dead bodies, the psychology of death, and the sociological consequences of the public manipulation of the dead.

RL-321 Women in the Bible (Either Semester; Yearly; 3.00 Credits; CA,H) This course focuses on the female characters in the Bible and on its teachings about the social and religious roles specific to women. The course studies those texts in both their ancient and modern contexts, with special attention to how they interact with culture, and explores what meanings those biblical passages can have for women (and men) today. Prerequisite: at least Sophomore standing.

RL-341 Religion and War (Variable; Yearly; 4.00 Credits; CA,H,CW) This course explores the role of religion in warfare. It looks at the evolution of religion and war in our species, modern anthropological investigations of religion and war, religious discussions of war in Western and non-Western religions.

RL-352 The Hebrew Prophets (Either Semester; Variable; 3.00 Credits; CA,H) This course combines a historical-critical study of the prophetic books of the Hebrew Bible against the background of the religion, politics, and society of ancient Israel and a theological appraisal of the relevance of the prophets' messages in today's world. Prerequisites: At least Sophomore standing or permission of the instructor.

RL-353 End Times Prophecy (Either Semester; Variable; 3.00 Credits; H) A historical-critical study of ancient Jewish and Christian apocalyptic literature, especially the biblical books of Daniel and Revelation and the influence of this biblical tradition on American Christianity and popular culture. Prerequisites: At least Sophomore standing and either RL202, RL203 or RL352.

RL-360 Sikhism (Fall; Variable; 4.00 Credits; H,I,CW) Because of the turban worn by many male Sikhs, Sikhs have become a visible minority (and often the target of hate crimes) in both the U.S. and India. But who are they and what do they believe? This course is an introduction to the Sikh religion, from the beginnings in North India to the present day. Focus will be on the development of Sikh identity and relations with Hindu and Muslim India. Prerequisites: RL120 or RL230.

RL-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

RL-430 Religion and Science Seminar (Variable; Variable; 3.00 Credits; H) This course serves as an advanced study of religion in a scientific world. It takes some of the most important issues in religious life and looks at them through the lens of scientific investigations. What is the human organism in light of modern cosmology? Why did religious behavior evolve in our species? What does science say about how religion works? What is the future of religion in our species?

RL-440 Yoga Studies (Spring; Variable; 4.00 Credits; CA,H,I,CW) In the past fifty years, Yoga has become one of India's best-known exports, primarily in the form of physical (Hatha) Yoga. This class will examine the history and varieties of Yoga and Yoga philosophy. We will examine many of the numerous varieties of Yoga philosophy

and explore their intersection with devotional movements. Prerequisites: RL120 and Junior or Senior standing.

RL-450 God, Evil & the Holocaust (Either Semester; Variable; 3.00 Credits; H) If God is so powerful and so good, why is there so much Evil in the world? This course examines this problem from Jewish, Christian and agnostic perspectives, with special attention to the Holocaust, and studies ancient and modern attempts to confront this problem, including readings from the Bible, philosophers, theologians, Holocaust survivors, modern fiction, and contemporary films. Prerequisites: Junior or Senior standing.

RL-490 Religion Internship (Fall & Spring; Yearly; 2.00-9.00 Credits; H) See " Internship " in catalog. Corequisite: RL495. Prerequisites: Jr. or Sr. Standing.

RL-495 Internship Seminar Religion Internship Research Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; H) See " Internship " in catalog. Corequisite: RL490.

RL-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

RL-TUT Religion Teaching Assistant (Variable; Variable; 1.00-3.00 Credits; H)

Sociology, Anthropology, and Social Work

Department Website:

<http://departments.juniata.edu/sociology/>

Faculty:

- Professor Susan Radis (Chair) - ext. 3674
- Associate Professor Cynthia Merriwether-de Vries - ext. 3678
- Assistant Professor Beth Williams- ext. 3697
- Assistant Professor Paula Wagoner Emerta - ext. 3653
- Associate Professor Daniel Welliver - ext. 6605

Background Information:

Sociology is the systematic study of human interaction. The discipline uses both descriptive and analytical methods and it differs from other social sciences by its focus on society. Anthropology, a much more broadly based discipline, is concerned with observation, description, and analysis of the physical, cultural, and ecological processes which define the human species. Accredited by the Council on Social Work Education, the Dorothy Baker Johnson and Raymond R. Day Social Work Program is designed primarily to prepare students for entry-level generalist social work practice. The

department's offerings may be combined to meet four kinds of academic needs: the broad study of societies and cultures and their contemporary problems for the liberally-educated; a theoretical and conceptual orientation for pre-professional sociologists and anthropologists; and rigorous training and field experience in social work for those interested in this career or in the pursuit of graduate education in social work.

Special programs, facilities, or equipment:

The Human Interaction Lab

Programs of Emphasis:

- Anthropology
- Social Work
- Sociology

Individualized Programs of Emphasis:

- Biological Anthropology
- Museum Studies/Anthropology
- Peace and Conflict Studies/Sociology
- Social Work/Spanish
- Social Work/Communication

Secondary Emphasis:

- Anthropology Requirements: 18 credits, 12 from the core list and choice of 6 additional.
- Sociology Requirements: 23 credits of designated Sociology courses.
- Generalist Option: 23 credits of designated Sociology courses.
- Social Issues Option: 14 credits of designated Sociology courses and choice of 6 additional upper-level Sociology courses.

Sample Internship/Research Experiences:

- The Abuse Network
- JC Blair Hospital
- Mainstream Counseling
- SCI: Smithfield
- Woodland Retirement Center

Courses:

SO-101 Introduction to Sociology (Fall & Spring; Yearly; 3.00 Credits; S) The study of human social groups and the social processes that lead to both structural and cultural integration and differentiation primarily within contemporary American society.

SO-199 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offered at the discretion of the department to qualified students Topic titles may vary from semester to semester and more than one may be offered per semester. Note: Students may take each ST: course for credit.

SO-203 Minority Experiences (Fall; Yearly; 3.00 Credits; S) An exploration of the factors that shape the experiences of minority group members in both domestic and global contexts. The social processes that functions to construct minority identity among racial, ethnic, gender, and ability groups are studied. Prerequisites: SO101 or AN151.

SO-204 American Families (Fall; Yearly; 3.00 Credits; S) Examines the structure and functions of the family as a vital social institution. Particular emphasis is placed on emerging trends within the family including dual careers, non-traditional families, divorce, and conflict management. Prerequisite: SO101 or AN151.

SO-241 Child & Family Services (Spring; Variable; 3.00 Credits; S) An overview of child and family services policies and practice. Primary emphasis is on the dynamic interaction between the child, family, community and social service delivery system. Service areas are explored including abuse and neglect, adoption, foster care, status offenders, and special needs of children and families. Prerequisites: SO101 or AN151.

SO-242 Aging & Society (Spring; Yearly; 3.00 Credits; S) Analyzes the physical, psychological and social processes involved in aging, and the societal response to aging. Prerequisite: SO101 or AN151.

SO-243 Death & Dying (Spring; Yearly; 3.00 Credits; S) An introduction to the social, psychological and cultural aspects of death and dying. The course is designed to lessen misconceptions concerning death and dying, to enable individuals to deal constructively with their feelings about personal death and the death of meaningful others and to help people cope more effectively with grief and bereavement. Prerequisites: Sophomore, Junior or Senior standing.

SO-244 Drugs and Society (Spring; Variable; 3.00 Credits; S) This course explores the history of substance abuse, models of addiction, physiological effects of commonly abused substances and treatment effectiveness. Some of the programs that will be examined include the 12-step program. Prerequisites: SO101.

SO-260 Introduction to Criminal Justice (Fall; Yearly; 3.00 Credits; S) Explores the nature of crime, the history of criminal justice, and the process of the modern justice system. Prerequisites: SO101 or AN151.

SO-299 Special Topics (Variable; Variable; 1.00-4.00 Credits) Offered at the discretion of the department to qualified students Topic titles may vary from semester to semester and more than one may be offered per semester. Note: Students may take each ST: course for credit.

SO-302 Social Deviance and Criminology (Spring; Yearly; 3.00 Credits; S) Examines contemporary psychological and sociological theories of behavior deviation, including crime, delinquency, substance abuse and selected other categories. Typologies for classifying and studying crime are developed and evaluated. Trends in behavior deviation, including the characteristics of offenders and victims, are critically explored. Informal and formal, as well as proactive and reactive, social control systems aimed at managing behavior deviation are described and analyzed. Prerequisites: SO101 or AN151.

SO-305 Gender and Society (Spring; Yearly; 3.00 Credits; S) This course is designed to explore the history and discourse related to the experiences and sociological definitions of gender roles across global and domestic contexts. Students will participate in critical analysis of the scholarship of gender roles using classical and contemporary works. The course will explore domestic and international experiences of men and women in biological, cultural, economic, environmental and political contexts. Prerequisites: SO101 or PY101.

SO-320 Wealth, Power, & Society (Fall; Variable; 3.00 Credits; S,CW) An investigation of the stratification of American society. The roots and repercussions of social inequalities are studied with special emphasis given to inequalities relating to social class, race, ethnicity and gender. Social structures through which these inequalities are sustained are critically examined. Prerequisites: SO101 and Sophomore, Junior, or Senior standing.

SO-335 Social Change (Spring; Variable; 3.00 Credits; S,CW) Exploration of causes and consequences of social change. Forms of social change are examined through case study analysis of significant economic and political developments, revolutions and widespread shifts in normative social patterns and their socially constructed meanings. Forces that drive social change will be studied, including changing demographics and technological innovation, as well as social movements and other intentional efforts to stimulate change through human agency. Prerequisites: SO101 and sophomore, junior or senior standing.

SO-350 Social Movements (Fall; Yearly; 3.00 Credits; S) This course provides a comprehensive critical analysis of collective action and social movement in global society. The course explores sociological literature on social movements and collective behavior. Students will produce a final video exploring a modern social movement. Students' projects will include the selected movements' history, leadership and membership, the impact of new media, public policies impacting the movement. Prerequisites: SO101 and SO, JR, or SR standing.

SO-399 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

SO-401 Sociology Senior Seminar (Spring; Yearly; 3.00 Credits; S) Sociology Senior Seminar is the capstone course for students who have focused their academic work in the sociological discipline. The course provides an opportunity for students to apply key curricular components previously explored during their undergraduate sociology coursework. The course is a designated service learning and experiential learning course. Students will assume substantial responsibility for the exploration of materials and presentation of those materials to their student colleagues. Students will also interact with campus and community partners during the semester. The course uses a student-led seminar format, coupled with community engagement and service learning components. Prerequisite: Senior standing.

SO-492 Sociology Internship/Need Paperwork (Fall & Spring; Yearly; 2.00-9.00 Credits; S) Minimum GPA of 2.50 and good academic standing required for internship eligibility. Development of internship proposal must occur a minimum of six weeks prior to start of internship. Corequisite: SO-495. Prerequisite: 2.50 GPA, Permission and Jr. or Sr. standing.

