

Academic Catalog 2013-2015


ROANOKE COLLEGE

## TABLE OF CONTENTS

## Roanoke College

Statement of Purpose; Freedom With Purpose; Goals for Liberal Learning; History; Accreditation and Affiliations; College Environment; Religion and College Life; Faculty

## Admissions

Freshman Students; Freshman Application Procedure; Transfer Students; International Students; Students with Disabilities; Internal Grievance Procedure For Disabled Students; Special Students; Adult Students

## Financial Aid

Financial Aid Regulations and Programs; Types of Financial Aid; Scholarship Competition Program; Student Loan Fund

## Student Services

Residence Life and Housing; Dean of Students Office; Student Activities; Student Government; Student Media; Art, Art History, Music and Theatre; Athletics; Recreation and Club Sports; Intramurals; Health Services; Counseling Center; Campus Safety; Dining Services; Social Fraternities and Sororities; Student Conduct System; Conduct Policies and Regulations

## Finances

College Charges; Tuition for Part-Time Students; Tuition for Graduates and Senior Citizens; Tuition for Intensive Learning Term; Domestic/On Campus; Housing Fees; Non-Travel Courses; Foreign Travel Courses; Miscellaneous Expenses; Method of Payment; Withdrawals and Refunds; Special Note

## Academic Honors and Awards

Semester Honors; Junior and Senior Scholars; Degrees with Distinction; Honors in Majors; Valedictorian and Salutatorian; Honor Societies; Prizes and Awards

## Academic Services

Goode-Pasfield Center for Learning \& Teaching; Freshman and Undeclared Student Advising; Entering Freshman and Transfer Student Pre-registration; The Writing Center @ Roanoke College; Subject Tutoring Program; Disability Support Services; Subject Tutoring; RC Success; Office of Career Services; Educational Centers; Information Technology; Libraries

## Academic Regulations and Procedures

Advising; Registration; Auditing Courses; Course Load/Overload; Academic Integrity; Class Attendance; Course Changes; Examination Rescheduling; Re-Examination; Academic Credit and Classification of Students; Competency Standards; Advanced Placement and Credit; Credit by Examination; Transfer Credit; Units and Credit for Courses; Classification; System of Grading; Academic Standards

## Programs of Study

Majors, Minors, and Concentrations; Requirements for Baccalaureate Degree Programs; Records, Transcripts and Diplomas

## Academic Programs and Opportunities

Intellectual Inquiry Curriculum; Intellectual Inquiry Perspectives Courses; Teacher Licensure; Honors Program; Internships, Independent Studies, and Independent Research; Summer Scholars Program; Semester in Washington, D.C.; Study Abroad Opportunities; Preparation for Graduate Work; Dual Degree
Engineering Program

## Courses of Instruction

Africana Studies; American Politics, Anthropology; Applied Computer Science; Art; Art History; Athletic
Training; Biochemistry; Biology; Business Administration; Chemistry; Chinese; Christian Studies;
Classics and The Ancient Mediterranean World; Communication Studies; Computer Science; Creative
Writing; Criminal Justice; East Asian Studies; Economics; Education; English; Environmental Studies;
Foreign Politics; French; Gender \& Women's Studies; Geography; German; Greek; Health and Human Performance; Health and Exercise Science; Health and Physical Education; Health Care; History; Honors; Intellectual Inquiry; Intensive Learning; International Relations; Japanese; Language; Latin; Latin American and Caribbean Studies; Legal Studies; Linguistics; Literary Studies; Mathematics; Modern Languages; Music; Neuroscience; Parish Youth Leadership; Peace and Justice Studies; Philosophy; Physics; Political Science; Psychology; Religious Studies; Rhetoric; Russian; Sociology; Spanish; Sport Management; Statistics; Teachers of English to Speakers of Other Languages; Theatre Arts; Theology; Writing

## Board of Trustees

Officers; Trustees; Trustees Emeriti; President Emeritus

## Faculty

Professors; Associate Professors; Assistant Professors; Teaching Associates; Special Appointment Faculty; Retired Members

## Administration

Academic Affairs; Admissions; Business Affairs; Department Chairs; Financial Aid, and Enrollment Management; Information Technology; Religious Affairs; Resource Development and Public Relations; Student Affairs

## Correspondence Directory

## ACADEMIC CATALOG 2014-2015

## From the Dean

This catalog is an educational guidebook for our students at Roanoke College, as well as a source of information for prospective students and others interested in the College. It describes the requirements for all academic programs and for graduation. It provides information about financial aid and scholarships. It sets forth regulations and faculty policies that govern academic life and acquaints students with the Roanoke College faculty and staff.

I encourage every student to become familiar with the contents of the Catalog. If any portion of it needs further explanation, faculty advisors and staff members in the Office of the Registrar and the Center for Learning and Teaching stand ready to answer any questions. Although there are advisors to assist, ultimately, it is the responsibility of the student to register correctly, to complete the necessary course work for graduation and to abide by the academic regulations of the College, as set forth by the faculty.

Dr. Richard A. Smith
Vice President and Dean of the College

## Catalog Policy

The contents of this catalog represent the most current information available at the time of publication. During the period of time covered by this catalog, it is reasonable to expect changes to be made without prior notice. Thus, the provisions of this catalog are not to be regarded as an irrevocable contract between the College and the student. The Academic Catalog is produced by the Registrar's Office in cooperation with various other offices on campus. The educational process requires continual review, and the College reserves the right to make appropriate changes in its courses, programs, grading system, standards of progress and retention, honors, awards, and fees. In general, students are to be governed by the Catalog that is current at the time they begin their studies at Roanoke College. However, a student has the option of declaring to be under the jurisdiction of a subsequent catalog except in cases where core requirements have been changed and the College has stipulated those eligible to declare the new curriculum. Should the faculty determine that a modification in course work for the major or teacher licensure program in education is necessary in order for students to complete a current course of study, the department reserves the right to modify degree or licensure requirements for students who have not yet formally declared a major or applied for teacher licensure.

Students transferring from a Virginia community college may elect to declare any Catalog in effect within the twenty-four month period immediately preceding the term they first enrolled except in cases where core requirements have been changed and the College has stipulated who is eligible to declare the modified curriculum.

Affiliation: The College maintains its partnership in church-related education with the Evangelical Lutheran Church in America through the Virginia Synod, The Metropolitan Washington, DC Synod, and the West Virginia-Western Maryland Synod.

Statement of nondiscrimination: Roanoke College does not discriminate against students, employees, or applicants on the basis of race, color, gender, creed, religion, age, sexual orientation, marital status, national or ethnic origin, disability, or veteran status.

## ROANOKE COLLEGE

## Statement of Purpose

## Vision

Roanoke College is committed to being a leading national liberal arts college, a model of experiential learning and a community committed to open discourse and civil debate as ways of learning and as preparation for service in the world.

## Mission

Roanoke College develops students as whole persons and prepares them for responsible lives of learning, service, and leadership by promoting their intellectual, ethical, spiritual and personal growth.

## Purpose

Roanoke College pursues its mission through an innovative curriculum that combines a core program in the liberal arts, major fields of study in the natural sciences, the social sciences, and the humanities and fine arts, along with career-oriented, specialized programs of study. Founded by Lutherans in 1842, Roanoke College welcomes and reflects a variety of religious traditions. The College honors its Christian heritage and its partnership with the Lutheran church by nurturing a dialogue between faith and reason. In keeping with its history and mission, the College strives to be a diverse community, nationally and internationally.

Central to achieving the purposes of the College is a strong commitment to liberal education and its vision of human freedom leading to service within the human community. The College's learning goals, therefore, focus upon developing both a student's confident sense of freedom in the world and a sense of purpose in using that freedom. Through these goals the College strives to produce resourceful, informed, and responsible citizens prepared for productive careers and for leadership in the community.

## Freedom With Purpose:

## A Liberal Arts Education at Roanoke College

## Philosophy

Education in the Liberal Arts is education for liberation. The term "liberal arts" derives from the Latin artes liberales and means, literally, the subjects of study appropriate to free persons. And the verb "to educate" means, in its Latin root, "to lead." A liberal arts education, then, is one that leads out from small worlds into larger ones.

It leads us out from small, safe worlds into larger, more interesting ones by training in us dissatisfaction with partial knowledge, with sloganeering, and with fixed ideologies. It instills in us instead an appreciation for the true complexity of things and a lifelong commitment to learning. A mind so trained respects facts, employs apt methods, and engages in creative problem solving. It examines alternatives; it does not fear tension or paradox. It welcomes the stubborn "misfit" fact that cracks open a too-small view and releases us into a wider play of thought. And it encounters this liberating openness in the vision of artists; in the venturesome thought of philosophers, theologians, and mathematicians; in the observation and experimentation of scientists; in the insights of social scientists; and in the experience of living in community.

A liberal arts education at a small, residential college frees us from isolation within ourselves into a community of learners and sharers, a community of discovery and collaboration, in which we can grow as individuals in constructive engagement with others.

A liberal arts education frees us from reliance upon received opinion into an achieved personal authority by training the skills of critical thought, sound research, and informed and reasoned debate. At Roanoke College this freedom grows out of a tradition of debating societies within a community of open discourse.

A liberal arts education frees us from entrapment within the conventions of our present place and time into a wider perspective that comprehends our own legacies, the breadth of human history, and the variety of human cultures. To support this work, Roanoke College commits itself to the work of building a diverse and tolerant college community.

A liberal arts education frees us from superficiality and distraction into the satisfactions of knowledge in depth, in which depth of learning leads to useful understanding-and to pleasure, wonder, and awe. At the same time, a liberal education frees us from mere specialization into a wider dialogue, in which depth of knowledge is shared and debated to clarify distinctions, to discover patterns, and to integrate human knowledge into an ever larger and more adequate view.

A liberal arts education engages ethics and questions of ultimate meaning. It does not offer pat moral answers. Instead, it provides the basis of all moral behavior-it helps us to imagine the reality of other lives. In matters of ethical living, it does not limit itself to the human, social world, but includes thoughtful consideration of our place within the natural world. At Roanoke College these inquiries are informed, in part, by a tradition of Lutheran education that encourages a dialogue between faith and learning.

Education in the liberal arts frees us from purposelessness into productive careers and lives of service, in which our work to discover what is good, true, and beautiful leads on to work for good in the world.

The effects of a liberal arts education-an education for liberation-are a love of learning, an openness within the vastness of what we do not know, and a desire to use what we do know in ethical living, engaged citizenship, and service for the general good. The broad aim of such an education, therefore, is to produce resourceful, informed, and responsible citizens.

## Principles

At Roanoke College a liberal arts education prepares students for lives of freedom with purpose. The college aims to produce resourceful, informed, and responsible citizens prepared for productive careers and for leadership in community, with an understanding of community appropriate to American diversity and to the increasingly global experience of the 21 st century.

Traditionally, the liberal arts are the skills of freedom. A liberal arts education at Roanoke College aims to produce resourceful citizens by developing these skills and habits of mind, including:

- the ability to read, listen, and observe carefully
- the ability to access information from disparate sources, to assess it appropriately, and to develop information into useful knowledge
- the ability to think critically, analytically, and creatively; to apply apt methods; to reason with rigor; and to use effective problem-solving skills
- the ability to use writing as a tool of thought and to communicate effectively in a variety of written and oral forms
- the ability to construct, understand, and evaluate arguments that use quantitative reasoning
- the ability to understand scientific discovery and to appraise it wisely
- the ability to make judicious use of new technologies
- the ability to work independently and collaboratively and to participate in experiential learning

Knowledge is essential to freedom. A liberal arts education at Roanoke College aims to produce citizens informed by:

- the cardinal achievements of human imagination as expressed in the arts and humanities, in the sciences, and in the social sciences
- depth of knowledge in at least one academic field of study, complemented by a breadth of experience across the traditional divisions of knowledge sufficient to enable integrative learning and thinking
- knowledge of the histories, values, and achievements of both western and non-western cultures in depth sufficient for the appreciation of disparate values and perspectives; this knowledge includes the cultural insight gained through language study
- knowledge of the values and histories that gave rise to liberal democracy in the United States and an understanding of contemporary issues from a variety of perspectives

Freedom, according to Martin Luther, includes both "freedom from" varieties of oppression and "freedom for" service in community. A liberal arts education at Roanoke College aims to produce responsible citizens by cultivating in its students:

- a commitment to academic integrity and intellectual freedom
- a lifelong commitment to learning and to using that learning in active engagement with others
- a sense of responsibility in which individual identity is honored within a diverse community characterized by mutual understanding and respect
- a commitment to engage in contemplation and reflection as a prelude to action, to make principled and ethical decisions, and to participate in deliberative public discourse
- a commitment to health in its largest sense: the physical and emotional well-being of self within a community that balances intellectual, ethical, spiritual, and personal growth
- a willingness to understand and respond to the needs and challenges of our time, both as individuals and as members of wide, inclusive communities
- a desire to contribute to the common good at Roanoke College, in the Roanoke Valley, and beyond.


## The College: Its History, Accreditations and Affiliations

Because David F. Bittle and Christopher C. Baughman, both Lutheran pastors, recognized the need to educate the young men of the rural frontier, they founded in 1842 the institution which was to become Roanoke College. Located near Staunton, Virginia, and named the Virginia Institute, it was chartered in 1845 and renamed the Virginia Collegiate Institute.

Realizing the advantage of having the school at a center of activity, the two men moved it to Salem in 1847. In 1853, the Virginia Legislature granted the charter that raised the school to college status, and the trustees changed its name to Roanoke College.

Today Roanoke is the center of learning for its 2000 students, a place where tradition and educational innovation meet. Excellence and creativity are the criteria by which Roanoke evaluates its academic programs. Careers of alumni and the respected standing of the College provide a means for measuring the quality of the education offered by Roanoke College. Every area of interest and specialization is represented among the College's alumni: the arts, athletics, business, education, government, industry, journalism, law, medicine, the military, public service and religion.

## Accreditation and Affiliations

Roanoke College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the Bachelor of Arts, Bachelor of Science, and Bachelor of Business Administration degrees. Contact the Commissions on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Roanoke College. The three-fold purpose for publishing the Commission's address and contact numbers is to enable interested constituents (1) to learn about the accreditation status of the institution, (2) to file a third-party comment at the time of the institution's decennial review, or (3) to file a complaint against the institution for alleged non-compliance with a standard or requirement. Note that normal inquiries about the institution, such as admission
requirements, financial aid, educational programs, etc., should be addressed directly to Roanoke College and not to the Commission's office.

Roanoke is a member of the College Entrance Examination Board, the National Commission on Accreditation, the Association of American Colleges, and the Association of Virginia Colleges. It is on the list of approved colleges of the American Chemical Society and the American Association of University Women. The Business Administration program is accredited by the Accreditation Council for Business Schools \& Programs. The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The Education Program is approved by the Virginia Department of Education and accredited by the Teacher Education Accreditation Council (TEAC).

## LUTHERAN AFFILIATION (ELCA)

Roanoke is proud of its distinguished heritage as America's second oldest Lutheran college. As an institution affiliated with the Evangelical Lutheran Church in America (ELCA), Roanoke College believes that a sound religious program must be an integral part of the total college life.

Never sectarian in its outlook, the College admits students of any race, color, national and ethnic origin, and sex, to all rights, privileges, programs, and activities generally accorded or made available to students at the College. It does not discriminate against students, employees, or applicants on the basis of race, color, gender, creed, religion, age, sexual orientation, marital status, national or ethnic origin, disability, veteran status, or political affiliation in administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs.

## Oak Ridge Associated Universities

Since 1993, students and faculty of Roanoke College have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 96 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty, enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of under-represented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available on the World-Wide Web at www.orau.gov/orise.htm or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, Consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact Dr. Richard A. Smith, Vice President and Dean of the College, ORAU Councilor for Roanoke College at 540-375-2203; contact Ms. Monnie E. Champion, ORAU Corporate Secretary, at 865-576-3306; or visit the ORAU home page at www.orau.org.

## The College Environment

The sense of community at the College provides a setting in which students are readily recognized for their accomplishments and are encouraged to realize their fullest potential. Students are also able to enjoy the security and the support that can be engendered only by personal relationships. Classes, clubs, societies, sports, and performing arts groups are small enough to assure participation. The College furnishes an opportunity for a fuller self-awareness and for achieving a responsible knowledge of society.

The majority of students - after Virginia residents - name Maryland, Massachusetts, New York, New Jersey, or Pennsylvania as home, with other points in New England and the South being well represented. While most of our students come from about 40 states, the presence of international students on the campus helps diversify our student body. Most students find friends from cultures both similar to and divergent from their own.

Located in the Roanoke Valley of southwest Virginia, below the scenic Blue Ridge Mountains, the area is home to approximately 300,000 people. Roanoke College resides in the city of Salem, which has a population of about 25,000 . The College is located off Interstate 81 , and is only a few minutes from the Roanoke Regional Airport which has service to nine major cities including Atlanta, Charlotte, Washington, D.C., Chicago, Detroit and others.

The Roanoke Valley serves as the region's cultural, economic and entertainment center, and features opportunities such as the Taubman Museum of Art, Center in the Square, the Roanoke Civic Center, the Jefferson Center, Valley View Mall and others. The nearby Blue Ridge Mountains offer many opportunities to hike, bike, ski and canoe.

The campus is a blend of Collegiate Gothic and Georgian architecture. The Administration Building (which houses the offices for the President and the Vice-President/Dean of the College, as well as the Office of the Registrar and Office of International Education) was constructed in 1847; together with Miller Hall, Trout Hall, and Bittle Hall that flank it, the Administration Building is registered as a Virginia and National Historic Landmark.
The Fintel Library has more than 3000 new items added to the collection annually. Besides the sheer size of the collection, Fintel library is proud to offer the latest in electronic journals (providing access to thousands of titles) and a wide selection of multi-media materials. Among the most popular items is the $1000+$ volume DVD collection. In addition, the library is also a selective depository for the United States Government Documents.

## Religion and College Life

As a college affiliated with the Evangelical Lutheran Church in America, Roanoke stands for a steady and consistent cultivation of religious life and strives to develop in its students an understanding of a person's ethical and spiritual responsibilities in society.

The religious life program is under the direction of the Dean of the Chapel, who is an ordained Lutheran pastor. The Assistant to the Chaplain has major responsibilities for program development with a special emphasis on service activities. In addition, Baptist and Roman Catholic campus ministers help provide a variety of religious activities.
The Religious Life Center is a gathering place for student fellowship, informal conversation, and dialogue over moral and theological issues that affect both the students and the society in which they live.

The opportunities for worship on campus include Chapel on Tuesday mornings, an informal service of Holy Communion on Wednesday evenings and special services on festivals and holy days. On Sunday, students are encouraged to worship in the local congregation of their choice. Roman Catholic Mass is offered every Sunday in Antrim Chapel.

## Faculty

Through Roanoke's faculty of approximately 135 full-time members, the student can make fruitful contact with a whole new world of learning and educational experiences. Over 90 percent of our faculty hold the
earned doctorate or the highest degree in their area of expertise. Faculty members are active scholars who regularly publish and consult in their academic specialties.

Close relationships between the faculty and students are possible. An advisor is assigned to newly enrolled freshmen or transfer students during the summer pre-registration process. After declaring a major students are assigned to faculty in their department.

## ADMISSIONS

Because of the College's diverse and challenging liberal arts and sciences curriculum, the prospective student must have substantial preparation in a broad range of academic subjects. Students graduating from an accredited secondary school with a strong college preparatory curriculum are best prepared for the academics at Roanoke. It is highly recommended that, in preparation for Roanoke, students take a minimum of 18 academic courses, including four in English, two in social studies, three-four in a foreign language, and two in lab sciences. Three courses in mathematics, including two in algebra (Algebra I and Algebra II) and one in geometry, are required.

Freshmen usually begin their degree programs with the fall term in August, but students are also considered for admission in January and June. The deadline for admission for the fall term is March 15 for freshmen. However, students are urged to submit their applications during the fall of their senior year. Freshman applications received after March 15 will be considered as space permits. Students will be notified of a decision beginning October 1 and no later than April 1.

Transfer students are also considered for admission in August, January and June. Applications are reviewed on a rolling basis, and applicants are encouraged to submit their paperwork early.

## Freshman Students

Candidates will be considered according to their academic potential as exhibited by their high school course work, standardized test scores, class rank, and other relevant academic information. Either the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT) is required of freshman applicants. The College recommends that the applicant take one of these examinations in the spring of the junior year in school and indicate that Roanoke College is to receive a copy of the results directly from the testing service. Information on both examinations is available at secondary schools or from Roanoke College. The examination code numbers for the College are 5571 for the SAT and 4392 for the ACT.

An application for admission is available on-line at www.roanoke.edu. Information about the College and admissions process can be obtained by writing to the Admissions Office, by calling the Admissions Office (800-388-2276 or 540-375-2270), by e-mail (admissions@roanoke.edu), or through the Internet (www.roanoke.edu). Inquiries pertaining to admissions should be directed to the Admissions Office. The College is a member of the Common Application, Inc.

A visit to the College is strongly recommended. Visitors are able to talk with a member of the admissions staff, tour the campus with a student guide, attend classes, and dine in the Commons student dining hall as guests of the College. The Admissions Office is open on weekdays from 9:00 a.m. to 4:30 p.m. for individual interviews and tours. Group presentations and tours are available on most Saturday mornings (September-April). Please call the Admissions Office (800-388-2276) or (540-375-2270) for additional campus visit information and/or to schedule an interview and tour. A student who anticipates a visit to the College should write or call in advance for an appointment. Appointments can also be scheduled on-line.

## Freshman Application Process

The Admissions Committee places primary emphasis on the applicant's secondary school record. Subjects taken, grades, SAT or ACT scores and class rank are among the more important factors taken into consideration. More than ninety percent of the students rank in the upper half of their graduating class. The committee also reviews any additional information submitted by either the applicant or the school.

For freshman applicants who have pursued a non-traditional secondary education program, the General Equivalency Diploma, granted by the appropriate state agency, is recognized. A transcript of the work that was completed in high school is still required; a curriculum similar to that previously described is recommended.

Secondary school students must submit the following when applying for admission: (1) a completed application; (2) an official and complete high school transcript; and (3) official results of either the SAT I or the ACT. The application fee is waived for online applications. The school record should be submitted directly to the Admissions Office by the applicant's counselor or principal.

Roanoke College has no limitation on the number or proportion of qualified persons with disabilities who may be admitted. Applicants complete the usual application procedure. Upon acceptance, applicants with disabilities have the option of requesting accommodations through the Disability Support Services office. If special tests are available and appropriate, applicants are encouraged to use them.

## Transfer Students

Transfer students must submit the following when applying for admission: (1) a completed application; (2) official transcripts of all college-level course work as well as secondary school records; and (3) the Admission with Advanced Standing form.

To be considered for admission, transfer students must be in good standing with all previous or current colleges and have a minimum cumulative grade point average of 2.2 (on a 4.0 scale) in academically transferable courses as determined by the Office of the Registrar. Official transcripts of all course work are required. Credit will be granted only for academic courses similar to those offered at Roanoke and completed at a regionally accredited college or university with a grade of "C-" or better. Foreign university credentials must be evaluated, course by course, through an approved foreign credentials evaluation service.

A minimum of 17 academic units (excluding credit earned for physical education) must be earned at Roanoke College toward the degree. Students with fewer than eight transferable academic units will be evaluated on the basis of their high school record in addition to their college work.
In general, students are to be governed by the Catalog which is current at the time they begin their studies at Roanoke College. However, a student has the option of declaring to be under the jurisdiction of a subsequent catalog except in cases where core requirements have been changed and the College has stipulated those eligible to declare the new curriculum. Should the faculty determine that a modification in course work for the major is necessary in order for students to complete a current course of study in a major; the department reserves the right to modify degree requirements for students who have not yet formally declared their major.
Students transferring from a Virginia community college may elect to declare any catalog in effect within the twenty-four month period immediately preceding the term they first enroll except in cases where core requirements have been changed and the College has stipulated who is eligible to declare the new curriculum.

## International Students

Each year, our campus is enriched by the presence of international students. Students from other countries who wish to enroll at Roanoke College must submit the application form, secondary school transcript with an official English translation, examination results and a financial statement. Official transcripts and records should to be sent directly to Roanoke from all high/secondary schools and universities that you have attended. The transcripts should indicate all of the completed courses, the final grades received and any certificates or diplomas awarded.

International students whose first language is not English should take the Test of English as a Foreign Language (TOEFL) and have the results mailed to the College. The minimum TOEFL score for admission
is 520 (68 internet-based or 190 computer-based). Roanoke College also accepts the results of the SAT, APIEL or IELTS exams in place of the TOEFL exam. The minimum APIEL score for admission is 3 and the minimum IELTS score is 6 . Two courses in English as a Second Language (LANG 221 and 222) are taught as needed each year. Students are enrolled in these courses based on their standardized test scores and on the results of a Roanoke College English proficiency test taken during orientation.

Successful results on national examinations such as "A" levels (U.K.) or Baccalaureate (France) may lead to advanced placement and credit toward the degree. These scores should be mailed with the application. Foreign university credentials must be evaluated, course by course, through an approved foreign credentials evaluation service.

All international applicants must send a bank-certified statement and/or other form of documentation such as the College Board's International Student Financial Aid Application indicating the annual resources available for their education. The financial statement or financial aid application should be sent with the admissions application and is required for the issuance of an I-20 Visa Eligibility form.

In order to be considered for academic scholarships, international students must first apply and be accepted to the college. Merit scholarships are based upon demonstrated academic achievement. International students may also win additional scholarships by competing on-campus in the Scholarship Competition Program. They are also invited to apply to the Honors Program and the Undergraduate Research Assistants Program. International students may also work on-campus for up to 20 hours per week during the school year.

## Students with Disabilities

Prospective students with disabilities are encouraged to visit Roanoke College. A personal visit enables the student and College representatives to meet and determine how the College might best serve the student's particular physical and learning needs.

After being accepted to Roanoke College, students with diagnosed disabilities must send a copy of medical or psycho-educational testing results to the Coordinator of Disability Support Services in the GoodePasfield Center for Learning \& Teaching. IEP or 504 plans will not be considered sufficient documentation unless accompanied by a full evaluation completed within three years prior to submission to the College. Roanoke College does not offer a special program for students with learning disabilities. Certain accommodations may be permitted based on the specific disability and the recommendations of the consulting professional. Any special considerations or accommodations requested by the student will not be allowed until testing results have been received and reviewed by the Coordinator of Disability Support Services. All requests are handled on a case-by-case basis. Students are encouraged to submit their documentation shortly after being admitted to the College to ensure that their accommodations are in place prior to the beginning of their first term.

At the beginning of each term, students will be required to obtain an Access Plan from the Coordinator of Disability Support Services in the Goode-Pasfield Center for Learning \& Teaching. This plan outlines necessary accommodations in accordance with submitted documentation. Students will submit an Access Plan to each instructor in whose class they wish to receive accommodations. It is then the students' responsibility to speak with their professors regarding their accommodation. This process will be repeated each semester. The College does not permit substitutions for language, statistics or mathematics requirements.

## Internal Grievance Procedure for Students with Disabilities

The College has an established written grievance procedure for students with disabilities. Any student with disabilities who has a specific problem or complaint (related to the accommodation's being requested) with any action taken or not taken by the college should first attempt to resolve the matter informally with the Coordinator of Disability Support Services. If the matter is not resolved to the student's satisfaction, it will
be handled as outlined in the document, "Roanoke College Disability Accommodation Policy." A copy is available at
http://roanoke.edu/AZ Index/Center for Learning_and_Teaching/Disability Support Services/Disability Accommodation Policy.htm.

## Special Students

Students who wish to pursue academic courses for purposes other than a Roanoke College degree are admitted to the College as special students. Special students are subject to all academic rules and regulations of this College. If a special student later applies to be a degree candidate and is accepted, any courses completed as a special student at Roanoke College may be applied toward the degree. The residency requirement of 17 units, however, must be completed after acceptance as a degree candidate.

## Adult Students

Roanoke College's Opportunities Program provides communication and support to allow adult students to attend college. These services include the availability of day and evening courses, special financial aid for part-time, degree-seeking adult students, and meetings of adult students to address special needs and topics of interest.

To qualify for the Opportunities Program, students must be at least 25 years old and satisfy the following requirements: completion of a high school diploma or GED; submission of a high school transcript; satisfactory completion of Algebra II; completion of SAT, or ACT (when applicable); a minimum of a 2.2 cumulative transfer grade point average (when applicable). See "Admissions" for more specific requirements.

Credit will be granted only for academic courses similar to those offered at Roanoke and completed at a regionally accredited college or university with a grade of "C-" or better. Official transcripts must be provided. Credits may also be received by adult students for scores the equivalent of "C-" or better on appropriate College Level Examination Program (CLEP) tests. See Advanced Placement and Credit, Credit by Examination, and Transfer Credit for more information. See "Transfer Students" for more information.

Additional information is available by contacting the Director of Adult Studies at 540-375-2303.

## FINANCIAL AID

To be considered for financial aid, the student must have been admitted to the College and plan to enroll as a degree-seeking student. Some programs require that students have a demonstrated financial need. Scholastic qualifications are also considered and, for College grants and scholarships, priority is given to those students who have demonstrated academic talent and potential.
The Financial Aid staff determines who will be eligible to receive aid and the amount of that aid. In arriving at such decisions, the cost of education and the total resources available to the student are considered.

As part of the application process, students are asked to file the Free Application for Federal Student Aid (FAFSA). Students who are Virginia Residents enrolling for first time at a Virginia private institution are required to complete the Virginia Tuition Assistance Grant application (TAG) by July 31. Both the FAFSA and TAG applications are available from the College's financial aid office, as well as the College's webpage.

## Financial Aid Regulations and Programs

The Free Application for Federal Student Aid (FAFSA) is used by the College to determine the student's financial need and serves as the initial application for financial aid. The FAFSA must be completed to receive any need-based funds from College, state, or federal sources. The College, through endowment and annual giving by alumni, friends, and parents, provides funds for student aid in a variety of forms. When these funds are considered with those from the federal and state programs, financial aid to students may reach substantial proportions. However, it is necessary to qualify for aid within certain limits and regulations.

In order to be fair to all applicants for financial assistance, the Financial Aid Office has established regulations governing the administration of the available funds.

1. Financial aid applications will be considered from new students after they have been approved for admission.
2. An applicant must file the Free Application for Federal Student Aid by March 1 to be considered for need-based aid.
3. Financial aid of various types is available to full-time, first time degree-seeking students carrying a minimum of three units per term. Generally, half-time students who are candidates for their first baccalaureate degree may apply for some federal student financial aid programs but are not eligible for the Virginia Tuition Assistance Grant Program, or most College grants and scholarships.
4. To renew merit-based financial awards, a recipient of aid should not be found in violation of College conduct policies and regulations and must maintain satisfactory academic progress according to guidelines available from the Financial Aid Office. To renew need-based assistance, recipients must complete a FAFSA each year. Eligibility for the Roanoke College Supplemental Grant may change if financial need or residency status changes.
5. Financial assistance is normally based on enrollment for a full academic year.
6. With the exception of the Beard Scholarship, total institutional dollars awarded to a student cannot exceed the cost of tuition in any given year.
7. Financial assistance is available to students regardless of race, national or ethnic origin, religion, sex, disability, or age.

## Types of Financial Aid

Eligible students may qualify for one or more of the following:
Roanoke College Scholarships
Roanoke College Grants/Awards
Roanoke College Bolton Award
Roanoke College Kizer Award
Roanoke College Lutheran Grant
Roanoke College Supplemental Grant
Virginia Tuition Assistance Grant Program*
Support from Independent Financial Organizations
Federal Pell Grant
Federal TEACH Grant
Federal Supplemental Educational Opportunity Grant (FSEOG)
Federal Perkins Loan
Federal Work-Study Program (FWSP)
Federal Direct Subsidized Stafford Loan Program
Federal Direct Unsubsidized Stafford Loan Program

## Federal Direct Plus Loan

Private Alternative Loans
*Roanoke College students who are bona fide residents of the Commonwealth of Virginia for one year may be eligible for Virginia Tuition Assistance Grant. Detailed program descriptions and eligibility criteria are available upon request from the Financial Aid Office.

Students who may be eligible for VA or GI benefits should contact the Veterans Administration to confirm and obtain a Certificate of Eligibility. This form must be submitted to the Registrar's Office as soon as possible to begin processing of benefits.

## Scholarship Competition Program

The Roanoke College Scholarship Competition Program was designed to recognize and support first time freshman students of superior academic and leadership ability. These students have the opportunity to compete for five different awards. To be considered for these scholarships, students must complete the Roanoke College Scholarship Competition Program application (available on-line at www.roanoke.edu), and be a prospective college freshman seeking first time fall enrollment. All participants must be accepted to the college prior to the on-campus competition.

All awards are renewed annually based upon the student making satisfactory academic progress as defined by the institution.

## Student Loan Fund

The Roanoke College Student Loan Fund is composed of assets from two principal sources:
Terrill Bushnell - Mr. Bushnell '14 bequeathed to Roanoke College two student loan funds in the name of his parents, Reverend Dr. John E. Bushnell and Annie Terrill Bushnell. The revolving scholarship funds are for the benefit of worthy junior and senior students who may be financially unable to bear the cost of continuing their education, with the student permitted to borrow from the fund in such amounts as may be decided by the Financial Aid Office.

Dr. Norborne F. Muir - Dr. Muir, a longtime friend of Roanoke College, bequeathed a gift, the income from which is a revolving loan fund for the primary purpose of making loans to worthy students with an established financial need who are seeking degrees at the College. These funds are loaned only to students requiring financial assistance who might not otherwise be able to attend and earn a degree, with such determination to be made entirely at the discretion of the College.

## STUDENT SERVICES

The Division of Student Affairs provides a variety of programs and services that contribute to a student's academic experiences and the educational mission of the College. Specific program and service areas include athletics, campus recreation, campus safety, care team, Colket Center, counseling center, crisis intervention, health services, residence life and housing, student activities, and student conduct.

## Residence Life and Housing

On behalf of the Residence Life and Housing staff, welcome to campus living! Our goal is to make your residence hall living experience a significant and positive part of your college life and beyond.

Like many private, liberal arts colleges, Roanoke is a residential college. That means that the campus living environment is an integral part of the college experience and is highly valued by the campus community as a complement to the classroom experience. We believe that living together in community provides residents opportunities to interact with other students, faculty and staff to enhance their social and interpersonal growth as citizens through shared living experiences.

The Residence Life and Housing staff is committed to encouraging an inclusive residence hall community that promotes civic and social responsibility, intellectual and personal growth, and physical and emotional well-being in its residents. We strive to achieve this community by providing our residents appropriate challenges and opportunities, support and encouragement, respect for community standards and recognition of one another's individuality.

## As members of a residential college, Roanoke students are required to live on campus during their full tenure as a student unless they meet one or more of the following criteria:

have lived in the Roanoke Valley area (within 30 miles of campus) for at least six months preceding the date of first enrollment and continue to reside with their parent(s)/guardian(s);
are married;
live with grandparents or siblings who live in the Roanoke Valley area;
are 23 years old (before the beginning of the term they desire to live off campus);
are a military veteran;
are enrolled part-time (students who claim off campus status due to part-time enrollment and who return to full-time status during the current or a subsequent semester will be charged the current room and board rate);
have received and accepted prior approval to live off-campus by the Residence Life and Housing staff and are currently living off-campus.

Part-time students must receive permission from the Residence Life and Housing staff to reside on campus. With the exception of Elizabeth Hall residents, residents are required to purchase a meal plan.

Residence hall space is reserved for a student after the individual has been admitted and has paid the tuition and room and board deposits. Students choose their room and roommate in late July.

Rooms are furnished with single beds (extra long mattresses), dressers, closets or wardrobes, desks, and desk chairs. Students are expected to bring linens (extra long), bedspreads, blankets, pillows, trash cans, lamps and any other personal articles. Housekeeping service is provided to clean common areas, but students are expected to maintain their individual rooms and apartments. The residence halls remain locked 24 hours a day. A room key and exterior door key or building access card are issued to each resident student. Each residence area is under the supervision of a professional Area Coordinator. In addition, a student Resident Advisor (RA) is assigned to each living area. The RAs assist students and enforce College regulations. Greek Resident Managers (GRMs) are assigned to the fraternity and sorority areas on campus and perform similar functions. Coinless washers and dryers are available for use by resident students during the regular academic year and the intensive learning term. The machines are operated by coin during the summers. Residence hall rooms and common areas have wireless internet access. Most students rely on their personal cell phones for telephone usage. However, the College provides a land line telephone upon request. A deposit for the telephone is required.

Rooms in residence halls, other than those designated for breaks and summer usage, are rented only for those periods of time that the College is in regular session as specified by the College calendar. Room changes are permitted until mid-spring semester. However, they must be approved by the Residence Life and Housing staff prior to the move.

The Resident Student Comprehensive Fee includes room and board and washer/dryer costs. Meals are served in the College cafeteria, known as the Commons, seven days per week. Commuting students may buy meals in the Commons. In addition, meals may be purchased in the Cavern, which is the College's dine-in/take out option.