SO-495 Sociology Research/Seminar (Fall & Spring; Yearly; 2.00-6.00 Credits; S) Requires students to reflect on the internship experience and pursue research related to the placement. Corequisite: SO490. Prerequisite: permission.

SO-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows the department to offer subjects not on the normal schedule. Prerequisites vary by title.

SO-ADVANCE Completion of Advanced Studies At: Participating International Programs: Muenster, Lille, Bockholt, Lincoln, Marburg(Variable; Variable; 45.00 Credits)

SO-TUT Sociology Teaching Assistant (Variable; Yearly; 3.00 Credits) Individualized study wherein the instructor designs the course in consultation with the student and is responsible for its administration. In the Tutorial, the instructor and student work closely on a regularly scheduled basis involving discussions, demonstrations, explanations and evaluations.

AN-151 Introduction to Anthropology (Fall & Spring; Yearly; 3.00 Credits; S,I) Dedicated to the proposition that there are many ways of being human, all of which are adaptations to particular sets of environmental and historical conditions. Trends and highlights of the human experience, both physical and cultural, are studied from a sociocultural perspective. Prerequisites: Freshman or Sophomore standing. Juniors and Seniors require the instructor's permission. No High School students are permitted.

AN-234 Constructing Race & Ethnicity (Fall; Variable; 3.00 Credits; S,CA) A cross-cultural study of social and cultural processes involved in the creation and maintenance of the social categories of race and ethnicity. Examines anthropological, historical, and legal texts as well as material from popular culture. Prerequisites: AN151 or AN254.

AN-254 Archaeology & Human Prehistory (Fall; Yearly; 3.00 Credits; S,I) Through readings, lectures, films, and discussions about a variety of archaeological sites, from Alaska to Zimbabwe, students are introduced to our earliest ancestors, to the diversity of prehistoric cultures, and to the origins of Western civilization.

AN-300 Anthropology of War & Peace (Either Semester; Variable; 3.00 Credits; S,I) A study of the incidence and nature of cooperation, competition, and conflict in human cultures. Evidence will be drawn from archaeological, ethnological and ethological data. Prerequisite: AN151 or PACS110.

AN-310 American Indians (Variable; Variable; 3.00 Credits; S) An examination of the social, economic and political lives of reservation and non-reservation American Indians set in the historical context of their minority treatment. Prerequisites; SO101 or AN151 or AN254.

AN-311 Topics in Anthropology (Spring; Variable; 3.00 Credits; S) Occasional offerings in which students and a professor explore an area of specialized interest. Some themes include religion, gender, culture change, cultural ecology, frontiers and insider/outsider. Prerequisites: AN151 or AN254.

AN-316 North American Prehistory (Variable; Variable; 3.00 Credits; S) A survey of the archaeological evidence in North America before 1492. Students learn about the diversity of groups, ranging in size from small bands of hunter-gatherers to highly complex societies, and how they exploited various ecological niches.

AN-351 Cultures of the World (Variable; Variable; 3.00 Credits; S,I) An introduction to the variation in human cultural systems. A cultural perspective is used to examine diversity in band, tribal, chiefdom, and state level societies. Prerequisites: AN151 or AN254 or permission.

AN-353 Archaeological Fieldwork (Spring; Even Years; 4.00 Credits; S) An introduction to the ethics, principles and techniques of archaeological field research in the first half of the course. The second half is devoted to a practicum: actual excavations on both prehistoric and historic sites. Prerequisite: AN151.

AN-399 Special Topics (Spring; Yearly; 1.00-4.00 Credits) Allows the department to offer special topics not normally offered. Departments may offer more than one special topic. Prerequisites vary by title.

AN-411 History of Anthropological Thought (Variable; Variable; 3.00 Credits; S,CW) Explores the major theoretical orientations of American and European Anthropology, including: functionalism, structuralism, social evolutionism, symbolic anthropology, as well as a consideration of Marxist, feminist and indigenous critiques. A capstone integrative experience for all upper level anthropology POEs. Prerequisites: AN151 or AN234.

AN-451 Cultural Ecology (Spring; Even Years; 3.00 Credits; S) An examination of the relationships between man and his environment, particularly noting how ecological variables influence such cultural patterns as subsistence, settlement, social relationships and stress behaviors. Some consideration is given to problems of the future. Prerequisite: AN151 or AN254.

AN-452 Archaeology Lab (Either Semester; Variable; 3.00 Credits; S) Provides instruction in all of the processes involved in preservation, conservation, cataloging, illustrating and analyzing artifacts and other materials from archaeological excavation. In addition to general experience, students specialize in an analytical technique of their choice. Prerequisites: AN151 and SO353.

AN-453 Archaeology (Variable; Variable; 3.00 Credits; S) An advanced introduction to archaeological method and theory. Students use a computer-simulated excavation to develop research problems, design research strategies, and collect, analyze, and interpret data. Prerequisite: AN254 and ND.SS214.

AN-454 Ethnology (Variable; Variable; 3.00 Credits; S,I) An introduction to cross-cultural research. Using statistical methods and data from ethnographic sources, students examine patterns of cultural continuity and discontinuity, and test hypotheses about human cultural systems. Prerequisites: AN151 & ND.SS214.

AN-490 Internship/Need Paperwork (Variable; Variable; 2.00-9.00 Credits) See catalog.

AN-495 Internship Seminar (Variable; Variable; 2.00-6.00 Credits) See catalog.

AN-499 Special Topics (Variable; Variable; 1.00-4.00 Credits) Allows department to offer topics not normally offered. Prerequisites vary by topic.

SW-221 The Life Cycle (Fall; Yearly; 3.00 Credits; S) An introduction to life span development from conception, through birth, infancy, childhood, adolescence and the various stages of adulthood. Explores perspectives on the physical, psychological and social aspects of development over time. Examines human diversity as well as similarities in growth and development. Prerequisites: SO101 or PY101.

SW-230 Introduction to Social Work Practice (Spring; Yearly; 4.00 Credits; S) Examines the generalist knowledge, values and skills of the social work profession. Emphasizes interviewing and communication skills, the development of a helping relationship, the strengths perspective and problem solving strategies. Prerequisites: SO101 or permission of instructor.

SW-231 Social Problems & Social Welfare (Fall; Yearly; 3.00 Credits; S) Explores persistent social problems such as poverty, inequality, and oppression, unemployment, family violence, and substance abuse using historical, philosophical, and social science perspectives. The development of social policies and services as institutional responses to these problems are described and analyzed. Prerequisites: SO101.

SW-330 Social Work Practice: Individual, Family And Small Groups Laboratory (Fall; Yearly; 2.00 Credits; S) Supervised field work in an approved social work agency. Provides opportunity to observe agency function and apply beginning social work practice skills. Corequisite: SW331. Prerequisite: SW230.

SW-331 Social Work Practice: Individual, Family And Small Groups (Fall; Yearly; 4.00 Credits; S) Explores the problem solving process used in social work practice with individuals, families and small groups. Interviewing and problem solving skills, family systems analysis and group process are refined in preparation for beginning practice with individuals, families, and small groups. Corequisite: SW330. Prerequisite: SW230.

SW-332 Social Work Practice: Large Groups, Organizations and Communities (Fall; Yearly; 4.00 Credits; S,CW) Focuses on the problem solving processes employed in the delivery of social work services at the agency, institutional and community level. Primary consideration is given to the systems approach to communities and the techniques, strategies, and roles utilized by the worker in assisting communities and groups to attain satisfying and developmental levels of social functioning. Prerequisite: SW230.

SW-333 Social Welfare Policies and Services (Fall; Yearly; 3.00 Credits; S) A conceptual study of the meanings, nature, scope, implementation and evaluation of social policy as it relates to issues of social welfare. Prerequisites: SW231 and ND.SS215.

SW-399 Special Topics (Either Semester; Variable; 1.00-4.00 Credits) Allows the department to offer topics not on the regular course offerings. Prerequisites and corequisites may vary by title.

SW-490 Social Work: Professional Semester (Spring; Yearly; 12.00 Credits; S) Full time supervised senior capstone field experience in an approved social work agency. Students integrate the knowledge, values and skills of the social work profession with experiential learning in preparation for assuming the responsibilities of an entry-level social work professional upon graduation. Corequisite: SW495 Prerequisite: Permission.

SW-495 Professional Semester: Research Seminar (Spring; Yearly; 3.00 Credits; S) Involves research and discussion of practice issues of importance to the generalist social worker focusing on the impact these issues have on student's own practice experience. Corequisite: SW490. Prerequisite: Permission.

World Languages and Cultures

Department Website:

<http://departments.juniata.edu/languages/>

Faculty:

- Visiting Language Instructor (French) Thibault de Durand de Premoral- ext. 3658

- Associate Professor Holly Hayer (Spanish) - ext. 3498
- Associate Professor Michael Henderson (French and International Studies) (Chair)- ext. 3497
- Associate Professor Judith Benz (German) - ext. 3496
- Visiting Language Instructor (German) Thorben Schmidt- ext. 3406
- Assistant Professor Amy Frazier-Yoder (Spanish) - ext. 3660
- Visiting Language Instructor (Spanish) Alejandra Santiago Martinez—ext.3498
- Professor James Roney (Russian and International Studies) - ext. 3495
- Visiting Language Instructor (Russian) Guzel Gilmeeva- ext. 5331
- Michael Beamer (Director, Intensive English) - ext. 5842
- Professor Henry Thurston-Griswold (Spanish) - ext. 3499
- Language Instructor Jingxia Yang-Stiffler (Chinese) - ext. 3524
- Instructor Deb Roney (Director of Language in Motion) - ext. 3493

Background Information:

The study of languages and cultures has always been an integral part of the liberal arts. The globalization of markets, of international problems, and even of individual lives has made the knowledge of more than one language and culture an essential skill. By teaching students to communicate in another language and to function successfully in another culture, the Department of World Languages and Cultures helps them acquire a respect for human diversity, an awareness of the purposes and possibilities of different forms of expression, and the experience and skills necessary to pursue graduate study or a variety of careers in education, business, information technology, government, and other areas. The study of literature and culture enables students to read with insight, to think and express themselves clearly, and to judge international issues and individual behaviors with a compassionate understanding of how the human condition varies across cultures. To prepare international students for success in both academic and professional settings, the Intensive English Program offers courses in English as a Second Language (ESL) at Intermediate through Advanced levels of proficiency.

Special programs, facilities, or equipment:

- Small class sizes
- Proficiency-based instruction
- Excellent study abroad programs
- Distinction in the Program of Emphasis

Programs of Emphasis:

- French
- German
- Russian
- Spanish/Hispanic Cultures
- K-12 certification in French, German, and Spanish

- K-12 dual certification in any two of the above languages

Individualized Programs of Emphasis

Students have designed interdisciplinary Programs of Emphasis which combine advanced study in French, German, Russian, or Spanish with disciplines such as:

- Art History/Museum Studies
- Environmental and Natural Sciences
- Health and Allied Health Professions
- History
- International Business
- International Relations
- Peace and Conflict Studies
- Politics
- Social Work

Secondary Emphasis:

- Requirements: Minimum of 15 credit hours in the target language beyond the third-semester level, selected in consultation with advisors.

Specific department policy:

IC/CA Waiver: The Interdisciplinary Colloquium and Cultural Analysis requirements will be waived for students who successfully complete a world language course beyond the 210 level in the target language and a semester or more of study abroad in the target language and culture.

AP Credit: Incoming students who have received a score of 4 or better on the Advanced Placement Exam and who enroll in an intermediate or advanced foreign-language course during their first year at Juniata College may receive up to four hours of AP credit.

Courses:

WL-201 Language in Motion (Fall & Spring; Yearly; 1.00 Credit; H,I,CS) Section 01. The course provides service-learning opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After attending workshops on topic identification and development and on presentation techniques, students will conference with the instructor and host teachers to develop individual projects for presentation in school classrooms. The course is graded pass-fail. Section 02. The course provides service-learning opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand

their knowledge of language and culture and to enrich local public school classrooms. After attending workshops on topic identification and development and on presentation techniques, students will conference with the instructor and host teachers to develop individual projects for presentation in school classrooms. Students receive letter grades. Prerequisite: Permission.

WL-202 Language in Motion (Fall & Spring; Yearly; 1.00 Credit; H,I,CS) See WL201. The course provides service-learning opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers and attending a Special Topics workshop, students will conference with the instructor and host teachers to develop individual projects for presentation in school classrooms. The course is graded pass-fail. Section 02. The course provides service-learning opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers and attending a Special Topics workshop, students will conference with the instructor and host teachers to develop individual projects for presentation in school classrooms. Students receive letter grades. Prerequisite: Permission.

WL-203 Language in Motion (Fall & Spring; Yearly; 1.00 Credit; H,I,CS) See WL201. The course provides opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers, students will conference with the instructor and two host teachers to develop individual projects for presentation in school classrooms. The course is graded pass-fail. Section 02. The course provides opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers, students will conference with the instructor and two host teachers to develop individual projects for presentation in school classrooms. Students receive letter grades. Prerequisite: Permission.

WL-204 Language in Motion (Fall & Spring; Yearly; 1.00 Credit; H,I,CS) See WL201. The pass-fail course provides opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers, students will conference with the instructor and the selected host teacher to develop individual projects for presentation in school classrooms. The course is graded pass-fail. Section 02. The course provides opportunities for international students, study-abroad returnees, heritage speakers, and upper-level language students to expand their knowledge of language and culture and to enrich local public school classrooms. After meeting with teachers, students will conference with the instructor and the selected host teacher to develop individual projects for presentation in school classrooms. Students receive letter grades. Prerequisite: Permission.

WL-303 Sociolinguistics (Spring; Odd Years; 3.00 Credits; CA,H,I) This undergraduate course is meant to encourage you to reflect on how language functions in society. We will consider a subset of topics relevant to sociolinguistics, among them dialect variation (e.g., regional, social, ethnic); language ideology and language prejudice; and linguistic debates in education. We will consider linguistic communities across the United States. Prerequisite: EN110 and Junior or Senior standing.

WL-398 Methods for Foreign Language Education (Fall; Yearly; 4.00 Credits; S,CS) This course is for students interested in teaching foreign languages or English as a foreign language or second language (ESL). This course provides a thorough introduction to contemporary theories and methods of language pedagogy. Students seeking K-12 certification in foreign languages may take this course instead of ED420 after studying abroad. It may also be taken by those students who have an interest in teaching English abroad. International students who are here a semester or a year should also consider taking this course. Prerequisites: ED110 and ED111 and ED130 and ED240

WL-490 World Language Internship (Variable; Variable; 2.00-9.00 Credits; H,I) See " Internships " in the catalog.

WL-495 Internship Seminar (Variable; Variable; 2.00-6.00 Credits; H,I) See " Internships " in catalog.

Academic Calendar

Fall 2015 Semester

August

Date	Day	Event
20 - 21	Thursday - Friday	August and International Students Orientation
22	Saturday	Inbound Programs
26	Wednesday	Upperclass Students Arrive
27	Thursday	Fall Semester Classes Begin
Aug. 27 - Sept. 4	Thursday - Friday	Drop/Add Period (Instructor's permission required after this da

September

Date	Day	Event
21	Monday	Incomplete Work due, Grades due September 25

October

Date	Day	Event
2 - 4	Friday - Sunday	Family Weekend & Homecoming
14	Wednesday	Mid-Term Date, Mid-Term faculty due date November 1
15 - 18	Thursday - Sunday	Fall Recess
19	Monday	Classes Resume

November

2 - 10	Monday - Tuesday	Senior & Junior Preregistration
10	Tuesday	Senior POEs Due
12 - 20	Thursday - Friday	Sophomore & Freshmen Preregistration
25 - 29	Wednesday - Sunday	Thanksgiving Recess
30	Monday	Classes Resume

December

Date	Day	Event
11	Friday	Last Day of Classes, Final Course Withdrawal Deadline
14 - 18	Monday - Friday	Final Examinations

MWF Class Meetings = 43
TTH Class Meetings = 29

Spring 2016 Semester

January

Date	Day	Event
17	Sunday	Students Return
18	Monday	Spring Semester Classes Begin
18 - 26	Monday - Tuesday	Drop/Add Period (Instructor's permission required after this date)

February

Date	Day	Event
8	Monday	Incomplete Work due, Grades due Feb. 12, 2nd Advisor form due for Freshmen and 2nd semester transfer s

March

Date	Day	Event
4	Friday	Mid-Term Date, Mid-Term faculty due date March 20
4	Friday	Transfer Students POEs Due Sophomore POEs Due

Date	Day	Event
5 - 13	Saturday - Sunday	Spring Recess
14	Monday	Classes Resume
21 - 29	Monday - Tuesday	Sophomore & Junior Preregistration
25	Friday	No Classes
March 30 - April 7	Wednesday - Thursday	Freshman Preregistration
March 30 - April 7	Wednesday - Thursday	Freshman Advising Worksheet meetings with advisors (replaces the

April

Date	Day	Event
17	Sunday	<i>Founders Day</i>
21	Thursday	<i>Liberal Arts Symposium</i>

May

Date	Day	Event
3	Tuesday	<i>Last Day of Classes, Final Course Withdrawal Deadline</i>
3	Tuesday	<i>Spring Awards Convocation</i>
4	Wednesday	Reading Day
5 - 11	Thursday - Wednesday	Final Examinations
13	Friday	<i>Senior Baccalaureate</i>
14	Saturday	<i>Senior Commencement</i>

MWF Class Meetings = 42

TTH Class Meetings = 29

September 14 - 15 - Rosh Hashanah

September 23- Yom Kippur

October 12 - Columbus Day

January 18 - MLK Day

May 8 - Mothers Day

Leap Year

Directories

Board of Trustees

Date in parentheses is that of appointment to the board.

Officers

McDowell, Robert N., Chair

Statton, Timothy D. Vice Chair

Habecker, Gail M., Treasurer

Yelnosky, Robert E., Assistant Treasurer

Ellis, Carol J., Secretary

Sheffield, Bethany, Assistant Secretary

Members

Troha, James A., B.A., M.A., Ph.D. – Ex-Officio (2013)

Terms Expire 2016

Close, Nicole C. '92, B.S., Ph.D., Founder/President, EmpiriStat, Inc., Mount Airy, MD (2013)

Donahue, Jayne K. '75, B.S., Executive Vice President and General Auditor, State Street Corporation, Southborough, MA (2013)

Habecker, Gail M. '76, B.A., E.B. A.C., PMG Advisors, LLC, Conshohocken, PA (2003-2006) (2007)

Hayes, William P. B.A., President & CEO, Kish Bankcorp, Inc., Belleville, PA (2004)

Hevrony, Nathan B.S. Principal & Managing Partner, HIG Equity, New York, NY (2013)

Holsinger, Steven J. '76, B.A., J.D., VP, Governance & Compliance of The Hershey Company Hershey Foods Corporation, Lancaster, PA (1999-00) (2001)

Raymond, Gary A. B.A., M.D., Doctor of Podiatric Medicine, Altoona, PA (2013)

Schwemlein, Christoph, '84, B.S., E.B.C.S., M.B.A., Managing Director, Gebr.Klocker, Borken Weseke, Germany (2001)

Statton, Timothy D. '72, B.S., Retired Executive Vice President and Director Bechtel Group, Inc, President, Bechtel Telecommunications Global Business Unit, Member of Bechtel Corporate Board, Sonoma, CA (1998)

Valko, George P. B.S., M.D., Vice Chair, Family Medical Department, Thomas Jefferson University, Collegeville, PA (2013)

Terms Expire 2017

Andrews, David P. '74, B.A., J.D., Attorney, Andrews and Beard Law Offices, Altoona, PA (1992-1995; 1999)

Beachley, David C. '77, B.S., President, Beachley Furniture Company, Inc., Hagerstown, MD (2005-2007, 2008)

Chang-lo, Pat, B.S., M.S., Country Manager/President, Greater China, Bechtel Corporation, San Rafael, CA(2011)

Ellis, Carol J. '71, B.S., M.Ed., Retired Manager, Exxon Mobil, Palm Coast, FL (2011)

Glaeser, Carl D.'77, B.S., Managing Partner, Palladian Capital Partners, New York, NY (2005)

Gibbel, Ethan J. '02, B.S., Vice-President, Gibbel Insurance Agency, Lititz, PA (2014)

Halbritter, Barry J.'65, B.S., President, MidState Tool & Supply, Inc., Duncansville, PA (1987)

Jones, Elaine V. '76, B.S., Ph.D., Executive Director, Venture Capital, Pfizer Corporation, Wayne, PA (2014)

Mason, Fred C. '73, B.S., M.B.A., Retired Director, Product Source Planning, Caterpillar, Inc., Greenland, New Hampshire (2008)

McDowell, Robert N.'67, B.A., M.A., Partner, CHM Partners International, LLC, Huntingdon, PA (1999)

McKonly, Linda W. '73, B.S., Civic Leader, Hanover, PA (2005)

Moyer, Bruce L. '74, B.A., J.D., President, Government/Legal Affairs, Moyer Group, Takoma Park, MD (2011)

Paulhamus, Richard E. '70, B.S. M.S., Consultant, Mohnton, PA (1997-2000, 2002)

Rys, William A. '96, B.A., J.D., Tax Lobbyist, Citigroup, Washington, DC (2014)

Siedzikowski, Henry F. '75, B.A., J.D., President, Attorney, Elliott Greenleaf & Siedzikowski, Blue Bell, PA (2011)

White, Mary M. '73, B.S., M.S., President/CEO, Swedish Medical Center, Englewood, CO (1999)

Terms Expire 2018

Davis, Bruce '65, B.A., M.F.A., Retired Executive Director, Academy of Motion Pictures Arts & Science, Los Angeles, CA (2012)

Fahey, David J. '81, Principal and Managing Director, Avison Young, Wayne, PA (2015)

Grajewski, Tracy L. '86, Senior Vice President Human Resources, Highmark, Export, PA (2015)

Hill, John T. B.A., C.P.A., President, COO, Magna Carta Companies, Pennington, NJ (2012)

Jensen, Eric C. '77, B.S., Ph.D., Senior Research Fellow, Lilly, Eli & Company, Indianapolis, IN (2009)

Monger Gray, Jodie E. '88, B.S., M.S., Ph.D., President, Customer Relationship Metrics, Stevensville, MD (2002)

Nagl, John, A. B.S., M.Phil., Headmaster, Haverford School, Haverford, PA (2012)

Pollock, Gayle W. '68, B.S., Director, Dehne, George & Associates, Old Saybrook, CT (2005)

Wise, Charles W. III, A.B., M.B.A., Retired Vice President, Human Resources, PPG Industries, Pittsburgh, PA (2000)

Faculty

Full-Time Faculty

The date in parentheses is that of first appointment to Juniata faculty.