For detailed information about living on campus visit www.roanoke.edu/reslife.

## Dean of Students Office

The Dean of Students Office is responsible for planning, coordinating and implementing various programs and services that foster interpersonal growth, development and learning. The Office also oversees the student conduct system, student well-being and town-gown relations.

## Student Activities

Campus-wide social and co-curricular activities are coordinated through the Colket Center, the College's campus center. The Director of the Colket Center \& Student Activities works with the student-run Campus Activities Board in providing a wide variety of activities to meet the needs and interests of the student body. Activities are open to all students and may include popular movies, live entertainment, dances, nightclub entertainment, and special events. National fraternities, both male and female, and special interest clubs provide additional social opportunities on campus.
A weekend shuttle, the Maroon Express, transports students from both the main and Elizabeth campus to downtown Roanoke city, a popular theater complex and a local shopping mall. The shuttle is a free service to all students.

Campus activities allow students to apply principles learned in the classroom to practical situations. As part of the cooperative curriculum, students involved in campus activities learn such leadership skills as budgeting, motivating, delegating, programming, evaluating, and negotiating. Also, involved students have the opportunity to develop close relationships with faculty and staff advisors.
Ten national Greek letter fraternities and sororities are recognized at Roanoke College, and the College provides designated housing for these organizations. The fraternity and sorority chapters and their founding dates are:
Alpha Sigma Alpha, Theta Beta Chapter, 2002 (women)
Chi Omega, Pi Epsilon Chapter, 1955 (women)
Delta Gamma, Gamma Pi Chapter, 1955 (women)
Delta Sigma Theta, Tau Omega Chapter, 2004 (women)
Kappa Alpha, Beta Rho Chapter, 1924 (revived 1987, men)
Pi Kappa Alpha, Phi Chapter, 2001 (men)
Pi Kappa Phi, Xi Chapter, 1916 (revived 2004, men)
Pi Lambda Phi, VA Lambda Kappa Chapter, 1959 (revived 2012, men)
Sigma Chi, Tau Chapter, 1872 (revived 1923, men)

## Student Government

Responsibility in certain areas of campus life is delegated to the students by the President of the College. In these areas, the student government operates by designated authority rather than by inherent right. Participation in self-government helps develop the discipline and sound judgment necessary to put education to the wisest possible use.

Students are members of numerous governing bodies, including the Board of Trustees College Life Committee, Residence Halls Community Council, Academic Integrity Council, College Conduct Board, Student Conduct Council, Resources and Planning Council, Curriculum Committee, General Education Committee and Student Life Council. The President of the Student Body is invited as a student observer to meetings of the Board of Trustees and of the Faculty.

## Student Media

Students write, edit, and publish a weekly newspaper, The Brackety-Ack Campus news is highlighted with editorials, letters-to-the-editor, columns, and opinion-poll articles.
The student literary magazine, On Concept's Edge, presents student-authored prose, poetry, and art work.
WRKE-LPFM is the student-run campus radio station. WRKE broadcasts on 100.3 on the FM dial and on the Web at WRKE.ORG. This low power, 100 watt station covers most of the Salem Virginia area. It offers a variety of programming during the academic year.

## Art, Art History, Music and Theatre Arts

F.W. Olin Hall for Arts and Humanities, home of the Fine Arts department, serves as a major cultural arts center for the Roanoke Valley. Some of the outstanding facilities available in Olin Hall include a 404 -seat main stage theater with computerized lighting and sound systems, 125 -seat recital hall, 500 -seat outdoor amphitheater; versatile classrooms, art studios, practice rooms, 100 -seat studio theatre, music rehearsal hall, sculpture garden, media classrooms, and faculty offices.

Running parallel to the active studio and art history programs for students is programming in the Olin Hall galleries, which presents an annual season of nine art exhibitions and events complementing art and art history studies, as well as national touring exhibitions from such institutions as the Virginia Museum of Fine Arts and the Smithsonian. In addition, student works are exhibited annually in Olin Hall, culminating in the art majors' exhibition held each year in the Olin and Smoyer Galleries.
In studio art, students in Olin Hall can develop their creativity in modern and fully-equipped painting, drawing, design, graphic art, computer, photography, printmaking, ceramic, and sculpture studios and laboratories. Students in art history study in Olin Hall's excellent lecture rooms, where they discover, examine, and analyze visual masterworks of the past and relate them to current understanding of the social, political, religious, and aesthetic contexts of these works.

In music, a student may audition for the Roanoke College Choir, which performs at special events and oncampus and off-campus programs throughout the year. A Spring tour is often a part of the choir's schedule. The Roanoke College Wind Ensemble and Jazz Ensemble perform four concerts a year as well as provide musical support for the College's spring commencement ceremony and several sporting events. Student chamber ensembles and soloists perform on Music at Noon concerts. Olin Hall also provides opportunities to hear the College's resident chamber ensemble, the Kandinsky Trio. Among its many instruments, Olin Hall is home to an exceptionally fine Steinway "D" concert grand piano.

In theatre arts, students audition for parts in several theatrical productions each year. Shows have included Antigone, Twelfth Night, Midsummer Night's Dream, Dracula, Hedda Gabler, Miss Julie, Cat on a Hot Tin Roof, Good Woman of Setzuan, The Heidi Chronicles, Laramie Project, 1959 Pink Thunderbird Convertible, Godspell, The Fantastiks, Little Shop of Horrors, and The 25th Annual Putnam County Spelling Bee. Participation in theatre arts at Roanoke College gives students experience in acting, makeup, costuming, set design, lighting, stage management, and publicity, among other phases of production. This experience is available to students from all majors at the College.
Because Olin Hall is a prominent center for cultural activities in the Roanoke Valley, students at the college are fortunate to have exposure to many local and visiting artists, a roster that has in past years included such notable names as Christopher Parkening, Marian McPartland, John Cage, Philip Glass, Chanticleer, Solisti di Zagreb (Yugoslavian chamber orchestra), Dizzie Gillespie, and Metropolitan Opera stars Dawn Upshaw, Jerry Hadley, and Elizabeth Futrell. Music students have had the benefit of personal instruction from these and numerous other visiting artists. In addition, Opera Roanoke and the Roanoke Symphony Orchestra have used the Olin Hall facility for their concerts in past seasons, and each season the department hosts the American Shakespeare Center from the Blackfriars Playhouse in Staunton, Virginia.

## Athletics

Roanoke College is a member of the National Collegiate Athletic Association Division III and the Old Dominion Athletic Conference. Men compete with other colleges in soccer, cross-country, basketball, baseball, track and field, tennis, golf and lacrosse. Women's varsity sports include soccer, field hockey, volleyball, cross-country, basketball, softball, tennis, lacrosse, and track and field.

Roanoke has excellent facilities to support every phase of a well-rounded athletic program. On the main campus, there are two athletic fields, including Donald J. Kerr Stadium, the home for our men's and women's soccer, men's and women's lacrosse, and field hockey teams. Kerr Stadium is equipped with seating for 1000 , floodlights and FieldTurf, a synthetic playing surface. The C. Homer Bast all-weather track flanks Kerr Stadium. Two tennis courts are close by. The C. Homer Bast Physical Education and Recreation Center includes two basketball courts, a state-of-the-art fitness center, classrooms, an athletic training room, offices, and locker rooms. At your Elizabeth Campus, there are three athletic fields, all
used for our intercollegiate practices and recreational activities. In addition, our Tennis Complex at the Elizabeth Campus, home of the Maroon Tennis programs, features eight courts.

## Campus Recreation

Students have the opportunity to participate in intercollegiate, club, intramural and recreational sports and activities. The campus recreation department offers students a wide variety of club sports from which to choose including bass fishing, equestrian, rugby, ultimate Frisbee, and golf. Students with any level of experience are welcomed to compete. Roanoke College greatly supports students who wish to play club sports and provides the resources needed to make the participation in club sports a valuable and enjoyable experience.

Joining a Club sport can greatly enhance one's college experience. It provides students with an outlet to release stress that arises from classes, as well as a way for students to interact with people they otherwise would never have met.

Roanoke College intramural sports and Group Fitness classes are widely popular amongst all types of RC students. Intramurals allows students to participate in multiple activities on a team or on an individual level. Games can be played on a coed and single sex level. Students can formulate their own teams or join as individuals and be placed on a team. There are a wide range of intramural sports offered by season at Roanoke College such as indoor and outdoor soccer, flag football, basketball, dodge ball, kickball, and many others. Any level of experience is welcomed and encouraged since intramurals offer an ideal opportunity for students to learn and harness skills in many types of sports.

The Outdoor Adventures program takes advantage of the College's geographic location to offer a unique outdoor experiential program which helps the College fulfill its mission of developing the whole person.

## Health Services

Student Health Services provides confidential on-campus health care services to all full-time students. The clinic functions like a typical doctor's office and is staffed by family physicians, nurse practitioners, and registered nurses. Nurse Practitioners may treat both acute and chronic conditions as well as prescribe medications and therapies. There is no charge for office visits; however, lab tests, certain procedures, physicals, immunizations, allergy or other injections incur charges payable by cash, check, Maroon Money, and most major credit cards. For more information visit www.roanoke.edu/health.

It is College policy that Health Services staff not excuse students from class. Each professor establishes individual policies regarding absenteeism. Students are encouraged to contact faculty members when illness or injury interferes with class attendance. In certain situations, Health Services, with the student's permission, may notify individual professors of a student's illness.

All new full-time students are required to provide a complete health record containing medical history, immunization record, and tuberculosis screening. Students will not be able to register for classes until this record is received. Part-time students may be asked to provide documentation of immunization history in the event of a communicable disease outbreak.

## Counseling Center

The years of college can be amongst the most gratifying and challenging of a person's life. Students transition into their adult lives while encountering a broader world of ideas and relationships that propel learning and choices about the kind of life they want to live, the kind of person they want to be, and the relationships they want to have. With these escalating demands, it is no wonder that there can be times of stress, confusion, emotional turmoil, and assorted behaviors that interfere with success. While students effectively meet most of these challenges on their own, there are times when they need additional ways to understand themselves and act effectively upon their lives. The Counseling Center assists with the mental health needs of a learning community to better achieve personal and academic success. The professionally licensed counseling staff provides personal counseling, informational programming, and practical
consultations, all free of charge. Appointments can be made in person at Morehead Hall or by telephone at 540-375-2302. After hours emergencies should be directed to Campus Safety at 375-2310.

## Campus Safety

The Office of Campus Safety supports the College's mission by providing a safe, secure and orderly campus environment where students can pursue their education and in which faculty and staff can teach and work. We pursue this goal through the protection of life, property and individual freedoms, the preservation of peace and order and the prevention of crime. Each day, we work to achieve our goals by providing efficient support services, campus patrol utilizing community policing practices, mentoring and educating students we contact, conducting professional and ethical investigations, providing effective emergency and crisis response and by employing well trained, courteous officers and staff.

Campus Safety works 24 hours a day / 7 days a week to provide police and security services to the College community. Areas of responsibility include radio and phone communications, campus patrol, emergency and crisis response, alarm monitoring, escorts, safety programs, conduct code enforcement, traffic control, ID cards, motor pool and more. Officers are appointed Special Conservators of the Peace by the Circuit Court and have arrest authority on College property. The Campus Safety Office is located at \#9 North College Avenue. The office can be contacted at 540-375-2310 or in the event of an emergency by using:

- one of the direct-dial emergency "Red Phones" located inside many buildings or
- Yellow "access/emergency" telephones, located outside the main entrance to each residence hall, as well as the Belk Fitness Center.
- "Blue Light" emergency phone towers, located in five areas of main campus, as well as at Elizabeth campus
- VOIP telephones located in all offices and classrooms and used in emergencies to call for help.

Each fall, Campus Safety publishes an Annual Security Report and an Annual Fire Safety Report for residential facilities, in compliance with the Higher Education Act of 1965. The Annual Security Report contains information about safety and security procedures and policies on our campus. Included are campus crime statistics for the most recent three calendar years. The Annual Fire Safety Report contains fire safety information about each residence hall, as well as statistical data and fire safety policies and procedures. A "notice of availability" of the reports is distributed to all students and the reports are available to prospective students upon request by contacting the Admissions Office. The reports can also be found on the college website at http://roanoke.edu/A-Z_Index/Safety/Reports.htm .

Automobiles - All students with vehicles on campus are required to register them with Campus Safety. There is an annual vehicle registration fee and the decal must be displayed on the vehicle at all times when parking in student parking on campus. Resident students from Virginia may be subject to paying personal property taxes on their vehicles to the City of Salem. These students should contact the City of Salem Commissioner of the Revenue to determine their status. A summary of parking and motor vehicle policies is distributed to students when a vehicle is registered and a parking decal issued. The complete policy is found in the Student Handbook or at
http://roanoke.edu/Documents/Parking/Student\ Parking\ Brochure ebook.pdf.

## Dining Services

Meals are served in the College cafeteria, known as the Commons, seven days per week. All residential students (with the exception of Elizabeth Hall residents) are required to purchase a meal plan. Commuting students may buy meals in the Commons. In addition, meals may be purchased in the Cavern, which is the College's dine in/take out option.

## Student Conduct and the Disciplinary System

Disciplinary powers reside with the College. Various types of disciplinary hearings are utilized depending upon the nature and severity of the misconduct. Complete information on the disciplinary system is found in the Student Handbook and in the Student Conduct Code Manual.

## Conduct Policies and Regulations

College policies and regulations are designed to protect the rights of all students and to support the purpose and aims of the institution. Students are responsible for learning and abiding by the policies and regulations. These policies and regulations are found in the following publications: Academic Catalog, Student Handbook, Academic Integrity at Roanoke College, and the Student Conduct Code of Roanoke College. A partial summary of the regulations is given here:

Academic Integrity - The College seeks to maintain the highest standards of intellectual scholarship and performance and works to promote honesty, integrity, and responsibility in all academic work. Violations of academic integrity (i.e., cheating, lying, plagiarizing, unauthorized use of an electronic device, impeding academic investigations, denying access to needed materials, etc.) are handled according to policies and procedures described in Academic Integrity at Roanoke College. Students need to be familiar with this booklet and pledge to follow the integrity guidelines.

Alcoholic Beverages - The College does not encourage the use of alcoholic beverages by students, nor does it condone the violation of applicable laws or College policies. The College respects the rights of students of legal age to consume alcoholic beverages in approved locations as long as they drink responsibly and adhere to applicable laws and College policies. Individuals who choose to consume alcoholic beverages, regardless of their age, are responsible for their behavior. The legal drinking age in Virginia is 21 years of age. The College seeks to educate students about alcohol use and abuse and provides information about assistance for those with a problem who seek help. The College reserves the right to limit or revoke the privilege of consuming alcohol on campus in the event that students do not drink responsibly.

Consideration for Others - Students are expected to observe and respect the rights of others, including the faculty and staff of Roanoke College who have a professional right to perform their duties without harassment or obstruction. The failure to do so, as defined in the Student Handbook, subjects the offender to disciplinary action, including suspension or expulsion.

Drugs - The possession, use, sale, or manufacturing of illegal drugs or paraphernalia which contains illegal drug residue, as well as the misuse of prescription drugs, is a violation of College policy and state law. Any student violating this policy may be subject to severe disciplinary action including suspension or expulsion. Law enforcement agencies are notified of drug-related criminal offenses occurring on campus and are given the names of those involved. The College seeks to educate students about substance use and abuse and provides information about assistance for those with a problem seeking help.

The College has a program aimed at preventing the illicit use of drugs and alcohol by students and employees in compliance with the Drug-Free Schools and Communities Act Amendments of 1989.

## FINANCES

The Business Office is open weekdays throughout the year from 8 a.m. to 4 p.m. However, from Christmas Eve until New Year's Day the College will not be open for normal daily operation. Online transactions may be accomplished $24 / 7$ through a student's MyRoanoke account.

## Tuition, Room and Board for Full-Time Students

Resident Students Those students who both live in double occupancy rooms and board on campus, per academic year: $\$ 49,976.00$ including mandatory fees. All residential students on the main campus are required to be on a meal plan. The 19-meal plan is required for the freshman year, but a 14-meal and 9meal plan option are also available for resident students after the freshman year. The charges for the meal plans and the method of tracking meal plan usage is determined by the College and is subject to review by the College each year.

Commuter Students Those students who do not live and board on campus, per academic year: \$37,802.00.

Overload Tuition Fee Applicable to each full unit taken in excess of five units in either first term (Fall) or second term (Spring).This fee is based on the number of units for which the student is registered at the end of the add period, at the per unit rate of $\$ 878.00$ ).

## Tuition for Part-Time Students

Students who carry fewer than three units and do not room on campus pay tuition (based on the number of units for which the student is enrolled at the end of the add period) at the per unit rate of $\$ 1,756.00$. The activity fee is $\$ 38$ per semester for part-time students.

## Tuition for Graduates and Senior Citizens

Roanoke College graduates may enroll in any credit course, either for credit or as an auditor, on a full or part-time basis and receive a discount of $50 \%$ off of tuition. Senior citizens who live within commuting distance of the college, are at least 60 years old, and are fully retired from normal full-time employment receive a reduction of $75 \%$ off of the tuition cost for credit courses. Qualifying senior citizens are only charged $\$ 100$ per unit for auditing a course.

## Tuition for Intensive Learning Term

The Intensive Learning (IL) Term is held in May of each academic year. There is no additional tuition charge for full-time students for one intensive learning term course. However, additional tuition costs may apply if the student was previously enrolled in an IL Term course. Students who take more than one Intensive Learning Term course will be required to pay an additional tuition charge at the rate of part-time tuition $\$ 1,756.00$. This amount will be billed on a separate invoice by the Business Office in April if these charges should apply.

Students attending Roanoke College as part-time status will pay tuition costs for May term at the current rate per unit which will be billed to their student account in April.

## Housing during the Intensive Learning Term:

Current full-time commuter students Housing fees if student moves on campus (see below).
Current part-time commuter or transfer students, or current non-student $\$ 1,756.00$ per unit tuition and housing fees if student moves on campus.

Current full-time resident students No additional housing charges or fees if student was a resident for at least two years and enrolled in their first IL course. No additional housing charges or fees if student was a resident for one year, has a room assignment for the next academic year and is enrolled in their first IL course.

## Housing Fees

| CATEGORY | ROOM | BOARD | TECHNOLOGY FEE |
| :--- | :--- | :--- | :--- |
| On-Campus 3 weeks |  |  |  |
|  | $\$ 522.00$ | $\$ 642.00$ | $\$ 39.00$ |
| On-Campus 2 weeks |  |  | $\$ 26.00$ |
|  | $\$ 348.00$ | $\$ 428.00$ | $\$ 13.00$ |

Refunds for Campus-based Courses in the Intensive Learning Term

A $100 \%$ refund of tuition, housing and fees paid will be given to those students who drop an IL term course on or before April 15th. There will be a late drop fee of $\$ 100$ charged to any student who drops the course after April 15th, as well as a late fee of $\$ 100$ for students pre-registering for an IL term course after April 15.

## Foreign Travel Courses in the Intensive Learning Term

The Roanoke College deposit for all foreign travel courses is $\$ 300$. In some cases, a course may require a higher deposit. The deposit is due by November 15 and is nonrefundable. The remainder of the course fee is due by February 1. Any deposit amount above $\$ 300$ and the course fee are refundable if funds have not yet been committed or expended on the student's behalf. The tuition charge, if applicable, is equivalent to the part-time tuition rate of $\$ 1,756.00$ per unit. All tuition charges and course fees must be paid in full prior to departure for the course. Students attending Roanoke College at part-time status will pay tuition costs for May term at the current tuition rate per unit which will be billed to their student account in April.

## Miscellaneous Expenses

Activity Fee A student activity fee will be charged to all students as follows; $\$ 190.00$ per semester for all full-time students and $\$ 38.00$ per semester for all part-time students. This fee is used to cover the cost of student activities available to all students.

Application Fee $\$ 30$ must accompany each application for admission. This fee is non-refundable.
Applied Music Fee (in addition to comprehensive fees)

## The fee per term for applied music is as follows:

1. Declared music major at or above sophomore level; full-time Roanoke College student; one applied music course/term to a maximum of $7 \mathrm{~N} / \mathrm{C}$
2. Music major (as described in 1), per additional applied music course $\$ 400$
3. All other full-time or part-time students per applied music course $\$ 400$
4. MUSC 107 (Studio Ensemble) Fee \$ 200

This fee is applied to the account of students registered for applied music courses at the end of the add period. If withdrawal from a course occurs later, there is no adjustment to this fee.

Auditor For fee purposes, a course for audit is considered the same as a credit course.
Breakage Excessive breakage of equipment in laboratory courses or of any College property in dormitory residences or elsewhere will be billed to the person responsible.

Credit by Examination A service charge of $\$ 878.00$ per unit for currently enrolled students and $\$ 1,756.00$ per unit for former students is made for giving an examination for credit in a course. The student omits class work and attendance and desires credit by successful completion of a comprehensive examination in the course.

Health Service Fees Students are charged for laboratory work, allergy injections, inhalation therapy, physicals, and gynecological examinations. Students are also responsible for prescription medications and any services received off campus. There are no charges for most routine healthcare and services.

ID Card Replacement A $\$ 25$ replacement fee will be charged for lost ID cards.
Late Check-in Fee A $\$ 100$ service charge is assessed to students who do not officially check-in by the appointed date.

Late IL Term Add/Drop Fee A $\$ 100$ fee is charged to all students who add or drop an IL term course after April 15th.

Lost Key Charge All resident students are issued a room key at no charge. There is $\$ 25$ charge for each key lost during the academic year, which covers the cost of changing the lock on residence hall rooms and issuing a new key.
Orientation Fee A $\$ 125$ fee will be charged to all new incoming full-time students to cover some of the costs associated with orientation activities. This fee in nonrefundable.

Parking A $\$ 75$ nonrefundable fee will be charged for a vehicle decal for student vehicles. Fines for parking in non-designated spaces for students range from $\$ 25-\$ 100$. See "Motor Vehicle Policy" in the Student Handbook for details.

Payment Plan Detailed information is outlined under "Method of Payment."
Print Allotment Students are allocated $\$ 50.00$ per academic year (Fall and Spring) on their Maroon Card for printing at computer labs on campus. $\$ 5.00$ for Intensive Learning and $\$ 10.00$ for Summer School is also allocated. This fund is only for printing and is not refundable to the student.

Return Check Fee or ACH Fee A $\$ 25$ fee will be charged for each check or electronic ACH payment returned by a bank. After three returned items we will only accept payment in the form of guaranteed funds (ex. credit card, money order, cashier's check, etc.).

Room Unlock Charge Resident students who lock themselves out of their rooms are permitted one (1) free unlock per academic year. Each subsequent unlock will cost the student $\$ 10$.

Service Charge A \$10 fee will be charged for all miscellaneous fines turned over to the Business Office to be applied to the student account for collection.

Single Room Fee There is an additional charge for resident students who are housed in a single room depending on residence hall. Please refer to the college website or contact the Business Office for details.

Student Discipline Fines are part of the available disciplinary sanctions.
Student Teaching Study Away For Education licensure students approved to complete their student teaching requirement outside the Roanoke Valley an additional fee of $\$ 1,000.00$ is charged.

Study Abroad Administrative Fee A study abroad administrative fee of $\$ 300.00$ is charged to students participating in any Roanoke College study abroad exchange or affiliated program or in a study abroad program not affiliated with Roanoke College. This fee applies to students studying abroad in the 2013-14 academic year and thereafter. The fee is nonrefundable.

Technology Fee A $\$ 492.00$ residential or $\$ 367.00$ non-residential per semester fee is charged to each full-time student for information technology equipment and services that support students' academic work. These facilities and services include, but are not limited to, the use of all student computer labs on campus, access to a wide range of standard software (e.g., word processing) in labs, electronic mail services and internet access, instructional software used by faculty and students, printing services in labs, help desk and technical support services, and the Fintel Library computer system.

Unpaid Debt - Tuition, Fees, and/or Student Loans Student accounts are payable at Roanoke College at the time such charges are incurred. Graduating students with outstanding financial obligations will have a hold placed on their records withholding release of a diploma, transcript and other College services until the debt is satisfied.

Roanoke College regulations prohibit the following for any student whose account with the College is delinquent until the debt has been satisfied: registration for classes, room selection, graduation, granting of credit, release of transcript, diplomas, schedules and loans.

Delinquent debts may be reported to a credit bureau. Unpaid student accounts which are deemed delinquent or student loans (i.e., Federal Perkins, RC Institutional) may be placed with a collection agency. Legal action may be taken to collect any balance due. If such action is required, the student/borrower will be liable for any cost associated with such action. The student/borrower should understand that collection costs will be a minimum of $331 / 3 \%$ of the outstanding balance including any reasonable legal fees.

Variable Expenses You will need to purchase textbooks for your college classes. Books will cost approximately $\$ 1,000$ for each of the four years of your studies. Transportation and personal expenses should also be calculated in your planning.

## Method of Payment

Advance Deposit An advance deposit is required for all students for the Fall, Spring and Summer terms. This deposit allows the student to pre-register for classes for the upcoming term and for resident students, it allows them to participate in the room selection process. The advance deposit is due as follows:

Resident Students \$ 800
Commuter Students $\$ 500$

Part-time Students. \$ 100

Summer. $\qquad$ \$ 125 (non-refundable)
For new students, the advance deposit is due on or before May 1st and will be refunded, except Summer, in full, for written cancellations received by May 1st. For returning students, the advance deposit is due on or before March 1st and will be refunded, except Summer, in full for written cancellations received by June 15th.

For students not attending Fall term, the Spring term advance deposit is due prior to the student preregistering for Spring courses and is refunded in full for written cancellations received by December 1st.

The advance deposit will be applied against the tuition and fees charged for the current term. Resident students who request and receive permission to live off campus after June 15 th will forfeit $\$ 300$ of the required advance deposit. The remainder of fees for each term are billed and due prior to the beginning of each term. Students will not be allowed to check-in with the Registrar's Office until their account is paid in full and all financial arrangements are completed.

## Monthly Payment Plan

Those who prefer to pay the comprehensive fee in equal monthly installments may choose among plans offered by Tuition Management Systems, Inc. (TMS). TMS offers several interest-free monthly payment options by providing more manageable cash flow and greater budgeting flexibility for a small enrollment fee of $\$ 65$. The most popular of the payment plans is a 10 -month plan that begins June 1 st and runs through March 1st.
Life insurance is provided for an insurable parent which covers the remaining portion of the student's contract in the event of the parent's death.

Information concerning the available payment plans will be mailed during the Spring. Additional information may be obtained in advance by writing, calling or visiting the website of TMS.

Tuition Management Systems, Inc.
P.O. Box 0169

Cincinnati, OH 45274-0169
Phone: 1-800-722-4867
Website: www.afford.com

## Withdrawal / Refund Policy

The College operates on an annual budget with commitments for faculty salaries and educational and plant expenses made a full year in advance. Therefore, Roanoke College has established a refund policy which is equitable to the College and students. The date of withdrawal used to compute refunds is the date the student last attended class, as recorded by the Registrar's Office.

For students who withdraw or separate from the College for any reason prior to the beginning of a term, a refund of all tuition, room, board, and fees paid will be made, less the advance payment required of all students, provided a written notice is presented to the Office of the Registrar by the matriculation date.

If an enrolled student withdraws before the $60 \%$ point of the period of enrollment, a refund of tuition, room, board, and activity, technology, and telecommunication fees will be calculated using calendar days and pro-rated based on the student's date of withdrawal. Any financial aid that is not earned must be returned to its source. The calculation of the return of these funds may result in the student owing a balance to the College or Federal Government. Federal funds will be returned in accordance with federal regulations. In addition, balances owed to Roanoke College - such as parking fines, student health fees, disciplinary fines, library fines, etc. - will be deducted from any refund due before any disbursement is made to the family.

In accordance with federal regulations, the College believes that it is the responsibility of the family to pay affordable educational costs before any financial aid is paid. In view of this basic approach to the family support, any charges to a student account that are assessed for the period of enrollment prior to a withdrawal or suspension are viewed as first having been paid by the student and his or her family.

Therefore, all financial aid will be returned to its source before any funds will be refunded to the student or his or her family.
Upon a withdrawal from the College for any reason, the Housing Agreement is terminated and the resident student forfeits any current or future room assignments. Residents must vacate their living areas within 48 hours. Upon readmission to the College, the student will be assigned housing based on available accommodations. Changes in room assignments can be made by contacting the Residence Life and Housing office.

A student may be granted a withdrawal for health reasons when physical or psychological functioning is so impaired that he/she cannot meet course requirements for the remainder of the term. The refund is calculated based upon the unused portion of total fees (prorated for the entire length of the term). The withdrawal request must be substantiated by documentation from an appropriately qualified, licensed health care provider (e.g., physician, Health Services staff, mental health practitioner, Counseling Center staff) which includes the following: a diagnosis of the condition, the time frame during the term in which the diagnosed condition occurred, a functional description of how this prevented the student from being able to continue or complete his/her academic requirements, and a recommendation of withdrawal for health reasons.

A student granted a withdrawal for health reasons must receive permission from the College to re-enroll. Such permission is contingent upon the College determining that the individual is capable of meeting the requirements of the College environment without detriment to his or her personal health, the health or educational progress of other campus community members, or the educational process of the institution. The student must reapply at least one month prior to the beginning of the term in which reinstatement is desired. The application must be substantiated by documentation from an appropriately qualified, licensed health care professional recommending readmission and functionally describing how the health impairment is sufficiently resolved so that there is a reasonable expectation the student can persist to complete the academic requirements of the term. The student must give written consent to his or her appropriately qualified, licensed health care provider to discuss the individual's situation with appropriate College officials. The final determinations for withdrawal and readmission shall be at the sole discretion of the College and for reasons deemed satisfactory to the College. Roanoke College reserves the right to withdraw a student or take other appropriate action if College officials determine a student's conduct or condition is detrimental to the health or educational progress of other campus community members or the educational process of the institution.

## Special Note

The College reserves the right to make changes in requirements, fees, course offerings, or other specified policies at any time.

The College neither gives final examinations, grants a degree, nor issues grade report forms or transcripts of credits unless satisfactory arrangements have been made with the Business Office for payment of all fees. Should payment of any fee become delinquent ( 10 days overdue) the student may be excluded from classes, and future use of credit may be denied.

## ACADEMIC HONORS AND AWARDS

Outstanding academic and extracurricular achievement is readily recognized at Roanoke College. Students who attain and maintain high levels of performance are honored each year in many ways.

## Semester Honors

The Dean's List Students are placed on the Dean's List of Distinguished Students if their semester grade point average for any Fall or Spring term is at least 3.5 but less than 4.0 , with no grade below " C " in any course. The student must have been enrolled for credit in at least four units, three of which were for a letter grade (excluding pass/fail and audit).

The President's List Students are placed on the President's List of Distinguished Students if their semester grade point average for any Fall or Spring term is 4.00 . The student must have been enrolled for credit in at least four units, three of which were for a letter grade (excluding pass/fail and audit).

## Junior and Senior Scholars

Junior Scholars A student classified as a junior during or at the end of the Fall term who has earned a minimum of 16 units at Roanoke College with a cumulative grade point average of 3.00 or higher is awarded a certificate of recognition as a Junior Scholar by the faculty.

Senior Scholars Annually, the department or coordinator in each major may recommend to the Dean as Senior Scholar a student whose work in that field has been most exemplary. In order to be considered, a student must have at least a 3.2 cumulative academic average and must have earned at least 25 units of credit, of which at least 17 units have been earned at Roanoke College. Eligibility is determined from among currently enrolled students on the basis of their academic records as of the end of the Fall term.

## Degrees with Distinction

Degrees Cum Laude, Magna Cum Laude, or Summa Cum Laude are conferred upon students who have earned a cumulative grade point average of at least 3.4, 3.7, or 3.9, respectively, for all courses taken at Roanoke. The student must have completed a minimum of 17 units (excluding physical education and co-curricular activities) at Roanoke College and completed all degree requirements to receive a degree with distinction.

## Honors in Majors

Qualified students may apply for honors in their major(s) by completing an honors project, which will consist of a program of independent study culminating in a paper, artistic creation, or performance. Students who meet the criteria given below will receive the designation "Honors in (field of study)" on their diplomas.

Students applying for major honors work must have at least a 3.4 grade point average in the major, calculated at the time of their application for honors work. In order to receive honors, students must have at least a 3.4 GPA in their major at graduation.

The honors project must be sponsored by a faculty member or members in the student's major, who will serve as the primary advisor(s) for the project, and by a committee composed of the primary advisor(s) and not fewer than two additional faculty. (Advisors are encouraged to include a faculty member from outside the student's major on the committee.)

Honors work is undertaken in the senior year or in the Summer prior to the senior year. While the project may be based on previous work, e.g., a seminar paper or independent study, it must represent a significant and original project over and above any past work. Application for major honors work is made the semester or Summer prior to undertaking the project.

A student applying for major honors work must submit a proposal to his or her committee. If the committee and department administering the student's major approve the proposal, permission to enroll in
honors work in the following term will be forwarded to the Associate Dean for Academic Affairs. At the discretion of the department a student may take one unit of honors work in one semester or two one-half units over two semesters. The department will determine whether honors credit may be used as an elective in the major. The application form is available in the Office of the Associate Dean for Academic Affairs and Administration.

The committee will evaluate the completed project based on the final product and on an oral examination. Projects other than research papers must include a narrative essay describing the work.

The primary advisor(s) will assign a letter grade for the project after consulting with the other committee members. Students completing the one-half unit honors course will receive a grade of "NG" at the end of the first term of the project; upon completion of the second half-unit course, the grade for the entire project will be assigned to both courses. If the student does not complete the second half-unit course, a letter grade will be assigned to the first.

Students whose projects receive a grade of "A-" or higher will be awarded honors, provided they have a 3.4 GPA in their major at graduation. Departments are encouraged to arrange a public forum to allow students receiving major honors to present their work.

## Valedictorian and Salutatorian

The valedictorian and salutatorian of the senior class will be selected from among those graduates who have completed at least 22 units (excluding health and human performance and co-curricular activities) while enrolled as full-time students at Roanoke College.

## Honor Societies

A high degree of excellence in certain fields will bring the student the distinction of invitational membership into one or more of the honorary fraternities with chapters on campus. Among these groups are the following:

Alpha Chi National college scholarship society dedicated to the stimulation of sound scholarship and devotion to truth. Eligible members are selected from the top 5 percent of the junior class and the top 10 percent of the senior class. Juniors must have at least a 3.8 cumulative grade point average, and seniors must have at least 3.5. Students must also have earned at least eight units at Roanoke College and possess exemplary character.
Alpha Epsilon Delta National honorary society recognizing outstanding academic achievement among students aspiring to a career in medicine, dentistry, pharmacy, veterinary and other health professions.

Alpha Kappa Delta National honorary society recognizing superior achievement in sociology.
Alpha Kappa Psi National business professional fraternity is open to all Business Administration and Economics majors in good academic standing.

Alpha Lambda Delta National honorary fraternity for freshmen whose grade point averages are 3.5 or higher after the first term.

Alpha Phi Sigma National honorary society recognizing academic excellence in Criminal Justice.
Alpha Psi Omega National honorary dramatics fraternity recognizing excellence in stagecraft.
Beta Beta Beta National honorary biological society for students with a superior academic record.
Delta Mu Delta National honorary society recognizing superior academic achievements of majors in business administration.

Kappa Delta Pi International honor society in education.
Lambda Pi Eta National honorary society recognizing academic excellence for communications majors.

Omicron Delta Epsilon National honorary Economics society is open to Economics majors with excellent academic standing. The student must have an overall grade point average of at least 3.0 and at least a 3.0 grade point average in four or more Economics courses.

Omicron Delta Kappa National leadership honor society for college students recognizes and encourages superior scholarship, leadership, and exemplary character.

Phi Alpha Theta National honor society for history majors with superior records.
Phi Beta Kappa The oldest and most prestigious academic honor society in the United States. The keyholders among the faculty and staff of Roanoke College maintain a Phi Beta Kappa chapter (Nu of Virginia) on campus. Student members are elected at the discretion of the keyholders on the basis of a high grade point average in liberal art courses, breadth and depth of studies in the liberal arts, and good character. Students with very high grade point averages become eligible at the end of their fifth semester; the majority of members are inducted in their senior year. There is no set formula for election; however, the national society requires students to have the equivalent of at least two years of algebra and two years of college-level modern language instruction (through the intermediate level).

Phi Sigma Tau National honor society for Philosophy.
Pi Lambda Upsilon A national honor society for outstanding students of Chemistry and Biochemistry.
Pi Delta Phi National honor society for students with a superior record in French.
Pi Mu Epsilon National honor fraternity for excellence in mathematics.
Pi Sigma Alpha National honorary society recognizing academic excellence in Political Science.
Psi Chi National honor society recognizing superior achievement in psychology.
Sigma Delta Pi National honor society for students with a superior record in Spanish.
Sigma Iota Rho National honorary society recognizing academic excellence in International Relations.
Sigma Tau Delta National honor society recognizing superior achievement in English language and literature.