Ames, William M., *Assistant Professor of Chemistry* (2013). B.A., Macalester College, 2004; Ph.D., The University of Iowa, 2009.

Andrew, Bradley B., *Professor of Economics* (2001). B.S., Framingham State College, 1989; M.A., Ph. D., University of Connecticut, 1992, 2002.

Baran, Peter, *Associate Professor of Chemistry* (2004). B.S., M.S., Ph.D., Slovak Technical University, 1985, 1986, 1992.

Barlow, J. Jackson, *Charles A. Dana Professor of Politics* (1991). Junior Faculty Award (1995); Beachley Distinguished Academic Service Award (2006). B.A., Carleton College, 1976; M.A., Ph.D., Claremont Graduate School, 1981, 1984.

Baughman, Kathy R., *Swigart Associates Supported Professorship of Business* (2009). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence, 2015, B.S., The Pennsylvania State University, 1991; M.B.A., Saint Francis University, 2009.

Beaky, Matthew M., *Associate Professor of Physics* (2011). B.S., Worcester Polytechnic Institute (1989). M.S., Ph.D., The Ohio State University, 1992, 1996.

Bellwoar, Hannah, *Assistant Professor of English* (2011). B.A., Temple University, 2000; M.S., Ph.D., University of Illinois, 2004, 2011.

Bennett, Randy L., *Professor of Biology* (2000). B.A., Western Maryland College (1985). Ph.D., University of Wisconsin-Madison, 1993.

Benson, Bethany, *Associate Professor of Art* (2007). Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2013). B.F.A., University of Massachusetts, 2000; M.F.A., Southern Illinois University, 2007.

Benz, Judith G., *Associate Professor of German* (2008). B.A., The College of William & Mary, 1997; Ph.D., Yale University, 2007.

Biddle, Kathleen R., *Associate Professor of Education* (2005). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2010). B.S., Indiana University of Pennsylvania, 1976., Ph.D., Tufts University, 1996.

Borgardt, James D., *William W. Woolford Professorship in Physics* (1998). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2003); Beachley Distinguished Teaching Award (2012); B.S., University of California, Santa Barbara, 1989; M.S., Ph.D., University of Arizona, 1995, 1997.

Braxton, Donald M., *J. Omar Good Professor of Religion* (2002). B.A., Wittenberg University, 1986; A.M., Ph.D., The University of Chicago, 1987, 1993.

Bukowski, John F., *Professor of Mathematics* (1997). Beachley Distinguished Academic Service Award (2013). B.S., Carnegie Mellon University, 1991; Sc.M., Ph.D., Brown University, 1992, 1997.

Buonaccorsi, Vincent P., *Professor of Biology* (2001). Beachley Distinguished Academic Service Award (2015). B.S., University of Notre Dame, 1993; Ph.D., College of William and Mary, 1998.

Burkhardt, Marlene E., *Professor of Accounting, Business and Economics* (2002). B.A., Wilkes College, 1980; M.S.W., University of Maryland, 1982; Ph.D., The Pennsylvania State University, 1990.

Chan, Jason P., *Assistant Professor of Biology* (2013). B.A., Wesleyan University, 2002; Ph.D., Tufts University School of Medicine, Sackler School of Biomedical Sciences, 2007.

Clarke, Kathleen, *Assistant Professor of Theatre Arts* (2008). B.A., Oberlin College, 1990; MFA, University of Washington, 2000

Cockett, Lynn S., *Professor of Communication* (2001). Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2006); B.S., Messiah College, 1989; M.L.S., Ph.D., Rutgers-The State University of New Jersey, 1993, 2000.

Cook-Huffman, Celia B., *W. Clay and Kathryn H. Burkholder Professor of Conflict Resolution* (1990). Junior Faculty Award (1996). Beachley Distinguished Academic Service Award (2010). B.A., Manchester College, 1986; M.A., University of Notre Dame, 1988; Ph.D., Maxwell School of Citizenship and Public Affairs of Syracuse University, 1993.

DeHaas, Sarah J., *Martin G. Brumbaugh Professorship of Education* (1997). B.S., Slippery Rock State College 1980. M.Ed, Providence College 1988; Ph.D., Pennsylvania State University 1991.

DeVries, Cynthia Merriwether, *Associate Professor of Sociology* (2002). B.S., M.S., Ph.D. The Pennsylvania State University, 1990, 1994, 2000.

Dickey, William M., *Assistant Professor of English* (2008). B.A., Shippensburg University, 2000; M.A., University of New Orleans, 2003; Ph.D., Indiana University of Pennsylvania, 2010.

Dries, Daniel R., *Assistant Professor of Chemistry* (2012). B.S., University of Delaware, 2000; Ph.D., University of California, San Diego, 2007.

Dunwoody, Philip T., *Professor of Psychology* (2004). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2010). B.A., Richard Stockton College of New Jersey, 1994; M.S., Ph.D., University of Georgia, 1998, 2000.

Escuadro, Henry, *Associate Professor of Mathematics* (2007). B.S., M.S., Ateneo de Manila University, 1994, 1997; Ph.D. Western Michigan University, 2006.

Fala, Grace M., *Professor of Communication* (1992). Junior Faculty Award (1998); Beachley Distinguished Academic Service Award (2004). A.A., Bucks County Community College, 1978; B.A., M.A., West Chester University, 1986, 1988; Ph.D., The Pennsylvania State University, 1993.

Fletcher, Alison, *Associate Professor of History* (2007). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2011). Bryn Mawr College; M.A., Ph.D., The Johns Hopkins University, 1995, 2003.

Frazier-Yoder, Amy, *Assistant Professor of Spanish* (2009). B.A., Washington & Lee University, 1999; M.A., Ph.D., University of Virginia, 2004, 2010.

Glazier, Douglas S., *Professor of Biology* (1980). Beachley Distinguished Academic Service Award (2000). B.A., Oakland University, 1973; Ph.D., Cornell University, 1979.

Glosenger, Fay I., *Dilling Endowed Chair in Early Childhood Education* (1982). Lindback Distinguished Teaching Award (1988), Beachley Distinguished Academic Service Award (1997). B.S., M.Ed., Ph.D., The Pennsylvania State University, 1971, 1977, 1984.

Goldstein, Peter M., *John Downey Benedict Professor of English* (1991). Beachley Distinguished Teaching Award (2004). B.A., Harvard University, 1976; J.D., University of Southern California, 1979; Ph.D., University of California, Los Angeles, 1991.

Hark, Richard R., *H. George Foster Chair of Chemistry* (2001). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2007). B.S., University of Rochester, 1984; Ph.D., University of Pennsylvania, 1996.

Hayer, Holly J., *Associate Professor of Spanish* (2005). B.A., Ursinus College, 1985; M.S., Ph.D., Georgetown University, 1991, 1997.

Henderson, Michael S., *Associate Professor of French* (1992). Beachley Distinguished Academic Service Award (2012); B.A., M.A., Arizona State University, 1982, 1984; Ph.D., University of California, Santa Barbara, 1991.

Hochberg, Mark R., *Charles A. Dana Professor of English* (1970). Beachley Distinguished Teaching Award (1980). B.A., University of Pennsylvania, 1966; M.A., Ph.D., Cornell University, 1969, 1970.

Hosler, Jay, *Professor of Biology* (2000). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2005). B.A., DePauw University, 1989; Ph.D., University of Notre Dame, 1995.

Hsiung, David C., *Dr. Charles R. and Shirley A. Knox Chair in History* (1991). Junior Faculty Award (1995). Beachley Award for Distinguished Teaching (2007). B.A., Yale University, 1983; M.A., Ph.D., The University of Michigan, 1985, 1991.

Johanesen, Katharine, *Assistant Professor of Geology* (2015). B.S., Beloit College, 2006; Ph.D., University of Southern California, 2011.

Johnson, Dennis L., *George "Fritz" Blechschmidt '54 Professorship in Environmental Science* (1999). B.A., Lock Haven University, 1989; B.S., M.S., Ph.D., The Pennsylvania State University, 1989, 1992, 1995.

Jones, Kathleen M., *Associate Professor of Education* (2005). B.S., M.S., Ph.D., The Pennsylvania State University, 1985, 1995, 2009.

Keeney, Jill B., *David K. Goodman '74 Endowed Chair in Biology* (1994). Junior Faculty Award (1999). Beachley Distinguished Academic Service Award (2011). B.S., The Pennsylvania State University, 1985; Ph.D., Washington University, 1990.

Kirchhof-Glazier, Debra A., *Professor of Biology* (1981). Lindback Distinguished Teaching Award (1987). Beachley Distinguished Academic Service Award (1999) B.S., Lebanon Valley College, 1973; Ph.D., Cornell University, 1979.

Kruse, Gerald W., *John '54 and Irene "58 Dale Professorship in Math and Computer Science* (1999). B.S., University of Illinois, 1985; Sc.M., Ph.D., Brown University, 1993, 1997.

Lamendella, Regina, *Assistant Professor of Biology* (2012). B.S., Lafayette College, 2004; M.S., Ph.D., University of Cincinnati, College of Engineering, 2006, 2009

Latten, James E., *Professor of Music* (2002). B.S., Mansfield University, 1986; M.S., Indiana University, 1990; Ph.D., The Pennsylvania State University, 2002.

Maleska, Monika, *Associate Professor of Art* (2006). B.A., University of Manitoba, Canada, 1998; M.F.A., University of Texas at San Antonio, 2001

Mathur, Amy E., *Assistant Professor of English* (2006). B.A., Juniata College, 1996; M.S., Carnegie Mellon University, 1997; Ph.D., University of Arizona, 2009.

Mathur, Ryan D., *Professor of Geology* (2001). B.A., Juniata College, 1996; Ph.D., University of Arizona, 2000.

Matter, John M., *Associate Professor of Biology* (1997). B.A., University of Missouri, 1983; M.S., Saint Louis University, 1987; Ph.D., University of Florida, 1995.

McKellop, J. Mark, *Professor of Psychology* (2002). Henry H.'57 and Joan R. Gibbel Award for Teaching Excellence (2008) B.A., The Ohio State University, 1994; M.A., Ph.D., University of Cincinnati, 2000.

McLaughlin, Ronald K., *Professor of Psychology* (1985). Lindback Distinguished Teaching Award (1989). B.A., University of Missouri, 1977; M.S., Ph.D., Northwestern University, 1981, 1983.

Merovich, George T., Jr., *Assistant Professor of Environmental Science & Studies* (2015). B.S., The University of Arizona, 1994; M.S., Frostburg State University, 1998; Ph.D., West Virginia University, 2007.

Miller, Robert J., *Rosenberger Chair of Christian and Religious Studies* (2003). B.A., St. John's College, 1975; M.A., University of California, Santa Barbara, 1978; M.A., Ph.D., Claremont Graduate School, 1980, 1986.

Muth, Norris Z., *Associate Professor of Biology* (2007). B.A., Brown University, 1997; M.S., Yale School of Forestry and Environmental Studies, 1999; Ph.D., State University of New York, Stony Brook, 2006.

Nagengast, Emil, *Professor of Politics* (1996). Junior Faculty Award (2000). Beachley Award for Distinguished Teaching (2011). B.A., Middlebury College, 1984; M.A., University of Kansas, 1990; Ph.D., University of Pittsburgh, 1996.

Page, Amanda M., *Assistant Professor of English* (2013). B.A., Wellesley College, 2003; M.A., Ph.D., University of North Carolina at Chapel Hill, 2005, 2011.

Park, Valerie G., *Associate Professor of Education*, (2003). B.S., The Pennsylvania State University, 1979; M.Ed., Shippensburg State University, 1982; Ph.D., The Pennsylvania State University, 2005.

Pelkey, Neil W., *Associate Professor of Environment Science and Studies and Information Technology* (2002). B.A., University of California; Ph.D., University of California.

Peruso, Dominick F., *Professor of Accounting* (1999). B.S., Saint Francis College, 1995; M.Ed., Ph.D., The Pennsylvania State University, 1999; 2012; C.P.A. in Pennsylvania.

Plane, Dennis L., *Professor of Politics* (2004). B.A., Rollins College, 1993; Ph.D., University of Texas at Austin, 2002.

Powell, Matthew G., *Associate Professor of Geology* (2007). Henry H.'57 and Joan R. Gibbel Award for Teaching Excellence (2013). B.S., M.S., Virginia Polytechnic Institute and State University, 1998, 2000; Ph.D., The Johns Hopkins University, 2005.

Prill, Susan E., *Associate Professor of Religion* (2006). B.A., Bard College, 1996; M.A., University of Michigan, 2000; Ph.D., University of London, 2005.

Radis, Susan T., *Professor of Social Work and Sociology* (1984). B.S., The Pennsylvania State University, 1969; M.S.S., Bryn Mawr College, 1973.

Ramakrishnan, Uma, *Associate Professor of Environmental Science and Studies* (2005). B.Sc., Bangalore University; M.S., Pondicherry University; Ph.D., University of California, Davis, 1999.

Rhodes, Loren K., *John and Irene Dale Professor of Information Technology* (1980). Lindback Distinguished Teaching Award (1986). Beachley Award for Distinguished Teaching (2008). B.S., M.S., Ph.D., The Pennsylvania State University, 1979, 1980, 1991.

Roberts, Wade, *Associate Professor of Philosophy* (2008). B.A., Birmingham-Southern College, 1996; M.A., Ph.D., Duquesne University, 1997, 2007.

Roney, James N., *I. Harvey Brumbaugh Professor of Russian* (1988). Lindback Distinguished Teaching Award (1993). Beachley Distinguished Teaching Award (2009). B.A., Dartmouth College, 1973; M.A., Ph.D., The Ohio State University, 1975, 1981.

Rosell, Karen J., *Professor of Art History* (1986). Lindback Distinguished Teaching Award (1989). Beachley Distinguished Teaching Award (1997). B.A., University of Richmond, 1980; M.A., Virginia Commonwealth University, 1982; Ph.D., Ohio University, 1986.

Rosenberger, Randy M., *Professor of Management* (1997). B.A., Dickinson College, 1980; M.B.A., Cornell University, 1985; Ph.D., The Pennsylvania State University, 1999.

Roth, Kimberly A., *Associate Professor of Mathematics* (2006). B.A., Oberlin College, 1996; Ph.D., The Pennsylvania State University, 2002.

Schettler, Paul D., Jr., *Charles A. Dana Professor of Chemistry* (1967). Beachley Distinguished Teaching Award (1978). Beachley Distinguished Academic Service Award (1995). B.S., University of Utah, 1958; Ph.D., Yale University, 1964.

Shelley, Russell K., *Elma Stine Heckler Professorship of Music and Director of Choral and Vocal Activities* (1991). Junior Faculty Award (1997). B.S., B.S.M., Baptist Bible College, 1985; M.S., Mansfield University, 1986; Ph.D., The Pennsylvania State University, 1997.

Sowell, David L., *Professor of History* (1989). Junior Faculty Award (1994). Beachley Distinguished Academic Service (2007). A.B., Western Kentucky University, 1975; B.A., Grand Valley State College, 1976; M.A., Ph.D., University of Florida, 1980, 1986.

Stenson, Catherine A., *Professor of Mathematics* (2000). Sc.B., Brown University, 1994; M.S., Cornell University, 1997; Ph.D., Cornell University, 2000.

Stiffler, Douglas A., *Associate Professor of History* (2002). A.B., Harvard College, 1990; M.A., University of California, 1993.

Streb, Jennifer L., *Associate Professor of Art History* (2008). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence, 2014, Juniata College, 1993; M.A., Ph.D., The Pennsylvania State University, 1997, 2004.

Sunderland, Benjamin B., *Professor of Mathematics* (1982). Beachley Distinguished Teaching Award (2015); B.S., M.A., Ph.D., The Pennsylvania State University, 1970, 1975, 1982.

Thomas, William H., *Professor of Information Technology* (2001). B.S., Lock Haven University, 1983; M.S., Shippensburg University, 1990.

Thurston-Griswold, Henry, *Professor of Spanish* (1992). Beachley Distinguished Teaching Award (2003) B.A., State University of New York at Cortland, 1981; M.A., Ph.D., The University of Texas at Austin, 1983, 1989.

Tuten, Belle S., *W. Newton and Hazel A. Long Professor of History* (1997). Beachley Junior Faculty Award (2001) Beachley Award for Distinguished Teaching (2013). B.A., College of Charleston, 1991; M.A., Ph.D., Emory University, 1994, 1997.

Tuten, James H., *Professor of History* (2006). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2009). B.A., College of Charleston, 1990; M.A., Wake Forest University, 1992; Ph.D., Emory University, 2006.

Unger, John B., *Assistant Professor of Chemistry* (2012). B.S., Hobart College; Ph.D., University of California Santa Barbara.

Utterback, Neal, *Assistant Professor of Theatre Arts* (2012). B.S., Coastal Carolina University, 1998; MFA, University of Florida, 2001; Ph.D., Indiana University, 2012.

Wang, Wei-Chung, *Associate Professor of Business & Economics and Director of Juniata Business Program in China* (2010). B.A., Shih Hsin University, 2000; M.S., Ph.D., University of California, Irvine, 2005.

Wang, Xinli, *Professor of Philosophy* (1999). B.S., Changchun Institute of Geology, China 1982; M.A., Huazhong University, 1988; Ph.D., University of Connecticut, 1999.

Weaver, Patricia C., *Charles A. Dana Professor of Accounting, Business and Economics* (1986). Beachley Award for Distinguished Teaching (2000). Beachley Distinguished Academic Service (2008). B.A., M.A., M.S., The Pennsylvania State University, 1963, 1965, 1991; C.P.A. in Pennsylvania.

Weimer, Donna S., *Colonel Sedgley and Elizabeth Bailey Thornbury Professor of Communication* (1990). Lindback Distinguished Teaching Award (1993). Beachley Award for Academic Service (2003). B.A., M.A., Ph.D., The Pennsylvania State University, 1974, 1983, 1990.

Welliver, Daniel M., *Associate Professor of Sociology* (2006). Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2012); B.A., Juniata College, 1979; M.C.P., The Pennsylvania State University, 1990; Ph.D., Indiana University of Pennsylvania, 2011.

Westcott, Kathryn M., *Professor of Psychology*, (2003). Beachley Award for Distinguished Teaching (2014). B.A., The Ohio State University, 1994; M.Ed., Ph.D., University of Cincinnati, 1998, 2001.

White, James D., *William I. and Zella B. Book Professor of Physics* (1998). The Henry H. '57 and Joan R. Gibbel Award for Teaching Excellence (2004).); Beachley Award for Distinguished Teaching (2014). B.A., Carleton College, 1985; M.Ed., Ph.D., The Pennsylvania State University, 1993, 1994.

Widman, David R., *Professor of Psychology* (1999). B.S., University of Wyoming , 1987; Ph.D., University of Albany, State University of New York, 1992.

Williams, Ursula, *Assistant Professor of Chemistry* (2014). B.S., Union College, 2009; Ph.D., University of Pennsylvania, 2014.

Worley, Sarah C., *Assistant Professor of Communication* (2004). B.A., Juniata College, 2000; M.A., The University of Colorado, 2003.

Wright, John J., *Associate Professor of Computer Science* (2002). B.S., Juniata College, 1993; M.S., Villanova University, 2000.

Adjunct Faculty

- **Wilhelmina P. Cruz-Vetrano, MD**, (2011) Medical Director, School of Medical Technology/Clinical Laboratory Science, Altoona Regional Health System
- **Joseph R. Noel**, CLS(NCA), MT(ASCP) (1984) Program Director, School of Medical Technology/Clinical Laboratory Science, Altoona Regional Health System, B.S. York College 1977.
- **Wood, Marie S.** M.S., M.T (ASCP), Program Chair, Medical Laboratory Science Program, Lancaster General College of Nursing & Health Sciences B.S., Millersville University, 1989; M.S., Indiana University of PA, 1999.