Society of Physics Students and Sigma Pi Sigma National organization which promotes educational activities for all students interested in physics.

Student Affiliate Chapter of the American Chemical Society Honorary society for chemistry majors designed primarily to promote interest in and appreciation for the science of chemistry and related fields.

## The National Society of Leadership and Success

Theta Alpha Kappa National honor society for theology and religious studies.
Xi Theta Chi Honorary fraternity for students showing proficiency in modern languages.

## Prizes and Awards

High standards of academic achievement and personal conduct are acknowledged at Roanoke College in a series of annual awards and prizes.

Karen Adkisson Award A book award given annually to a first-year student for high achievement in the introductory biology course sequence.

Alpha Kappa Delta Award A prize awarded annually to a senior sociology major who is a member of Alpha Kappa Delta and who most exemplifies the objective of AKD: "to promote an interest in the study of sociology, research of social problems, and such other social and intellectual activities as will lead to improvement in the human condition.

Alpha Kappa Psi Key and Certificate This professional business fraternity awards the key and certificate to the graduating senior with the highest grade point average.

Alpha Lambda Delta Award An award presented to the Alpha Lambda Delta member who is a graduating senior with the highest scholastic average.

Alpha Psi Omega Award An award presented for outstanding service and contribution to theatre arts at Roanoke College.

American Chemical Society Student Affiliate Award One year membership in the ACS student affiliates is provided by the Chemistry department for students showing outstanding promise in the field of chemistry.

American Institute of Chemists Student Award A certificate and one-year membership for the American Institute of Chemists is awarded to a senior in recognition of potential advancement in the chemical professions.

Karl W. Beck Memorial Prize A prize in money made possible by gifts of friends in memory of the late Karl W. Beck, who was a professor and chair of the psychology department. It is given for excellence in psychology.
C. Randolph Benson Sociology Award A prize awarded annually to a senior sociology major who has demonstrated academic excellence and leadership in the field of sociology.

Franz Boas Anthropology Paper Prize A prize awarded annually to the author of the paper judged by a faculty panel to be most outstanding in its demonstration of analytical acuity, clarity of writing, and capacity to contribute to anthropological scholarship.

Dr. C.W. Bondurant Student Affiliate Award An annual award, in honor of Dr. Charles W. Bondurant, given by the students of the American Chemical Society Student Affiliate chapter to a Chemistry or Biochemistry major who has excelled both in the study of Chemistry and involvement with the Roanoke College community.

Dr. Charles W. Bondurant Summer Scholars A stipend provided by Dr. C.H. Fisher and others to allow undergraduate chemistry majors to perform research during the Summer under the supervision of a staff member. Recipients are selected by the chemistry department faculty.

John T. Bowman Memorial Award A prize in money made possible by the income from a gift by Mrs. John T. Bowman of Salem, Virginia, awarded to a senior for outstanding work in the field of religion.

Harry J. Breithaupt Award Awarded to the student with the best original essay judged as excellent in the field of United States history.

Harry J. Breithaupt Award Awarded to the student with the best original essay judged as excellent in the field of American government.

Harry J. Breithaupt Scholarship This scholarship is awarded to a student who is a Virginia resident who has displayed interest and aptitude in the study of American political system.

Breithaupt Scholarship for Mastery of the English Language This scholarship is awarded to a student who is a Virginia resident who has attained masterful proficiency in the knowledge and use of the English language.

Breithaupt Scholarship for the Scholarly Study of Literature in English This scholarship is awarded to a student who is a Virginia resident who has demonstrated a lively aptitude for the scholarly student of literature In English.

Annie Terrill Bushnell Prize A prize in money awarded annually by the estate of Mrs. William A. Anderson, Jr., in memory of her mother, Annie Terrill Bushnell, to the woman student who has shown the highest qualities of leadership and loyalty to the College and to her fellow students.

The Reverend Dr. John E. Bushnell Prize A prize in money awarded annually by the estate of Mrs. William A. Anderson, Jr., in memory of her father, The Reverend Dr. John E. Bushnell, to the male student who has shown the highest qualities of leadership and loyalty to the College and to his fellow students.

Joanne Leonhardt Cassullo Prize in Art History A monetary prize that commemorates Ms. Cassullo's generous support of our program. She is a 1978 graduate of Roanoke College and member of the Board of Trustees. This award will be given annually to the outstanding student in art history.

Julia McBriety Chalfant Memorial Award An award made possible by the income from gifts of family and friends in memory of the late Julia McBriety Chalfant ' 63 for excellence in mathematics.

Chemical Rubber Company Freshman Chemistry Award A book prize, awarded annually by the chemistry department and the Chemical Rubber Company of Cleveland, Ohio, to the student who has shown the greatest achievement in general chemistry.

Communication Studies Outstanding Performance Award An award recognizing an outstanding student in Communication Studies, chosen by the Communication Studies faculty, who shows a high degree of promise in the field. The name of each year's winner will be inscribed on a perpetual plaque and the designated student will receive a cash award.

Community Service Award A prize awarded annually to a senior(s) sociology major who has contributed significantly to the local community through work in social services, social justice, and community issues.

Computer Science Outstanding Achievement Award An award given to the outstanding computer science student.

Creative Writing Outstanding Achievement Award The citation recognizes outstanding writing by creative writing students early in the major. Recipients will have their names inscribed on a plaque displayed in Miller Hall.

Richard deOlazarra Award This award was established to honor Richard deOlazarra who taught Marketing for 30 years. The prize will be awarded annually to an outstanding and deserving rising senior in the marketing concentration.

Julius D. Dreher Endowed Scholarship Award Dr. J. D. Dreher, President of Roanoke College from 1878 to 1903, provided a bequest to "endow a prize scholarship in English language and literature to be awarded annually in the junior class under regulations to be established by the English department." This scholarship is applicable toward tuition during the senior year at Roanoke College. Only English majors of junior standing are eligible for the award.

English Department Teaching Award The award recognizes a student pursuing one of the majors in the English Department who is also working toward an Education minor or teacher licensure and who is fully committed to a career in teaching. The student receives a cash award and a book.

Environmental Promise Award Given to a first year student, this award recognizes outstanding performance and promise for future contributions in Environment Studies.

Environmental Studies Service Research Award This award, given by the Environmental Studies program, recognizes outstanding contributions to the program in either service of research.

John Todd Faw Memorial Award An annual monetary award granted to that Roanoke College student who best exemplifies the spirit of J. Todd Faw, a Roanoke College sophomore at the time of his death in 1982.The recipient should demonstrate an active concern for the Roanoke College community; possess the personal qualities of concern for others, intellectual curiosity, and initiative; and have the commitment and potential to improve society.

Financial Executives International Award An award given by Financial Executives International to students who are recognized as outstanding students in finance and accounting. The recipients are selected by the Business Administration and Economics Department faculty.

Fine Arts Prizes: Art, Art History, Music, Theatre Art in money awarded annually to increase interest and reward excellence in the department of fine arts, given to those students whose work in the department is most outstanding for the year.

Lawrence D. and Mary A. Fisher Scholarship The income from a gift provided by Dr. and Mrs. Charles Fisher is used to assist an outstanding student majoring in Chemistry or Biochemistry.

Fortnightly Club Award An annual monetary award to a rising junior who has achieved excellence in academics and is active in community service and College-related activities.

Herta T. Freitag Mathematics Award An award made possible through the generosity of Herta T. Freitag, mathematician, educator, and long-time friend of Roanoke College. The award is made annually to an outstanding senior mathematics major, selected by the mathematics faculty of Roanoke College.

Patricia M. Gathercole Endowed Scholarship An award given to students for semester or year-long study abroad based on academic merit and financial need.

Patricia M. Gathercole Literature Award This monetary award is given to the student (or students), majoring or minoring in Modern Languages, who has done exceptionally well in the study of French, German, or Spanish literature.

Sam Robert Good Award An award established by gifts from Mr. and Mrs. James Cheston and the theatre program to honor Professor Good for his contributions to theatre arts at Roanoke College. It is a prize in money awarded each year to a student who has demonstrated both theatrical and academic excellence at Roanoke College.

Health and Human Performance Department Award A one-year membership in the American Alliance of Health, Physical Education, Recreation and Dance(AAHPERD) or National Athletic Trainers' Association (NATA0, and a cash award presented by the Department of Health and Human Performance to an upper-class Health and Human Performance major who has excelled in work performed during the past year.
C. William Hill, Jr. Criminal Justice Award This award is named in recognition of the service and leadership of C. William Hill, Jr., Professor of Political Science, who began teaching at Roanoke in 1969. This monetary prize is awarded annually to that graduating senior majoring in criminal justice who has demonstrated academic excellence and outstanding potential for continued scholarly growth.

Pendleton Hogan Mary Queen of Scots Award The income from a gift by Pendleton Hogan '29, aids Roanoke College students who research the Mary Queen of Scots era.

James Lewis Howe Award Awards provided by the Blue Ridge Chapter of the American Chemical Society and named in honor of James L. Howe, a former member, presented to outstanding chemistry or biochemistry majors.
N. Jane Ingram Computer Science Award Created by the Department of Mathematics, Computer Science and Physics to recognize Jane Ingram, who retired in 2012 after 34 years of service, this award honors a student who has demonstrated excellence in Computer Science.

Inorganic Chemistry Award A certificate of recognition and commendation from the Inorganic Chemistry Division of the American Chemical Society.

International Relations Award An award presented annually to the graduating senior majoring in international relations who has excelled in his/her field and who has attained at least a 3.0 cumulative grade point average.

Patricia Dragon Jordahl Award for Service in Modern Languages A monetary award in recognition of a senior major or minor In a modern languages who has demonstrated strong academic performance and outstanding service to the Department of Modern Languages and/or to the teaching and learning of modern languages.

The Brian Keith Award The Brian Keith Award is awarded annually as a prize for the history student who has shown leadership and service within the Roanoke College student Historical Society.

Daniel Poe Klein Scholarship This scholarship award was established by gifts from his parents, brothers David and Thomas, and friends in memory of Daniel Poe Klein, a member of Pi Kappa Phi. It is presented annually to the male rising senior who has demonstrated outstanding talent in the field of education and who has shown exemplary moral leadership in the College community.

The Kim Kyusik Award A monetary award presented to students who have demonstrated academic excellence in the field of East Asian history.

Dr. Philip C. Lee, Jr. Endowed Scholarship An award made annually to a Lee Scholar, who is a Roanoke College Biology major, to support research during the Summer under the supervision of a Biology department faculty member. This endowment was established by family, friends and colleagues in memory of Dr. Philip C. Lee, Jr., a longtime Biology department faculty member.
Gary Wesley Leonard Memorial Award in Biology An award made possible through anonymous gifts of friends and the Beta Beta Beta national honorary biology society in honor of Gary Wesley Leonard, a Biology major at the College at the time of his death. Presented annually, the recipient is chosen by the staff of the Biology department from the members of the junior or senior class on the basis of general academic excellence, major work of high proficiency in the field of biology, and good student citizenship. The name of the winner is inscribed on a perpetual plaque.

Evans W. Lindsey Memorial Prize A prize in money provided annually through a gift by the late Mr. J.W. Burress, bestowed on that student who, on an advanced level, has done outstanding work in the field of modern languages and served as an inspiration to fellow students.

Literary Studies Outstanding Sophomore Performance Award An award recognizing an outstanding sophomore major in Literary Studies, chosen by the Literary Studies faculty, who shows a high degree of promise in the field. For the award, students must have completed twelve course units, must have completed or be in the process of completing four courses in the major; and must have an overall GPA of 3.0. The name of each year's winner will be inscribed on a perpetual plaque and the designated student will receive a cash award.

Darryl W. Lowry Endowed Scholarship Award This award is given to the outstanding rising senior Economics major. The recipient is chosen by the Economics faculty, and the scholarship is awarded for the following academic year.

Jesse Lee and Mary Elizabeth Lucado Award A monetary prize given by Joseph A. Lucado, through an endowment, to the outstanding Senior in teacher education. The recipient's name will be engraved on the permanent plaque.

Jesse Lee and Mary Elizabeth Lucado Endowed Scholarship An endowed scholarship given to one student in a teacher preparation program and one student in Health and Human Performance, with a minimum of 3.0 GPA and with preference given to those who are active in campus academic, social, and sports life in leadership roles.

Mathematical Association of America Membership Award One-year memberships in the Mathematical Association of America given by the MCSP Department to recognize outstanding achievement in mathematics.

Margaret Mead Leadership Award An award given annually for outstanding leadership and service in contribution to anthropology and cultural awareness at Roanoke College.

The Merck Award Provided by Merck and Company, Inc., it is a Merck Index to an outstanding graduate in Chemistry or Biochemistry.
Susan Millinger Award Created by the Department of History to recognize the contributions of Susan Millinger, who retired in 2007 after 32 years of service, this award honors students who have done exemplary work in the fields of ancient, medieval, or the history of gender.

The Anna Morgan Award for Excellence in Communications An award to a senior who excels in communications and who has demonstrated a commitment to the field.

Conrad Moldenhauer Memorial Scholarship This scholarship, funded by family and friends of Conrad Moldenhauer, will provide financial assistance for students who wish to take part in the Roanoke College Oxford Summer Scholars program. Conrad took part in this program in 1992 and considered it an experience of a lifetime. The selection of scholarship recipients will occur through a collaboration of Roanoke College History Department and the Office of Financial Aid.

Frank Munley Physics Award Created by the Department of Mathematics, Computer Science and Physics to recognize Frank Munley, who retired in 2008 after 22 years of service, this award honors a student who has demonstrated excellence in Physics.

The Andrew Murphy Award for Fiction An annual prize in "Bucks", for the best short fiction written by an undergraduate at Roanoke College. The anonymous donor requests that the award be determined by at least three members of the English department faculty. The prize-winning selection will be published in the college's student literary magazine, with appropriate respects to Professor Andrew Murphy.

Ronald R. Oetgen Organic Chemistry Award This award is named in recognition of the service and leadership of Ronald R. Oetgen, Professor of Chemistry, who taught at Roanoke from 1967 to 2006. A certificate of accomplishment and a book are presented to the outstanding student in the two-semester organic chemistry course.

Omicron Delta Epsilon Award This award goes to an Economics major who has made an outstanding contribution to undergraduate education. The recipient is chosen by the Economics faculty and receives an Omicron Delta Epsilon gold key pen.

Outstanding Achievement in Computer Science A gift given by the MCSP Department to recognize outstanding achievement in Computer Science.

Outstanding Junior Psychology Major A gift given to the junior student or students deemed by the Faculty as having demonstrated outstanding academic achievement and potential for continued success in Psychology.

Outstanding New Student In Fine Arts Award given to most promising student new to an area of study in Fine Arts.

Outstanding Sophomore Health and Human Performance Award This award recognizes a sophomore Health and Human Performance major who shows promise in the field of health and physical education through involvement in professional activities and service. To be eligible for the award students must have completed 13 course units, be in the process of completing four courses in the major, and show a high degree of achievement in their academic work. The minimum GPA requirement will be 2.75 . The recipient receives a one-year membership in the American Alliance for Health, Physical Education, Recreation and Dance and will be honored by having his/her name inscribed on the departmental (Outstanding Sophomore Health and Human Performance) plaque.

Outstanding Student in African Studies Concentration Awarded for outstanding achievement in African Studies concentration course work and independent research in the concentration.

Outstanding Student in Anthropology Concentration Awarded for outstanding achievement in Anthropology concentration course work and independent research in the concentration.

Outstanding Students in Accounting, Business Administration, Business Information Systems, Economics, Finance, Global Business, Health Care Administration, Human Resource Management, and Marketing Awards are presented annually to seniors in Business Administration and Economics who have excelled in their fields. Also, awards are presented annually to seniors who have excelled in the concentrations of Accounting, Business Information Systems, Finance, Global Business, Health Care Administration, Human Resources Management, and Marketing.

Outstanding Student in Chinese Monetary prize awarded annually by the Modern Languages Department to the best and most promising student of Chinese.
Outstanding Student in Classics and the Ancient Mediterranean World Concentration Awarded for outstanding achievement in Classics and the Ancient Mediterranean World concentration course work and independent research in the concentration.

Outstanding Student in the Crime, Deviance and Social Control Concentration Awarded to the outstanding student in the Crime, Deviance and Social Control concentration.

Outstanding Student In East Asian Studies Concentration Awarded for outstanding achievement in East Asian Studies concentration course work and independent research in the concentration.

Outstanding Student in French Monetary prize awarded annually to the best and most promising students of French.

Outstanding Student in Gender and Women's Studies Concentration Awarded for outstanding achievement in Gender and Women's Studies concentration course work and independent research in the concentration.

Outstanding Student in German Monetary prizes awarded annually to students of the German language who have excelled in their work during the past year.

Outstanding Student in Health Care Delivery Concentration A prize awarded annually to a senior whose work has been most outstanding in the health care delivery concentration. The minimum grade point average is 3.2.

Outstanding Student in the Human Development Concentration This award is given annually to the student who has demonstrated outstanding academic achievement in the human development concentration and has shown potential for continued success in the field of developmental psychology.
Outstanding Student in Information Analysis Concentration A prize awarded annually to a student whose work has been most outstanding in the information analysis concentration. The minimum grade point average is 3.2.
Outstanding Student in Italian Monetary prize awarded annually by the Modern Languages Department to the best and most promising student of Italian.

Outstanding Student in Japanese Monetary prize awarded annually by the Modern Languages Department to the best and most promising student of Japanese.
Outstanding Student in Latin American and Caribbean Studies Concentration Awarded for outstanding achievement in African Studies concentration course work and independent research in the concentration.

Outstanding Student in Neuroscience Concentration A prize awarded by the Psychology Department to the most promising student in Neuroscience concentration.

Outstanding Student in Peace and Justice Studies Concentration Awarded for outstanding achievement in Peace and Justice Studies concentration course work and independent research in the concentration.

Outstanding Student in Russian Monetary prize awarded annually by the Modern Languages Department to the best and most promising student of Russian.

Outstanding Student in Spanish-Monetary prizes awarded annually by the Modern Languages Department to the best and most promising students of Spanish.

Mamie S. Patterson Travel Award An award given to students based on their academic achievement in the study of a modern language and their contribution to the promotion of modern language study. Awarded for use in conjunction with a May travel course.

Dr. George G. Peery Achievement Award An award given annually, the Peery Achievement Award was established in 1986 in honor of Dr. George Peery, former chairman of the Biology Department. The
recipient, a junior or senior member of the Tri-Beta Society, is chosen by the membership of Tri-Beta and the faculty of the Biology Department on the basis of both academic achievement and, in particular, outstanding service to the Tri-Beta Society and the Biology Department. The name of the winner is inscribed on a perpetual plaque.

Psi Chi Achievement Award A gift given to the Psi Chi member who has best exemplified excellence in scholarship, leadership, and service. The recipient is chosen b student and faculty members of Psi Chi, the honorary society in Psychology.

Physics Society Award A prize in money awarded to the outstanding freshman in physics.
Dr. Harry E. Poindexter Award A prize in money given to a senior history major who has demonstrated academic excellence and leadership in the field of history.

The R. Dan Richardson Award The department of History established this award to honor Dan Richardson and his 30 years of dedicated service to the College. The award is presented to a senior who has demonstrated excellence and promise for growth in modern European history.

The Roy H. Ritter Southern History Prize A monetary prize awarded annually in memory of Roy H. Ritter '26 to a junior or senior who has demonstrated academic excellence and outstanding achievement in the study of the history of the South. Mr. Ritter was a partner in the engineering firm of Whitman, Requardt and Associates and one of America's outstanding civil engineers.

John D. Schumacher Endowed Chemistry Award A monetary prize awarded to a senior upon completion of a research project, in memory of John D. Schumacher, who taught chemistry at Roanoke College in the late 1930s and early 1940s.

Jeanne and Ray Robinson Endowed Prize An annual monetary award given to an outstanding journalism student as chosen by the English faculty. This Award was established by a generous gift from Jeanne and Ray Robinson.

Michael J. Sandridge Award for Excellence This award honors a student teacher who demonstrates the qualities exemplified by Michael Sandridge. The annual recipient will be an individual who sees the good in every student and approaches his or her teaching with joy, passion and strength of spirit.

The Dr. William A. Sandridge Leadership Award An award given annually in honor of Dr. William A. Sandridge and made possible by the faculty of the Business Administration and Economics Department. The recipient is selected by the Business Administration and Economics faculty from among those graduating seniors who have demonstrated outstanding leadership qualities both within the department and in the campus community.

The Will Selzer Political Science Award A monetary prize awarded annually to the graduating senior majoring in Political Science who has demonstrated academic excellence and outstanding potential for continued scholarly growth.

Frank E. Snow Memorial Award A monetary award given to student (s) majoring in Modern Languages.

Undergraduate Award in Analytical Chemistry A six month subscription to the journal, Analytical Chemistry, presented to the student showing the most potential for the field.

Virginia Society of Certified Public Accountants Award of Achievement An award presented annually to the outstanding student in Accounting. The recipient is selected by the Accounting faculty.

Howard Warshawsky International Relations Award A monetary award presented annually to the graduating senior majoring in International Relations who has excelled in his/her field and who had attained at least a 3.0 cumulative grade point average.

Gregory L. Weiss Paper Prize A prize awarded annually to the author of a paper judged by the Sociology faculty to be most understanding in its demonstration of the conceptual and/or analytical
reasoning of a sociological question or problem, and not simply a reflection of an effort to learn more about or to describe a particular topic.

Mack Welford Award This award recognizes an outstanding Education student who is working toward an Education minor or full teacher licensure, has a minimum GPA of 2.5, and has also been engaged in service to the community.

The Mary Cooper Williams Memorial Award An award, established by Dr. L. Grady Cooper '22, and his wife, Miriam Greever Cooper, is presented annually to an outstanding student majoring in religion and philosophy with a preference given to Lutheran students who are studying for the ministry or service in the church.

Charles C. Wise Poetry Award An award made possible by an anonymous donor, for an original poem judged outstanding by the members of the English department.

Matthew M. Wise Scholarship Award This scholarship prize was established in honor of Dr. Matthew M. Wise for his 30 years of dedicated service as a faculty member in Roanoke College's English department. It is used to support the senior Literary Studies major who is most outstanding academically.

The Reverend Dr. Paul L. Yount Prize A prize in money given annually, in memory of the Reverend Dr. Paul L. Yount ' 10 , is given annually to the pre-ministerial student who has shown the highest qualities of leadership.

Zeno Contest The Zeno Contest is a critical thinking contest sponsored annually by the Religion and Philosophy Department and open to all Roanoke College students. A modest cash prize and an extravagant trophy are awarded to the student with the most cogently reasoned solution to a logical puzzle.

## ACADEMIC SERVICES

## Goode-Pasfield Center for Learning \& Teaching

The Goode-Pasfield Center for Learning \& Teaching, located in the Fintel Library, offers a variety of programs designed to promote student success in the classroom and after graduation. The staff adheres to a developmental approach, recognizing that students learn best when they actively participate in making decisions about their fields of study and future careers.

## Freshman and Undeclared Student Advising

The Goode-Pasfield Center for Learning \& Teaching coordinates academic advising for freshmen and undeclared students. Faculty and professional advisors are available for the academic and developmental advising of entering freshmen, transfer freshmen, and all other students who have yet to declare an academic major. Advisors have a working knowledge of the Roanoke College community and assist the student in the exploration of academic and professional goals. Freshman advisors are assigned to entering students during the pre-registration process.

## Entering Freshman and Transfer Student Pre-Registration

Entering freshmen will pre-register for Fall courses either at an on-campus summer orientation session or by a telephone appointment with a summer academic advisor. Transfer students will pre-register for classes by speaking with an academic advisor over the phone. Academic advisors will be available for course advising throughout the pre-registration period. All pre-registered full-time students are expected to attend the College's fall orientation program and to finalize the registration process at that time.

## The Writing Center @ Roanoke College

The Writing Center @ Roanoke College, supervised by staff in the Goode-Pasfield Center for Learning \& Teaching and located in the Fintel Library, is a place where writers working in any discipline and at any level of competence meet with trained peer tutors in informal, one-on-one tutoring sessions that focus on
writing. Tutors talk with writers about their academic, creative or professional writing, helping writers to do such things as brainstorm ideas, improve organization, incorporate sources into a research paper, polish the language in a poem or short story, or learn to identify and correct grammar and style problems. The Writing Center also sponsors workshops on writing-related topics.

## Subject Tutoring Program

A centralized subject tutoring program, housed in the Fintel Library, is supervised by the staff of the Goode-Pasfield Center for Learning \& Teaching. The Subject Tutoring Program was awarded international accreditation in 2010 by the College Reading and Learning Association (CRLA). Tutors are required to complete an extensive training program and provide twenty-five hours of tutoring assistance before receiving certification. Drop-in tutoring and individual tutoring appointments are offered in the following subjects: Business and Economics, Language, Math, Lab Sciences, and Social Sciences.

## Disability Support Services

The Goode-Pasfield Center for Learning \& Teaching maintains the documentation of students with diagnosed medical or learning disabilities and Attention Deficit Hyperactivity Disorder. The Center's staff facilitates students' consultation with faculty members and academic advisors regarding reasonable accommodations. Services such as extended-time testing and the tape recording of classes are facilitated by the office.

## RC Success

The Goode-Pasfield Center for Learning \& Teaching coordinates a freshman retention program, RC Success, during the spring semester as an intervention for freshmen on academic warning. The program pairs participants with individual peer mentors and requires regular attendance at a monitored study hall. Students are also required to participate in weekly study skills workshops.

## Office of Career Services

The Office of Career Services provides students with career planning programs. Services include such activities as self assessment, career exploration, identification of educational options (college majors) as related to career interests, the arrangement of internships, and the job search process. Through group workshops and individual appointments, students are guided through career planning, resume writing, interview skills, and other areas necessary to this process. Assistance is provided in networking with alumni regarding internships, externships, and full-time job placement. The goal of the Office of Career Services is to provide students with the skills necessary to enter the world of work upon graduation or upon completion of graduate school. All services of this office are available to alumni as staff time permits.

## Educational Centers

## Center for Church and Society

The Roanoke College Center for Church and Society aims at bringing Christian religious and moral perspectives, particularly in their Lutheran interpretation, to bear on contemporary challenges to church and world. To further this goal, the Center encourages and supports interdisciplinary studies, faculty seminars on-campus, and cross-cultural studies off-campus, and sponsors lectures on contemporary issues as well as continuing education programs for clergy and laity.

## Institute for Policy and Opinion Research

The Institute for Policy and Opinion Research assists faculty members and students in conducting research projects in the local community. These projects provide students with valuable and practical first-hand experience in research design, questionnaire construction, interviewing, computer use, data analysis, and report writing.

## Information Technology

The Information Technology Division (IT) provides information and technology services for the College. There are student computer labs and wireless networking across campus with access to numerous software resources through Roanoke's high speed campus network.

New students are provided with an account which includes email and private storage before the summer to prepare for their time as a Roanoke student. Students, faculty and staff can access hundreds of software products from anywhere through Roanoke College Remote Computing (RCRC) at roanoke.edu/rcrc.

The IT Help Desk is located on the third floor of Trexler. For more information or help, stop by, visit our webpage at http://www.roanoke.edu/IT or call 540-375-2225. Located on the first floor of Trexler, the Media Technology Center is the place to go for help with projects utilizing multimedia. Laptops and media-related equipment such as digital cameras and projectors are available to check out at the Library circulation desk.

## Libraries

## Fintel Library

Named in honor of Dr. Norman Fintel, eighth president of Roanoke College, and his wife, Jo, the Fintel Library offers a collection of over half a million total items. The facility is handicapped accessible, offers seating for over 400, includes individual and group study rooms, has a "silent study" area, a campus computer lab, and the Goode-Pasfield Center for Learning \& Teaching.

More than 3000 new items are added to the collection annually. Besides the sheer size of the collection, Fintel library is proud to offer the latest in electronic journals (providing access to the full text of thousands of titles) and a wide selection of multi-media materials. Among the most popular items is the $1000+$ volume DVD collection. In addition the library is also a selective depository library for United States Government Documents.

Fintel Library has a combined catalog and shares its collection with the Wyndham Robertson Library at Hollins University through a reciprocal borrowing agreement. This agreement has the effect of placing an additional 300,000 volumes in the hands of our students. A weekday courier service provides delivery within 24 hours of a request.

The Fintel Library houses the Roanoke College Archives. In addition to the historical records relating to the College, the holdings include rare books, the papers of both former Secretary of the Treasury Henry H. Fowler and former Congressman James R. Olin, and the photographs of E. Howard Hammersley.

The Fintel Library staff strives to provide students with the very highest level of resources and service.

## ACADEMIC REGULATIONS AND PROCEDURES

## Advising

Academic advisors are faculty and staff members who are available for consultation in the planning of students' academic programs and who help students make the best use of their talents and interests. Students who have declared majors are assigned advisors in their major departments; freshmen and students who have not declared a major may be assigned a faculty advisor or an advisor from the GoodePasfield Center for Learning \& Teaching.

Students should contact their advisors when planning their programs, when pre-registering and/or registering, and when needing advice or assistance relating to academic or professional concerns or goals. Academic advisors can assist students in reviewing academic performance, exploring possible majors and other programs, examining special educational opportunities (e.g., internships, research, international study), or planning for graduate school. Students may also obtain supplemental academic and career assistance by contacting staff in the Office of Career Services.

Although faculty and staff can provide valuable assistance and guidance for students, the ultimate responsibility for devising appropriate schedules, meeting degree and program requirements, and complying with all academic regulations belongs to the student. Therefore, students should be familiar with the College's requirements, their major(s) and other program requirements, this Catalog, and their own academic transcripts.

## Registration

Students must be officially registered for their courses in order to earn academic credit. Students preregister and register for courses on-line via their WebAdvisor account through the Roanoke College homepage. Pre-registration and registration information, including times and locations, is provided by the Office of the Registrar at www.roanoke.edu/registrar.

## Auditing Courses

Students who do not wish to receive credit for courses may enroll as auditors. Auditors are not required to take quizzes, tests, and examinations, to complete projects, or to submit papers. They are, however, required to meet the course attendance policies and to participate in class discussions.

Instructors will determine whether or not students have met these requirements and, thus, whether or not to have the notation "AU" entered on the students' transcript. Individuals outside a degree program who wish to audit must apply for and be admitted to special-student status. Students registering to audit a course must inform the Office of the Registrar in writing at the time of registration or within the add period for the course at the beginning of the term.

## Course Load/Overload

The normal load of a student is eight units for each academic year. The student is expected to enroll in four units in each regular term; however, three units constitutes full-time status. A minimum of 33 academic units (including at least one unit of intensive learning), and two one-fourth units of physical education activities (or the equivalent) should be completed over a four-year period.

The College recognizes that some students must complete their study as rapidly as is consistent with sound academic standards. Students may therefore carry an academic overload commensurate with their ability.

An overload fee of $\$ 878.00$ per unit is charged for each full unit taken in excess of five units. Approval to enroll in six or more courses requires the additional approval of the Associate Dean for Academic Affairs and Administration.

Further acceleration is possible by enrolling in May terms (beyond the one required) and/or Summer sessions. Thus, a student may enter the College in January, June, July, or August. A student may complete the requirements for a degree in three regular sessions (i.e., six semesters) and three Summer sessions.

## Academic Integrity

Roanoke College is committed to the maintenance of the highest possible standards of academic integrity among all of its constituents. To promote an atmosphere conducive to a free quest for intellectual fulfillment, the administration, staff, students, and the faculty have the responsibility and the obligation to adhere to and to enforce the standards of the academic integrity policy as defined and outlined in the brochure Academic Integrity at Roanoke College. Students are required to make a written commitment to support this policy and to work fully with the campus community in sustaining the academic integrity of Roanoke College.

It must be recognized that there will be those individuals who violate the governing principles which this institution has adopted for the independent search for knowledge. When such violations are suspected, it is the duty of the institution's members to report those who are suspected of such acts. While striving to sustain a consistently high level of academic integrity, Roanoke College also strives to ensure due process to all who have been charged with academic integrity violations. No one person has the right to assume the enforcement of this policy; thus, each charged with a violation, as well as each bringing the charges, has the right to a full hearing.

The Academic Integrity Council consists of the Associate Dean for Academic Affairs and Administration, members of the faculty and professional staff appointed by the President, and student members elected annually by the student body. Members of the Council are chosen for Academic Integrity Panels and Academic Integrity Boards, which hear all cases involving charges of violations of academic integrity. Violations include cheating in any form, plagiarizing, lying in direct association with academic matters or during the process of an academic integrity hearing or investigation, unauthorized use of an electronic device, impeding an investigation, denying access to academic materials, or other actions that violate student regulations or public statutes for the purpose of committing or supporting an academic integrity violation.

All violations of academic integrity are viewed with gravity by the College community. Possible penalties include dropping a student from a course with a grade of "F" or "XF" (which is treated as an "F" in the computation of the grade point average), Academic Integrity Probation, Academic Integrity Suspension, and permanent expulsion from the College. The Academic Integrity at Roanoke College brochure should be consulted for complete details concerning the College's academic integrity system.

It is the responsibility of each student to become familiar with the regulations and procedures of the system immediately upon enrollment. To assist students in meeting this responsibility, the brochure Academic Integrity at Roanoke College is made available to all entering students at orientation, and all students must pass a quiz on its contents. Questions concerning the Academic Integrity System should be addressed to the Associate Dean for Academic Affairs and Administration.

## Class Attendance

The College is committed to the principle that class attendance is a vital part of its academic program. Attendance makes possible that dialogue between student and teacher which is the foundation of the educational process. Thus, absence from class denies students access to the full measure of a college education.

Regular class attendance is expected in all courses. Individual instructors who have specific attendance requirements will state these on the syllabus distributed at the beginning of each course. Every student is accountable for all work missed because of class absence except as required by federal law. Instructors, however, are under no obligation to make special arrangements for students who are absent. A listing of mandatory events outside of stated class hours must be made available to the students before the end of the designated course Add period. If out-of-class events are added after the course Add period, alternate events or assignments must be provided for students with conflicts.

Unless prior consent for absence from the first meeting of a class is granted by the course instructor, the instructor may request that the Office of the Registrar drop an absent student from the class roster. However, it is the responsibility of the student, not the instructor or the advisor, to make sure he/she is enrolled in the correct schedule each term.

## Course Changes

Any change in a student's course of study requires consultation with the student's advisor. Course changes must be submitted online or to the Office of the Registrar before the deadlines stated in the Academic Calendar.

## Examination Rescheduling

Students are expected to take their final examination on the day and hour as specified in the Academic Calendar. Due to evening courses, however, some students have found that their final examination schedule consists of three consecutive exams. This could be morning, afternoon, and evening exams on the same day or an afternoon and evening exam on one day and a morning exam the next day. A student with such a schedule may request permission from one of the professors to reschedule the exam at the convenience of the professor. If all three professors will not reschedule, the student is urged to seek the assistance of his or her advisor or the Office of the Registrar.

## Re-Examination

A re-examination may be given only under circumstances that constitute an emergency. Approval of the instructor and the Associate Dean for Academic Affairs and Administration is required. In addition, a different examination must be given.

## Academic Credit and Classification of Students

## Competency Standards

By meeting competency standards as described below, students are excused from taking some courses to satisfy the General Education requirements. The awarding of competency does not carry academic credit. Rather, it gives students more program flexibility by increasing their number of elective courses and allowing them to move to higher levels of study at a faster pace if they wish. If a student elects to take a course for credit after being awarded competency for that course, the competency is removed (except in foreign language where students cannot elect to repeat coursework for which they have earned competency).

Biology Competency may be attained in Introduction to Biology by satisfying either of the following requirements: (1) a score of 3 on the Advanced Placement Test, or (2) a score of 630 on the SAT II Test in Biology and no secondary school grade lower than a " $B$ " or its equivalent in a biology course.

Chemistry Credit for Chemistry 111 will be granted to candidates with a score of 4 or 5 on the Advanced Placement Test in Chemistry. Competency may be attained in Chemistry 111 by scoring in the 50 th percentile or better on the ACS Exam in General Chemistry. For competency in advanced courses, a student must score in the 50th percentile or better on the appropriate ACS Exam.

Foreign Language Competency for the 101, 102 and 201 courses in a foreign language may be attained by students who earn: (1) a minimum score of 570 on the SAT II Subject Test in a foreign language or (2) a score of 3 on the appropriate language Advanced Placement Test. (Academic credit at the 201 course level of a foreign language will be awarded for a score of four or five on the Advanced Placement Test.) Competency will be determined otherwise on an individual basis by scores on an examination administered by Roanoke College faculty. Students who successfully complete the 102- or 150-level foreign language course will be awarded competency at the 101-level. Students who successfully complete the 201-level foreign language course will be awarded competency at the 101 and 102-level. (Note: Upon completion of INQ/SPAN 277, students who have also completed Spanish 102 or 150 will receive competency in Spanish 201.)