Administration

Office of the President

- **Troha, James A.**, B.A., M.A., Ph.D. President
- **Sheffield, Bethany**, B.A., Executive Assistant to the President
- **Rodriguez, Rosalie**, B.S., M.S., Special Assistant to the President for Diversity and Inclusion

Campus Technology Services

- **Wood, Anne M.**, B.S., Assistant Vice President and Chief Information Officer
- **Roll, Brenda R.**, Assistant to Assistant Vice President & Chief Information Officer and Technology Department Coordinator

- **Black, Justine**, B.S., Assistant Director of Instructional Technology
- **Brown, Rick**, Director of Administrative Information Services
- **Chen, Wenli**, B.S., Server Administrator
- **Cianci, Ray**, Telecommunications Analyst
- **Drake, Dustin**, B.S., Network Administrator
- **Feagley, Gary**, IT Support Specialist II
- **Fultz, Zachary**, Associate Degree, Solutions Center Technical Leader
- **Lee, Sandy**, B.S., M.S., Programmer/Analyst
- **McBride, Nicholas**, Senior Web Developer
- **Moschella, Bill**, B.S., IT Support Specialist
- **O'Dellick, Lisa R.**, Programmer/Analyst
- **Pheasant, Joel**, B.S., M.Ed., Director of Technology Solutions Center
- **Price, Larry A.**, Senior Server Administrator
- **Tyler, Joseph**, Associate Degree, Director of Campus Network and Security

Academic Affairs

- **Bowen, Lauren**, B.A., M.A., Ph.D., Provost
- **Krugh, Joanne L.**, Administrative Manager, Provost Office
- **Anderson, Terrance**, M.B.A., Director of JCEL
- **Basom, Brett J.**, B.S., Assistant Registrar
- **Beamer, Michael**, M.A., Director of the Intensive English Program
- **Benson, Briana**, Middle School Mobile Educator
- **Blake, Kathryn**, B.A., M.A., Director of the Juniata College Museum of Art
- **Bleil, Beth**, B.A., M.A., Academic Counselor, Director of Disability Services
- **Breene, Christine L.**, B.A., Director of the Early Childhood Education Center
- **Conaway, Sharon**, B.S., Biology Mobile Educator
- **Cowan, Melissa**, B.A., M.A., Instructor, Intensive English Program
- **Csoman, Kati R.**, B.A., M.P.A., Dean of International Education
- **Dudash, Andrew M.**, M.L.I.S., B.A., Head of Reference Services
- **Erdman, Shya**, B.S., International Education Advisor-Study Abroad
- **Frederick, Athena D.**, B.A., Registrar
- **Gibson, Caroline**, International Education Advisor
- **Gordon, Jacob**, B.S., M.S., Reference and Instruction Librarian
- **Grant, Christopher**, B.S., M.S., Laboratory Coordinator
- **Glosenger, Fay**, B.S., M.Ed., Ph.D., Faculty Director of Early Childhood Education Center
- **Hesel-Ickes, Amber**, B.S., Ph.D., Laboratory Teacher/Coordinator
- **Howell, Christopher**, Performing Arts Intern
- **Keeney, Jill**, B.S., Ph.D., Faculty Director of NSF Research
- **Kysor, Darwin V.**, B.A., M.A., Ph. D., Director of Career Services
- **Mumford, John W.**, B.S., M.A., M.L.S., Library Director and Associate Head Men's Soccer Coach
- **Nagle, Roy D.**, B.S., M.S., Director of Environmental Health and Safety
- **Pearson, Mark**, Ph.D., Laboratory Instructor/Equipment Coordinator
- **Peters, Carol A.**, B.A., M.A., Director of the Writing Center

- **Plane, Rebecca**, Master Teacher
- **Putt, Kristie**, B.A., M.A., Assistant Director of the Sill Business Incubator
- **Ranalli, Carlee K.**, B.S., M.S., Director of Institutional Planning and Research
- **Rappert-McGetrick, Trista**, B.A., M.A., ESL Instructor
- **Rinehart, Yanping T.**, B.S., M.S., Science Technician
- **Roney, Deborah W.**, Ph.D., Director of Language in Motion, Instructor
- **Siglin, Amanda**, B.S., Ph.D., Director of the Health Professions Program
- **Streb, Jennifer.**, B.A., M.A., Ph. D., Curator, Juniata College Museum of Art, Asst Professor of Art History
- **Sullivan, Jessie C.**, B.S., Technical Director
- **Walls, Christine Y.**, B.S., Cell Culture/Microscopy Technician
- **Woodling, Julie**, B.S., M.A., Head of Library Systems and Technology
- **Wray, Shannon**, B.S., ESS Technician
- **Yohn, Charles E.**, B.S., Ph.D., Director of the Raystown Field Station

Student Affairs

- **Cook-Huffman, Daniel J.**, B.A., M.A., Interim Dean of Students
- **Taylor, Blair**, M.S., Dean of Students Office Assistant
- **Ankney, Stephen**, B.S., Residence Director, Academic Support Services Assistant
- **Campbell, Ellen**, B.S., M. Ed., Interim Assistant Dean of Students
- **Flores, Lilah**, B.A., M. Ed., Residence Director, Inbound Coordinator
- **Gibboney, Tom**, B.S., Associate Head Football Coach
- **Gillich, Caroline M.**, B.S., Head Field Hockey Coach
- **Grugan, Fiona**, B.A., Residence Director, International Services Coordinator
- **Harper, Kerry**, MSW, College Counselor
- **Hooper-Conway, Penny D.**, Assistant Director of Residential Life
- **Herring, Kayleigh**, B.S., M.Ed., Residence Director, Assistant Women's Soccer Coach
- **Hooper-Conway, Penny**, Assistant Director of Residential Life
- **Hunter, Patricia**, B.S., M.A., LPC, College Counselor
- **Johnston, Taylor** B.S., Residence Director/Raystown Field Station Assistant
- **Leonard, Jesse**, B.A., M.S., Director of Public Safety
- **Leydig, Jeffrey**, B.S., Head Athletic Trainer
- **Maxon, Jessica**, Interim Director of Student Activities & Interim Director of Community Service/Service Learning
- **McDonald, Kathleen**, B.S., Residence Director/Assistant Women's Basketball Coach
- **McKenzie, Scott T.**, B.S., Soccer Coordinator
- **Peters, Connie**, R.N., College Nurse
- **Reveley-Cohen, Jonathan**, M.A., College Counselor

Athletic Department Coaches & Advisors

- **Curley, Gregory** B.A., M.S., Director of Athletics

- **Aurand, David**, Athletic Equipment Manager
- **Edwards, Dodie**, B.S., M.S., Assistant Athletic Trainer
- **Heberger, David**, B.S., Sports Information Director
- **Hoffman, Lori**, Athletics Business Coordinator
- **Karam, Kristin**, B.S., Assistant Sports Information Director
- **Leydig, Jeff**, Athletic Trainer
- **McKenzie, Scott**, Assistant Athletic Director
- **Russell, Donald**, B.S., M.S., Assistant Athletic Trainer
- **Shoff, Meghan**, B.S., Assistant Athletic Trainer
- **Simeone, Sarah**, B.S., Strength and Conditioning Intern
- **Smith, Douglas**, B.S., Fitness Center Manager
- **Zauzig, Belinda**, Athletic Department Assistant

Coaching Staff

Baseball

- **Sheibley, Adam**, B.A., Head Baseball Coach
- **Levy, Tye**, Assistant Baseball Coach

Basketball (Men's)

- **Curley, Gregory**, Head Men's Basketball Coach
- **Black, A. Keith**, Assistant Men's Basketball Coach
- **Scholly, Brian**, B.A., Assistant Men's Basketball Coach

Basketball (Women's)

- **Young, Danielle**, Head Women's Basketball Coach
- **McDonald, Kathleen**, B.S., Residence Director/Assistant Women's Basketball Coach
- **Millar, Anne**, Assistant Women's Basketball Coach

Cheerleading

- **Black, Justine**, B.S., Head Cheerleading Coach

Cross Country

- **Cutright, Jon D.**, B.A., M.S., Head Cross Country Coach
- **Taylor, Blair**, M.S., Assistant Cross Country Coach

Field Hockey

- **Gillich, Caroline**, B.S., Head Field Hockey Coach
- **McNeish, Jill**, Assistant Field Hockey Coach

Football

- **Launtz, Tim**, B.A., Head Football Coach
- **Gibboney, Tom**, B.S., Associate Head Football Coach
- **Gallardy, Drew**, B.S., Defensive Coordinator
- **Hayes, Stephen**, B.S., Assistant Football Coach
- **Hepner, Allan**, B.S., Assistant Football Coach
- **Knapp, Scott**, B.S., M.S., Offensive Coordinator
- **MacEachern, Donald**, Assistant Football Coach
- **Quinter, Todd**, Assistant Football Coach
- **Schuck, Kyle**, B.A., Football Intern
- **Valdiserri, Julian**, B.S., Football Intern

Soccer (Men's)

- **Dubois, Daniel**, Men's Soccer Coach
- **Miller, John**, Assistant Men's Soccer Coach
- **Mumford, John**, B.S., M.A., M.L.S., Assistant Men's Soccer Coach

Soccer (Women's)

- **McKenzie, Scott** B.S., Assistant Athletic Director, Head Women's Soccer Coach
- **Herring, Kayleigh**, B.S., M.Ed., Residence Director, Assistant Women's Soccer Coach

Softball

- **Kszepka, Samantha**, B.S., M.S., Head Softball Coach
- **Gearhart, Dave**, Assistant Women's Softball Coach
- **Runk, Katie**, Assistant Women's Softball Coach

Swimming

- **Smith, Nathan**, B.A., Women's Swim Coach and Aquatics Director
- **Musselman, Kristin**, Assistant Women's Swim Coach

Tennis (Men and Women's)

- **Perow, Lauren**, M.S., Assistant Tennis Coach

Track (Men and Women's)

- **Cutright, Jon D.**, Head Track Coach
- **Taylor, Blair**, M.S., Assistant Cross Country Coach

Volleyball (Men's)

- **Shawaryn, Patrick**, Head Men's Volleyball Coach
- **Kraft, Mike**, Assistant Men's Volleyball Coach

Volleyball (Women's)

- **Pavlick, Heather** Head Women's Volleyball Coach
- **Dale, Casey**, B.S., Assistant Women's Volleyball Coach

College Advancement and Marketing

- **Welsch, Gabriel J.**, B.A., M.F.A., Vice President for Advancement and Marketing
- **Brown, Rosann**, B.A., Executive Director of Marketing
- **Ciccarelli, Angela S.**, Graphic Designer
- **Closz, Cathy**, B.S., Assistant Director of Development
- **Dickey, Kathleen S.**, B.A., Assistant Director of Parent and Affinity Programs
- **Drobka, Lisa**, Assistant Director of Development, Major Gifts
- **Fragello, Luke**, Director of New Media Communications
- **Gracey, Carole**, Associate Director of College Advancement
- **Hersh, Candice**, B.S., Associate Director of Marketing
- **Kasun, Genna W.**, B.A., M.A., Assistant Director of Advancement Communications
- **Keating, Michael S.**, B.S., MBA, Director, Corporation & Foundation Support
- **Meadows, David D.**, B.A., Director of Alumni Relations
- **Miller, Christine**, Assistant Director of Alumni Relations
- **Oberle, Sally**, B.S., Director of Advancement Services
- **Peruso, Miranda**, B.A., Director of Annual Giving
- **Scialabba, Joseph**, B.A., M.N.M., Executive Director of Development
- **Steele, Adam**, B.S., Digital Marketing Specialist
- **Stuber, Tammy**, Assistant Director of Career Services
- **Wall, John T.**, B.A., Director of Media Relations

College Enrollment and Retention

- **Sugihara, Fumio**, B.S., M.Ed., Vice President for Enrollment
- **Bartol, Michelle M.**, B.S., Dean of Enrollment, Lucy M. Calhoun Administrator Award (1996)
- **Bollman-Dalansky, Terri L.**, B.S., Director of Enrollment Operations
- **Bright, Colton**, B.A., Admission Counselor
- **Crutcher, DeLane**, B.A., Associate Dean of Admissions
- **Gibboney, Cindy**, Director of Enrollment Operations
- **Good, Rylan**, B.A., Associate Dean of Admissions
- **Himes, Shane Thomas**, M.B.A., Director of Student Financial Planning
- **McConkey, Sara**, B.A., Data Management Coordinator
- **Patrick, Tracie**, Financial Aid Counselor
- **Rennell, Holly**, A.S., B.A., M.S., Admission Counselor

- **Rennell, Randy**, B.A., M.S., Director of Enrollment Data Analysis and Research
- **Ross, Diane**, Financial Aid Counselor
- **Sadowsky, Sarah Diane**, B.A., MFA, Assistant Dean of Enrollment
- **Simons, Stephen**, B.A., Admission Counselor
- **Swantak, Katherine**, B.A., Admission Counselor
- **Thompson, Maureen**, B.S., Admission Counselor

Business Affairs

- **Yelnosky, Robert**, B.S., Vice President for Finance and Operations
- **Andreas, Jeffrey R.**, Assistant Director, Operations and Custodial Supervisor
- **Coder, David G.**, Architectural Trades Supervisor
- **delGiudice, Tristan S.**, B.S., Director of Facilities Services
- **Kitko, Cindy J.**, Associate Degree, Staff Accountant
- **Kyle, Cady H.**, B.S., M.H.R.M., P.H.R., Assistant Director of Human Resources
- **Martin, Earl N.**, Assistant Director, Facilities Services
- **Meadows, Jeffrey**, Associate Degree Ground Supervisor
- **Perow, Lauren**, M.S., Bursar
- **Rennell, Valerie**, Assistant Director of H.R. and Risk Management
- **Shideler, Lorri**, Associate Director of Conferences and Events
- **Shontz, Susan F.**, Budget Director
- **Ulrich, Gail Leiby**, B.A., Director of Human Resources
- **Wiser, Karla**, B.S., C.P.A., Controller

Campus Ministry

- **Witkovsky, L. David**, B.S., M.Div., College Chaplain
- **Baer, Lisa**, Catholic Campus Minister

Staff & Departmental Assistants

- **Bloom, Heather L.**, Associate Degree, Print Shop Supervisor
- **Bowser, Melinda**, Payroll Specialist
- **Broomfield, Katron**, B.S., Unity House Coordinator
- **Bumbarger, Heather A.**, Educational Services Assistant
- **Carlson, Signe**, B.A., Academic Coordinator
- **Chamberlain, Patricia K.**, Senior Operations Specialist/Communications Manager
- **Coffman, Grace**, Facilities Services Assistant
- **Cramer, Lori**, Annual Giving Specialist
- **Croyle, Guy**, B.S., M.Agr., CELTA, Advancement Data Coordinator
- **Fagan, Timothy**, Public Safety Officer
- **Fleegal, Stacia**, B.A., M.A., Baker Institute Assistant
- **Garvey, Mary**, B.A., Health and Wellness Office Assistant
- **Gibboney, Christie**, Associate Degree, Alumni Relations Office Assistant
- **Glass, Daniel**, Public Safety Officer
- **Haizlip, Jeanine**, Halbritter Assistant

- **Hartman, Janice, B.A.**, College Archivist
- **Heverly, Kyle** Associate Degree, Public Safety Officer
- **Houck, Charlotte A.**, Library Office Assistant
- **Hughes, Lori J.**, Post Office Supervisor
- **Hughes, Timothy J.**, Patrol Supervisor
- **Isenberg, Sherry A.**, Science Supply Coordinator
- **Jones, Lynn B.**, Circulation Supervisor and Interlibrary Loan Coordinator
- **LaVere, Susan A.**, Health Professions Program & Educational Services Assistant
- **Levy, Tye**, Public Safety Officer
- **Lightner, Angela**, Operations Assistant, Application Processing
- **Lightner, Patricia L.**, Library Cataloging Coordinator
- **Lockhoff, Ashley**, Conferences and Events Assistant
- **Lockhoff, Peggy**, Customer Service Representative
- **Lucas, Renee M.**, Educational Services Assistant
- **McKim, Betty** Accounting Assistant
- **McDevitt, Dolores, B.S.**, ECEC Teacher
- **Meyers, Stephanie, B.S.**, Customer Service and Info Desk Representative
- **Miles, Michael S.**, Public Safety Officer
- **Neville, Megan, B.A., M.Ed.**, Educational Services Assistant
- **Norris, Kathryn**, Part-time Public Safety Officer
- **Panosetti, Carla J.**, Public Safety Officer and Office Assistant
- **Pierotti, Susan Y.**, Educational Services Assistant
- **Prough, Jodi**, Academics Records Assistant
- **Prough, John**, PT Public Safety Officer
- **Renninger, James**, PT Public Safety Officer
- **Rhodes, Carrie L.**, Scheduling Assistant
- **Roth, Lisa, B.A.**, Advancement Specialist
- **Sieber, Susan, B.S.**, Gift Processing Assistant
- **Slocum, Erika**, Associate Degree, Accounts Payable Assistant
- **Smith, Andrea**, Associate Degree, Benefits Coordinator
- **Sneath, Amy**, PT Public Safety Officer
- **Steele, Donald C.**, Public Safety Officer
- **Taylor, Linda**, Payroll/Accounts Payable Assistant
- **Turner, Stephanie, B.S.**, Human Resources Assistant
- **Widman, Elizabeth G., B.S.**, CIE Office Assistant
- **Williams, Wendy**, Post Office Assistant
- **Yocum, Bethany K.**, Library Acquisitions Coordinator
- **Zilch, Pamela**, Operations Specialist, Campus Visit Coordinator

Emeriti

Board of Trustees – Emeriti – 2015/2016

Date in Parentheses is that of appointment to the board.

Baker, Anne C., B.A., B.M., M.A., J.D., New York, NY (1987)

Brinker, John A. '69, B.S., M.B.A., Vice Chairman, Bernzott Capital Advisors, Santa Barbara, CA (2000)

Brown, Charles C., Jr. '59, B.A., J.D., Bellefonte, PA (1976-79, 1981)

Brumbaugh, F. Samuel '54, B.S., Pen Argyle, PA (1987-1990) (1991)

Cramer, John McN. '63, B.A., LL.B., Harrisburg, PA (1982)

Cruser, George E. '52, B.S., New Hope, PA (1982-86) (1991)

Dale, John A. '54, B.S., M.A., L.H.D., Medford, NJ (1997)

DeMar, Francis X., Huntingdon, PA (1990)

Detwiler, Donald L. '64, B.S., President, CEO, New Enterprise Stone & Lime Co., Hollidaysburg, PA (1994)

Gibbel, Henry H. '57, B.S., CEO, Director, Lititz Mutual Insurance Company, Lititz, PA (1973-76, 1978)

Green, Madeleine F., B.A., M.A., Ph.D., Retired Vice President, American Council on Education, Chevy Chase, MD (2003)

Groff, Warren F. '49, B.A., B.D., Ph.D., D.D., Bartlett, IL (1976)

Hershberger, William E. '57, B.S., Cohoes, NY (1989)

Hess, Kenneth E. '75, B.S., Ephrata, PA (2000)

Hesselbein, Frances R., L.H.D., New York, NY (1988)

Hogan, David J.'61., Senior Managing Director, Mannheim LLC, New York, NY (2005)

Kindig, Karl K. '72, B.S., J.D., Abingdon, VA (1994)

Knox, Charles R. '54, B.S., L.L.D, La Quinta, CA (1978)

Michel, Harriet R. '65, B.A., L.H.D., New York, NY (1989)

Patterson, Wayne C. '60, B.S., M.S., Ph.D., Parker, CO (1986)

Pheasant, Thomas R. '66, B.S., M.D., Vitreoretinal Surgeon, Retina/Oculoplastic Consultants, Wormleysburg, PA (1988-91, 1992)

Rosenberger, W. Clemens '54, B.S., M.Div., D.D., Lancaster, PA (1979)

Shreiner, Patricia J. '62, B.S., P.A., Chambersburg, PA (2001)

Strueber, Michael M. B.S., M.A., M.Ed., Hollidaysburg, PA (2003)

Swigart, Patricia B., B.T., A.A., Huntingdon, PA (1999)

Taylor, Maurice C., '72, B.A., M.A., Ph.D., J.D., Vice President for University Operations, Morgan State University, Baltimore, MD (1993)

Wagoner, Robert E. '53, B.S., Palmyra, PA (1982)

Faculty

Date in Parentheses is that of emeritus status.

Bowser, John D., *Associate Professor of Mathematics, Emeritus* (1997). B.S., Juniata College, 1957; M.S., West Virginia University, 1959; Ph.D., Pennsylvania State University, 1976.

Boyle, Michael D.P., *William J. von Liebig Chair in Biomedical Sciences, Emeritus* (2012). Beachley Award for Distinguished Teaching (2010). B.S., University of Glasgow, Scotland, 1971; Ph.D., Chester Beatty Research Institute, England, 1974.

Cherry, Elizabeth A. Ellis, *Professor of History, Emerita* (1998). Beachley Distinguished Academic Service Award (1990). Beachly Distinguished Teaching Award (1998). A.B., College of Wooster, 1956; A.M., Columbia University, 1957.

Church, Evelyn H., *Assistant Professor of Spanish, Emerita* (1991). A.B., Wake Forest College, 1949; M.A., Middlebury College, 1970.

Crouch, Howard H., *Martin G. Brumbaugh Professor of Education, Emeritus* (1989). B.S., The Ohio State University, 1949; Ed.M., Westminster College, 1953; Ph.D., The Ohio State University, 1964.

Demarest, Jeffery R., *Professor of Biology, Emeritus* (2014). B.S., Monmouth College, 1973; Ph.D., University of California, Berkeley, 1980.