History Competency may be attained in History 140 (Modern World) or History 200 (US History) by satisfying either of two requirements: (1) a score of 3 on the Advanced Placement Test, or (2) a score of 590 on the SAT II Test.

Mathematics Competency may be attained in Mathematics 121 with a score of three on the Calculus AB Advanced Placement Test. Competency may be attained in Mathematics 121 and Mathematics 122 with a score of 3 on the Calculus BC Advanced Placement Test. Credit for Mathematics 121 will be granted to a candidate with a score of four or five on the Calculus AB Advanced Placement Test. Credit for Mathematics 121 and Mathematics 122 will be granted to a candidate with a score of 4 or 5 on the Calculus BC Advanced Placement Test.

Competency may be obtained in Mathematics 111 with a score of 80 percent on the competency test developed and administered by the Mathematics, Computer Science, and Physics department. The test will be administered during the orientation period preceding the beginning of classes for the Fall term. Requests to take the test must be made in writing to the chair of the MCSP department.

Competency for all other mathematics courses will be determined on an individual basis by considering secondary school grades, standardized test scores, and scores on examinations administered by Roanoke College.

Music Competency may be attained in Music 150 with a minimum of two years of high school theory, with a grade of B or better.

Physics Competency in introductory Physics may be attained by satisfying either of these two requirements: (1) a score of 3 on the Advanced Placement Test, or (2) a score of 650 on the SAT II Test in Physics. Competency in advanced physics courses may be determined on an individual basis upon completion of an examination administered by the department.

Physical Education Competency will be granted in one team sport or one individual sport through a full season of varsity intercollegiate participation.

Political Science Competency may be attained in Introduction to Political Science (Political Science 101) by satisfying either of these two requirements: (1) a score of 3 on the Advanced Placement Test, or (2) a grade of "A" in a secondary school advanced placement American Government and/or Comparative Government course. Credit for Introduction to Political Science (Political Science 101) may be granted if the candidate scores 4 or better on the appropriate Advanced Placement Exam.

## Advanced Placement and Credit

Roanoke College grants advanced placement and unit credit on the basis of the Advanced Placement Tests of the College Entrance Examination Board, the College Level Examination Program (CLEP), and the International Baccalaureate Higher Level Examination for courses which normally would be introductory for new students at the College. Generally, on the Advanced Placement Test the candidate who scores 3 will be granted competency. Unit credit will be granted if a candidate scores a 4 or 5 . For the International Baccalaureate Higher Level Examinations, the candidate who scores a 4 will be granted competency, and unit credit will be granted if a candidate scores 5,6 , or 7 . Students scoring the equivalent of a " C -" or higher on the College Level Examination Program test will receive unit credit. However, no student may accrue more than eight units of credit through Advanced Placement tests, College Level Examination Program tests, International Baccalaureate Higher Level Examinations, and/or Credit by Examination.

Military service school credit, as evaluated by the American Council on Education Guide to the evaluation of educational experiences in the armed services, may also be considered for credit, provided the coursework is appropriate to the academic curriculum of Roanoke College. Specific information can be obtained from the Associate Dean/Registrar.

## Credit by Examination

Currently enrolled and former students of the College may stand for examination in a course provided they fulfill conditions which allow such examinations. A student who has previously enrolled in, failed, audited, or unofficially attended a course may not stand for examination in it. An examination may not be given in a term when the course is offered. No more than one credit by examination may be taken during any term. Also, no student may accrue more than eight units of credit through Advanced Placement tests,

International Baccalaureate Higher Level Examinations, Credit by Examination, or College Level Entrance Program tests. The approval of the instructor, the chairperson of the department offering the course, and the Associate Dean/Registrar must be obtained. A special fee is charged and must be paid prior to taking the examination. For credit to be obtained in a given term, the examination has to be administered no later than three weeks prior to the beginning of the regularly scheduled examination period of the Fall and Spring terms or one week prior to the regularly scheduled examination period of the Summer session.

## Transfer Credit

Credit for academic work completed elsewhere will be accepted by official transcripts from regionally accredited colleges and universities if the courses are appropriate to the academic curriculum of Roanoke College. At least 17 of the total units required to graduate from Roanoke College (excluding Health and Human Performance 160 and Health and Human Performance activities) must be earned at Roanoke College. At least one-half of the minimum number of units required for a major must be completed at Roanoke College. After a student has registered with Roanoke College, degree credit will be granted only for elective courses and, in exceptional cases, up to a total of two units in the student's major or minor or concentration taken at another institution. Transfer credit will not be approved for courses taken to meet core requirements. Approval for courses taken in the major, minor, or concentration must be obtained in advance from the departmental chairperson and the Registrar. Approval will not be granted for courses previously failed at Roanoke College. Credit will be granted for work in which a grade of "C-" or higher has been earned; transfer grades will neither appear on the Roanoke College transcript nor be used in calculation of the cumulative or major grade point average. Exceptions to these policies may be made in extenuating circumstances as approved by the Panel on Admissions, Readmissions, and Appeals.

The College does not accept credit for nonacademic experiential learning or professional certificates. However, in cases where coursework is appropriate to the academic curriculum of the College, exceptions may be made for military service school credit, as evaluated by the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Services.

Through a longstanding agreement with Hollins University, Roanoke College will grant academic credit for courses appropriate to a Roanoke College program, including grades and quality points, to those regular students who, with the approval of the appropriate advisor or departmental chairperson and the Office of the Registrar, enroll in a course at Hollins, assuming that the course concerned is not currently available to the student through Roanoke College. The agreement applies only to fall and spring terms.

There are additional conditions and limitations on transfer credit for persons seeking a second degree. (See "The Second Bachelor's Degree" section.)

Degree credit will not be granted to a student for courses taken at any institution when the student is in a status of suspension or expulsion from Roanoke College or from any other college or university.

## Units and Credit for Courses

The College considers a unit the equivalent of four semester hours. This determination is based on in class and out of class workload requirements. Most regular courses carry one unit of credit, though some offer only one-half unit of credit. Research and honors projects may be taken for either one or one-half unit of credit. Applied music, music ensembles, physical education activities and theatre workshops carry onequarter unit of credit.

## Classification

The classification of students is determined according to the number of units earned. Classification as a freshman means a student has earned fewer than eight units.

Classification as a sophomore requires a minimum of 8 units earned; as a junior, a minimum of 16 units earned; and as a senior, a minimum of 25 units earned. The determination will be made at the end of each term.

## System of Grading

## Grades and Quality Points

Student work is graded according to the following scale:
Letter Grade Quality Points Per Unit
A. ..... 4.0
A- ..... 3.7
B+ ..... 3.3
B ..... 3.0
B- ..... 2.7
C+ ..... 2.3
C. ..... 2.0
C- ..... 1.7
D+ ..... 1.3
D ..... 1.0
D- ..... 0.7
F. ..... 0

## Letter Grade

Quality Points Per Unit
$\mathbf{P} \quad$ (Work passed under pass/fail) Not Assigned
W (Voluntary withdrawal from a course prior toNot Assignedthe beginning of the ninth week ofthe term. The grade designation"W" will not be counted as a unitattempted and will therefore notaffect the student's cumulative gradepoint average.)
WP (Withdrawn from course passing Not Assignedbeginning the ninth week of the termthrough the thirteenth week of the term.)
WF (Withdrawn from course failing ..... 0beginning the ninth week of the termthrough the thirteenth week of the term.)
DP (Involuntarily withdrawn from course Not AssignedPassing by Conduct Board or faculty)
DF (Involuntarily withdrawn from course ..... 0Failing by Conduct Board or faculty)
XF (Dismissed from course for violation ..... 0 of academic integrity)

In addition to the above grades, the following notations are used in reporting temporary term grades, but these notations do not become a part of the student's permanent record:
"IN" represents incomplete and indicates that the student has not completed, for valid reason approved by the instructor, the work of the course. The incomplete work must be submitted to the instructor not later than two weeks after the beginning of the next term, including the Summer session, at which time the instructor will assign the final course grade. Grades of "IN" are not included in determining a student's grade point average. When the "IN" is converted to a permanent grade, the student's GPA will be recalculated.
"SP" is recorded by authorization of the Office of the Registrar for the student who is under the care of a physician at the time of the final examination or who has not completed the work of the course by reason of extended illness. Written verification by the physician is necessary to receive an "SP." The work of the course must be completed before the end of the next term. At the beginning of each term in which a student does not enroll, the grade of "SP" must be renewed by submission of a physician's statement and be approved by the Office of the Registrar.

Students who have received either an "IN" or an "SP" and who fail to complete their work will be immediately subject to the rules of academic discipline (warning, suspension, expulsion) which would have applied when the original course should have been completed.

A student who is absent from a final examination without valid reason will receive a "zero" on the examination. If there is a valid reason for the absence, the grade of "SP" or "IN" may be given.
"NG" represents no grade and indicates that the instructor does not submit, at the time grades are due, a final grade. A grade of "NG" is recorded in consultation with the Office of the Registrar. An "NG" must be converted to a final grade by the end of the next term, including the Summer session.

The "WP", DP", WF", and "DF" reflect the grade in the course as of the date of official withdrawal. The grade designation "WP" or "DP" will not be counted as a unit attempted and will therefore not affect the student's cumulative grade point average. A "WP" is recorded only if a student officially withdraws from the College through the Office of the Registrar. In each case that the grade designation "WF" or "DF" is assigned, the course will be considered as a unit, or partial unit, attempted and will be considered an " $F$ " in the computation of the cumulative grade point average.

## Grade Point Average

The cumulative grade point average is determined by dividing the sum of the student's quality points by the sum of the units attempted, excluding grades that do not carry a unit attempted.

## Pass/Fail Elective Option

The primary purpose of the pass/fail elective option is to encourage students to explore an unfamiliar academic area without fear of lowering their cumulative grade point average.

In addition to internships, theatre workshops, and other courses that must be taken on a pass/fail basis, students may complete one elective course on a pass/fail basis. The pass/fail elective course, taken on a pass/fail basis, cannot be in the same academic discipline as the major, minor or concentration nor can it be a required course for the major, minor or concentration which is outside the discipline. In addition, the course may not be one of a group from which courses may be taken to satisfy major, minor or concentration requirements. No course satisfying a core requirement can be taken on a pass/fail basis.

One course completed on this basis may be offered as a part of the 33 units (excluding the two one quarter unit physical education activities) required for the degree, but if passed will not be used to determine the cumulative grade point average. Courses failed will be charged as courses attempted in determination of the cumulative grade point average. At least 30 of the 33 academic units used to meet degree requirements must be taken for a letter grade. Courses failed will be charged as courses attempted in determination of the cumulative grade point average.

If a major, minor, or concentration is declared at some future time in an academic discipline for which the pass/fail course is part, the "pass" grade will be converted back to the original grade submitted.

Students seeking a second degree may not exercise the pass/fail elective option for elective courses but may enroll in courses which are automatically graded on a pass/fail basis.

Special (non-degree-seeking) students may exercise the pass/fail elective option but are advised not to do so in any course which they may want to apply toward core requirements, major, minor, or concentration credit should they become degree-seeking students.

Requests for pass/fail may only be submitted to the Office of the Registrar prior to, and during, the add period for the particular course. In order to receive a pass, a grade of D - or better must have been earned. If a student has performed well in a pass/fail elective course being taken on a pass/fail basis, the student may submit a written request to the Office of the Registrar absolutely no later than the last day of classes for that semester to remove the pass/fail elective designation, thus reverting to having a letter grade recorded for the class. The student will then be eligible to enroll in another course using the pass/fail elective option, but a student may enroll in only one course under the pass/fail elective option in any given semester.

## Repeating Courses

Students may repeat any course except for prerequisites for courses that have already been taken or are currently being taken. Such prerequisite courses may be repeated only with the approval of the department. All grades for courses will be reported on transcripts, but only the most recent grade for any given course will be used to compute the student's grade point average, with the exception of grades of "XF" which will be used in computing the grade point average. A grade of "W", resulting from a student's withdrawal from a repeated course, will not remove a previous grade for that course, nor will courses retaken on an audit (AU) basis.

Units for a repeated course that has previously been passed will be counted only once toward graduation. A student's academic standing, grade point average, and class ranking in any given semester will not be recalculated retroactively when a course is repeated in a later semester. Upon graduation, courses cannot be taken on a repeat basis. Transcripts will assign units attempted for each time a course is taken, but will mark repeated courses " $R$ " to indicate that they are not to be assigned quality points or used in computing grade point average.

## Dismissal from a Course

Students who are either suspended or expelled from a course or from the College will be assigned a final grade of either "DP" or "DF" by the course instructors as of the date of dismissal if the final examination has not been completed. The only exception would be in the course in which a student has been found responsible for an academic integrity violation and received a penalty grade of "XF."

## Withdrawal from Courses

In a regular term, if a student drops a course or withdraws from the College prior to the beginning of the third week of the term, the course is dropped from the student's academic record. If a student withdraws from a course or from the College after the beginning of the third week but prior to the beginning of the ninth week of the term, the grade designation of "W" will be assigned. For courses that meet only a portion of the term, withdrawal rules will apply on a pro-rated basis using calendar days, counting from the first scheduled class meeting.
A student may withdraw from courses after the beginning of the ninth week of class and until two weeks before the beginning of the examination period only as a result of withdrawing from the College. A grade of "WP" or "WF" is assigned for each course.
If a student withdraws from a course or from the College after the second day and prior to the ninth class day of a May term, the grade designation "W" will be assigned by the instructor. The designation "W" will not be counted as a unit attempted and will, therefore, not affect the student's cumulative grade point average. Withdrawal from a course or from the College within seven class days of the final examination will not be authorized except for medical reasons or other extenuating circumstances as authorized by the Registrar. If a student withdraws from a course or from the College after the second day and prior to the third week of a Summer session, the grade designation "W" will be assigned by each course instructor. The designation " W " will not be counted as a unit attempted and will, therefore, not affect the student's cumulative grade point average. Withdrawal from a course or from the College within two weeks of the
applicable final examination will not be authorized except for medical reasons or other extenuating circumstances as authorized by the Registrar.

A student may withdraw from the College for medical reasons until the beginning of the examination period. All courses are removed from the academic record in cases of medical withdrawal.
(Please see "Dismissal from a Course" for information regarding involuntary withdrawals.)
Any drop or withdrawal from a course or the College must be authorized by the Office of the Registrar and must be made in writing. Withdrawal forms are available in the Office of the Registrar. Students considering withdrawal from the College are expected to meet with the Associate Dean for Student Success Initiatives.

## Grade Reports

Midterm reports for all students are published using letter grades ("A," "B," "C," "D," "F") for all courses. All midterm reports are considered advisory to the student and are not made part of the permanent record. Upon completion of Fall, Spring, May, and Summer terms, student grade reports are available through the WebAdvisor option on MyRoanoke on the Roanoke College Homepage.

## Class Rank

A ranking of students by class is compiled at the end of the Fall and Spring terms. It is based upon the cumulative grade point average of each student. Grades earned in non-credit courses and pass/fail courses are not considered in determining class rank (unless the pass/fail course is failed).

## Academic Standards

## Academic Standing and Scholarship Requirements

The Associate Dean/Registrar examines and evaluates the total record of all students in May and December to determine whether students shall be commended, placed on academic warning, or suspended from the College. All cumulative grade point averages are computed on the basis of all courses taken except those passed under the pass/fail option. A course failed will be charged as a course attempted. All minimum requirements that follow are stated in terms of academic credit and do not take into account courses carrying non-academic credit. Although there are advisors to assist, ultimately, it is the responsibility of the student that he/she is correctly registered, completes the necessary course work for graduation and abides by the academic regulations of the College, as set forth by the faculty.

## Academic Warning

Students will be placed on academic warning if their cumulative grade point average at the end of a term is less than 1.70 for freshmen, 1.85 for sophomores, or 2.0 for juniors and seniors. Academic warning indicates that the student is not performing academically at a level sufficient for graduation. Freshmen and sophomores especially should recognize that the GPA sufficient to prevent their being placed on academic warning is lower than that required for graduation.
Students who leave the College while in a status of academic warning, although not suspended, return with the same status.

## Academic Suspension

Students placed on warning will be notified immediately after the Fall or Spring term. Students placed on academic warning will have two regular terms (fall or spring) in which to raise their cumulative grade point average to the required minimum for their classification provided that they earn at least a 2.0 term GPA in each subsequent term of warning. Students who do not meet the GPA requirement will be suspended for one regular term and must apply for readmission to return for a subsequent term.

Students who have served a one-term suspension and are subsequently suspended a second time will be suspended for two additional regular terms and must apply for readmission.

Students who have served two academic suspensions and subsequently fail to maintain the required GPA will be expelled from the College.

Any full-time student whose overall cumulative grade point average is less than 1.0 at the end of his/her first regular term will be suspended for a period of one regular term.

Any full-time student who fails all one unit courses in which he/she is enrolled during any regular term will be suspended immediately for a period of 12 months.

Students who have been suspended and wish to return to Roanoke must follow the readmission process described in "Readmission Process for Suspended Students." Note that no course credits will be transferred to Roanoke College if earned while the student is in a status of suspension.

Students who are academically suspended from the College, serve their period of suspension, apply for readmission, and are granted readmission, will be subject to the rules of academic warning and suspensions, as stated in this catalog.

Students who appeal their suspension, have their appeal granted, and do not serve a period of suspension, are placed on academic warning and have until the end of their next term of enrollment to raise their grade point average to the minimum level required.

## Appeals Process

An appeals process is provided for students (1) notified of suspension, (2) applying for readmission, or (3) requesting a waiver of an academic rule, regulation or requirement. Appeals of academic suspension must be submitted by the deadline stated in the letter of notification (ordinarily one week). There is no time limit on applications for readmission. However, an appeal of an academic rule, regulation or requirement must be made no later than one year after the term on which the appeal is based.

The Panel on Admissions, Readmissions, and Appeals is likely to consider favorably only those appeals based on truly extenuating circumstances or that offer compelling reasons for granting the student's request. At all times the Panel attempts to balance concerns for the individual against concerns for equity.

Appeals regarding Intellectual Inquiry or Honors Program requirements must have the approval of both the director of the program and the Panel on Admissions, Readmissions, and Appeals.

Appeals are addressed to the Panel on Admissions, Readmissions, and Appeals, c/o the Office of the Registrar and are accepted in written format only. Individuals are notified of the Panel's decision once it has been made. New appeals submitted subsequent to a decision having been rendered will be heard only based on the discovery of new information which could not reasonably have been presented to the Panel at the time of the original meeting. The decision as to whether a new appeal meets this criterion will be made by the Associate Dean/Registrar, based on the condition noted above. If the Associate Dean/Registrar finds that new information has been discovered, the re-appeal is referred to the Vice-President/Dean of the College for a decision.

## Readmission Process for Suspended Students

Students placed on academic, academic integrity, or disciplinary suspensions are not automatically eligible to return after their period of suspension. Students wishing to return following a suspension must reapply at least one month prior to the beginning of the term in which re-instatement is desired. The Panel on Admissions, Readmissions, and Appeals will evaluate requests for readmissions on the basis of the following criteria:

1. The student's written statement in which (a) compelling reasons are offered for wishing to return to Roanoke College; (b) the student's activities or accomplishments during the period of suspension are described; (c) he/she indicates why his/her academic performance will be better than before the suspension;
2. Evidence of the student's ability to perform work necessary, within one academic year, to raise his/her GPA to the minimal level required for persistence at and graduation from Roanoke College (letters of recommendation from faculty members who can attest to the student's likelihood of success at Roanoke College will be considered by the Panel in conjunction with the student's statement);
3. Evidence of the student's likelihood of making the social adjustment necessary for persistence at and graduation from Roanoke College.

The Panel expects suspended students to pursue academic course work during their suspension. While this work will not be transferable, it will be personally beneficial and will provide the College with valuable information in the event that the student applies for readmission.

The Panel will evaluate requests for readmission by students in terms of criteria listed above and determine on a case-by case basis whether or not to grant readmission. Please note that only written materials are reviewed by the Panel and that individual appearances before the Panel are not permitted.

New appeals submitted subsequent to a decision having been rendered will be heard only based on the discovery of new information which could not reasonably have been presented to the Panel at the time of the original meeting.

## PROGRAMS OF STUDY

## Majors, Minors, and Concentrations

Roanoke College offers 36 majors under programs of study leading to the bachelor's degree.
Bachelor of Arts (B.A.)
Art, Art History, Biology, Chemistry, Christian Studies, Communication Studies, Creative Writing, Criminal Justice, Economics, French, History, International Relations, Literary Studies, Music, Philosophy, Physics, Political Science, Psychology, Religious Studies, Sociology, Spanish, and Theatre Arts.

## Bachelor of Science (B.S.)

Applied Computer Science, Athletic Training, Biology, Biochemistry, Chemistry, Computer Science, Environmental Studies, Health and Exercise Science, Health and Physical Education, Mathematics, Physics, Psychology, and Sport Management.

Bachelor of Business Administration (B.B.A.)
All majors at the College fall into one of two categories as described below. Since the determination of cumulative grade point averages in the major is based on these definitions, students should clearly understand the components of their major fields.

Disciplinary majors include all courses taken in a chosen discipline (except those specifically excluded by the department from the major) and all courses taken from other disciplines to meet requirements. Interdisciplinary majors include all courses taken within the prescribed pattern of courses which are designated as applicable to the major.

## Application for Major

A student must apply for a major prior to classification as a junior (16 units of credit).The application is submitted electronically using a link on the Registrar's webpage. The application will be forwarded to the chairperson or program coordinator of the department in which the student plans to major. If approved, the application and the recommendation of the department are forwarded by the chairperson to the Office of the Registrar. A department may refuse a student admission to, or continuance in, a major program.

Students who have not declared a major and have earned junior classification will not have access to registration. Students who make application to a major but are not accepted should request permission of the Registrar to register. Declarations of major must be approved and on file in the Registrar's Office for all students prior to graduation.

Students are advised that if they fail to take certain course before their junior year they may not be able to complete major requirements within the traditional four-year period.

Those interested in teacher licensure should consult with the chair of the Education Department as early as possible in the freshman year.

In general, students are to be governed by the Catalog which is current at the time they begin their studies at Roanoke College. However, a student has the option of declaring to be under jurisdiction of a
subsequent Catalog except in cases where core requirements have been changed and the College has stipulated those eligible to declare the new curriculum. Should the faculty determine that a modification in course work for a major or teacher licensure program in Education is necessary in order for students to complete a current course of study; the department reserves the right to modify degree or licensure requirements for students who have not yet formally declared a major or applied for teacher licensure.

Students transferring from a Virginia community college may elect to declare any Catalog in effect within the 24 month period immediately preceding the term they first enroll except in cases where core requirements have been changed and the College has stipulated who is eligible to declare the new curriculum.

If a student decides to drop a major after he/she has formally declared the major, the student should inform the Office of the Registrar, using the on-line form, to remove the major from the student's record.

## Minors Program

Although all students are required to complete the requirements of a major, such is not the case for the Minors Program. The program is optional for students and for academic departments. The purpose of the program is, in part, to provide students with a broader based liberal arts background by studying a second field in some depth. Roanoke College offers 31 minors. They are:

American Politics<br>Art<br>Art History<br>Biology<br>Chemistry<br>Christian Studies<br>Communication Studies<br>Computer Science<br>Creative Writing<br>Dramaturgy<br>Economics<br>Elementary Education<br>Environmental Studies<br>Foreign Politics<br>French<br>German<br>History - European<br>History - U.S.<br>History - World<br>Literary Studies<br>Mathematics<br>Music<br>Philosophy<br>Physics<br>Psychology<br>Religious Studies<br>Secondary Education<br>Sociology<br>Spanish<br>Theatre Performance<br>Theatrical Design

Each minor represents an organized program of study consisting of at least six units from among those which may be offered for a major. The specific requirements are selected by each department which participates in the Minors Program.

No more than two units may be used to satisfy both the requirements of a minor and the requirements of a major. At least one-half of the minimum number of units required for a minor must be completed at Roanoke. A cumulative grade point average of at least a 2.0 is required in the minor courses taken at Roanoke, except for minors in Education where a 2.5 is required. Courses used to satisfy a minor requirement may not be taken under the pass/fail option. Specific requirements for each minor are described under the appropriate academic discipline. Upon completion of all requirements for the minor, the Office of the Registrar will certify the minor field on the official transcript.

To declare a minor, a student must major in a different discipline or multi-disciplinary program. A student's intention to pursue a minor may be declared at any time, provided that there is enough time to complete all courses. The student must submit an application to the chair of the department in which the student wishes to obtain a minor using the on-line declaration form in the Roanoke College webpage. After approval, the chairperson forwards the application to the Office of the Registrar. With the concurrence of the Associate Dean for Academic Affairs, a department may refuse a student admission to, or continuance in, a minor program.

## Concentrations

In addition to the major and minors programs, the College offers students further opportunities to acquire specialized skills and knowledge useful in career development. Such a program of study is known as a concentration. Roanoke offers the following 24 concentrations. They are:

```
Accounting
Africana Studies
Anthropology
Business Information Systems
Classics & the Ancient Mediterranean World
Crime, Deviance, and Social Control
East Asian Studies
Finance
Gender and Women's Studies
Global Business
Health Care Administration
Health Care Delivery
Human Development
Human Resource Management
Information Analysis
Latin American & Caribbean Studies
Legal Studies
Marketing
Neuroscience
Parish Youth Leadership
Peace & Justice Studies
Public History
Statistics
Teaching of English to Speakers of Other Languages (TESL)
```

Each concentration consists of a prescribed pattern of course work approved by the faculty and totaling at least five units. A concentration may be taken only in conjunction with or in addition to a major. Courses used in a concentration may not be taken under the pass/fail option. At least one-half of the minimum number of units required for concentration must be completed at Roanoke College. The prescribed courses
in a concentration must include at least three units which are not used to satisfy the student's major requirements. Successful completion of this program with a cumulative grade point average of at least 2.0 will be recognized, upon certification of the Office of the Registrar, by entry on the student's permanent academic record at the time of graduation from Roanoke College.

To declare a concentration, a student must major in a different discipline or multi-disciplinary program. A student's intention to pursue a concentration may be declared at any time, provided that there is enough time to complete all courses. The student must submit an application to the chair of the department which coordinates the concentration using the online declaration form on the Roanoke College webpage. After approval, the chairperson forwards the application to the Office of the Registrar. With the concurrence of the Associate Dean for Academic Affairs and Administration, a department may refuse a student admission to, or continuance in, a concentration.

## Requirements for Baccalaureate Degree Programs

## Graduation Requirements

To earn a bachelor's degree the student must pass no fewer than 33 academic units (including at least one intensive learning experience) and two one-quarter unit Health and Human Performance activities (or the equivalent) for a total of $331 / 2$ units or the equivalent. At least 30 of the 33 academic units used to meet degree requirements must be taken for a letter grade.

A minimum of 17 of the academic units (excluding physical education) must be earned at Roanoke College toward the degree. If a student is granted competency for one physical education activity, the onehalf unit of physical education required for graduation is reduced to one-quarter unit. The student must have a cumulative grade point average of at least 2.0 in all courses (excluding courses offered and passed on a "pass/fail" basis.) In addition, the student must meet the requirements for the Intellectual Inquiry Curriculum or the Honors Program Curriculum and for a major. The student must earn a cumulative grade point average of at least a 2.0 in all Intellectual Inquiry Courses (INQ) attempted as well as a cumulative grade point average of 2.0 in all courses attempted in the major. Grade point requirements for the Honors Program are described under "Honors Program" elsewhere in this Catalog. In any major, prerequisite courses which are not themselves required for the major are not included in the major cumulative grade point average.

Since core requirements and major requirements may be completed without reaching the total of $331 / 2$ course units, students must elect courses to fulfill the remaining work. These elective studies may be used to satisfy areas of personal interest or professional need. Some students choose to use these subjects to qualify for a second major, a minor, or an area of concentration.

## Participation in May Commencement Exercises

The following groups of students will be invited to participate in commencement exercises held at the close of the spring term:
a. Have completed degree requirements prior to commencement.
b. Will, at the end of the spring term, have earned at least a 2.0 overall grade point average and at least a 2.0 major and INQ grade point average but who are lacking no more than two units of academic credit. (The students must pre-register for the outstanding course work and have made any appropriate deposits so that completion of degree requirements will occur no later than the end of the summer term for the year in question).
c. Are participating in the Dual Degree Engineering Program and who have completed all residency requirements at Roanoke College and will complete all degree requirements by the end of the summer term for the year in question.

Beside the names of students in groups b and c , a notation of "Anticipated August Graduate" will be included in the commencement program. An empty diploma tube will be presented to these students at Commencement. Following the completion of all degree requirements, a diploma will be ordered.

## Declaration of Degree Candidacy

By no later than the middle of the term preceding that term in which graduation is expected, students anticipating graduation must submit to the Office of the Registrar an application for degree candidacy and meet with the Registrar to complete the graduation review.

## Residency Requirement

Up to two of the last eight units of degree credit may be taken at another approved institution, but no more than one of the final four units may be taken at another institution. All courses taken at another institution must be approved in advance by the Registrar. Approval will not be granted for courses previously failed at Roanoke College. Credit will be granted for work in which a grade of "C-" or higher has been earned. Transfer grades will neither appear on the Roanoke College transcript nor be used in calculation of the cumulative or major grade point average. Also, students participating in study abroad receive a waiver. Special permission for others to waive this rule may be granted upon successful appeal to the Panel on Admissions, Readmissions, and Appeals.

## Limitation Regulations

Rapid changes in the content and methodologies of academic disciplines make it necessary to require that one's program of study not be outdated by long delays in qualifying for the degree. Consequently, the College imposes certain conditions on those who fail to complete their programs within a stipulated time.

Students seeking their first bachelor's degree are subject to the degree requirements and the academic regulations governing classification and scholarship as described in the Catalog current at the time of their first enrollment at Roanoke, provided that they qualify for a degree within 10 calendar years of the date of first enrollment. For transfer students, the period will be dated from the earliest enrollment at an accredited institution from which transfer credit is recorded.

Students who do not qualify for the degree within the 10 year period must meet the degree requirements and be subject to academic regulations governing classification and scholarship which apply for the next year in which the student re-enrolls. Applicable requirements and regulations shall be based thereafter on those prevailing at five-year intervals.

At any time after the conclusion of the tenth year following initial enrollment, the faculty of the department of major study may review the currency of the student's program and may, with the concurrence of the Registrar, require the student to repeat certain courses or otherwise make up deficiencies.

## After Graduation

Upon completion of the College career, one becomes a member of the Roanoke College Alumni Association, a non dues-paying organization of Roanoke College alumni now numbering over 21,000. The Alumni Association is governed by an Executive Council which represents the geographic areas and interests of alumni (including Honor Guard, Hall of Fame, Roanoke Fund, Maroon Club and area chapters). The Alumni Executive Council President serves as an ex-officio member of the Board of Trustees and works with the Parents Council to coordinate activities and programs to promote the College.

All alumni are given the opportunity to receive the Roanoke College Magazine, may attend the Spring Alumni Festival held on campus annually, and are invited to participate in area chapter events and activities. Alumni chapters focus on involvement of area alumni, parents, and friends in the promotion of the College through social events, admissions efforts, career networking, and development and are active in Atlanta, Baltimore, Washington, D.C., Hampton Roads, New England, New York, Philadelphia, Richmond, and the Roanoke Valley. Other events throughout the year are also held in California, Chicago, and Florida.

## Double Majors, Second Majors and Second Bachelor's Degrees

The College recognizes that some individuals have a need for a broader based education than that which can be obtained through the traditional single-major, single-degree program. This circumstance is particularly true for those who wish to have highly flexible career opportunities at the time of graduation and for graduates who may wish to pursue new career directions which require additional education.

To accommodate these needs, the College offers two opportunities: (1) a single degree with two majors, which is open only to those who are pursuing or who have earned a degree from Roanoke College, and (2) a second bachelor's degree, which is available to graduates of Roanoke or any other regionally accredited college or university.

## Second Major

While working toward a degree within one major program, students may also complete the program of a second major and have the achievement recorded on their permanent record and official transcripts, provided that the following conditions are met:

1. All requirements for each major must be completed and a maximum of five units may be applicable to both majors, provided that the total number of courses in both majors is no fewer than 17 (except as described below).
2. If the majors are in different degree areas (BA, BS, B.B.A.), the student must, at the time of declaring degree candidacy, select the degree to be awarded. (Two degrees will not be awarded.)
3. If one major is interdisciplinary, the number of units applicable to each major must be approved by the appropriate chairperson or coordinator.
A graduate of the College may subsequently earn a second major under the conditions described above. The requirements of the major shall be those set forth in the catalog for the session in which re-enrollment occurs. Transfer credit earned elsewhere after graduation may not be used to satisfy these requirements.

## Second Bachelor's Degree

Holders of a bachelor's degree from a regionally accredited college or university may earn a second bachelor's degree by fulfilling the conditions outlined below.

Roanoke College graduates must meet the major requirements in effect at the time of re-enrollment. Those graduates who completed General Education or Centers of Distinction requirements as part of their first degree will not be required to complete the Intellectual Inquiry requirements. A minimum of eight units must be earned at Roanoke beyond those earned for the first degree. Units in excess of $331 / 2$ earned while working toward the first degree will not be counted as fulfilling the eight needed for the second degree. Courses offered for the first degree may be used to satisfy core and major requirements, provided that they were taken at the College or taken elsewhere prior to first enrollment at the College. Credit earned elsewhere after graduation will not be accepted for transfer credit toward the second degree. If a second major has been earned as part of the first degree program, a second degree will not be awarded for a major in that field.

Graduates of other accredited institutions will be admitted as transfer students and must fulfill the core and major requirements for the degree program as set forth in the Catalog for the session in which enrollment first occurs. Transferable credit and credit earned at Roanoke must total at least $331 / 2$ (or the equivalent).A minimum of 17 of these units (excluding physical education) must be earned at Roanoke after completion of the original degree. Transferable courses taken in the first degree program may be used to meet core requirements. No more than one-half of the minimum units required for the major may be satisfied by transfer credit.

If, in the judgment of the faculty in the major area, the earlier work of a student does not adequately cover more recent advances or needs in the field, the student may be required to repeat certain courses or otherwise make up the deficiency.

Such requirements should be established at an early date and must have the approval of the chairperson in the major field and the Office of the Registrar.

Academic requirements: All holders of a bachelor's degree will be subject to the academic requirements and regulations for seniors. Such students will not, however, be eligible for any scholastic awards or recognition except the Dean's List, President's List and honor societies. To qualify for a degree, a student must have a cumulative grade point average of at least 2.0 for all course work attempted at Roanoke College to meet the requirements of the second degree. A cumulative grade point average of at least 2.0 must also be attained in all major courses taken at Roanoke.

Second-degree candidates may not enroll in an elective course on a pass/fail basis but may enroll in internships, which are automatically graded on that basis.

## Baccalaureate Degree Requirements When Transferring Early Into a Graduate Program

Roanoke College plays a major role in the undergraduate education of some students who choose to leave before graduating in order to enter a post-graduate program. Roanoke is proud of these students and will award the appropriate baccalaureate degree (B.A., B.S., or B.B.A.) to students who have satisfied or will satisfy the following guidelines:

1. The student must have been awarded an advanced degree by the transfer institution. Examples would include Ph.D., M.S., and J.D.
2. The student must not have been awarded a baccalaureate degree.
3. The student must have completed at least 17 academic units at Roanoke College, (excluding physical education) with at least a 2.0 overall grade point average and a 2.0 GPA in the major.
4. The student must have satisfied the core requirements of Roanoke College in place at the time of transferring. All substitutions or exemptions must be approved by the Academic Standards Committee.
5. The student must have completed the requirements for the major. Not more than four graduate course units may apply toward the major.
6. The student may apply not more than eight units of the graduate program toward the $331 / 2$ units required by Roanoke College.
7. The department chair of the student's major and the Registrar will determine which graduate courses will be included in the student's record. In case of disagreements the Academic Standards Committee will make the final determination.
8. Upon approval by the faculty, the student will be awarded the appropriate baccalaureate degree at the next commencement.

## Records, Transcripts and Diplomas

## Privacy of Student Records

In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974, the Associate Dean/Registrar has been designated the official to receive requests for, dispense information about, and maintain records on, all students. Such records consist of admissions data and the educational record of the students while enrolled at the College. Students may inspect these records upon written request and have access to the material in accordance with the law. Such records are not only accessible to certain responsible College and administrative personnel but may be reviewed and utilized by them if necessary. Records are not released to a third party without the specific written authorization of the student.

## Transcripts

Any student, former student, or graduate of the College may (upon written request or by using electronic access through iwantmytranscript.com) have the Office of the Registrar provide a complete transcript of credits, provided all College bills have been paid. A payment of $\$ 5$ is required for each requested transcript. Official transcripts carrying the seal of the College are sent to third parties, as directed by the student, or in a sealed envelope to the student. Unofficial transcripts may be openly issued to the student. Official transcripts may also be sent electronically. In most cases, transcripts will be issued within one week of receipt of the request.

Diploma Replacement Fee
Lost or damaged diplomas can be replaced by applying to the Assistant Registrar. The replacement fee is $\$ 30.00$.

## ACADEMIC PROGRAMS AND OPPORTUNITIES

## The Intellectual Inquiry Curriculum

The Intellectual Inquiry Curriculum flows from the Roanoke College Goals for Liberal Learning, "Freedom With Purpose". It is built around critical inquiry into questions that are important to us as individuals, citizens, and members of a global community. By engaging students in rigorous inquiry and developing abilities in communication and critical thinking across the curriculum, it furthers the college's mission of developing the skills students need to live as informed, resourceful, and responsible citizens. Combined with students' majors, it gives students the resources for building an integrated body of knowledge concerning themselves and their world.

Of the $331 / 2$ units required for a degree at Roanoke College, between $11 \frac{1}{2}$ and $14 \frac{1}{2}$ units are needed to fulfill the Intellectual Inquiry Curriculum requirement.

## First Year Seminars

The Intellectual Inquiry core courses (INQ courses) begin with two first-year seminars that introduce students to the fundamentals of liberal arts education. The first of these courses, entitled "Intellectual Inquiry," introduces students to critical thinking in higher education, taking as its starting point a focused topic in a scholarly field. Critical inquiry will be taught in the context of careful reading of important intellectual works, as well as inquiry-based writing assignments. The second course ("Living an Examined Life") is a disciplined reflection on basic questions of ethics and values, within the tradition of a particular scholarly field. Students will learn reasoning skills through reading, writing, and oral communication as they link key works with broader traditions of critical reflections on the good life for individuals and communities. Students will be encouraged to explore ways in which they can use these broader traditions for their own reflections on what it means to live well. These first year seminars are required of all students completing the INQ curriculum.

## Intensive Learning

The objectives of the Intensive Learning Program are to foster intense and purposeful faculty-student interchange and to encourage thoughtful, creative exploration of a focused topic during a time when students are enrolled in one and only one course. The College provides a wide array of Intensive Learning opportunities, including travel courses as well as on-campus courses. All intensive learning courses emphasize active student participation, for example, in field study, simulations, and laboratory work. The majority of these courses are offered in May, during a three-week term. All students are required to complete at least one unit of Intensive Learning to graduate from Roanoke College.

## The Intellectual Inquiry Perspectives Courses

Students also take a series of courses that calls upon them to inquire into important questions using the perspectives, knowledge and methods of different ways of knowing: the Humanities and Fine Arts, the Social Sciences, and Mathematics and the Natural Sciences.

Students are required to complete three units in the Natural Sciences and Mathematics Division including at least one laboratory science course and at least one mathematics or statistics course, two units in the Social Science Division from different disciplines, and two units in the Humanities and Fine Arts Division (one each from pre- and post- 1500 time periods).

At least one of the 200-level INQ courses must have a global perspective. Courses that address questions from this perspective seek to make connections in the global context in which we live. For example, questions may include: What can we learn about and from the natural and cultural forces that shape societies beyond our familiar world? What do we need to know about the interaction of societies in the world community? What do we need to know about the role and impact of the United States internationally, as seen from other perspectives? Global courses are denoted with a G in the course section designation.

The 200-level intellectual Inquiry courses are:
Natural Sciences and Mathematics Division
INQ 240 Statistical Reasoning
INQ 241 Mathematical Reasoning

```
    (Mathematics/Statistics/Computer Science)
    INQ 250 Scientific Reasoning I
    (Natural Science with Lab)
    INQ 251 Scientific Reasoning II
    (Natural Science with no Lab)
Social Sciences Division
    INQ 260 Social Scientific Reasoning
Humanities and Fine Arts Division
    INQ 270 Human Heritage I
    INQ 271 Human Heritage II
```

Up to three substitutions are allowed as described below. However, students applying substitutions still must take at least one INQ course in the Natural Sciences and Mathematics, one in the Social Sciences, and one in the Humanities and Fine Arts. The global requirement must be satisfied by a designated 200level INQ course. Disciplinary substitutions for the global requirement are not allowed.

A one-unit course in Mathematics or Statistics may substitute for INQ 240.

- A one-unit course in Mathematics, Statistics or Computer Science may substitute for INQ 241.
- A one-unit laboratory science course in Biology, Chemistry, Environmental Studies, or Physics may substitute for INQ 250 or 251.
- A one-unit course in Anthropology, Criminal Justice, Economics, Geography, International Relations, Political Science, Psychology, or Sociology may substitute for INQ 260.
- A one-unit course in Art, Art History, English, 300- or 400-level Foreign Languages literature or culture courses (NOT French 301-304, 330, 341; German 301, 335; Spanish 303, 304, 330, 335, 341, 402, 403), History, Music, Philosophy, Religion, or Theatre may substitute for INQ 270 or 271. Courses substituting for 270 must primarily cover material that dates from before 1500; courses substituting for 271 must primarily cover material that dates from after 1500.


## The Capstone: Contemporary Issues

Having seen ways in which different disciplines address questions, students complete the INQ courses with a required capstone seminar entitled "Contemporary Issues". The course asks them to look back on their experiences and their work in the Intellectual Inquiry Curriculum and to synthesize diverse disciplinary approaches in a collaborative investigation of a contemporary issue. In addition to individual written assignments, students will work in small groups to research and develop a proposal concerning a concept, an approach, or a solution to a contemporary problem. They will be encouraged to draw on their previous course work, pool their intellectual resources and skills working with a group, gain additional practice in conducting research and writing clearly and persuasively, and finally, will present the work in a formal oral defense.

## Foreign Language

Students are required to complete the study of a foreign language through the first semester of the intermediate level (through the 201-level). For most students who continue a language studied in high school, this will require one or two units at Roanoke College; for students electing to take a new language this will require three units. Students may be exempted from all or part of the requirement by demonstrating competency in a foreign language (see "Competency Standards" described elsewhere in this Catalog).

## Health and Human Performance

All Roanoke college students will be required to take Health and Human Performance 160: Fitness for Life (one-quarter unit) to fulfill graduation requirements. In addition, all students will take a one-quarter unit course in a lifetime sport or activity which is different from the activity taken in Health and Human Performance 160. (All varsity athletes will take Health and Human Performance 160: Fitness for Life but
may receive a Health and Human Performance activity competency for satisfactorily completing one season of a varsity sport). Health and Human Performance 160 cannot be repeated for credit and it is a prerequisite for all other HHP activity courses. Once the physical education requirement for graduation has been met, a student may not complete additional Health and Human Performance activity courses for credit.

## Teacher Licensure

Roanoke College offers a four-year program designed to prepare teachers in kindergarten, elementary, and secondary education within the requirements for the bachelor's degree and the sequence of courses within a student's academic major. The program provides the opportunity to gain teacher licensure in Virginia and approximately 40 other states through approval granted by the Commonwealth of Virginia under its National Association of State Directors of Teacher Education and Certification and the Legislative Contract Reciprocal Certification Programs.

Students who pursue licensure in education (elementary or secondary) must major in an academic area other than education. (Students may not major in Business Administration.) Securing an education advisor (preferably in the first year) is required. Students desiring to teach must plan their schedules to include specific professional education courses. Requirements for student teaching are available from the department of Education. Deviation from the established program may necessitate Summer school or additional terms of attendance.

## Honors Program

The Honors Program is designed for students with excellent academic performance, broad extracurricular engagement, and leadership abilities. Honors students must pass no fewer than 33 academic units (including at least one intensive learning experience) and two one-quarter unit Health and Human Performance activities (or the equivalent). To graduate with the Honors Program designation, students must also complete the honors curriculum (described below) in place of the Intellectual Inquiry curriculum, complete an Honors Distinction Project with a grade of B or higher, maintain a 3.2 grade point average overall and in Honors core courses, and complete an Honors Portfolio. Credit for the Portfolio Seminar does not count toward the 33 academic units required for graduation. Students who fail to achieve a grade point average of 3.0 in any term will be evaluated by the Honors Program Director to determine whether they may continue in the program.

## Honors Program requirements include:

Four * Semesters of Portfolio Seminar
HNRS 111, 112 Portfolio Seminar I (1/4 unit each)
HNRS 113, 114 Portfolio Seminar II (1/4 unit each)
*Students who enter the Honors Program after their freshman year are not required to take HNRS 111 and 112.

Two semesters of First Year Seminars
HNRS 110 Honors Seminar
HNRS 120 Living an Examined Life
Seven courses from disciplinary perspectives, which are satisfied by HNRS courses listed below. Students may also choose to substitute up to three disciplinary courses or INQ courses in place of equivalent HNRS requirements. A fourth substitution of an INQ course is allowed with permission of the Honors Program Director. However, students applying substitutions still must take at least one HNRS course in the Natural Sciences and Mathematics (HNRS 240, 241, 250, 251), one in the Social Sciences (HNRS 260), and one in the Humanities and Fine Arts (HNRS 270, 271). In addition, at least one of the 200-level HNRS courses or INQ substitutions must have a global perspective. Global courses are denoted with a G in the course section designation. Disciplinary substitutions for the global requirement are not allowed.

HNRS 240
HNRS 241
HNRS 251
HNRS 250
HNRS 260
HNRS 270
HNRS 271

Statistical Reasoning
Mathematical Reasoning OR
Scientific Reasoning II
Scientific Reasoning I
Social Scientific Reasoning (2 units required from different disciplines)
Human Heritage I
Human Heritage II

The capstone course
HNRS 300
Contemporary Issues

## Honors Distinction Project

This requirement asks student to bring their academic, intellectual, cultural, and/or service interests to bear on a distinctive project that extends over at least two semesters. Projects may include elements of independent research, creative work, study away, internship, or service learning. Honors Distinction Projects culminate in a scholarly or creative product, and oral defense, and presentation on or off campus as appropriate. Project proposals must be approved by the Honors Program Advisory Group. Credit will vary.

Satisfactory completion of the Honors Portfolio
Proficiency in a foreign language through the intermediate level, LANG 202
Health and Human Performance
HHP $160 \quad$ Fitness for Life ( $1 / 4$ unit)
HHP activity HHP 101-159 (1/4 unit)
One unit of Intensive Learning

## Experiential Learning

## Professor Grant, Director of Experiential Learning

At the heart of Roanoke College's vision and mission statements is a commitment to being a model of experiential learning and preparing students for responsible lives of learning, service, and leadership. In pursuit of these ideals, Roanoke Pathways is a comprehensive program to enhance and support experiential learning opportunities. These include research, internships, study-away (Intensive Learning travel courses as well as semester- and year-long study abroad), service-learning, and creative/artistic works. Students participating in Pathways opportunities work closely with faculty in authentic, real-world contexts and are prompted to draw deliberate connections between knowledge gained through traditional modes of learning and that gained through these real-world experiences. Through intentional planning for the experiences, critical, guided reflection during the experiences, and public showcasing at the culmination, students test and refine academic knowledge and skills, experience personal and professional growth, and are better prepared to engage productively in our common civic life. Through Roanoke Pathways, the Office of Experiential Learning provides students with information and advice on available opportunities, financial support through a competitive grants program, and creative and technological support for showcasing their experiences. Students are encouraged to visit the office, located in the Fintel Library, during their first semester to familiarize themselves with the wide array of opportunities available.

## Internships, Independent Studies, and Independent Research

Internships, independent studies, and independent research are available within most of the College's academic disciplines in order to provide students with a practical application of their particular majors or more specialized study in a particular area. Students who wish to pursue an internship, independent study or independent research should follow departmental guidelines for application. Generally, students wishing to register for independent studies, internships or independent research must make their requests known to a faculty member (the prospective supervisor) who will determine if the student meets the department's criteria for the respective experiential learning activity and then will inform the department chair.

Independent studies and research are graded with letter grades, as are Intensive Learning Internships. All other internships are graded on a pass-fail basis; students must complete a minimum of 110 hours in the internship for each unit of credit. Students may not earn more than two units of internship credit toward a degree.

## Summer Scholars Program

The Summer Scholar Program at Roanoke College is a grant program that enables qualified students to conduct intensive, independent research for eight to twelve weeks during the Summer. To qualify, a student must have a GPA of 3.0 or higher and must have completed eight units of credit by the start of the grant period. Each Summer scholar works with a faculty mentor who guides the project. Over the course of the Summer, students and mentors meet for a series of colloquia to share ideas. At the conclusion of the program, a day is set aside to showcase the work of the student scholars. In oral presentations, poster sessions, and research exhibits, they present the findings of their Summer-long research, on projects that range from polymer synthesis to the culture of bullfighting in Spain. The Summer Scholar award covers activation waiver for one unit of independent study, on campus housing, and a stipend of $\$ 2500$. Information is available on the College's webpage.

## Semester in Washington, D.C.

## Associate Professor Peppers

Roanoke College sponsors a one-semester program in Washington, DC through the Lutheran College Washington Consortium. Students live and work in the Nation's Capital. They take two one-unit academic courses and a two-unit internship in the office of a member of Congress, a government agency, a nonprofit organization, a museum, a theater, or other challenging positions designed to meet the students’ needs and interests. In addition, they participate in field trips, lectures, cultural activities, and community service.

This full semester program is available in the Fall and Spring and is open to Juniors and Seniors in most academic disciplines. During the summer, the program makes housing available for students who have secured their own internships. Information is available on campus through Dr. Todd Peppers (Department of Public Affairs, 540-375-2417, peppers@ roanoke.edu) or Dr. Nancy D. Joyner, Dean, Lutheran College Washington Semester (1-888-456-5292), dean@washingtonsemester.org.

## Study Abroad Opportunities

Roanoke College offers many study abroad programs that allow students to earn academic credit while studying outside the U.S. Students may select from academic year, semester, Intensive Learning, or summer opportunities. Through its exchange and affiliated programs, Roanoke College provides study options around the world in all academic disciplines. The International Student Exchange Program (www.isep.org) offers study sites in over 50 countries where the language of instruction may be in English or a foreign language. Exchanges at the University of East London, the University of East Anglia in Norwich, England, the five-campus University of Ulster in Northern Ireland, the Universidad Pública de Navarra in Pamplona, Spain, the University of Bamberg in Germany, and the Asian Studies Program of Kansai Gaidai University in Hirakata, Japan, offer Roanoke College students opportunities to enroll with local students and other students from around the world in classes in English and other languages at prestigious overseas universities. Our affiliated programs including Regent's College in London, Hollins Abroad in Paris, the Umbra Institute in Perugia, Italy, the Institute at Palazzo Rucellai in Florence, Italy, Griffith, Deakin, and James Cook Universities in Australia, Massey University in New Zealand, the Lutheran College China Consortium's semester at Zhejiang University in Hangzhou, China, and the Virginia Summer Program at Oxford University provide additional study abroad options. Transfer credit may also be granted for coursework taken at study abroad programs not affiliated with Roanoke College if approved by the appropriate faculty and the Associate Dean/Registrar.

The Intensive Learning Program offers international travel courses in a variety of disciplines led by Roanoke College faculty during the three week IL term in May of each year. Recent destinations have included Argentina,

China, England, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, Palau, Peru, Scotland, Spain, and Uganda.

Roanoke College scholarships and grants can be applied in all cases, to all Roanoke College exchange programs and in most cases to affiliated programs. Some special scholarships are available for the Virginia Summer Program at Oxford and for Intensive Learning international travel courses.

Students who wish to study abroad for a semester or year on a Roanoke College exchange or affiliated program must have a minimum cumulative grade point average of 2.5 at Roanoke College. Applicants must demonstrate appropriate academic preparation and maintain full-time student status prior to and during the term abroad.

Students must seek approval for their planned coursework on semester or year-long study abroad programs from the department chair of their major department and then from the Associate Dean/Registrar during the semester prior to their study abroad. Before requesting this approval, students should consult with their academic advisors for assistance with course selection. If approved courses are unexpectedly closed, cancelled or otherwise unavailable at the study abroad site, students must contact their advisors, department chairs, and the Associate Dean/Registrar, as early in the term as possible to secure approval of credit for alternate courses. Transfer of credit is not guaranteed for any course that has not been approved in advance. If approval of credit for a course cannot be obtained in advance, the student must bring back to their department chairs textbooks, syllabi, and all graded coursework so the course can be evaluated for transferability. Credit may be granted in the major, minor, concentration, general education or for elective credit. In all cases, transfer credit will be granted only for work in which a grade of "C-" or higher (or the equivalent) has been earned. Transfer grades do not appear on the Roanoke College transcript and are not included in calculation of the cumulative or major grade point average. Students studying abroad will be granted a waiver of the residency requirement so that coursework can be transferred as part of the last eight units of degree credit.

Inquiries should be addressed to the Office of International Education, 206 Administration Building, and (540-375-2068).

## Preparation for Graduate Work

In many professions, it becomes necessary for a student to make an academic commitment beyond the undergraduate level. It is recommended that students seek advice from their academic advisor on the selection of proper courses which will best serve them in graduate school. Career Services and the Registrar's Office are also available for assistance.

## Health Professions Programs

Students planning to seek admission to medical, dental, pharmacy, veterinary school or to other health professions should plan their courses of study early. The Health Professions Advisory Group (HealthPAG), a group of faculty members, serves to counsel students as to required courses and steps to take in the admission process. Students should register with HealthPAG early in their studies at Roanoke in order to receive the greatest assistance from the committee.
Although most students preparing for further study in the health professions major in one of the sciences, it is possible to major in any field of interest, provided the minimum requirements of the program are met. Requirements of individual schools and programs vary, so it is important to check with the committee and the professional school catalog for specific requirements.

Current members of HealthPAG are: Dr. Angela Allen (PSYCHOLOGY), Professor Jim Buriak (HEALTH AND HUMAN PERFORMANCE), Dr. Brooks Crozier (BIOLOGY), Dr. Gary Hollis
(CHEMISTRY), Dr. Tim Johann, Co-Chair (CHEMISTRY), Dr. Dar Jorgensen, Co-Chair (BIOLOGY), Dr. Chad Morris, (SOCIOLOGY), Dr. Matthew Rearick (HEALTH AND HUMAN PERFORMANCE).

## Pre-Law Program

Professor Peppers, Advisor
There is no single prescribed course of study for those preparing for a career in law. Law schools seek students who are capable of analytical reasoning and clear, crisp writing. These skills may be developed in a variety of academic majors.

The Intellectual Inquiry curriculum at Roanoke College emphasizes those skills necessary for success in law school. In addition, courses offered in political science, criminal justice, business administration and sociology majors provide training in specific law-related areas. Critical thinking and writing are major components of courses in these fields.

Admission to law school is quite competitive. Therefore, it is important that students contact the pre-law advisor early in their academic careers. The pre-law advisor has information on law school admissions, curricula, and financial aid.

## Pre-Ministerial Program

Professor Wisnefske, Advisor
The most important requirement for students heading for seminary or graduate study in religion is a broad education. The Intellectual Inquiry curriculum at Roanoke College provides that. Many majors are also useful for future training for the ordained ministry. However, it is very important to have a good grasp of the history of philosophy and at least an introduction to the various fields of religious study-sacred texts, history of religions, religion and society, and theology. Knowledge in these fields is often presupposed in seminary training and graduate school. It is advisable for students planning to attend seminary to consult with a member of the department of Religion and Philosophy and/or the Dean of the Chapel.

## Pre-Social Work Advising Program <br> \section*{Professor Hoffman, Advisor}

Students who are interested in pursuing careers in Social Work are well served by a broad liberal arts curriculum and focused study in the social sciences, particularly Sociology and Psychology. Successful preparation for graduate study in Social Work involves developing knowledge of societal conditions, interpersonal and group dynamics, and individual behaviors that are linked to the need for social services and therapeutic intervention. The Sociology department at Roanoke College provides specialized advising for students who would like to direct their undergraduate studies and co- curricular activities toward the helping professions. In addition, the theoretical grounding, critical thinking and social research skills that are hallmarks of the general Sociology curriculum provide a particularly useful foundation for graduate study in Social Work. Guided internships in local social service agencies are available in the department and highly recommended. Admission to many MSW programs is increasingly competitive, so students should consult with the Pre-Social Work advisor in Sociology early in their undergraduate careers.

## Dual Degree Engineering Program

Professor Grant, Coordinator
For students interested in entering engineering and allied professions, Roanoke College offers a combined plan program with Virginia Polytechnic Institute and State University. Through this program students are given the opportunity to broaden their academic background at a liberal arts college before beginning professional studies. The program offers an attractive alternative to the highly structured, traditional engineering curricula.

In the dual degree program, students will complete all core requirements of Roanoke College and the majority of the requirements for a degree in Physics or Mathematics in the first three years of their program. Students should contact the Program Coordinator upon enrollment to discuss a recommended course of study. In general, the following courses are required at Roanoke College in addition to those specific to Virginia Tech listed below:

PHYSICS MAJOR: PHYS 201, 202, 203, 370, one physics course 300-level or above, and one 400level physics course. MATH 121(or MATH 118 and MATH 119), and MATH 122, 201, and 331, CHEM 111 and 112

MATH MAJOR: PHYS 201 and 202, MATH 118 and 119, or 121, and MATH 122, 131, 201, and 331, STAT 202, CPSC 120, and three additional courses chosen from (MATH 268, $278,288,321,332,361,371,381,388$, STAT 301, 302, 303, 304), CHEM 111 and 112

After completion of coursework at Roanoke College, the student transfers to Virginia Tech. In several additional years, students complete the requirements for an engineering degree. Selected coursework from Virginia Tech is transferred back to Roanoke College to complete major requirement and the $331 / 2$ total units needed for graduation.

## Virginia Tech Requirements

In addition to the courses described above, the student should also take the introductory engineering courses required of engineering students at Virginia Tech. These courses are also offered at Virginia Western Community College and should be taken during the Summer between the student's first and second year or second and third year at Roanoke College.

Admission to Virginia Tech as a transfer student may occur at any time after two years of study at Roanoke College. While admission may be approved for the Spring semester, Summer or Fall transfer is encouraged. Transfer applicants must meet all normal transfer admission requirements of Virginia Tech. Participants in this program who have completed the requirements listed above and have a grade point average of 3.0 or above are guaranteed admission to Virginia Tech.

## COURSES OF INSTRUCTION

In this section of the Catalog, majors or programs are listed alphabetically. Individual courses are listed under each heading. For purposes of administration, several majors or programs often come under a single department. Students interested in an academic major or minor should see the department chair. Students are responsible for noting and fulfilling all prerequisites for each individual course. All courses in the regular session with enrollments of five or fewer students may be canceled unless one or more of the following conditions are met:

1. At least three of the students need the course in the semester in which it is being offered in order to complete the requirements for a major.
2. The course is offered as a prerequisite for other courses in the major or concentration and cannot be rescheduled for another semester in which it might attract more students.
3. When one or two students need the course to graduate and special arrangements have not been able to be made within the department. A "required course" will be interpreted to mean not only those specifically required of all students in a major, but also those electives offered on a rotational basis when that course is the only one available in a particular semester which a student can use to satisfy major requirements.

## Department of Biology Biology

Department of Business Administration and Economics Accounting; Business Administration; Business Information Systems; Economics; Finance; Global Business; Health Care Administration; Human Resource Management; Marketing

Department of Chemistry Biochemistry; Chemistry
Department of Education Teacher Licensure and Teaching English to Speakers of Other Languages
Department of English American Literature; British Literature; English; Communication Studies; Creative Writing; Literary Studies; Peace and Justice Studies

Program of Environmental Studies Environmental Studies
Department of Fine Arts Art; Art History; Dramaturgy; Music; Theatre Arts; Theatre Performance; Theatrical Design

Department of Health and Human Performance Athletic Training; Health and Exercise Science; Health and Physical Education; Sport Management

Department of History Africana Studies; East Asian Studies; Classics and the Ancient Mediterranean World; Geography; Hispanic/Latin American and Caribbean Studies; History; Latin; Public History

Department of Mathematics, Computer Science and Physics Applied Computer Science, Computer Science; Mathematics; Physics; Statistics

Department of Modern Languages Chinese; French; German; Italian; Japanese; Linguistics; Russian; Spanish

Department of Psychology Human Development; Neuroscience; Psychology
Department of Public Affairs American Politics; Criminal Justice; Foreign Politics; International Relations; Legal Studies; Political Science

Department of Religion and Philosophy Christian Studies; Parish Youth Leadership; Philosophy; Religious Studies; Greek

Department of Sociology Anthropology; Crime, Deviance, and Social Control; Gender and Women's Studies; Health Care Delivery; Information Analysis; Sociology

The listing of a course in this Catalog does not obligate the College to teach the course unless there is sufficient enrollment to justify it. Courses are subject to change without notice.

# AFRICAN AND AFRICAN DIASPORA STUDIES CONCENTRATION <br> Assistant Professor Jesse Bucher, Concentration Coordinator 

Students in any major interested in developing a specialization in Africa or the African Diaspora may earn a concentration in African and African Diaspora Studies by successfully completing (with a cumulative grade point average of at least 2.0) at least six units. Of these, one unit must be a language, two units must be from the list of core courses, two units must be from the list of electives, and one unit must be a capstone Independent Study or Internship approved by the concentration's coordinator.

Students may count courses from the list of core courses as electives.
Special topics courses, Internships, IL Courses, Intellectual Inquiry and Honors courses may apply toward the concentration when applicable and with the permission of the concentration coordinator. Of the six units of study, four must be classroom based.

Any course listing that is followed by "*" must be approved by the concentration coordinator.

## Language (1 Unit)

Choose from:

| SPAN 201 | Intermediate Spanish I |
| :--- | :--- |
| SPAN 202 | Intermediate Spanish II |
| SPAN 303 | Spanish Composition |
| SPAN 304 | Spanish Conversation |
| FREN 201 | Intermediate French I |
| FREN 202 | Intermediate French II |
| FREN 301 | French Conversation II |
| FREN 302 | French Composition |
| GERM 201 | Intermediate German I |
| GERM 202 | Intermediate German II |
| GERM 301 | German Composition and Conversation |

[Students may substitute an African language taken off-campus with approval from the concentration coordinator]

## Core Courses (2 Units)

Choose from:

| ENGL 310 | Literatures of the African Diaspora |
| :--- | :--- |
| HIST 208 | Archaeology of Slavery |
| HIST 210 | Environmental History |
| HIST 253 | Africa to 1850 |
| HIST 254 | Africa from 1850 |
| HIST 255 | South Africa |
| HIST 256 | Black Political Thought in Africa and the African Diaspora |
| HIST 350 | Issues in Africa |
| HIST 490 | Research Seminar * |
| POLI 224 | Comparative Political Systems: Africa |
| SOCI 224 | Race and Ethnicity |

Electives (2 Units)
Choose from:
ANTH 240 Race and Human Evolution
ENGL 260 World Literature *
ENGL 302 Southern Literature
HIST 207 American Material Culture

| HIST 260 | The South |
| :--- | :--- |
| HIST 272 | Latin America |
| HIST 370 | Issues in Modern America * |
| FREN 315 | Francophone Societies |
| POLI 352 | Human Rights Policy |
| RELG 130 | Living Religions of the World |
| SOCI 338 | Women's Lives Around the World |
| SPAN 312 | Civilization and Culture: Spanish America |
| SPAN 323 | Spanish Latin American |

Independent Study or Internship (1 Unit)
Choose from:

An Independent Study focused on Africa and/or the African Diaspora *
An Internship relevant to Africa and/or the African Diaspora *

## ANTHROPOLOGY

Professor Leeson and Assistant Professor Morris, Coordinators
A major in Anthropology is not offered. A concentration in Anthropology offers students the opportunity to study human beings around the globe using a comparative and holistic framework. In this interdisciplinary concentration, students will develop a recognition of global and historical cultural diversity that will be beneficial in careers that value cross-cultural communication, including business, the arts, education, public policy, and social services. Students in the anthropology concentration will systematically explore the extraordinary range of similarities and differences in humans and human behavior across time and space. Students from any major may graduate with a concentration in Anthropology by successfully completing at least six units from the classes described below and earning a cumulative grade point average of at least 2.0. Of these six units, one must be ANTH 101, Introduction to Cultural Anthropology, which the coordinators recommend taking as early as possible. Of the remaining five units at least one must come from Anthropology's other subfields of archaeology (ANTH 218), linguistics (ANTH 320), or physical anthropology (ANTH 240). Additionally, at least one course must include a fieldwork experience, chosen from ANTH 310, ANTH 380, ANTH 406, ANTH 416, or another approved course. In accordance with the general rules applicable to all concentrations, no more than three courses from a student's major may apply to the concentration and at least three courses in the concentration must be completed at Roanoke College.

Required Courses:
ANTH 101 Introduction to Cultural Anthropology, along with at least one course from both the subfield and fieldwork categories.

## Subfield Category:

ANTH 218 Introduction to Archaeology (cross-listed as HIST 218)
ANTH 240 Race and Human Evolution
ANTH $320 \quad$ Basic Linguistics (cross-listed as ENGL 320/LING 320)
Fieldwork Category:
ANTH $310 \quad$ Global Storytelling: Exploring the Ethnographic Process
ANTH $380 \quad$ Creating Community Change: Applied Anthropology
ANTH 416 Internship
Any approved IL or other course with a substantial anthropological fieldwork component

## Elective Courses:

| ANTH 212 | Food and Culture |
| :--- | :--- |
| ANTH 218 | Introduction to Archaeology (cross-listed as HIST 218) |
| ANTH 240 | Race and Human Evolution |
| ANTH 261 | Selected Topics in Anthropology |
| ANTH 310 | Global Storytelling: Exploring the Ethnographic Process |


| ANTH 320 | Basic Linguistics (cross-listed as ENGL 320/LING 320) |
| :--- | :--- |
| ANTH 361 | Selected Topics in Anthropology |
| ANTH 380 | Creating Community Change: Applied Anthropology |
| ANTH 405/406/407 Independent Study |  |
| ANTH 416 | Internship |
| ARTH 220 | Ancient Egyptian Art and Archaeology |
| ARTH 222 | Archaeology of Death in the Ancient Near East |
| ARTH 224 | Encyclopedic Museum and Archaeological Ethics |
| HIST 206 | Historical Archaeology |
| MUSC 240 | Music in Culture |
| SOCI 323 | Health, Illness and Healing |
| SOCI 327 | Religion and Culture |
| SOCI 329 | Global Perspectives on Family |
| SOCI 337 | Environmental Sociology |

An internship or independent study focused on an anthropological topic is encouraged; the topic must be approved by the concentration coordinators. Interested students should contact the concentration coordinators as soon as possible for help in identifying additional appropriate courses available on campus (including special topics, INQ, and INQ-IL courses) or through study away programs.

## 101 Introduction to Cultural Anthropology

An introduction to the concepts and methods used by anthropologists to study human societies and cultures. Case studies from primarily non-Western cultures will provide an overview of the culture concept and its relationship to institutions of kinship, marriage, gender, language, race and ethnicity, production, exchange, political organization, magic, religion, and the arts. This course is required for the Anthropology concentration and is an elective in the Sociology major and minor programs. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 212 Food and Culture

The consumption of food is not merely a human biological need, but also a means of defining ourselves according to culture. To understand what and how a people eat is to understand part of the history and values of that group. This course will explore the production, distribution, and consumption of food in different human societies, examining the influential role food has played in human governance, economy, spiritual belief, and gender roles. We'll also examine modern foodways, paying careful attention to issues of identity, food security, and globalized food production. Finally, we'll focus on our own foodways, examining the rise of "nutritionism" in the United States, along with its implications for our health, economy, and, of course, culture. This course is an elective in the Sociology major and minor programs. (1).

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ANTH 101, INQ 260AN, or permission of the instructor.

## 218 Introduction to Archaeology

An introduction to the various theories of excavation and survey techniques, culture change, dating methods, and reconstruction of economic, social and religious practices or prehistoric societies. Case studies focus on both old- and new-world cultures. (Cross-listed as ARTH 218/ HIST 218). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 240 Race and Human Evolution

The goal of this course is to create a broad understanding of the human existence from a biological standpoint: Where did we come from? How can the physical differences between us be explained? This introduction to the basic concepts of physical/biological anthropology discusses scientific theories of human evolution and biodiversity alongside detailed discussion of the cultural origins of human racial classifications. Topics covered include basic genetic and evolutionary theory, human biological adaptation, primate evolution and behavior, fossil and other evidence of human evolution, the inherent fallacy associated with biologically-driven racial classification, and the history of "race" as a concept in popular and academic discourse. This course is designed to be accessible to both non-science and science majors. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

261 Selected Topics in Anthropology
An examination of special topics in anthropology, with topics selected on the basis of faculty and student interest. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 310 Global Storytelling: Exploring the Ethnographic Process.

Ethnography is anthropology's hallmark methodology; a dynamic way of seeing and living in the world of the other. This is a project-intensive course examining the ways in which anthropologists conduct ethnographic research and write ethnography. Students will practice a variety of ethnographic fieldwork techniques including, but not limited to, participant observation, field note-taking, interviewing, mapping, photography, and film production. We will examine a few key ethnographic works, several anthropologists' reflections on the practice of ethnography, and a variety of analytic and interpretive approaches to the production of ethnography. This course is an elective in the Sociology major and minor programs. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ANTH 101, INQ 260AN, or permission of the instructor.

## 320 Basic Linguistics

The scientific study and description of language according to the principles of modern linguistics. (Crosslisted as ENGL 320/ LING 320) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 361 Selected Topics in Anthropology

An examination of special topics in anthropology, with topics selected on the basis of faculty and student interest. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 380 Creating Community Change: Applied Anthropology

How can the anthropological worldview be used to improve the lives of individuals and communities? Why do some development programs work, while others fail? The purpose of this course is to allow you to recognize the role of culture in contemporary human problems, and to use this recognition to identify means of creating positive, sustainable, and minimally biased change. The course will include overviews of the history of applied anthropology and of the current state of the field in several different domains of application, including health, the environment, business, and education. Importantly, the course will also contain considerable discussion of the ethical quandaries inherent in applied work. Finally, the course includes an active community research component, which is designed to provide some field experience in applying course material. As such, you will be exposed to some training in the anthropological methods of participant observation and interviewing. This course is an elective in the Sociology major and minor programs. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ANTH 101, INQ 260AN, or permission of the instructor.

## 405, 406, 407 Independent Study

A supervised research project or extensive literature review. (1/2, 1, 1/2)
Prerequisite: Approved written proposal.

## 416 Internship

Practical experience in a community or field setting in which anthropology is applied. This course will be an elective within the Anthropology concentration. (1)
Prerequisite: Approved written proposal.

ART
Professor Hardwig; Associate Professors Heil, Shortridge (Chair)

The Art Program consists of 11 units including a five-unit core, expected to be completed by the end of the sophomore year, and six upper-level courses as follows:
Core Courses (five units)

## Two units from the following:

ART 111 Drawing I
ART $121 \quad$ Painting I
ART $131 \quad$ Photography I
ART 151 Two-Dimensional Design

## One from the following:

ART 171 Ceramics I
ART 181 Sculpture I

## Two ARTH courses:

ARTH 150 Art, Culture, \& Society I or any 200-level ARTH course from the corresponding time period. and
ARTH 151 Art, Culture, \& Society II or any 200-level ARTH course from the corresponding time period.

## Art majors must complete six additional units of art courses:

Completion of coursework in two different disciplines (100-200-300 levels), in the following areas: Painting, Ceramics, Photography, Drawing, Printmaking, Graphic Design, Sculpture.

## Two additional elective units in studio art.

## Portfolio Review for Entry to the Major in Spring of Sophomore Year

1. Admission to the major normally occurs in the Spring of the sophomore year after portfolio review; all prospective majors must successfully complete portfolio review.
2. Students must have completed or be currently enrolled in the five core courses before applying for the major and must maintain at least a 2.0 grade point average in these five courses.
3. Students should consult with the Art Area Faculty for areas of study and departmental policies.
4. Students will be assigned an art faculty advisor after successfully completing sophomore review.
5. Transfer students who wish to major in art should consult with the Chair of the Fine Arts department as soon as possible after enrollment at Roanoke College.

## Visual Arts Education

For courses in this sequence or requirements for teacher licensure, the student should consult the college catalog under Education.

## Art Minor

The minor in Art consists of six units. Two must be studio classes from the core and three units must be from studio art classes at the 200-level and above. The sixth unit may be any studio art course, art history course, or course from another program that has been approved by the art faculty.

## 101 Arts and Crafts in the Schools

Lecture and group discussion on arts and crafts as a form of communication. Emphasis on teaching arts and crafts in schools. Includes work in fibers, clay, paper, and other areas. (Does not apply to major or minor programs in art.) (1/2)
Lecture/Studio: $3 \mathrm{hrs} / \mathrm{wk}$.

## 111 Drawing I

This course is designed to develop a fundamental understanding of drawing through various approaches, techniques, and media. Emphasis will be on building skills and knowledge through the act of drawing, working primarily from life. (1)
Lecture/Studio: 4 hrs/wk.

## 121 Painting I

Introduction to basic principles of painting: knowledge and use of media, understanding of color, composition, and form using the painting medium, and development of different styles and techniques. Emphasis will be on building skills and knowledge through the act of painting, working primarily from life. (1)
Lecture/Studio: 4 hrs/wk.