Donaldson, James R., *Professor of Accounting, Business and Economics, Emeritus* (2012). Beachley Distinguished Academic Service Award (1998). B.S., Juniata College, 1967; M.A., University of Akron, 1972; M.B.A., Syracuse University, 1984.

Drews, David R., *Charles A. Dana Professor of Psychology, Emeritus* (2004). Beachley Distinguished Teaching Award (1989). B.A., Dennison University, 1965; M.S., Ph.D., University of Delaware, 1968, 1970.

Duey, William E., *Assistant Professor of Economics and Business Administration and Registrar, Emeritus* (2000). B.S., The Pennsylvania State University, 1959; MBA, The George Washington University, 1970; M.A., Shippensburg University, 1986.

Esch, Linda Sue, *Charles A. Dana Professor of Mathematics, Emerita* (2007). Lindback Distinguished Teaching Award (1979). Beachley Distinguished Teaching Award (1990). B.S., Juniata College, 1968; A.M., Ph.D., Boston University, 1970, 1974.

Fisher, Tom L., *Professor of Chemistry, Emeritus* (2013). Beachley Distinguished Academic Service Award (2002). B.S., Old Dominion University, 1964; Ph.D., Iowa State University, 1970.

Goehring, Doris, *Assistant Professor of Speech and Theatre Emerita* (1990) A.B., University of Pittsburgh, 1947; A.M., Columbia University, 1950.

Gooch, James L., *Professor of Biology, Emeritus* (2000). Beachley Distinguished Teaching Award (1982). B.S., M.S., West Virginia University, 1960, 1967, Ph.D., University of Delaware, 1968.

Gustafson, Todd D., *Professor of Biology, Emeritus* (2007). Lindback Distinguished Teaching Award (1981). B.A., Jacksonville University, 1971; M.S., Ph.D., University of Wisconsin, 1973, 1976.

Heberling, Paul M., *Professor of Anthropology, Emeritus* (1989). Beachley Distinguished Teaching Award (1969) A.B., M.S., The Pennsylvania State University, 1948, 1950.

Heller, Bernice Engman, *Associate Professor of Spanish, Emerita* (1997). A.B., College of Wooster, 1953; A.M., University of Kansas, 1955.

Heller, Max N., *Associate Professor of Mathematics and Computer Science, Emeritus* (1997). B.S., M.S., The Pennsylvania State University, 1958, 1976; M.A.T., Indiana University, 1967.

Jaeger, Klaus A.G., *I. Harvey Brumbaugh Professor of German, Emeritus* (2008). Beachley Distinguished Teaching Award (1992). M.A., The Ohio State University, 1965; Ph.D., The Pennsylvania State University, 1989.

Kaminsky, Edward F., *Professor of Economics and Business Administration, Emeritus* (1997). B.S., King's College, 1996; M.B.A., Wilkes College, 1973; C.P.A. in Pennsylvania.

Katz, Judith N., *Associate Professor of English, Emerita* (2014). Beachley Award for Distinguished Teaching (2006). B.A., The City College of New York, 1966; M.A., Ph.D., The Pennsylvania State University, 1968, 1972.

Kaylor, Earl C., Jr., *Charles A. Dana Supported Professor of History, Emeritus* (1991). Beachley Distinguished Teaching Award (1972). A.B., Juniata College, 1946; B.D., Bethany Theological Seminary, 1949; A.M., University of Notre Dame, 1951; Ph.D., The Pennsylvania State University, 1963.

Kipphan, Klaus P., *Charles A. Dana Professor of History, Emeritus* (2003). Beachley Distinguished Teaching Award (1974, 2001). A.B., Gymnasium Eberbach, Germany, 1959; A.M., Fairleigh Dickinson University, 1965; Ph.D., University of Heidelberg, 1969.

Lakso, James J., *Professor of Accounting, Business and Economics, Emeritus* (2013). Beachley Distinguished Teaching Award (1983). Beachley Distinguished Academic Service (2005). B.A., Wittenberg University, 1967; M.A., Ph.D., University of Maryland, 1970, 1973.

Lewis, Janet R., *Associate Professor of Philosophy, Emerita* (2008). Sears-Roebuck Teaching Excellence and Campus Leadership Award (1991). Beachley Award for Distinguished Teaching (1999) B.A., Wilson College, 1964; M.A., Bryn Mawr College, 1968.

Masters, Henry G., *Associate Professor of Psychology, Emeritus* (1999). B.A., University of Rochester, 1958; M.A., Emory University, 1961; Ph.D., The Kansas State University, 1968.

McBride, Alexander T., *Professor of Art, Emeritus* (2005). Beachley Distinguished Teaching Award (2002). B.F.A., Rhode Island School of Design, 1962; M.F.A., Cornell University, 1964.

Mitchell, Donald J., *Professor of Chemistry, Emeritus* (2003). Beachley Distinguished Teaching Award (1986). Beachley Distinguished Academic Service Award (1991). B.S., Westminster College, 1960; Ph.D. Vanderbilt University, 1965.

Murray, M. Andrew, *Elizabeth Evans Baker Professor of Religion and Peace and Conflict Studies and Director of the Baker Institute, Emeritus* (2008). L.H.D. Bridgewater College (1998). Beachley Distinguished Academic Service Award (1991). B.A., Bridgewater College, 1964; M.Div., D.Min., Bethany Theological Seminary, 1968, 1980; L.H.D., Manchester College, 1993.

Mutti, Laurence J., *Professor of Geology* (2015). Lindback Distinguished Teaching Award (1982). Beachley Distinguished Teaching Award (1995). B.A., Beloit College, 1971; Ph.D., Harvard University, 1978.

Nieto, Jose C., *Mary S. Geiger Professor of Religion and History, Emeritus* (2004). B.S., University of Santiago de Compostela, Spain, 1949; B.D., United Evangelical Seminary, Spain, 1956; Th.M., Ph.D., Princeton Theological Seminary, 1962, 1967.

Norris, Wilfred G., *William I. and Zella B. Book Professor of Physics, Emeritus* (1998). Beachley Distinguished Academic Service Award (1993). B.S., Juniata College, 1954; Ph.D., Harvard University, 1963.

Ochiai, Ei-Ichiro, H. *George Foster Chair of Chemistry, Emeritus* (2005). B.S., M.S., Ph.D., University of Tokyo, 1959, 1961, 1964.

Pfrogner, Ray L., *Associate Professor of Physics, Emeritus* (1998). B.S., Juniata College, 1960; M.S., Ph.D., University of Delaware, 1964, 1971.

Reed, Ruth E., *Jacob H. and Rachel Brumbaugh Professor of Chemistry, Emeritus* (2012). Beachley Distinguished Teaching Award (1993). B.A., Winthrop College, 1968; Ph.D., Virginia Polytechnic Institute and State University, 1974.

Reilly, F. Robert, *Charles A. Dana Professor of Social Work and Sociology, Emeritus* (2012). Beachley Distinguished Teaching Award (1991). B.A., Susquehanna University, 1971; M.S.W., Marywood College School of Social Work, 1974; A.C.S.W. member.

Reingold, I. David, *H. George Foster Chair of Chair of Chemistry, Emeritus* (2012). Lindback Distinguished Teaching Award (1992). Beachley Distinguished Academic Service Award (2001). A.B., Dartmouth College, 1971; Ph.D., University of Oregon, 1976.

Richardson, Kim M., *Professor of Education, Emerita* (1979). Lindback Distinguished Teaching Award (1983). Beachley Distinguished Academic Service Award (1996). B.A., Duke University, 1969; M.S., Old Dominion University, 1972; Ph.D., Temple University, 1981.

Rockwell, Kenneth H., *Professor of Biology, Emeritus* (2000). Beachley Distinguished Teaching Award (1979). B.S., Juniata College, 1957; M.S., Brown University, 1960; Ph.D., The Pennsylvania State University, 1967.

Russey, William E., *Charles A. Dana Supported Professor of Chemistry, Emeritus* (2001). Beachley Distinguished Teaching Award (1975). B.A., Kalamazoo College, 1961; M.A., Ph.D., Harvard University, 1964, 1966.

Siems, Norman E., *William W. Woolford Professorship in Physics, Emeritus* (2011). Lindback Distinguished Teaching Award (1984). Beachley Distinguished Teaching Award (1994). Beachley Distinguished Academic Service (2009). B.S., Rensselaer Polytechnic Institute, 1966; M.S., The Johns Hopkins University, 1970; Ph.D., Cornell University, 1976.

Trexler, J. Peter, *Professor of Geology, Emeritus* (1989). Beachley Distinguished Teaching Award (1976). A.B., M.S., Lehigh University, 1950, 1953; Ph.D., The University of Michigan, 1964.

Troy, Jack G., *Associate Professor of Art, Emeritus* (2005). B.S., West Chester College, 1961; M.A., Kent State University, 1967.

Wagoner, Paula L., *Associate Professor of Anthropology* (2015). A.A., Sheridan College, 1988; A.B., Smith College, 1991; M.A., Ph.D., Indiana University, 1995, 1997.

Wagoner, Robert E., *Professor of Philosophy, Emeritus* (2000). Beachley Distinguished Teaching Award (1988). B.S., Manchester College, 1952; Ph.D., Harvard University 1968.

Wampler, Dale L., *Professor of Computer Science, Emeritus* (1999). Beachley Distinguished Academic Service Award (1981). A.B., Bridgewater College, 1957; Ph.D., University of Wisconsin, 1962.

Washburn, Robert H., *Professor of Geology, Emeritus* (2001). B.S., M.S., University of Nebraska, 1959, 1961; Ph.D., Columbia University, 1966.

Woodrow, Thomas W., *Martin G. Brumbaugh Professor of Education, Emeritus* (1997). Beachley Distinguished Academic Service Award (1992). B.S., Juniata College, 1958; M.Ed., Indiana University of Pennsylvania, 1966; D.Ed., The Pennsylvania State University, 1976.

Wright, Dale E., *Professor of Psychology, Emeritus* (2002). A.B., Chico State College, 1959; B.D., Berkeley Baptist Divinity School, 1962; Ph.D., University of Vermont, 1970.

Zimmerer, Robert P., *Charles A. Dana Supported Professor of Biology, Emeritus* (1993). Beachley Distinguished Teaching Award (1985). B.S., University of Wisconsin, 1954; M.S., Cornell University, 1961; Ph.D., The Pennsylvania State University, 1966.

Administration

Date in parentheses is that of emeritus status.

- **Kepple, Jr., Thomas R.**, Emeritus (2013). B.A., Westminster College, 1970; M.B.A., Ed.D., Syracuse University, 1974, 1984; L.H.D., Elizabethtown College, 2011; L.H.D., Juniata College, 2013.
- **Neff, Robert W., President**, Emeritus (1998). B.S., The Pennsylvania State University, 1958; B.D., M.A., Ph.D., Yale University, 1961, 1964, 1969; D.D., Juniata College, Manchester College, 1979; L.H.D., Bridgewater College, 1979.