## 131 Photography I

Introduction to the theory and practice of photographic processes including camera mechanics, print production, image composition, and history of photography. (1)
Lecture/Studio: 4 hrs/wk.
Pre-requisite: ART 111 or 151 or permission.

## 151 Two-Dimensional Design

An exploration of the theory and practice of art fundamentals. Introduction to the elements of studio art, including form, line, shape, value, texture, color, space, content, and style. Emphasis on visual problemsolving, the vocabulary of art, and craftsmanship in the use of materials. Computer applications in graphics introduced. (1)
Lecture/Studio: 4 hrs/wk.

## 171 Ceramics I

An introduction to clay emphasizing both hand building and throwing on the wheel; both ceramic sculpture and pottery vessels will be made. The focus is on understanding clay in both technical and creative terms. (1)
Lecture/Studio: 4 hrs/wk.

## 181 Sculpture I

An introduction to the basic ways of seeing and responding to the third dimension. The course is organized as a series of projects which approach the use of materials, the construction of forms, and the articulation of artistic concepts in a variety of ways. (1)
Lecture/Studio: 4 hrs/wk.

## 191 Special Topics

Studio experience in areas not normally offered, with the focus to be determined by the art faculty. May be repeated for credit. ( $1 / 4$ )
Lecture/Studio: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: Permission.

## 211 Drawing II

This course is designed to broaden the student's understanding of drawing through exploration of various topics which could include: development of subject matter, contemporary drawing issues, expression and representation, the human form, etc. We will work from life and imagination. (1)
Lecture/Studio: $4 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Art 111.

## 221 Painting II

This course is designed to broaden the student's understanding of painting, emphasizing the interconnection of style, expression, composition, media, and representation to subject matter. We will work from life and imagination. (1)
Lecture/Studio: $4 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ART 121.

## 231 Photography II

Continuation of Introduction to Photography with more advanced problems and more independent outside work on the part of the student. Fundamentals of studio lighting, use of medium format camera, film processing and darkroom techniques, experimental techniques, computer imaging applications, and historical context of styles will be explored. (1)
Lecture/Studio: 4 hrs/wk.

Prerequisite: Art 131 or permission. 35mm film camera.

## 241 Printmaking: Etching and Relief Methods

Fundamentals of printmaking in the areas of etching, block printing, collagraphs, and monoprinting.
Emphasis on fine art production and techniques of each art form. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 111 or ART 151 or by permission.

## 261 Graphic Design I: Graphic Design and Reproduction Techniques

Introduction to basic layout design with an emphasis on the stages of camera-ready art production and the use of computers. (1)
Lecture/Studio: $4 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ART 111 or ART 151 or permission.

## 271 Ceramics II

Studio practice in forming, firing, and glazing ceramic ware; individual instruction will be emphasized. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 171.

## 281 Sculpture II

Further exploration of the methods and techniques of three-dimensional form. Additive, subtractive, and constructive procedures using wood, clay, stone, and metal will be emphasized. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 181.

## 291 Special Topics

Studio experience in areas not normally offered, with the focus to be determined by the art faculty. May be repeated for credit. ( $1 / 2$ )
Lecture/Studio: 2 hrs/wk.
Prerequisite: Permission.

## 311 Drawing III

Further exploration of themes addressed in ART 211, engaged at the advanced level, with more individualized instruction. Direction of work, creative solutions, and expressive use of drawing medium emphasized; a significant amount of independent work must be produced.
Lecture/Studio: $4 \mathrm{hrs} / \mathrm{wk}$. (1)
Prerequisite: ART 211.

## 321 Painting III

Further exploration of themes addressed in ART 221, engaged at the advanced level, with more individualized instruction. Direction of work, creative solutions, and expressive use of painting medium emphasized; a significant amount of independent work must be produced. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 221.

## 331 Photography III

Advanced study of materials, techniques, and equipment in traditional and digital photography. A significant amount of mature work must be produced based on individual projects proposed by the student.

Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 231.

## 341 Printmaking: Silkscreening and Planographic Methods

Fundamentals of printmaking in the areas of stencils, photo-silkscreening, computer applications, and lithography. Emphasis on fine art production and techniques of each art form. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 111 or ART 151 or permission.

## 361 Graphic Design II: Advertising Design Fundamentals

Introduction to the conceptual, artistic, and technical methods of visual communication used by different advertising media. Introduction to computer applications in advertising. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 261.

## 371 Ceramics III

Advanced study of materials and techniques in ceramics. Individual instruction will be emphasized; a significant amount of independent work must be produced. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: ART 271.

## 381 Sculpture III

Advanced investigation of the potential of sculptural form. Additive, subtractive, constructive, and cast forms will be emphasized, and projects will be selected depending on student interest. A significant amount of independent work must be produced. (1)
Lecture/Studio: $4 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ART 281.

## 391 Special Topics in Art

Selected studies in specialized studio areas. May be repeated for credit. (1)
Lecture/Studio: 4 hrs/wk.
Prerequisite: Permission.
405, 406, 407 Independent Study and Research
A program of advanced intensive study and experience in art under the guidance of the art area staff. (1/2, 1,1/2)
Prerequisite: Completion of all coursework in the area of interest and submission of a written proposal, following departmental guidelines.

## 411 Drawing Portfolio

Advanced level work for students who have completed the drawing sequence through the 300 level. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. ( $1 / 2$ )
Prerequisite: Completion of ART 111, 211, 311 and submission of written proposal, following departmental guidelines.

## 416 Art Internship

Practical experience working in or with artistic organization as participant-observer, leading to the preparation of a report which describes and evaluates that organization's activities. (1)
Prerequisite: Completion of all coursework in the area of interest and submission of a written proposal, following departmental guidelines.

## 421 Painting Portfolio

Advanced level work for students who have completed the painting sequence through the 300 level. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using
disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 121, 221, 321 and submission of written proposal, following departmental guidelines.

## 431 Photography Portfolio

Advanced level work for students who have completed the photography sequence through the 300 level. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 131, 231, 331 and submission of written proposal, following departmental guidelines.

## 441 Printmaking Portfolio

Advanced level work for students who have completed the two printmaking classes Art 241 and Art 341 and either Art 111 or Art 151. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 111 or 151, 241, 341 and submission of written proposal, following departmental guidelines.

## 461 Graphic Design Portfolio

Advanced level work for students who have completed the two graphic design classes Art 261 and Art 361 and either Art 111 or Art 151. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 111 or 151, 261, 361 and submission of written proposal, following departmental guidelines.

## 471 Ceramics Portfolio

Advanced level work for students who have completed the ceramics sequence through the 300 level. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 171, 271, 371 and submission of written proposal, following departmental guidelines.

## ART 481 Sculpture Portfolio

Advanced level work for students who have completed the sculpture sequence through the 300 level. It is expected that a student will incorporate the issues introduced in the previous courses. Focus will be on the creation of a self-directed body of work, visual research, advanced development of concepts using disciplinary media and techniques, and will result in a public display or presentation of work. May be repeated for credit. (1/2)
Prerequisite: Completion of ART 181, 281, 381 and submission of written proposal, following departmental guidelines.

## 495, 496, 497 Honors Project

A program of independent study culminating in the public presentation of a paper or artistic creation. (1/2, 1, 1/2)
Prerequisites: To qualify for consideration to receive honors in the major, a student, in the senior year or in the summer prior to the senior year, must work under the guidance of a faculty committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project.

## ART HISTORY

Professor Long; Assistant Professors Hargrove, Warden

The goal of Art History is to connect historical events and human experiences with visual expression. The major begins with a required 2 -semester general survey, moves to period-specific surveys, advances to specialized lecture/discussion classes within periods, and culminates in seminars. This sequence of courses allows students to develop their mastery of subject matter - objects, artists, and ideas - while at the same time building their skills at interpreting, assessing, and explaining that subject matter and the methodologies for its study.

Students planning to go on to graduate school are urged to study at least one foreign language (preferably German) through the intermediate level.

## Art History Major

A major in art history requires the completion of ten units. These include:
ARTH $150 \quad$ Art, Culture, \& Society I
ARTH 151 Art, Culture, \& Society II
ARTH 218 Introduction to Archaeology
Three, 200-level Art History classes with one from each of the following areas: Ancient; Medieval, Renaissance, or Baroque; $18^{\text {th }}, 19^{\text {th }}, 20^{\text {th }}$ century European or American Art

Two Art History classes at or above the 300 level
ARTH $456 \quad$ Research Seminar in Art History
One elective: Electives may come from art history or from courses in another major that have been approved by the art history faculty.

One INQ or Honors course taught by ARTH faculty may count towards the ARTH major with approval of the art history faculty, who will determine the area of the major into which the course falls.

## Art History Minor

The minor in Art History is designed to give students a general experience of both the content and methods of art history. A minor in art history requires the completion of six units, including:

Two units from the following courses: ARTH 150/ARTH 151/ ARTH 218
*Two, 200-level Art History classes, from different areas: Ancient; Medieval, Renaissance, or Baroque; $18^{\text {th }}, 19^{\text {th }}, 20^{\text {th }}$ century European or American Art
*One Art History class at or above the 300 level
*One elective: Electives may come from art history or from courses in another major that have been approved by the art history faculty.

One INQ or Honors course taught by ARTH faculty may count towards the ARTH major with approval of the art history faculty, who will determine the area of the major into which the course falls.

## 150 Art, Culture, \& Society I

At a time when few people could read, human-made objects were the primary form of mass
communication. Students will explore the architecture, sculpture, and painting of the ancient and medieval

Mediterranean world (Ancient Near East, Egypt, Greece, Rome, and Medieval Europe) to discover how the visual arts shaped and reflected the values and concerns of different cultures. (1)
Lecture/Discussion: 3 hrs/wk.

## 151 Art, Culture, \& Society II

The rise of an increasingly literate urban middle-class leads to great changes in the history of art, starting with the birth of the Renaissance in Italy through to the influence of popular culture in 20th-century America. Students will explore the works of major figures in the history of painting, sculpture, and architecture from circa 1400-1980 within the context of radical cultural and societal change. (1) Lecture/Discussion: 3 hrs/wk.

## 218 Introduction to Archaeology

An introduction to the theories and methods used by archaeologists to reconstruct the cultural practices of past human societies, from religion and authority to domestic life and trade. Case studies introduce students to archaeological sites in places such as Egypt, Greece, Mesoamerica, and North America. (Crosslisted as ANTH 218/HIST 218) (1)
Lecture/Discussion: 3 hrs/wk.

## 220 Ancient Egyptian Art and Archaeology

This course investigates the art and archaeology of ancient Egypt from the pyramids to the iconic art of 'King Tut.' We will discuss the art of pharaohs, gods, and mortals. Art and artifacts are placed within their archaeological, social, and historic context. (1)
Lecture/Discussion: 3 hrs/wk.

## 222 The Archaeology of Death in the Ancient Near East

This course investigates the range of objects, paintings, and tomb types found in ancient Egypt and the ancient Near East. The study of these objects provides us with a window to living traditions and social structures. Material covered will include the Royal tombs of Ur; tomb paintings; and human sacrifice. (1) Lecture/Discussion: 3 hrs/wk.

## 224 The Encyclopedic Museum and Archaeological Ethics

Encyclopedic Museums, like the Metropolitan Museum of Art or the Virginia Museum of Fine Arts, have large collections representing cultures across the globe and spanning human history. This class will look at encyclopedic museums through their Egyptian and Near Eastern collections. We will investigate how such collections are formed, the ethics of collecting archaeological materials from Egypt and the Near East, and the controversy behind several famous pieces, from the bust of Nefertiti to the Elgin Marbles. (1)
Lecture/Discussion: $3 \mathrm{hrs} / \mathrm{wk}$.

## 226 Greek and Roman Art

An examination of the major works of art produced during the ancient Greek and Roman periods. Aspects of Greek and Roman thought, politics, religion, and patronage will be explored to explain the functions, styles, and themes of the art of these cultures.(1)
Lecture/Discussion: $3 \mathrm{hrs} / \mathrm{wk}$.

## 236 Medieval Art

An exploration of the art produced in Europe from the 4th to the 14th centuries. The class will examine how visual culture reflects the political, social, and religious needs of different communities throughout the period. (1)
Lecture/Discussion: 3 hrs/wk.

## 246 Italian Renaissance Art

The study of Italian art from Giotto to Michelangelo. Aspects of Italian Renaissance culture and patronage will be explored in order to explain the styles and themes of the period. Where appropriate, the accomplishments of Northern Renaissance artists will be introduced. (1)
Lecture/Discussion: 3 hrs/wk.

## 256 Baroque Art

An examination of the major monuments of European art produced between 1600 and 1700. Aspects of Baroque culture and patronage will be explored in order to explain the styles and themes of the period. (1)
Lecture/Discussion: 3 hrs/wk.

## 266 18th Century European Art

This course focuses on the major artists, art works, and art historical ideas of Europe between roughly 1700-1789 and covers artistic styles from the late Baroque to Rococo to early Neo-Classicism. Watteau, Fragonard, Canaletto, Hogarth, and Gainsborough are some of the artists studied. (1)
Lecture/Discussion: 3hrs/wk.

## 276 The Arts of the United States

A historical and conceptual survey investigating American architecture, painting, crafts, and sculptures. (1)
Lecture/Discussion: 3 hrs/wk.

## 286 19th-Century European Art

An examination of the major movements in European art from Neoclassicism to Post-Impressionism (1789-1900), including artists such as Jacques-Louis David, Francisco Goya, Caspar David Friedrich, Eugene Delacroix, JMW turner, Edouard Manet, Vincent van Gogh, and Auguste Rodin. Artworks are discussed within cultural, political, and critical contexts with an eye to formal innovation and the emerging concept of "modernity." (1)
Lecture/Discussion: 3hrs/wk.

## 291 Special Topics in Art History

Selected studies in specialized art history areas. May be repeated for credit. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: Permission.

## 296 20th-Century Art and Architecture

An analysis of the main schools of modern art and architecture in Europe and America from the opening of the century to the 1980s. The various works of art will be approached in terms of cultural and critical contexts. (1)
Lecture/Discussion: 3 hrs/wk.

## 336 Issues in Medieval Art

An examination of issues important to the period. Topics vary. May be repeated for credit. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 150 or permission.

## 343 Early Netherlandish Painting

Robert Campin, Jan van Eyck, and Rogier van der Weyden set the tone for the art of the Netherlands in the fifteenth century. This class will study each artist's oeuvre and how it reflected contemporary concerns, particularly the interrelationship between the historical context, religious life, and social standing of the artists who made the paintings and the patrons who commissioned and used them. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 150 or permission.

## 346 Issues in Renaissance Art

An examination of issues important to the period. Topics vary. May be repeated for credit. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 150 or permission.

## 348 Leonardo, Michelangelo, and Raphael

In the $21^{\text {st }}$ century, Leonardo, Michelangelo and Raphael are considered the three artistic geniuses of Italian Renaissance Art. This class will study each artist's oeuvre and how it reflected contemporary concerns, examine the interdependence of career and biography, and consider notions of genius in the study of art. (1)
Lecture/Discussion: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ARTH 150 or permission.

## 353 The Dutch Golden Age: Rembrandt and Vermeer

Rembrandt and Vermeer are among the most popular "Old Master" painters. Exhibitions of their works and movies and books about their lives attract huge audiences. This course explores the oeuvres of these two painters, comparing what we know (and want to know) about them as art historians with how they have been seen by non-scholars in the past twenty-five years. (1)
Lecture/Discussion: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ARTH 150 or permission.

## 356 Issues in Baroque Art

An examination of issues important to the period. Topics vary. May be repeated for credit. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 151 or permission.

## 381 Romanticism

An examination of European Art from 1795-1848, focusing on the cultural concept of Romanticism, which is a broad perspective characterized by drama, tension and exoticism. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 151 or permission.

## 386 Issues in Modern Art

An examination of issues important to the period. Topics vary. May be repeated for credit. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 151 or permission.

## 388: Impressionism and Post-Impressionism

Explores in detail the work of major figures in French Art during the second half of the $19^{\text {th }}$ century, including: Monet, Degas, Van Gogh, Gauguin and Cezanne. (1)
Lecture/Discussion: 3 hrs/wk.
Prerequisite: ARTH 151 or permission.

## 391 Special Topics in Art History

Selected studies in specialized art history areas. May be repeated for credit. (1)
Lecture: hours vary.
Prerequisite: Permission.

## 406 Independent Study and Research

A program of advanced intensive study and experience in art history under the guidance of the art history staff. (1)
Prerequisite: Permission and submission of a written proposal, following departmental guidelines.

## 416 Art Internship

Practical experience working in or with artistic organization as participant-observer, leading to the preparation of a report which describes and evaluates that organization's activities. (1)
Minimum 110 hours.
Prerequisite: Permission and submission of a written proposal, following departmental guidelines.

## 456 Research Seminar in Art History

A seminar approach to selected topics for advanced students. Topics vary. (1)
Lecture: 3 hrs/wk.
Prerequisite: Permission of the instructor.

## 495, 496, 497 Honors Project

A program of independent study culminating in the public presentation of a paper. ( $1 / 2,1,1 / 2$ )
Prerequisites: To qualify for consideration to receive honors in the major, a student, in the senior year or in the Summer prior to the senior year, must work under the guidance of a faculty committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project.

## BIOCHEMISTRY

Professors Hollis, Crozier, Pysh; Associate Professors Johann, Lassiter, Ramesh, Sarisky (Coordinator); Assistant Professors Brenzovich, Keithley

Biochemistry is one of the most important interdisciplinary fields in science today. Biochemistry is the study of the chemical processes of living organisms, including the molecular structures of biomolecules, their reactions (e.g. metabolism, genetic expression), and regulation of those reactions. The biochemistry curriculum at Roanoke includes substantial curricular components from both the biology and chemistry departments. Opportunities for Biochemistry graduates include graduate study in biology, chemistry, or biochemistry, employment in the biotechnology or pharmaceutical industries, or pursuit of a professional degree in a medical field. Biochemistry is one of the courses of study available to students interested in medical school, veterinary school, dental school, and other health professions.

## The Biochemistry Major

The B.S. in Biochemistry requires 12.5 units in Chemistry and Biology, including CHEM 111, 112, 221, $222,331,341,342,280(1 / 2)$, BIOL $120,210,315$, and either 380 or 400 , and One of these two options:

A: one unit of research in either BIOL or CHEM culminating in a formal paper and oral defense, or
B: one additional unit chosen from CHEM courses numbered 250 or higher. CHEM 416 may not be used to fulfill this requirement. Math 121(or Math 118 and Math 119) and 122 and two units of physics with lab are prerequisites for Chem 331.

For students with competency in CHEM 111, the units in the major decrease by one with the B.S. in Biochemistry requiring 11.5 units in chemistry and biology as enumerated above.

Biochemistry majors may receive certification from the American Chemical Society by taking three additional chemistry courses. See the Chair of the Chemistry Department for details. Biochemistry majors are strongly encouraged to do multiple semesters of research. Faculty with biochemistry research interests include Dr. Crozier, Dr. Johann, Dr. Lassiter, Dr. Pysh, Dr. Ramesh, Dr. Sarisky and Dr. Keithley. Students considering graduate study should take additional advanced level courses such as a second semester of physical chemistry, instrumental analysis, or advanced biology courses such as developmental or advanced cell.

## BIOLOGY

Professors Crozier, Jorgensen, Pysh (Chair); Associate Professors Collins, Lassiter, Poli, Powers, Ramesh; Lecturers Bosch, Thibodeaux

The Biology Department offers both the B.S. and B.A. degrees.

Students seeking the B.S. degree are required to complete eight and one-half units of Biology coursework: Biology 120, 125, 455 (one-half unit), and six upper division courses (200-level or above) with at least one of the six chosen from each of the four Biology Department curricular core areas: 1) Molecular Biology \& Genetics, 2) Cell Biology \& Microbiology, 3) Integrative Biology, and 4) Ecology \& Evolution (see below). Additionally, B.S. degree candidates must complete Chemistry 222 (Chemistry 111, 112 and 221 are prerequisites), two units of Physics (103/104 or 201/202), one unit of Mathematics (112 or higher,) and one unit of Statistics (Statistics 101 or INQ 240).

Students seeking the B.A. degree must complete seven and one-half units of Biology coursework: Biology 120, 125, 455 (one-half unit), and five upper division courses (with at least one course chosen from each of the four Biology Department curricular core areas - see below). Additionally, B.A. degree candidates must complete Chemistry 112 (Chemistry 111 is prerequisite), one unit of Physics with laboratory (INQ 250 PH OR Physics 103 or higher), one unit of Mathematics (112 or higher,) and one unit of Statistics (Statistics 101 or INQ 240).

## Biology Core Areas

Core area requirements are intended to ensure students' broad exposure to key areas of modern biology, while allowing significant choice in tailoring their course-of-study to interest and preparation for postgraduate study or work. Students are encouraged to consult Biology Department faculty in determining their course choices and should plan their schedules carefully, paying attention to prerequisite requirements and frequency of course offerings. Please note that most upper division Biology courses are offered on a rotating basis.
The upper-division course component of a student's program of study (six for the B.S. degree; five for the B.A. degree) must satisfy the following requirements:
a. For either the B.S. or B.A. degree, at least one of these courses must be chosen from each of the four curricular core areas:-Molecular Biology \& Genetics, Cell Biology, Integrative Biology, and Ecology \& Evolution.
b. The remaining two upper-level courses for the B.S. degree (one for the B.A. degree) may come from any of the four core areas.
c. At least four of the six for the B.S. degree (three of five for the B.A. degree) must be laboratory courses.
d. Students seeking either degree must have at least two, 200-level laboratory courses.
e. At least three of the six for the B.S. degree (two of five for the B.A. degree) must be at the 300 -level or higher.
f. Courses cross-listed in more than one core area may not be used to satisfy the requirement for more than one core area.
g. Independent Study courses (BIOL 350, 355, 460, 470, 495, 496, 497) and Internship (BIOL 450) are taken in addition to major requirements and may not be counted as part of the upper division course requirement for either the B.S. or B.A. degree.

Core areas and distributions:

## A. Molecular Biology \& Genetics

BIOL 245- Special Topics
BIOL 315 - Genetics
BIOL 345 - Special Topics
BIOL 346 - Special Topics
BIOL 380 - Advanced Genetics
BIOL 400 - Molecular Biology
BIOL 410 - Genomics
B. Cell Biology

BIOL 210 - Cell Biology
BIOL 245- Special Topics

BIOL 305 - Principles of Physiology
BIOL 345 - Special Topics
BIOL 346 - Special Topics
BIOL 365 - Plant Anatomy \& Physiology
BIOL 370 - Immunology
BIOL 390 - Advanced Cell Biology
BIOL 420 - Developmental Biology
C. Integrative Biology

BIOL 235 - Microbiology
BIOL 240 - Algae \& Fungi
BIOL 245- Special Topics
BIOL 265 - Plant Diversity
BIOL 270 - Invertebrate Biology
BIOL 275 - Vertebrate Biology
BIOL 280 - Animal Biology
BIOL 345 - Special Topics
BIOL 346 - Special Topics
BIOL 365 - Plant Anatomy \& Physiology
D. Ecology \& Evolution

BIOL 205 - General Ecology
BIOL 225 - History of Life
BIOL 245- Special Topics
BIOL 300 - Aquatic Ecology
BIOL 330- Community Ecology
BIOL 340- Animal Behavior
BIOL 345 - Special Topics
BIOL 346 - Special Topics
BIOL 415 - Evolution
Biology 245 and 345 (Special Topics) can be applied to fulfill core area requirements depending upon the specific nature of a particular course and at the discretion of the Department. Biology 230 may not be used as one of the two upper-level biology electives for the B.S. degree or the one upper-level biology elective for the B.A. degree. Biology 260 may be used as one of the two upper-level biology electives for the B.S. degree or the one upper-level biology elective for the B.A. degree. Anthropology 240 is recommended for both the B.A. and B.S. degrees in Biology.

## Minor In Biology

A minor in Biology requires six units of Biology coursework: Biology 120 and 125 (INQ 250BI or the equivalent may be substituted for one of these with Departmental permission) and four additional courses chosen from at least two of the Biology core areas (listed previously). No more than one unit of Independent Study or Internship may be counted. Courses not listed in the Biology core areas require Departmental approval to be counted toward the minor.

## 105 Human Biology

A general introduction to biology using the human organism as a model. The course will be taught across levels of biological organization, from biological molecules to organ systems and whole organism structure and function. Additional topics include human development and consideration of modern views on human evolution. (May not be taken for major credit by natural science majors.) (1)
Lecture: 3 hrs/wk.

## 120 Principles of Biology

An overview of biological science, focusing on the central role of genetics and its connections to the other major areas of study within biology. The first course in a two-semester introductory sequence for biology majors. (Students intending to major in biology or biochemistry should enroll in this course the Fall semester of their freshman year.) (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: 3hrs/wk.

## 125 Biodiversity

An overview of ecology, evolution, and organismal diversity, focusing on the variety of organisms present on our planet and the interactions between these organisms and their environments. The second course in a two-semester introductory sequence for biology majors. (Students intending to major in biology should enroll in this course the Spring semester of their freshman year. Prospective biology majors should enroll in Biology 120 before enrolling in Biology 125.) (1)
Lecture: 3 hrs/wk.; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BIOL 120 or permission.

## 205 General Ecology

Ecology is the study of the distributions and abundances of organisms. The course focuses primarily on species/environment interactions, species/species interactions, community dynamics, and ecosystem function. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BIOL 125 or ENVI 230.

## 210 Cell Biology

A study of the fundamental processes that occur within eukaryotic cells, focusing on the structures and functions of the organelles, the cell cycle, and cell signaling. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. ; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: One 200-level BIOL course or one 200-level CHEM course or permission.

## 225 History of Life

An overview of current thinking on the origin and progression of life on our planet. The history of evolutionary thought will be traced from before Darwin to the Modern Synthesis. Current scientific information will be considered in a variety of topical areas, including the origin of multi-cellular life, and the paleobiology and evolutionary development of representative organismal groups, including humans. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BIOL 125 or permission.

## 230 Human Anatomy and Physiology I

Structure and function of the human body at the cell and organ system levels, covering general cell structure and function, and the integumentary, skeletal, muscular, and nervous systems. (This class has a strictly enforced registration restriction with preference given to declared Health and Human Performance majors; may not be used as one of the two upper-level biology electives for the B.S. degree or the one upper-level biology elective for the B.A. degree.) (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 105 or the equivalent or 120.

## 235 General Microbiology

The morphology, taxonomy, ecology, and economic importance of representative microorganisms, with emphasis on bacteria. Human health issues such as sexually transmitted diseases and food safety, and plant health issues will be covered. Microbiological aspects of water and soil will also be examined. Emphasis in the laboratory will be placed on proper application of microbiological techniques. (1)
Lecture: 3 hrs/wk.; Laboratory 3 hrs/wk.
Prerequisite: BIOL 120 and 125 or permission.

## 240 Algae and Fungi

Morphology, physiology, and ecology of these organisms will be emphasized including field trips to study them in their natural habitats. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 120 and 125 or permission

## 245 Special Topics

Study of a special topic in biology not regularly offered. (1)
Lecture: 3 hrs/wk.
Prerequisites: BIOL 120 and 125.

## 260 Human Anatomy and Physiology II

Structure and function of the human body at the cell and organ system levels, covering the endocrine, digestive, respiratory, circulatory, excretory, and reproductive systems. (1) (May be used as one of the two upper-level biology electives for the B.S. degree or the one upper-level biology elective for the B.A. degree- see Biology core areas section.)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: BIOL 230.

## 265 Plant Diversity

The evolutionary relationships, life histories, and field studies of bryophytes, ferns and their relatives, and vascular plants. Field trips to appreciate botanical history, farming impacts, and plant development are included. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 120 and 125 or permission.

## 270 Invertebrate Biology

A study of the invertebrate animals including phylogenetic relationships among the taxa and focusing on the physiology, embryology, ecology, and behavior of representative forms. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 120 and 125 or permission.

## 275 Vertebrate Biology

Identification, morphology, phylogeny, zoogeography, ecological physiology, and behavior of vertebrates.

Lecture 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 120 and 125 or permission.

## 280 Animal Biology

A study of the Kingdom Animalia, focusing on phylogeny, taxonomy and structure/function of representative animal types. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BIOL 120 and125 or permission.

## 300 Aquatic Ecology

Synthesis of biological, chemical, and physical factors and processes in streams and lakes. Field work and laboratory analyses of samples collected. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: One 200-level BIOL course.

## 305 Principles of Physiology

A study of physiological principles in animals. Particular emphasis will be placed on a consideration of how function at the cellular level is integrated through the organ system levels in a variety of vertebrate animal types, with mammals serving as an important example. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: BIOL 210.

## 315 Genetics

A study of the principles of Mendelian, population, and molecular genetics. (1)
Lecture: 3 hrs/wk; Laboratory 3 hrs/wk.
Prerequisite: One 200-level BIOL course and CHEM 112.

## 330 Community Ecology

An exploration of the causes of biological diversity in communities and how diversity and species interactions produce emergent properties that form ecosystem functions. (1)
Lecture: 3 hrs/wk.; Lab: 3 hrs/wk.
Prerequisites: BIOL 125 and one 200-level BIOL course.

## 340 Animal Behavior

An exploration of fundamental principles and processes of animal behavior related to survival, feeding, signaling and communication, group formation, mate choice, kinship, and cooperation. We will take evolutionary and ecological approaches to understand the proximate and ultimate mechanisms controlling behavior in nonhuman animals and will explore how animal behavior research is conducted. (1)
Lecture: 3 hrs/wk.
Prerequisites: BIOL 125 and one 200-level BIOL course.

## 345 Special Topics in Biology

Study of a special topic in biology not regularly offered. (1)
Lecture: 3 hrs/wk.
Prerequisite: Department permission.

## 346 Special Topics in Biology

A study of a special topic in biology not regularly offered. This course has a required laboratory component. (1)
Lecture: 3 hrs/wk; Laboratory: 3 hrs/wk.
Prerequisite: Department permission.

## 350 Student Research

Problems chosen and carried out under the direction of a member of the departmental staff. (1)
Prerequisite: Permission.
Open to majors and minors with permission of the Department.

## 355 Student Research

Problems chosen and carried out under the direction of a member of the departmental staff. (1/2)
Prerequisite: Permission.
Open to majors and minors with permission of the Department.

## 365 Plant Anatomy and Physiology

Cellular, tissue, and organ anatomy of conifers and flowering plants will be studied in detail leading to advanced work in tissue culture, hormonal and light influenced growth responses. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: BIOL 210.

## 370 Immunology

An overview of the field of immunology, from the molecular to organ levels. The relationships among the immune system, health, and disease will be explored. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: BIOL 210

## 380 Advanced Genetics

A study of the eukaryotic genome with particular reference to chromosome structure and function. (1)
Lecture: 3 hrs/wk.; Laboratory 3 hrs/wk.
Prerequisite: BIOL 315.

## 390 Advanced Cell Biology

The genetics, biochemistry and physiology of eukaryotic and prokaryotic cells at the molecular level. Topics include control of gene expression, protein synthesis, signal transduction and membrane physiology. The laboratory makes extensive use of current techniques in cellular and molecular biology, and places emphasis on student-designed experiments. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. ; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BIOL 210 and CHEM 221.
400 Molecular Biology
A detailed analysis of information flow from DNA to RNA to protein, with emphasis on both prokaryotic and eukaryotic gene regulation. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: BIOL 315.
410 Genomics A study of the field of genomics, including structural, functional and comparative genomics. Microbial, eukaryotic and human genome projects will be covered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BIOL 315.

## 415 Evolution

A study of the mechanisms that give rise to biological diversity, from the molecular to the ecological. (1)
Lecture: 3 hrs/wk.
Prerequisites: BIOL 315.

## 420 Developmental Biology

An examination of embryonic development at the molecular and cellular levels. Topics will include genetic control of developmental processes, cell-cell signaling, and the molecular basis of differentiation and pattern formation. Examples from vertebrate, invertebrate, and plant systems will be used. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Laboratory: 3 hrs/wk.
Prerequisite: BIOL 210

## 450 Internship

Work experience in a field of professional biology under the guidance of a member of the biology faculty. (May not be counted as one of the required courses for the Biology major.) (1)
Prerequisite: One 200-level BIOL course and permission.

## 455 Seminar

A semester-long inquiry into a specialized topic in one of six general areas: Cell Biology, Genetics, Animal Biology, Plant Biology, Evolution, or Ecology. Using the primary literature principally, students will summarize the current knowledge in an area through both oral, poster, and written presentations. Special emphasis will be placed on analysis of the application of specific techniques and methodologies in contemporary biological investigations. (1/2)
Lecture: $11 / 2 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Junior or senior standing.

## 460 Senior Research

Problems chosen and carried out under the direction of a member of the departmental faculty. (Open to BS majors with permission of the Department; must be followed by Biology 470, Senior Thesis.) (1) Prerequisites: Senior Standing.

## 470 Senior Thesis

Preparation of a written summary of a senior research project carried out under the supervision of a Department faculty member. An oral presentation will be required. (1) Prerequisite: Senior Standing.

A program of independent study culminating in a paper, artistic creation, or performance. Prerequisite: To qualify for consideration to receive honors in the major, a student, in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2) Prerequisite: Senior Standing.

## BUSINESS ADMINISTRATION

Professors Baker, L. Lynch, McCart, Nazemi (Chair); Associate Professors S. Gibbs (Coordinator), Hagadorn, Velazquez; Assistant Professor Galluch; Lecturers Hutkin, Mulder, Shaff, Smith

The degree of Bachelor of Business Administration requires successful completion of 13 units in Business Administration and Economics: Business Administration 110, 215, 218, 225, 227, 233, 248, 254, 342, 348, and 499; Economics 121 and 122. In order to be admitted to the B.B.A. program, students must earn a grade of "C" or better in BUAD 110 and MATH 111 (or approved MATH equivalent) or INQ 240. Students should contact Dr. Kevin Baker, chair of the Admissions Committee, with questions regarding these requirements. Since upper-level courses are based on prerequisites, students are urged to plan their programs carefully with their advisors. Students should complete, or be currently enrolled in, Business Administration 110, 215, 218, 225, 227, and Economics 121 and 122, before the end of their sophomore year. Note that Business Administration 248 and 348 have Mathematics 111 and INQ 240 as prerequisites. Note that Economics 120 cannot be used for the B.B.A. program.

## Concentration in Accounting

A concentration in accounting is achieved by completion of the following program with a cumulative grade point average of at least 2.0: Business Administration 315, 325, 335, 345, 415 and 425. At least three of these courses must be taken at Roanoke College. Admission to the concentration requires an overall grade point average of 2.0 and a 2.0 grade point average in all courses that are prerequisites to concentration courses.

## Concentration in Business Information Systems

A concentration in Business Information Systems is achieved by completion of the following courses and their pre-requisites: BUAD 218, 328, 338, 368, 438 and one from CPSC 310, 340, 365, 415, 416 or BUAD 416. Admission to the concentration requires an overall grade point average of 2.0 and a 2.0 grade point average in all courses that are pre-requisites to concentration courses.

## Concentration in Finance

A concentration in finance is achieved by completion of the following program with a cumulative grade point average of at least 2.0: Economics 232, Business Administration 242, 342, 442 plus three courses selected from Economics 242, 247, 252, Business Administration 142, 315, 322 (1/2 unit, repeated), 341, 345 , and 416. Admission to the concentration requires an overall grade point average of 2.0 and a 2.0 grade point average in all courses that are prerequisites to concentration courses.

## Concentration in Global Business

A concentration in global business is achieved by completion of the following program with a cumulative grade point average of at least a 2.0: Business Administration 211, 215, 233, 333; Economics 121, 122, 247; Two from Economics 287, Political Science 231, 232, 333, or an appropriate Business Administration 406 or 416 as approved by the department chair, a travel course in Foreign Language, or an appropriate commercial language at the 202 level, or culture course in Foreign Language(GRNM 311, SPAN 311). Admission to the concentration requires an overall grade point average of 2.0 and a 2.0 grade point average in all courses that are prerequisites to concentration courses.

## Concentration in Health Care Administration

The Health Care Administration concentration is designed primarily for students interested in Hospital or Health Care Administration. A major in Health Care Administration is not offered at Roanoke College. It is likely that most of these students will pursue (eventually or immediately after graduation) a master's degree in Hospital/Health Care Administration. Ultimately, they would be likely to work for a hospital, health maintenance organization, or public or private medical facility.
A cumulative grade point average of at least 2.0 in all prerequisite course work is required for admission to the Health Care Administration concentration. In addition, the student must earn a 2.0 cumulative grade point average in all course work required to complete the concentration. The concentration is achieved by completion of the following courses Business Administration 110, 218, 254. Economics 120 or $121 \& 122$, 227; Sociology/Philosophy 223, Sociology 323; In addition, students must complete one unit from Business Administration 354 or Psychology 250 or Business Administration 416 or Sociology 416.

## Concentration in Human Resource Management

A concentration in Human Resource Management is achieved by completion of the following program: Business Administration 237, 274 and 344; one from Business Administration 254 or Psychology 250, one from Business Administration 324, 334, Economics 267, or Psychology 300; one from Business Administration 211, 364, 374 or 416.
Admission requires an overall grade point average of 2.0, and a 2.0 grade point average in all courses that are prerequisites to concentration courses.

## Concentration in Marketing

A concentration in marketing is achieved by completion of the following program with a cumulative grade point average of at least 2.0: Business Administration 233, 343, 433, 493 and two courses selected from Business Administration 333, 338, 353, 363, 406, 416, special topics course or pre-approved IL course. Admission to the concentration requires an overall grade point average of 2.0 and a 2.0 grade point average in all courses that are prerequisites to concentration courses. Note that Business Administration 218, 233, and INQ 240 (or equivalent) are prerequisites for Business Administration 433. Also Business Administration 233, 343 and 433 are prerequisites for Business 493. The Marketing Concentration is open to all majors who satisfy the GPA requirements stated above.

## BUAD 110 Business Connections

This course is an introduction to the field of business with emphasis on business decision making through use of lectures, discussion and invited speakers. The course also utilizes a focused computerized simulation project designed to integrate all the functional areas of business covered throughout the semester. Students will gain an introductory knowledge of all the functional areas including, but not limited to economics, globalization, entrepreneurship, accounting, finance, marketing, information systems, business analytics and operation, organizational behavior, business law, and human resource management. In addition, students will be exposed to important issues relating to business management, leadership, professionalism and ethics. Other areas of emphasis include team building and technological skills. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 142 Personal Finance

This course develops a comprehensive understanding of everyday financial matters such as banking, credit, home finances, planning, investing, and taxes. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 210 Entrepreneurship

A survey of issues involved in starting and owning a small business including forms of ownership, acquisition of financing, marketing and operations concepts, culminating in the preparation of a simplified business plan. (1)
Lecture: 3 hrs/wk.
Prerequisite: BUAD 215.

## 211 Introduction to Global Management

An introduction to the organizational, legal, economic, human and cultural aspects of conducting and managing business internationally. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 215 Accounting Principles I

An introduction to the field of accounting and to the development of a broad understanding and use of accounting information. PC applications are utilized. (1)
Lecture: 3 hrs/wk.

## 218 Information Systems

This course explores the fundamental concepts of information systems in modern organizations. The course provides intensive preparation in the most useful applications of computers in business. (1) Lecture: 3 hrs/wk.
Prerequisite: BUAD 110 and either MATH 111 or permission.

## 225 Accounting Principles II

Continuation of broad understanding of how accounting principles, accounting practices, and financial data assist decision makers. Topics include corporations, analysis of accounting information, and managerial accounting, including cost accounting, planning, and control. PC applications are utilized. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 215.

## 227 Legal and Labor Foundations of Business

This course will integrate important components from Business Law with Human Resource Management. The course is designed to give a foundation in the concepts of Business Law and HRM. Assignments and projects will apply the concepts learned including the selection of an organizational form, applicable legal requirements, hiring process, performance appraisal, and designing a comprehensive HRM plan for a hypothetical business. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 233 Marketing Management

Principles, practices, and basic theoretical concepts in the field of marketing. Special attention will be given to sustainable business activities. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BUAD 110 or 125 and either ECON 121 or 122.

## 237 Employment Law

An overview of the statutory, constitutional, and common law governing the employment relationship. Among topics covered will be the at-will employment doctrine, wrongful discharge, covenants not to compete, unemployment insurance, employee privacy and workplace freedom, collective action, discrimination in various forms, harassment, retaliation, wage and hour regulation, family and medical leave, and employee benefits. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 242 Investments

An introduction to security analysis, principles, and problems of investments for individuals and firms; management of the securities by risk and purpose of investors. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BUAD 225 and ECON 121 and 122, or permission.

## 248 Business Analytics

The objective of the course is for students to develop critical thinking and modeling skills which are essential requirements of the business decision making process. Critical thinking will be practiced through problem identification and solution. Problem solution will require the identification and execution of applicable models and data sets. Thus a main portion of this course will be directed toward determining
and finding appropriate data, learning the roles and limitations of different types of modeling tools, and then developing customized models using the appropriate data to solve business problems. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: INQ 240, BUAD 218, and MATH 111.

## 254 Organizational Behavior and Management

An introductory examination of theoretical principles and practical applications related to managing and leading individuals and groups in the work setting. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 260 Topics in Business Administration

Selected topics involving problems and controversies of a social and political nature. (1)
Lecture: 3 hrs/wk.

## 264 Foundations of Leadership

A broad theoretical and practical overview of leadership concepts and principles. Topics will include, but are not limited to traits of effective leaders, ethics, team development, leadership theory, strategic leadership and conflict resolution. Students will be required to develop and present an original communitybased leadership project proposal. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 274 Human Resource Management

The principles of employee selection, job design, performance appraisal, compensation, training and development, career management, safety and health, and labor relations. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 315 Intermediate Accounting I

This course examines the political environment and conceptual foundations, basic mechanics, and fundamental topics of financial reporting. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 225.

## 322 Student-Managed Fund

The participants in this class will manage a portion of the College's general endowment fund by actively managing a portfolio under the supervision of a faculty member. The fund will be continuously managed, with the course portion being offered each (and every) semester. Students earn $1 / 2$ unit per semester. A maximum of two units can be earned toward graduation with only one unit counting toward the Finance Concentration. Offered on a pass-fail basis. (1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ECON 122 and BUAD 225.

## 324 Training \& Development

A deeper examination of the training and development function in organizations, with particular emphasis on conducting a needs assessment and then designing, developing, conducting, and evaluating training. Students will conduct a training program as part of the course requirements. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 274.

## 325 Intermediate Accounting II

Continuation of Business Administration 315. (1)
Lecture: 3 hrs/wk.
Prerequisite: BUAD 315 or permission.

## 328 Application Development in Business

A comprehensive overview of computer applications development in business using application programming and application development tools. This course will serve as an elective within the

Business Administration major and as a requirement in the Business Information Systems
concentration. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 218.

## 333 Global Marketing

This course introduces the students to political, cultural, and economic factors influencing the global marketing of goods and services. The students will learn about development of international products, pricing strategies, promotion techniques, and channels of distribution. (1)
Lecture/Case Study: 3 hrs/wk.
Prerequisite: BUAD 233.

## 334 Compensation \& Benefits

A deeper examination of compensation and benefits in organizations. Compensation topics will include strategies for pay increases, analysis of salary survey data, internal equity issues, and compliance and regulatory issues. Benefits topics will include statutory vs. voluntary benefits, paid time off, retirement plans, health and wellness benefits, regulatory issues, family-friendly benefits, and managing employee benefits. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 274.

## 335 Cost Accounting

The measurement of product cost arising from material procurement and use, employment of labor services, and overhead factors in job order and process settings. Budgeting, standard costs, and other tools for planning and control. (1)
Lecture: 3 hrs/wk.
Prerequisites: BUAD 218 and 225.

## 338 e-Business

Comprehensive coverage of electronic business and electronic transactions to include electronic marketing and retailing, electronic procurement and payment, cyber security, on-line auction and shops, and web technologies for virtual communities in a global marketplace. (1)
Lecture: 2 hrs/wk.; Lab: 1 hr/wk.
Prerequisite: BUAD 218.

## 341 Commercial Banking

Designed to provide an understanding of bank operations and management, as well as issues and problems at the national and international level. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ECON 121 and 122.

## 342 Corporate Finance

The principles of asset management, financial structure, and types of securities and their characteristics.
(1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ECON 121 and 122; BUAD 218 and 225; declared Business major or permission.

## 343 Buyer Behavior

This course provides a comprehensive overview of the theories related to buyer behavior. Students will learn how to apply these theories in marketing and retailing contexts. (1)
Lecture: 3 hrs/wk.
Prerequisite: BUAD 233.

## 344 Recruitment \& Selection

A deeper examination of the staffing management function in organizations, including a focus on research and best practices for recruitment, selection, and performance management. Particular attention will be paid to conducting job analysis, developing interview questions, and evaluating candidates. (1)

Lecture: 3 hrs/wk.
Prerequisite: BUAD 274.

## 345 Income Taxation

Examination of the present federal tax law and development of the accounting principles and procedures involved in the preparation of tax returns. PC applications are utilized. (1)

Lecture: 3 hrs/wk
Prerequisite: BUAD 215 or permission.

## 348 Production and Operations Management

Basic principles and problems of organizing and operating business facilities including functions, process, responsibilities, and techniques. Substantial computer applications. (1)

Lecture: 3 hrs/wk
Prerequisites: BUAD 110, MATH 111, INQ 240; declared Business major or permission.

## 353 Sales and Sales Management

An in-depth study of the steps associated with the personal selling process as well as the techniques required to motivate and manage a high performance sales force effectively. (1)
Lecture: 3 hrs/wk.
Prerequisite: BUAD 233.

## 363 Promotion Management

This course provides a comprehensive overview of the principles and problems faced in the area of promotion management. Students will gain understanding and practice in the development of an advertising campaign; the use of sales promotion tools; and issues in regulation, ethics, and cultural impact of those activities. (1)

Lecture: 3 hrs/wk.
Prerequisite: BUAD 233 or permission

## 364 Team Dynamics

An examination of the dynamics of team development and teamwork. Topics covered in this course will include, but are not limited to group theory, mission and goal development, team development, conflict management, problem solving and team leadership. Students will be required to demonstrate competency in team leadership through the development of a class project in team dynamics. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 254 or PSYC 250.

## 368 Decision Support and Intelligent Systems

A comprehensive study of managerial decision making and the use of such tools as Data Base Management, Decision Support, and Intelligent Systems in solving business and management problems. This course will serve as an elective within the Business Administration major and as a requirement in the Business Information Systems concentration. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BUAD 218 and INQ 240.

## 374 Negotiations

The goal of this course is to help students understand and improve their negotiating and decisions-making skills, as well as to understand the actions of others. The class includes extensive use of cases and experiential exercises. (1)
Lecture: 3 hrs/wk.
Prerequisites: BUAD 254 or PSYC 250.

A seminar taught with a scholar-statesperson that deals with a policy issue of public significance. (Made possible by the Henry H. Fowler Endowment. Open to selected students with Department permission.) (1, $1 / 2$ )

## 405, 406, 407 Independent Study and Research

A program of intensive study in Business Administration carried out under the direction of a member of the Departmental staff. (Enrollment with the approval of the Department.) (1/2, 1, 1/2)

## 415 Auditing

A course covering the principles employed in the conduct of a financial statement audit. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 315.

## 416 Internship

Work experience in private or public sector, utilizing analytical tools, and including a student project. (1)
Prerequisite: BUAD 218 and permission of the Department.

## 425 Advanced Accounting

A course focusing on the consolidation of financial statements. In addition, a brief introduction to international, governmental and nonprofit accounting is covered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BUAD 315.

## 433 Marketing Research

A course providing students with the skills needed to define a research situation, construct the research model, collect and analyze data, generate and test the response or solution, and integrate the steps into a coherent project. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BUAD 218, 233, and INQ 240.

## 438 Systems Analysis and Design

A comprehensive overview of the development of information systems in a business environment. (1)
Lecture: 3 hrs/wk.
Prerequisites: BUAD 218 and permission.

## 442 Advanced Financial Management

An in-depth analysis of financial theory, principles, and policies used in managing the firm's capital structure. (1)
Lecture: 3 hrs/wk.
Prerequisites: BUAD 242 and 342 and ECON 232 or permission.

## 464 Advanced Leadership

An advanced analysis of leadership topics including an applied experience in leadership practice. A special emphasis will be placed on the ethics of leadership. Students enrolled in this course will be required to propose and execute an actual community oriented project within the timeframe of the semester. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: BUAD 264, and either BUAD 364 or 374.

## 493 Marketing Capstone

In this capstone course students will integrate the marketing material previously learned with the analytical and critical thinking skills to make marketing decisions. A variety of marketing concepts and techniques will be used to develop marketing objectives, strategies and programs. The course will include case studies, evaluation of leading marketing articles, use of simulations and the development of a formal marketing plan. (1)
Lecture: 3 hrs/wk.

Prerequisites: BUAD 343 and 433.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student, in his/her senior year or in the Summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## 499 Business Policy

The capstone course of the Business Administration curriculum. The students will use Strategic Management as the framework to integrate and apply the knowledge acquired from all the coursework in the Business Administration major. The course utilizes lecture, readings, case methodology, simulations, and a major project of starting a business entity. (1)
Lecture: 3 hrs/wk; Lab 3 hrs/wk.
Prerequisites: BUAD 227, 233, 248, 254, 342, 348 and senior major status.

## CHEMISTRY

Professors Hollis, G. Steehler; Associate Professors Johann, Sarisky (Chair); Assistant Professors K. Anderson, Brenzovich, Hughes, Keithley; Lecturer Livingston

Three major programs are offered by the Department: The B.A. in Chemistry, the B.S. in Chemistry, and the B.S. in Biochemistry.
The B.A. requires 9.5 units of chemistry, including Chemistry $111,112,221,222,331,332,350,280$ (1/2), - and two additional CHEM courses numbered 250 or higher. (CHEM 416 may not be used to fulfill this requirement). Math 121 (or Math 118 and Math 119) and 122 and two units of physics with lab are prerequisites for Chemistry 331 , which is required for all chemistry majors.
The B.S. in Chemistry requires 12.5 units in chemistry, including Chemistry 111, 112, 221, 222, 260, 331, $332,341,350,280(1 / 2)$, one unit of research at the 400 -level, one unit of another advanced course ( 342 , $420,430,460$, or 499 ), and one additional CHEM course numbered 250 or higher. (CHEM 416 may not be used to fulfill this requirement). Math 121 (or Math 118 and Math 119) and 122 and two units of physics with lab are prerequisites for Chemistry 331, which is required for all chemistry majors. Students who complete this program are certified by the American Chemical Society.
The B.S. in Biochemistry requires 12.5 units in chemistry and biology, including Chemistry 111, 112, 221, $222,331,341,342,280(1 / 2)$, Biology 120, 210, 315, and either 380 or 400 . Students must also complete one of these two options: either one unit of research in either CHEM or BIOL that culminating in a formal paper and oral defense, or one additional unit of CHEM numbered 250 or higher. (CHEM 416 may not be used to fulfill this requirement).Math 121 (or Math 118 and Math 119) and 122 and two units of physics with lab are prerequisites for Chemistry 331 , which is required for all chemistry and biochemistry majors. Biochemistry majors may receive certification from the American Chemical Society by taking three additional chemistry courses. See the Chair of the Chemistry Department for details.

For students with competency in CHEM 111, the units in the major decrease by one with the B.A. in Chemistry requiring 8.5 units in chemistry, the B.S. in Chemistry requiring 11.5 units in chemistry, and the B.S. in Biochemistry requiring 11.5 units in chemistry and biology as enumerated above.

Chemistry and Biochemistry majors are strongly encouraged to do research; students wishing to strengthen their programs of study are advised to take advanced level courses in chemistry, mathematics, or other sciences.

## Minor in Chemistry

The minor in chemistry requires six units in chemistry, which can include Chemistry $111,112,221,222$, and additional chemistry units at or above the 250 level which may apply towards a major in Chemistry.

## 111, 112 General Chemistry I and II

The introductory course in chemistry. (Required for all chemistry, biochemistry, pre-medical, pre-dental, pharmacy, and paramedical students. Recommended for all science majors. Students who pass CHEM 112 HR receive competency for CHEM 111.) $(1,1)$

Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: CHEM 111 is a prerequisite for CHEM 112; CHEM 112HR is by permission only.

## 205 Research Experience

A research project in chemistry or biochemistry. May not be used to satisfy the BA chemistry elective or BS chemistry research requirement. May be repeated for credit. (1/2)
Lecture: 3 hrs/wk.
Prerequisite: Permission of the Department.

## 221, 222 Organic Chemistry I and II

A study of the chemistry of the compounds of carbon. Fundamental concepts of chemical bonding are employed to develop chemical models and to correlate structure-property relationships within and among the various classes of carbon compounds. $(1,1)$
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: CHEM 112 is a prerequisite for CHEM 221; CHEM 221 is a prerequisite for CHEM 222.

## 240 Pharmaceutical Chemistry

A study of the chemistry of pharmaceuticals, with emphasis on the molecular-level interactions between drugs and the body. Drug metabolism, drug-receptor interactions, and drug development are explored with case studies including cancer drugs, opiates, and antibiotics. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHEM 222.

## 260 Descriptive Inorganic Chemistry

A study of the elements and their compounds. The properties of these substances, spanning the entire periodic table, will be described and explained through the connections to chemical theories and concepts. The occurrence, isolation, uses, and compounds of elements will be explored. Biochemical and industrial applications will be considered. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHEM 112.

## 270 Environmental Chemistry

A study of the sources, reactions, transport and fate of chemicals in air, water, and soil environments as well as the effects of these compounds on human health and the natural environment. The chemistry of both natural and anthropogenic processes will be examined. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHEM 112.

## 280 Sophomore Seminar: Communicating Chemistry

Scientific communication skills: Literature searching skills, written and oral scientific presentation skills. Introduction to research methods: Planning and organizing a research project, data analysis techniques. (1/2)
Lecture: $11 / 2 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHEM 221.

## 299 Special Topics in Chemistry

The study of a special topic in chemistry that is not normally offered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Permission.

## 331, 332 Physical Chemistry I \& II

The physical aspects of chemical phenomena, including the properties of solids, liquids, gases and solutions; thermodynamics; kinetics; electrochemistry; and elementary quantum theory. $(1,1)$
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: CHEM 222, MATH 122, and two units of physics are prerequisites for CHEM 331; CHEM 331 is a prerequisite for CHEM 332.

## 341, 342 Biochemistry I \& II

A study of the major macromolecules found in biological systems with an emphasis on structure/function relationships, as well as the role of each class in central and secondary metabolic processes. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHEM 222; CHEM 341 Is a prerequisite for CHEM 342.

## 350 Instrumental Analysis

The theory and practice of the principal methods of instrumental analysis. Areas include electrochemistry, chromatography (GC and LC), spectroscopic methods (UV-Vis, IR, NMR), mass spectrometry, X-ray analysis, and atomic absorption. (Offered in alternate years.) (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite or co-requisite: CHEM 331.

## 399 Special Topics in Chemistry

The study of a special topic in chemistry that is not normally offered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Permission.

## 405, 406, 407 Independent Study and Research

A research project in chemistry or biochemistry that results in the production of a scholarly paper and an oral presentation. May be repeated for credit. (1/2, 1, 1/2)
Prerequisite: Permission of the Department.

## 416 Internship

Practical experience in a setting where chemistry is applied, under the guidance of a member of the chemistry department faculty. (This course may count as elective credit but not fulfill a degree requirement in chemistry or biochemistry.) (1)
Prerequisite: Junior or senior standing and permission of Department.
420 Advanced Organic Chemistry
An in-depth study of selected topics in organic chemistry, with particular emphasis on physical organic chemistry. (Offered in alternate years.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: CHEM 222 and 331.

## 460 Advanced Inorganic Chemistry

Advanced topics in inorganic chemistry with an emphasis on bonding and structure. (1)
Lecture: 3 hrs/wk.
Prerequisites: CHEM 222 and 331.
(Offered in alternate years.)

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major a student in his/her senior year or in the Summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and the Department .A minimum GPA of 3.4 in the major is required. $(1 / 2,1,1 / 2)$

## 499 Special Topics in Chemistry

The study of a special topic in chemistry that is not normally offered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Permission.

## CHINESE

A major in Chinese is not offered at Roanoke College.

## 101, 102 Elementary Chinese I, II

A study of the fundamentals of Chinese with emphasis on pronunciation and aural comprehension.
Includes oral and written work, cultural material, and selected readings. (1, 1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHIN 101, or its equivalent, is a prerequisite for 102.

## 201 Intermediate Chinese I

A review of the essentials of Chinese grammar with the introduction of advanced structures, continued development of essential language skills, and further acquisition of vocabulary. An emphasis will be placed on cultural issues and on conversational skills to handle situations of everyday life and to increase the range of personal expression; inclusion of cultural materials. (1) Lecture: 3 hrs/wk.
Prerequisite: CHIN 102.

## 202 Intermediate Chinese II

A continuation of the advancement of Chinese grammar with the introduction of advanced structures, continued development of essential language skills, and further acquisition of vocabulary. An emphasis will be placed on cultural issues and on conversational skills to handle situations of everyday life and to increase the range of personal expression; inclusion of cultural materials. (1)
Lecture: 3 hrs/wk.
Prerequisite: CHIN 201.

## 306 Advanced Studies in Chinese

Guided independent learning to continue the acquisition of the Chinese language and the study of culture beyond the 202 level. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CHIN 202.

## CHRISTIAN STUDIES

Professors Berenson, Hinlicky, McDermott, Peterson, Wisnefske, Zorn

The major in Christian Studies focuses on the historical development of Christian beliefs and thought up to their contemporary elaboration and transmission. Designed to prepare students for diverse futures, the major emphasizes student choice within broad areas of competency.

A major in Christian Studies requires the completion of 10 units:
Area options (six courses total):
Four courses from among the following:
Scripture: (no more than one)
RELG 201 Israelite Patriarchs, Prophets, Priests, and Princes
RELG 202 New Testament Christianities
RELG 215 Pauline Christianity
RELG 216
Philosophy: (no more than one)
PHIL 221

The Life and Teachings of Jesus

Faith and Philosophy


In addition, students are encouraged to take at least one course in non-Christian Religion. They are also encouraged to take at least two semesters of Greek, Latin, or German, and an appropriate concentration and/or minor (such as Classics, Peace and Justice Studies, Parish Youth Leadership or Philosophy).

## Minor in Christian Studies

A minor in Christian Studies requires completion of six courses:
Any four of the following:
One of RELG 201, 215 or 216
One of PHIL 221, 251, 253 or 255
RELG 220, 282, 284, or 286
Any two of RELG 312, 317, 330, or 340.
Courses in other disciplines that focus on Christian thought and history may count towards the minor with the approval of the department.

Course descriptions can be viewed under the Religious Studies major.

CLASSICS AND THE ANCIENT MEDITERRANEAN WORLD<br>Professor Berenson and Associate Professor Hawke, Coordinators

Study of the Classics and the Ancient Mediterranean World encompasses the cultures of the Ancient Near East (e.g., Egypt, Assyria and Persia) and of the Classical world (i.e., Greece and Rome). Students from any major may earn a concentration in Classics and the Ancient Mediterranean World by successfully completing (with a cumulative grade point average of at least 2.0 ) at least six units. Of these units, two must be in the same ancient language (Greek or Latin are offered regularly; Egyptian may be available through special tutorials with the permission of the professor). A third unit of an ancient language may be counted toward the concentration with the approval of the concentration coordinator. The remaining courses offered for the concentration must come from at least two different disciplines. In addition, no more than three courses from a student's major may apply to the concentration. Interested students should contact the concentration coordinators as soon as possible for help in identifying additional appropriate courses available on campus (including special topics, INQ courses and Intensive Learning courses) or through overseas studies programs.

GREK 101, 102 Elementary Ancient Greek I, II
LATN 101, 102 Elementary Latin I, II
ARTH 150
ARTH 220
ARTH 222 Archaeology of Death in the Ancient Near East
ARTH 224 Encyclopedic Museum and Archaeological Ethics
ARTH 226 Greek and Roman Art
ARTH 291/391 Special Topics in Art History (as appropriate)
HIST 110 Ancient World
HIST 212 Ancient Greece
HIST $290 \quad$ Special Studies (as appropriate)
HIST $310 \quad$ Issues in Ancient History
HIST $490 \quad$ Research Seminar (as appropriate)
PHIL 251 Early Western Philosophy
PHIL 260 Selected Topics in Philosophy (as appropriate)
PHIL $301 \quad$ Plato
PHIL 302 Aristotle
RELG 202 New Testament Christianities
RELG 210 Early Christian Conflicts and Community Life
RELG 211 Hellenistic Cults, Magic, and Mystery Religions
ENGL $220 \quad$ Special Topics (as appropriate)
ENGL $260 \quad$ World Literature (as appropriate)

## COMMUNICATION STUDIES

Professor Turpin; Associate Professors Carter, Cooper; Assistant Professors Khoo, Melican; Lecturer D. Selby

The Communication Studies major provides a liberal arts approach to a dynamic and varied discipline. The major is designed to allow students the flexibility to focus on preparing for further studies in graduate school or to pursue a career in such fields as mass media, public communications, and organizational communications.

Students desiring to major in Communication Studies are encouraged to complete INQ 240 (Statistical Reasoning) as early as possible. Communication Studies majors should also plan on taking RHET 125 during their first year.

To complete a major in Communication Studies, a student must complete 10 courses as outlined below:
Required (six units)
RHET 125 Tests, Rhetoric and Media
COMM 101 Introduction to Communication Studies
COMM 250 Communication Theory
COMM 350 Research Methods

COMM $354 \quad$ Rhetorical Theory and Criticism
COMM 411 Seminar
Intermediate (two units from):
COMM 202
Mass Communications
COMM $220 \quad$ Public Speaking
COMM 260 Interpersonal Communication
Electives (two units):
COMM 301
Special Topics
Video Production
COMM $317 \quad$ Professional Communication
COMM 319 Journalism
COMM 330 Small Group Communication
COMM 360 Studies in Intercultural Communication
COMM 405, 406, 407 Independent Study
COMM 416 Internship
COMM 496 Honors Project
ENGL 356 Studies in Film

## Minor in Communication Studies

A minor in Communication Studies requires six units, including COMM 101; COMM 250; two units from COMM 202, COMM 220, or COMM 260; and two units at the 300-level or above.

## 101 Introduction to Communication Studies

Introduction to oral communication and communication theory. Course includes study of various communication models and situations and the processes and techniques that function within them. It also examines cultural, symbolic, and perceptual variants and their effects on the communications process. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 202 Mass Communication

A survey of the theories, processes, effects, and media of mass communication. The course will focus on issues of concern principally to the mass media within the United States, but issues of globalization will be addressed.(1)
Lecture: 3 hrs/wk.
Prerequisite: COMM 101.

## 220 Public Speaking

Study of voice, production, and management in various forms of public address. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: INQ 110 or INQ 120 or HNRS 105.

## 250 Communication Theory

An introduction to the most important contemporary theories of human communication. This course will explore general issues concerning the nature of theory and communication, the relation between theory and practice, and the influence of culture and gender. Students will critically examine how the communication process contributes to the development of information and meaning, selfhood, interpersonal relationships, social influence, and culture. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 101.

## 260 Interpersonal Communication

An introduction to issues in interpersonal communication, examined from the perspective of communication competence. Using scientific concepts and theories, students will be asked to become critics of everyday conversation. Students will also use theoretical principles to improve personal effectiveness, appropriateness, and adaptability in conversing with others. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 101.

## 301 Special Topics

A concentrated study of a topic or issue related to the field of communications. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 250.

## 311 Video Field Production

The study and practice of the fundamentals of professional videography. Students will receive instruction in practical applications in the areas of videography, editing, production, and media literacy. (1) (Crosslisted as THEA 311.)
Lecture: 3 hrs/wk.
Prerequisite: COMM 250 or permission.

## 317 Professional Communication

The study and practice of communication theories, concepts, and skills as they apply to business and professional settings including interpersonal and group dynamics, written communication, business and professional presentations and meeting management skills. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 101, COMM 220; COMM 250 is strongly recommended.

## 319 Journalism

A practical introduction to journalism, with special emphasis on reporting skills and writing newspaper news and features, broadcast news, and public relations products. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 202 and 250.

## 330 Small Group Communication

Introduction to and practice in the structured small group, with primary emphasis on preparation for, analysis of, and participation in problem-solving oriented groups. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: COMM 250 and 260.

## 350 Research Methods

Introduction to the principles and basic skills necessary to criticize research literature. In this course students will develop descriptive and experimental studies using data collection, analysis and presentation techniques in communication research. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: COMM 250.

## 354 Rhetorical Theory and Criticism

In this course students will think, analyze, and write carefully about public messages that influence our experience, professions, lives and cultures. This course will explore the possibilities and difficulties of forming, using, and evaluating messages that individuals or groups use to influence or change a large public audience. (1)
Lecture: 3 hrs/wk.
Prerequisite: COMM 250.

## 360 Studies in Intercultural Communication

An examination of major issues related to intercultural and cross-cultural communication. The course will explore those communication issues in particular cultures both within and beyond the United States. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: COMM 250; COMM 260 is strongly recommended.

## 405, 406, 407 Independent Study

Supervised reading and research of a specific subject within media or communication studies resulting in a written report. ( $1 / 2,1,1 / 2$ )

Prerequisites: One 300-level COMM course.

## 411 Senior Seminar

A seminar approach to selected topics for advanced students. (1)
Prerequisites: COMM 350 and 354.

## 416 Internship

Experience in a field of applied communications (for example, newspaper, radio, television), under supervision from the agency involved and the course instructor. (1)
Laboratory: $10 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One 200-level COMM course and permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper.
Prerequisite: To qualify for consideration for honors in the major, a student in his/her senior year or in the summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and the department. A minimum GPA of 3.4 in the major is required. Communication 350 and 354; Communications 495 Honors Project is a prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## COMPUTER SCIENCE

Professor Shende (Coordinator); Assistant Professor Bouchard

Our modern world relies on computers for everything from electronic commerce to medicine, from online entertainment to online searching for information, from social networking to robotics, from controlling power plants to flying airplanes. Computer scientists are needed more than ever to design and build the computational systems that society depends on now and will need to solve future problems. The computer science program at Roanoke College prepares students to play a part in meeting these computational needs and challenges and to be lifelong learners capable to adapting to the changing landscapes of technology. It provides students with a balanced breadth and depth of knowledge in computer science that allows them the choice between continuing their education in graduate school or beginning their professional career. Two major programs are offered: the B.S. in Computer Science and the B.S. in Applied Computer Science. Both programs give students a solid foundation in computer science while developing the skills necessary to apply their knowledge in the modern computing environment. The Computer Science program gives students a deeper understanding of the theoretical foundation of computer science while the applied computer science program focuses more on applications. A student interested in attending graduate school should choose the computer science major rather than the Applied Computer Science major.

A Bachelor of Science degree with a major in computer science requires the satisfactory completion of 12 units in the areas of computer science, mathematics, and statistics to include Computer Science 170, 250, $290,390,395,425$; Mathematics 131, 201; Statistics 202; one unit of Senior Research (436 or 435/437) and two additional units from computer science courses at or above the 300 level (one of these units may be Math 361 or Math 371 ). Computer Science 120 is a prerequisite for the computer science courses, Mathematics 118 or 121 is a prerequisite for Mathematics 131, and Mathematics 121 (or Math 118 and Math 119) and Mathematics 122 are prerequisites for Statistics 202 and Mathematics 201.

A Bachelor of Science degree with a major in applied computer science requires the satisfactory completion of 12 units in the areas of computer science, mathematics, and statistics to include Computer Science 170, 250, 290, 340, 365, 415, Mathematics 131; Statistics 202; one unit of Senior Project (446 or $445 / 447$ ) and three additional units from computer science courses at or above the 300 level. Computer Science 120 is a prerequisite for the computer science courses, Mathematics 118 or 121 is a prerequisite for Mathematics 131, and Mathematics 121 (or Math 118 and Math 119) and Mathematics 122 are prerequisites for Statistics 202.

## Minor in Computer Science

A minor in Computer Science requires six units: Computer Science 120, 170, 250, Mathematics 131, and two additional units of computer science at or above the 300 level.

## 120 Fundamentals of Computer Science I

Problem solving and algorithm design; basic programming concepts including subprograms and objects. Programming in a modern object-oriented language and an introduction to the UNIX operating system are an integral part of the course. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: No formal prerequisite; however, a strong aptitude for math usually predicts success in the course.

## 170 Fundamentals of Computer Science II

Program design and implementation including inheritance, polymorphism, abstraction, recursion, searching, and sorting. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: CPSC 120.

## 250 Data Structures and Algorithms

The design, implementation, and analysis of data structures and the algorithms associated with them. (1)
Lecture: 3hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: CPSC 170.

## 290 Computer Architecture and Operating Systems

Machine language and assembly language concepts, data paths, parallel system architecture; system calls, process synchronization and scheduling, input and output subsystems, memory management, file systems. (1)

Lecture: 3hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: CPSC 250.

## 301 Systems Administration I

This course introduces students to computer hardware, installation and maintenance of operating systems, and various systems administration tasks including creating and maintaining users accounts, managing user privileges, learning about scripting languages and writing scripts to automate tasks, and managing computer resources (processes, file systems, etc.). (1/2).
Prerequisite: CPSC 170.
Lecture: $2 \mathrm{hrs} / \mathrm{wk}$.

## 302 Systems Administration II

This course introduces students to system administration of computers in a networked environment. Students will learn about the hardware necessary to connect computers in a network, and the software necessary to configure the computers to be able to communicate with each other on the network. Once the computers are networked together, students will learn about configuring and managing various network services such as network file systems (sharing files across a network), network information systems (sharing authentication information across a network), the Domain Name Service (DNS). Students will also learn about network security and creating secure networks by creating software firewalls. (1/2) Prerequisite: CPSC 301.
Lecture: $2 \mathrm{hrs} / \mathrm{wk}$.

## 310 Topics in Applied Computing

A course offered in various formats, designed to give students instruction and hands-on experience in an area of applied computing. (1)
Lecture: 3 hrs/wk.
Prerequisite: CPSC 170.

## 340 Database Systems

Database organization and management; hierarchical, network, and relational models of data and some corresponding systems. (Offered in alternate years.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CPSC 170 and MATH 131.

## 342 Numerical Analysis

Numerical integration and differentiation, numerical methods in linear algebra, interpolation; error analysis, stability, and conditioning. (Offered on a rotating basis, not every year.)(Cross-listed as Mathematics 342.) (1)
Lecture: 3 hrs/wk.
Prerequisites: MATH 201, MATH 122 and CPSC 120.
(Offered on a rotating basis, not every year.)

## 360 Networks

An experiential study of the fundamentals of networking, networked applications, network security, and the use of software tools in troubleshooting networks. (Offered on a rotating basis, not every year.) (1)
Lectures: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CPSC 250.

## 365 Software Engineering and Project Design

Introduction to the principles of software engineering, software process models, requirements engineering, designing methodology and metrics, and testing and quality assurance. Students will apply these principles to the design and implementation of a large software project. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CPSC 250.

## 390 Theory of Computation

Study of formal models of computation. Topics include regular, context-free, context-sensitive, and unrestricted grammars; Church's thesis; computability; and undecidability. (Offered in 2011-2012 and alternate years.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CPSC 170 and MATH 131.

## 395 Analysis of Algorithms

Introduction to the analysis of algorithms. Students will revisit various algorithm design techniques, learn methods to analyze the computational complexity of the resulting algorithms, and study complexity classes to differentiate between tractable and intractable problems. (1)
Lecture: 3 hrs/wk.
Prerequisite: CPSC 250 and MATH 131.

## 405, 406, 407 Independent Study and Research

Selected topics in computer science carried out under the direction of a member of the computer science staff. (Enrollment with the approval of the Chair of the department.) (1/2, 1, 1/2)

## 415 Web Programming

Technologies for developing dynamic web sites with emphasis on server-side programming. (1)
Lecture: 3 hrs/wk.
Prerequisite: CPSC 250.

## 416 Internship

Field placement providing practical experience and training in areas in which computer science is applied. These areas may include industry, government agencies, educational institutions, insurance companies, and a variety of private enterprises. (1)
Prerequisite: Permission of the Department.

## 425 Principles of Programming Languages

Fundamentals in the design and implementation of programming languages. Topics include BNF, compilation and interpretation, data types, control structures, runtime systems, data abstraction, exception handling and concurrency. Language paradigms include functional, logic, and object oriented approaches. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CPSC 250.

## 435, 436, 437 Senior Research

An independent research project, under the direction of a computer science faculty member, that results in a scholarly paper and oral presentation. (1/2, 1, 1/2)
Prerequisite: Permission of the department.

## 445, 446, 447 Senior Project

An independent software development project, under the direction of a computer science faculty member, that results in a deliverable product and oral presentation. ( $1 / 2,1,1 / 2$ )
Prerequisite: CPSC 365 and permission of the department.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student, in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## CREATIVE WRITING <br> Professors Hanstedt, Heller, Schultz; Associate Professors Almeder, McGlaun

The Creative Writing program provides students with the opportunity to explore their experience and their imaginations in depth through writing and reading poetry, fiction, nonfiction, and other genres. Majors will be prepared for life-ling enjoyment of reading and writing, as well as for graduate study in creative writing or literature, or for careers requiring excellent writing skills and creativity, such as journalism, editing and publishing, law, public relations, and advertising.

The Creative Writing major requires 11 units of work as described below:
Core Requirements (six units):
RHET 125 Texts, Rhetoric and Media
CRWR $215 \quad$ Creative Writing-Fiction
CRWR 216 Creative Writing-Poetry
CRWR $330 \quad$ Forms and Genres
CRWR 411 Senior Seminar I
CRWR 412 Senior Seminar II
Workshop Course Electives (one unit); students will take at least one advanced workshop course from the following list:
CRWR 315 Advanced Creative Writing-Fiction
CRWR 316 Advanced Creative Writing-Poetry
CRWR 317 Advanced Creative Writing-Special Topics
Literary Studies Electives (four units): any English 200-level or above, two of which must be at the 300level or above.
Prerequisites: Before students enroll in 300-level workshops they must have completed the 200-level workshop in the appropriate genre (215 or 216). In addition to Rhetoric 125, either 215 or 216 will serve as a prerequisite for 317. Unless otherwise stated, 300- or 400-level literature courses require as prerequisites English 240 or 250, and one other 200-level course.

## Minor in Creative Writing

A minor in Creative Writing requires six units, including RHET 125, CRWR 215, CRWR 216, one advanced workshop course (CRWR 315, 316, or 317), CRWR 330, and one 200-level Literary Studies (ENGL) elective.

## 215 Creative Writing-Fiction

An introduction to writing the short story. Students will receive responses to their writing from their peers and from the instructor. Students will also read and discuss works by notable fiction writers. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 216 Creative -Poetry

An introduction to writing poetry. Students will receive responses to their writing from their peers and from the instructor. Students will also read and discuss works by notable poets. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 315 Advanced Creative Writing-Fiction

Development of writing skills in fiction, building upon introductory creative writing courses. Student will also read and discuss works by notable fiction writers. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125 and CRWR 215.

## 316 Advanced Creative Writing-Poetry

Development of writing skills in poetry, building upon introductory creative writing courses. Students will also read and discuss works by notable poets. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125 \& CRWR 216.

## 317 Advanced Creative Writing-Special Topic

Development of writing skills in a designated genre other than poetry and fiction, building upon introductory creative writing courses. Students will also read and discuss works by notable authors in the genre. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125 and wither CRWR 215 or 216.

## 330 Forms and Genre

The study of poetry and prose structures in order to analyze how creative works are crafted, with special attention to the ways contemporary works respond to traditional forms. Students will read and discuss works by major authors and will experiment with forms by creating original works in both poetry and prose. (1)
Lecture: 3 hrs/wk.
Prerequisite: RHET 125, CRWR 215 and 216.

## 405, 406, 407 Independent Study

Supervised production of a final project, which may be different in kind from those completed for other Creative Writing courses, and may include a student presentation of public reading as well. ( $1 / 2,1,1 / 2$ )
Prerequisites: RHET 125, CRWR 215, 216 and one from 315, 316, or 317, and permission.

## 411 Senior Seminar I

The first part of a two-term capstone for majors in Creative Writing, this course draws together students who have previously written and studied poetry, fiction, and perhaps other genres. Discussion will focus on careful reading of significant texts in a variety of genres, periods, and national literatures. In response, students will produce original work in their chosen genre(s). (1) $3 \mathrm{hrs} / \mathrm{wk}$. Prerequisite: RHET 125, CRWR 215, 216; and one from 315, 316, or 317.

## 412 Senior Seminar II

The second part of a two-term capstone for majors in creative Writing, this course draws together students who have previously written and studied poetry, fiction, and perhaps other genres. Discussion will focus on careful reading of significant texts in a variety of genres, periods, and national literatures. In response, students will produce original work in their chosen genre (2), culminating in the completion of the senior writing project. (1) $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CRWR 411.

## 416 Internship

Experience in a field of applied writing through programs such as magazine and book publishing, public relations, government communications, or various aspects of the media. (1)
Prerequisite: RHET 125, CRWR 215, 216 and one from 315, 316, or 317, and permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a final project. (1/2, 1, 1/2)
Prerequisite: Rhetoric 125, Creative Writing 215, 216 and one from 315, 316, or 317. To qualify for consideration to receive honors in the major, a student in his/her senior year or in the summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. Creative Writing 495 Honors Project is prerequisite for 497 Honors Project.

## CRIMINAL JUSTICE

Associate Professor Peppers (Coordinator); Lecturer Brogan
The B.A. degree with a major in criminal justice may be awarded to those students who satisfactorily complete 12 units from the following program:
A. Criminal Justice - three required units:

| CJUS/POLI/I.R. 209 | Research Methods in Public Affairs |
| :--- | :--- |
| CJUS/POLI 211 | Criminal Justice |
| CJUS 401 | Seminar in Criminal Justice |

B. Political Science - two required units:

| POLI 201 | State and Local Government or POLI 270 Public Administration |
| :--- | :--- |
| POLI 250 | Public Policy |

C. Sociology - three required units:

SOCI 101 Introduction to Sociology
SOCI 238 Juvenile Delinquency
SOCI 334 Criminology
D. Electives - four required units:

Two from Group I: Policy Studies
CJUS/POLI 213 Criminal Law
CJUS/POLI 214 The Judicial Process
CJUS $215 \quad$ Criminal Justice Forensics
CJUS 325 Comparative Law Enforcement
CJUS/SOCI 326 Comparative Corrections
POLI 233 International Law

## Two from Group II: Related Studies

BUAD 215
CJUS 227
CJUS 231
INQ 250 CH
POLI 201

Accounting Principles I
Law and Society
Juvenile Justice
Chemistry \& Crime
State and Local Government

POLI 312
PSYC 211
PSYC 230
SOCI 237

Civil Liberties
Adolescent Development
Abnormal Psychology
Deviant Behavior

Courses from among CJUS 261, 401, 406, 416, 495-497 or one from among INQ 260 PS or IL 177, 277 or 377 may be used as electives within either groups I or II when they include topics related to Criminal Justice with the approval of the major coordinator; or any Honors 301 course whose topic is appropriate and approved by the major coordinator.

## 209 Research Methods in Public Affairs

An examination of the research methodologies and techniques used in the study of public policy and politics. The course emphasizes both qualitative and quantitative methods. The lab focuses on statistical applications. (1) (Cross-listed as POLI 209/I.R. 209)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 and one other course in the major, ENVI 250, or permission.

## 211 Criminal Justice

An introductory analysis of the criminal justice system in the United States, its structure, processes, and problems. (1) (Cross-listed as POLI 211)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 213 Criminal Law

A study of the criminal justice system at work in the courtroom setting, emphasizing the relationship between substantive criminal law, criminal procedure, and the rules of evidence. (1) (Cross-listed as POLI 213)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 214 The Judicial Process

An exploration of the politics of the American judicial system. This includes such topics as the structure of courts, selection of judges, actors who participate in the judiciary, judicial behavior, and the civil and criminal varieties of courts. (1) (Cross-listed as POLI 214)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 215 Criminal Justice Forensics

An introduction to the practices of forensic science in law enforcement and the court system. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CJUS/POLI 211.

## 227 Law and Society

An introduction to legal culture by studying the interaction between law, legal systems, and society. The class exposes the student to the theoretical perspectives used to explain the interplay between law and society found in the literature of the social sciences. (1)
Lecture: 3 hrs/wk.

## 231 Juvenile Justice

An examination of the theory, policy, and administration of the juvenile justice system. (1)
Lecture: 3 hrs/wk.
Prerequisite: One course in CJUS or permission.

## 261 Selected Topics in Criminal Justice

An examination of selected topics in criminal justice. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
325 Comparative Law Enforcement

A comprehensive overview of law enforcement using a comparative perspective. The development, mission, organization, and management of law enforcement agencies will be examined. The U.S. system will be analyzed and compared to those of other countries. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI/CJUS 211 or permission.

## 326 Comparative Corrections

An exploration of philosophies, rationales, and models of adult corrections. Historical and existing correctional systems in select countries, e.g., the U.S., Canada, England, France, Japan, Mexico, Sweden, and Russia will be examined. (1) (Cross-listed as SOCI 326)
Lecture: 3 hrs/wk.
Prerequisite: POLI/CJUS 211 or permission.

## 401 Seminar in Criminal Justice

Advanced, in-depth study of selected topics in criminal justice with emphasis on developing a synthesis from the multi-disciplinary coursework required in the major. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Senior Criminal Justice major with POLI 201 or 270 and CJUS 209 and SOCI 334
completed, or permission.

## 405, 406, 407 Independent Study

Supervised review of a literature and research project in the area of criminal justice. ( $1 / 2,1,1 / 2$ )
Prerequisite: A minimum 3.0 major GPA and both Department and instructor permission. CJUS 405 is a prerequisite for CJUS 407.

## 416 Internship

A supervised placement providing practical experience in an agency relating to criminal justice. (1)
Prerequisite: A minimum 3.0 major GPA and both instructor and major coordinator permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student, in his/her senior year or in the Summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## EAST ASIAN STUDIES

Associate Professor Xu, Coordinator
Students from any major interested in developing a specialization in East Asia may earn a concentration in East Asian Studies by successfully completing (with a cumulative grade point average of at least 2.0), either in an approved program in East Asia or on campus, at least six units. Of these units, two must be in an East Asian language (Chinese, Japanese, or Korean), one must be in East Asian History, and one must be in Asian politics. The other two units are to be taken from relevant courses on or off campus, including special topics classes. One unit may be taken from an international perspective (see East Asian Studies advisor for list of courses available). An internship or independent study focused on an East Asian topic in any department is also advisable; the topic must be approved by the East Asian Studies advisor as well as the relevant department. Interested students should contact the East Asian Studies advisor as soon as possible for help in identifying appropriate courses either on campus or overseas.

1. Two units in a language (required)

Chinese, Japanese, or Korean
2. One unit in East Asian History (required); in addition, up to two other units may be taken in East Asian history.
HIST $281 \quad$ Early East Asia
HIST 282 Modern East Asia
3. One unit in Asian Politics (required)

```
POLI 222 Comparative Political Systems: Asia
```

4. One unit from an international perspective (optional)
BUAD 211 Introduction to Global Management

ECON 237 Comparative Economic Systems
ECON 247 International Trade and Finance
POLI 231 International Politics
POLI 232 International Organizations
RELG 130 Living Religions of the World
5. One unit in an independent study/internship (optional)

NOTE: Either in any discipline as long as the topic is East Asian.
6. One unit from Selected Topics (optional)

NOTE: Any selected topics course which focuses on Asia.

## ECONOMICS

Professor Fleming; Associate Professors Kassens, Nik-Khah
The major in Economics requires eleven (11) units in economics as follows: Economics 121, 122, 232, $321,322,448,461$, and any four economics courses at the 200 level or higher (excluding Economics 416 Internship). Mathematics 111 or 112 or 118 or 121 is a prerequisite for Economics 321 and 322, and INQ 240 is a prerequisite for Economics 448.
Admission to the BA program in Economics requires the approval of the department chairperson. An application should be submitted as soon as a student becomes interested in the major and shows evidence of possessing the quantitative and analytical skills required to satisfactorily complete this major. Economics 120 cannot be used for the Economics or Business Administration majors. Economics 120 can serve as a prerequisite for Economics 227, 237, 257, and for Business Administration 233, for non-majors only.

## Minor in Economics

The minor in Economics requires seven units in economics as follows: Economics 121, 122, 321, 322, 461 and any two economics courses at the 200 level or higher. Mathematics 111 or 112 or 118 or 121 is a prerequisite for Economics 321 and 322, and INQ 240 is a prerequisite for Economics 448.

## 120 Introduction to Economics

A course introducing the student to contemporary economic discourse, with an emphasis on the pricing mechanism, competitive and monopolistic markets, poverty and inequality, national income, and unemployment. (Not open to anyone majoring in Business Administration or Economics, or anyone currently enrolled in or having completed Economics 121 and 122.)(1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 121 Principles, Micro

An introduction to contemporary economic discourse, with an emphasis on the pricing mechanism, production, competitive and imperfectly competitive markets, game theory, poverty and inequality, public economics, and global trade. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 122 Principles, Macro

An introduction to contemporary economic discourse, with an emphasis on aggregate concepts and issues such as unemployment, inflation, growth and international trade and the role of government in dealing with these issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 227 Health Economics

An examination of the production of health and the role of medical services, the determinants of the demand for medical care and the impact of health insurance, the determinants of the supply of medical services, the role of government in promoting health and the financing and delivery of health care, and the impact of behavioral factors on health. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ECON120 or 121.

## 232 Money and Banking

Money, credit, and the banking system with special emphasis on the role of money as a determinant of economic activity. Attention is also given to international monetary markets. (1)
Lecture: 3 hrs/wk.
Prerequisites: ECON 121 and 122.

## 237 Comparative Economic Systems

The ideological, theoretical, and institutional basis for planned and market economies with examples drawn from various countries. (1)
Lecture: 3 hrs/wk.
Prerequisite: ECON 120 or 121.

## 242 Economics of the Public Sector and its Finance

An analysis of the relationship between the state and the market, with an emphasis on the role of the state in reducing poverty and inequality, promoting health, safeguarding the environment, addressing corporate power, and financing these activities through effective taxation. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ECON 121 and 122.

## 247 International Trade and Finance

An analysis of the benefits and costs of trade, the impact of trade barriers and controls, the effects of globalization, and the role of money and capital markets in international commerce. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites ECON 121 and 122.

## 252 The Fed Challenge

This course is an academic competition designed to expand the understanding of the Federal Reserve System's unique role in the economy and the importance of Federal Open Market Committee decisions. (1) Lecture: 3 hrs/wk.
Prerequisites: ECON 121 and 122, and permission of the instructor.

## 257 Competition, Monopoly, and Public Policy

An examination of the role of the state in addressing corporate power. Topics emphasized include collusion, mergers, technology an intellectual property, and the uses of antitrust law and regulation. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite ECON 120 or 121.

## 261 Topics in Economics

Selected topics involving problems and controversies of a social and political nature. (1)
Lecture: 3 hrs/wk.

## 267 Labor Economics

Analysis of the short-and long-run aspects of the supply and demand for labor, with attention paid to labor market issues including wage inequality, human capital formation, and unemployment. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ECON 120 or 121.

## 287 Economics and the Environment

This course deals with various approaches to the relationship between economic activity and the environment, with an emphasis on examples drawn from various environmental issues and regions in our globalized world. (1)
Lecture: 3 hrs/wk.

## 321 Intermediate Theory: Microeconomics

In-depth coverage of contemporary economic discourse, with an emphasis on the pricing mechanism, competitive and imperfectly competitive markets, game theory, the distribution of income, and public economics. (1)
Lecture: 3 hrs/wk.
Prerequisites ECON 121or permission; MATH 111 or 112 or 118 or 121.

## 322 Intermediate Theory: Macroeconomics

An examination of the measurement, analysis, and control of aggregate economic activity, with particular attention to the roles played by government in achieving full employment and price stability. (1)
Lecture: 3 hrs/wk.
Prerequisites: ECON 122 or permission; MATH111 or 112 or 118 or 121.

## 395, 396 Henry H. Fowler Public Policy Seminar

A seminar taught with a scholar-statesperson that deals with a policy issue of public significance. (Made possible by the Henry H. Fowler Endowment. Open to selected students with department permission.) (1, 1/2)

405, 406, 407 Independent Study
A program of intensive study in economics carried out under the direction of a member of the departmental staff. (Open to majors with the permission of the department.) $(1 / 2,1,1 / 2)$

## 416 Internship

Work experience in private or public sector, utilizing analytical tools, and including a student project. (Admission by permission of department. May not be counted toward major credit.) (1)

## 448 Introduction to Econometrics

An introduction to the statistical methods used in empirical economic research. The objective of the course is to provide both a working knowledge of econometric theory and an applied experience through estimating empirical models using econometric software. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ECON 321 or 322, and INQ 240; or permission.

## 461 Economics Seminar

An in-depth investigation of topical issues in economics at the advanced theory level. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Senior standing in Economics or permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## EDUCATION

Professor Murrill, Associate Professors Earp, Stallions, Whitt (Chair); Teaching Associates Elmore, Stoneman

Roanoke College's Education Program is approved by the Department of Education for the Commonwealth of Virginia and nationally accredited by the Teacher Education Accreditation Council. The program offers teacher licensure with endorsements in the areas described below.

## Teaching in the Diverse Classroom

Teaching in the Diverse Classroom, Roanoke College's teacher licensure program, is designed to provide pre-service teachers with the content knowledge and pedagogical skills required for $21^{\text {st }}$ century global classrooms. Pedagogical skills, content knowledge, and an understanding of differentiated instruction are essential for program completion. Pre-service teachers are taught how to recognize readiness levels, interests, and learning profiles/styles of PreK-12 students and how to design lessons related to these characteristics by differentiating the curriculum's content, process, and/or products. Emphases on content knowledge, research-based pedagogy, and cultural/linguistic diversity empower students to construct student-centered teaching practice for contemporary classrooms.

## Elementary Education (PreK-6)

Secondary Licenses (6-12)

- Biology
- Chemistry
- Computer Science
- English (Add-ons: Speech Communication, Journalism)
- History and Social Science
- Mathematics
- Physics

Foreign Languages (PreK-12)

- French
- German
- Spanish

Specialty Area Licenses (PreK-12)

- English as a Second Language
- Health and Physical Education
- Music Education: Vocal/Choral
- Theatre Arts
- Visual Art Education

Add-on Endorsement (6-12)

- Mathematics-Algebra

For elementary licensure, freshmen and transfer students entering Roanoke College major in a discipline other than business administration as required by the Virginia State Board of Education. Secondary education licensure candidates must complete a major in a subject pertinent to their licensure area.

Course Requirements for Specific Teacher Licensure Programs:
Elementary Education (PreK-6)

| EDUC 210 | Principles of Education |
| :--- | :--- |
| EDUC 221 | The Exceptional Student |
| EDUC 230 | Reading and Literature in the Elementary Classroom |
| EDUC 242 | Instructional Technology |
| EDUC 320 | Differentiated Instruction for Elementary Math and Science |
| EDUC 330 | Differentiated Instruction for Elementary Language Arts |
| EDUC 338 | Field-Based Internship/Practicum |
| EDUC 350 | Differentiated Instruction for Elementary Social Studies |
| EDUC 370 | Field-Based Reading |
| EDUC 480 | Strategic Classroom Management in the Elementary School (in Block) |
| EDUC 490 | Student Teaching, Grades PreK-6 (in Block, 2 units) |
| HIST 200 | United States History |

PSYC 215 Child and Adolescent Development
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools

```
Secondary Licenses
Biology (6-12)
    EDUC 210 Principles of Education
    EDUC 221 The Exceptional Student
    EDUC 242 Instructional Technology
    EDUC 311 Secondary Curriculum Concepts and Pedagogy
    EDUC 338 Field-Based Internship/Practicum
    EDUC 345 Differentiated Classrooms in the Secondary School
    EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
    EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
    EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
    PSYC 215 Child and Adolescent Development
    TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English
        Language Learners in Secondary Schools
    BIOL 120 Principles of Biology
    BIOL 125 Biodiversity
    BIOL 455 Seminar
    One unit from Molecular Biology & Genetics:
        BIOL 315, 345, 346, 380, 400, 410;
    One unit from Cell Biology & Microbiology:
        BIOL 210, 305, 345, 346, 365, 370, 390, 420;
    One unit from Integrative Biology:
        BIOL 235, 240, 265, 270, 275, 280, 345, 346, 365;
    One unit from Ecology & Evolution:
        BIOL 205, 225, 300, 345, 346, 360, 415;
    Two additional units from any four Biology core areas
Also:
    CHEM 111 General Chemistry I
    CHEM 112 General Chemistry II
    CHEM 221 Organic Chemistry I
    CHEM 222 Organic Chemistry II
    MATH 112 Concepts and Techniques of Calculus (OR higher)
    INQ 240 Statistical Reasoning
    PHYS 103 Fundamentals of Physics I
    PHYS 104 Fundamentals of Physics II
It is recommended that students seeking this endorsement substitute either MATH 118 and 119
(Differential Calculus and Integral Calculus), or MATH 121 (Calculus I) for the
Math requirements and calculus-based Physics 201-202 (Newtonian Mechanics and Electricity and
Magnetism) for Physics 103-104.
Chemistry (6-12)
    EDUC 210 Principles of Education
    EDUC 221 The Exceptional Student
    EDUC 242 Instructional Technology
    EDUC 311 Secondary Curriculum Concepts and Pedagogy
    EDUC 338 Field-Based Internship/Practicum
    EDUC 345 Differentiated Classrooms in the Secondary School
    EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
    EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
    EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
```

| PSYC 215 | Child and Adolescent Development |
| :---: | :---: |
| TESL 221 | Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools |
| CHEM 111 | General Chemistry I |
| CHEM 112 | General Chemistry II |
| CHEM 221 | Organic Chemistry I |
| CHEM 222 | Organic Chemistry II |
| CHEM 331 | Physical Chemistry I |
| CHEM 332 | Physical Chemistry II |
| Three other units from department offerings. |  |
| Also: |  |
| BIOL 125 | Biodiversity |
| PHYS 103 | Fundamental Physics I OR |
| PHYS 201 | Newtonian Mechanics |
| PHSY 104 | Fundamental Physics II OR |
| PHYS 202 | Electricity and Magnetism |
| MATH 118 and 119 Differential Calculus and Integral Calculus, OR |  |
| MATH 121 | Calculus I |
| Computer Science (6-12) |  |
| EDUC 210 | Principles of Education |
| EDUC 221 | The Exceptional Student |
| EDUC 242 | Instructional Technology |
| EDUC 311 | Secondary Curriculum Concepts and Pedagogy |
| EDUC 338 | Field-Based Internship/Practicum |
| EDUC 345 | Differentiated Classrooms in the Secondary School |
| EDUC 351 | Teaching Reading and Writing in the Content Areas, 6-12 |
| EDUC 481 | Strategic Classroom Management in the Secondary School (in Block) |
| EDUC 491 | Student Teaching, Grades 6-12 (in Block, 2 units) |
| PSYC 215 | Child and Adolescent Development |
| TESL 221 | Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools |
| CPSC 120 | Fundamentals of Computer Science I |
| CPSC 170 | Fundamentals of Computer Science II |
| CPSC 250 | Data Structures and Algorithms |
| CPSC 290 | Computer Architecture \& Operating Systems |
| CPSC 340 | Database Systems |
| CPSC 395 | Analysis of Algorithms |
| CPSC 425 | Principles of Programming Languages |
| INQ 240 | Statistical Reasoning OR |
| STAT 202 | Probability |
| MATH 118 | d 119 Differential Calculus and Integral Calculus, OR |
| MATH 121 | Calculus I |
| MATH 131 | Discrete Mathematics |
| MATH 201 | Linear Algebra |
| English (6-12) |  |
| EDUC 210 | Principles of Education |
| EDUC 221 | The Exceptional Student |
| EDUC 242 | Instructional Technology |
| EDUC 311 | Secondary Curriculum Concepts and Pedagogy |
| EDUC 338 | Field-Based Internship/Practicum |
| EDUC 345 | Differentiated Classrooms in the Secondary School |
| EDUC 351 | Teaching Reading and Writing in the Content Areas, 6-12 |
| EDUC 481 | Strategic Classroom Management in the Secondary School (in Block) |

EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English
Language Learners in Secondary Schools
COMM 101 Introduction to Communications Studies OR
COMM 220 Public Speaking
ENGL 220 Special Topics OR
ENGL 260 World Literature OR
CRWR 215 Creative Writing - Poetry OR
CRWR 216 Creative Writing - Fiction
ENGL 240 British Literature
ENGL 250 American Literature
ENGL 315 Research Methods \& Critical Perspectives OR
CRWR 330 Forms and Genres
ENGL 321 Advanced Grammar and Style
ENGL 322 Theory \& Practice of Composition
ENGL 323 The English Language
Two additional one-unit upper level ENGL or CRWR courses at the 300-400 levels.
English Speech Communication (6-12)
COMM 101 Introduction to Communication Studies
COMM 220 Public Speaking
COMM 260 Interpersonal Communication

## Journalism

COMM 202 Mass Communication
COMM 319 Journalism

## History and Social Sciences (6-12)

EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools
HIST 110 Ancient World OR
HIST 120 Medieval World
HIST 130 Early Modern World OR
HIST 140 Modern World
HIST 200 U.S. History
Two units from the American History course groups (200, 300, 400 levels) in history major. One other one-unit history course from departmental offerings. A non-western unit is strongly recommended to fulfill the additional course required.
GEOG 110 World Geography
One other one-unit geography course from departmental offerings; Geography 101 is strongly recommended.
Two one-unit economics courses from Business/Economics department offerings.
POLI 101 Introduction to Political Science
Two other one-unit political science courses from departmental offerings.

## Mathematics (6-12)

EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools
MATH 118 and 119 Differential Calculus and Integral Calculus, OR
MATH 121 Calculus I
MATH 122 Calculus II
MATH 131 Discrete Mathematics
MATH 201 Linear Algebra
MATH 321 Vector Calculus
MATH 278 Foundations of Geometry
MATH 361 Abstract Algebra
CPSC 120 Fundamentals of Computer Science I
STAT 202 Probability
INQ 240 Statistical Reasoning OR
STAT 302 Statistical Methods
Plus one additional unit course in mathematics at the 200-level or above.
Physics (6-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English
Language Learners in Secondary Schools
PHYS 201 Newtonian Mechanics
PHYS 202 Electricity and Magnetism
PHYS 203 Modern Physics
PHYS 315 Experimental Analysis
PHYS 350 Electromagnetic Theory
PHYS 370 Thermal Physics
PHYS 480 Senior Seminar: Physics Capstone
Also:
BIOL 125 Biodiversity
CHEM 111 General Chemistry I
CHEM 112 General Chemistry II
MATH 118 and 119 Differential Calculus and Integral Calculus, OR
MATH 121 Calculus I
MATH 122 Calculus II

MATH 331 Differential Equations

## Foreign Language Licenses

French (PreK-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 338 Field Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 490 Student Teaching, Grades PreK-6 (in Block, 2 units) OR
EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units) OR
EDUC 492 Student Teaching, Grades PreK-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English
Language Learners in Elementary Schools
FREN 101 Elementary French I
FREN 102 Elementary French II
FREN 201 Intermediate French I
FREN 202 Intermediate French I
FREN 341 Methods of Teaching French OR
LANG 341 Methods of Teaching Foreign Language OR
EDUC 311 Secondary Curriculum Concepts \& Pedagogy
One language course from the following:
FREN 301 OR 303
One composition course from the following:
FREN 302 OR 304
One unit in civilization and culture from:

| FREN 311 | Building a Nation: French Civilization and Culture I |
| :--- | :--- |
| FREN 312 | A Nation Emerges: French Civilization and Culture II |
| FREN 315 | Francophone Societies |
| course from four of any of the five periods of literature listed below:  <br> Middle Ages  <br> FREN 421 The Medieval World Renaissance <br> Renaissance  <br> FREN 420 The French Poetic Tradition <br> FREN 431 Renaissance Vision and Voices <br> 17th and 18th Centuries  <br> FREN 441 Political and Civil Order in 17 ${ }^{\text {th }}$ and 18th-Century French Literature <br> 19th Century  <br> FREN 420 The French Poetic Tradition <br> FREN 451 Romanticism, Realism and Naturalism in the 19th-Century Literature <br> 20th Century  <br> FREN 461 The Modern Novel and Short Story |  |

NOTE: FREN 420 may be counted for only one period of Literature.
German (PreK-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12

```
    EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
    EDUC 490 Student Teaching, Grades PreK-6 (in Block, 2 units) OR
    EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units) OR
    EDUC 492 Student Teaching, PreK-12 (in Block, 2 units)
    PSYC 215 Child and Adolescent Development
    TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English
        Language Learners in Elementary Schools
    GRMN 101 Elementary German I
    GRMN 102 Elementary German II
    GRMN 201 Intermediate German I
    GRMN 202 Intermediate German II
    GRMN 301 German Composition and Conversation
    GRMN 314 The Cultures of the German-Speaking Countries OR
    GRMN 315 The Post-War Germanies
    GRMN 320 Age of Goethe: Faust
    GRMN 321 Survey of German Literature
    GRMN 335 German Phonetics and Phonology
    GRMN 461 20th-Century Fiction
    LANG 341 Methods of Teaching Foreign Language OR
    EDUC 311 Secondary Curriculum Concepts & Pedagogy
Spanish (PreK-12)
    EDUC 210 Principles of Education
    EDUC 221 The Exceptional Student
    EDUC 242 Instructional Technology
    EDUC 338 Field-Based Internship/Practicum
    EDUC 345 Differentiated Classrooms in the Secondary School
    EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
    EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
    EDUC 490 Student Teaching, Grades PreK-6 (in Block, 2 units) OR
    EDUC 491 Student Teaching, Grades 6-12 (in Block, 2 units) OR
    EDUC 492 Student Teaching, Grades PreK-12 (in Block, 2 units)
    PSYC 215 Child and Adolescent Development
    TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English
    Language Learners in Elementary Schools
    SPAN 101 Elementary Spanish I
    SPAN 102 Elementary Spanish II
    SPAN 201 Intermediate Spanish I
    SPAN 202 Intermediate Spanish II
    SPAN 303 Spanish Composition
    SPAN 304 Spanish Conversation
    SPAN 311 Civilization and Culture: Spain OR
    SPAN 312 Civilization and Culture: Spanish America
    SPAN 320 Introduction to Literature: Spain
    SPAN 323 Introduction to Literature: Spanish America
    SPAN 341 Methods of Teaching Spanish OR
    LANG 341 Methods of Teaching Foreign Language OR
    EDUC 311 Secondary Curriculum Concepts and Pedagogy
    SPAN 402 The Structure of Modern Spanish OR
    SPAN 403 Translation and Interpretation
    Two 400-level Spanish courses
    Two one-unit elective Spanish courses from 300-400 level courses.
```


## Specialty Area Licenses

English as a Second Language (PreK-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 338 Field-Based Internship/Practicum
EDUC 351 Teaching Reading \& Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 492 Student Teaching, PreK-12 (in Block, 2 units)
ENGL 321 Advanced Grammar and Style
LANG 341 Methods of Teaching Foreign Languages OR
EDUC 311 Secondary Curriculum Concepts \& Pedagogy
LING 320 Basic Linguistics
PSYC 215 Child and Adolescent Development
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools
TESL 330 Reading and Principles of Second Language Acquisition
TESL 346 Curriculum and Assessment for the ESL Teacher
TESL 370 Field Experience in Reading Instruction and Diagnosis for English Language Learners
In addition, students must complete two units of modern foreign language study in the same language.
(Competency will be accepted based on College "Competency Standards").
Health and Physical Education (PreK-12)

| BIOL 105 | Human Biology OR |
| :---: | :---: |
| BIOL 120 | Principles of Biology |
| BIOL 230 | Human Anatomy and Physiology I |
| EDUC 210 | Principles of Education |
| EDUC 242 | Instructional Technology |
| EDUC 338 | Field-Based Internship/Practicum |
| EDUC 351 | Teaching Reading and Writing in the Content Areas, 6-12 |
| EDUC 481 | Strategic Classroom Management in the Secondary School (in Block) |
| EDUC 492 | Student Teaching, Grades PreK-12 (in Block, 2 units) |
| HHP 200 | Foundations of Movement |
| HHP 203 | Individual Activities |
| HHP 204 | Team Sports |
| HHP 205 | Non-Traditional Games and Activities |
| HHP 206 | Fundamentals of Rhythms and Dance |
| HHP 207 | Health Fitness Concepts and Applications |
| HHP 221 | Professional Concepts and Leadership Development |
| HHP 223 | First Aid \& Safety (or demonstrated competency in "Responding to Emergencies" course) |
| HHP 301 | Personal and Community Health |
| HHP 302 | Physical Education Methods \& Materials I: PreK-6 |
| HHP 305 | Adapted and Developmental Physical Education |
| HHP 306 | Motor Behavior |
| HHP 335 | Coordinated School Health Programs |
| HHP 403 | Exercise Physiology |
| HHP 404 | Physical Education Methods and Materials: 6-12 |
| HHP 409 | Health Education Methods \& Materials: PreK-12 |
| PSYC 215 | Child and Adolescent Development |
| TESL 220 | Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools |

Two Health and Human Performance activities from catalog listings, the first of which must be HHP 160, are required.

```
Music Education: Vocal/Choral (PreK-12)
    EDUC 210 Principles of Education
    EDUC 221 The Exceptional Student
    EDUC 242 Instructional Technology
    EDUC 311 Secondary Curriculum Concepts and Pedagogy
    EDUC 338 Field-Based Internship/Practicum
    EDUC 345 Differentiated Classrooms in the Secondary School
    EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
    EDUC 481 Strategic Classroom Management in the Secondary School
    EDUC 492 Student Teaching, Grades PreK-12 (in Block, 2 units)
    MUSC 150 Fundamentals of Music
    MUSC 240 Music in Culture
    MUSC 251 Diatonic Harmony
    MUSC 252 Chromatic Harmony
    MUSC 261 Music History I: Classical Antiquity through }170
    MUSC 262 Music History II: 1700-1900
    MUSC 321 Instrumentation and Score Reading
    MUSC 323 Conducting
    MUSC 339 Music Education in the Elementary School
    MUSC 340 Music Education in Secondary School
    MUSC 350 20th-Century Theory
    PSYC 215 Child and Adolescent Development
    TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English
    Language Learners in Elementary Schools
```

Private applied music
Second private applied music
Ensemble
( 5 sem. @ $1 / 4$ unit each $=1.25$ units)
(4 sem. @ 1/4 unit each = 1 unit)
( 7 sem. @ $1 / 4$ unit each = 1.75 units)

## Theatre Arts (PreK-12)

EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 492 Student Teaching, Grades PreK-12 (in block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools
THEA 125 Stagecraft
THEA 150 Play Analysis
THEA 211 Acting I
THEA 212 Acting II
Three other Theatre Arts courses (three units)
Visual Arts (PreK-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy

EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Areas, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 492 Student Teaching, Grades PreK-12 (in Block, 2 units)
PSYC 215 Child and Adolescent Development
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools
ART 101 Arts and Crafts in the Schools
ARTH 150 Art, Culture \& Society I
ARTH 151 Art, Culture \& Society II
ART $240 \quad$ Children and Their Art (at Hollins)
Seven additional units as follows:
Two units from the following: ART 111, 121, 131, 151
One unit from the following: ART 171 OR 181
Two units from the following: ART 211, 221, 231, 241, 261, 271, OR 281
Two units from the following: ART 311, 321, 331, 341, 361, 371, OR 381
Note: Two media must be completed through the advanced (300) level. Media are painting, ceramics, photography, drawing, printmaking, graphic design, and sculpture.
Note: ART 151 is the entry class for ART 241 and ART 261.

## Add-on Endorsement

Mathematics-Algebra (6-12)
EDUC 210 Principles of Education
EDUC 221 The Exceptional Student
EDUC 242 Instructional Technology
EDUC 311 Secondary Curriculum Concepts and Pedagogy
EDUC 338 Field-Based Internship/Practicum
EDUC 345 Differentiated Classrooms in the Secondary School
EDUC 351 Teaching Reading and Writing in the Content Area, 6-12
EDUC 481 Strategic Classroom Management in the Secondary School (in Block)
EDUC 491 Student Teaching, Grades 6-12 (in Block, 1 unit)
TESL 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools OR
TESL 221 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools
MATH 118 and 119 Differential Calculus and Integral Calculus, OR
MATH 121 Calculus I
MATH 122 Calculus II
MATH 131 Discrete Mathematics
MATH 201 Linear Algebra
MATH 278 Foundations of Geometry
PSYC 215 Child and Adolescent Development
CPSC 120 Foundations of Computer Science I OR
INQ 241 Mathematical Reasoning (Departmental approval - course with a computer science topic that includes some programming)
INQ 240 Statistical Reasoning OR
STAT 202 Probability OR
STAT 302 Statistical Methods
Guidance in the selection of both Inquiry Curriculum and elective courses is strongly advised. A second advisor from the Education faculty is required for all students seeking teacher licensure. For teacher licensure, Honors courses will count in the same manner for Inquiry Curriculum courses or major courses as in the Honors program. For specific information, consult with a major advisor.

Minor in Elementary Education: Teaching in the Diverse Classroom
A minor in Elementary Education (PreK-6) requires six units, including Education 210, 221, 230, 242, 320, 338, and TESL 220.

NOTE: Completion of a minor in Elementary Education does not meet all requirements for elementary teacher licensure. An overall 2.5 GPA, 2.5 GPA in the minor, VCLA and Praxis I math completed successfully or have met the SAT/ACT established pass score, as outlined below, are required for granting the minor.

Minor in Secondary Education: Teaching in the Diverse Classroom
A minor in Secondary Education (6-12) requires six units, including Education 210, 221, 242, 338, 345, 351 and TESL 220 OR 221.

NOTE: Completion of a minor in Secondary Education does not meet all requirements for secondary teacher licensure. An overall 2.5 GPA, 2.5 GPA in the minor, VCLA and Praxis I math completed successfully or the SAT/ACT established pass score, as outlined below, are required for granting the minor.

## Teacher Licensure Program Requirements

The College has selective admission requirements for the Teacher Licensure Program. Points at which students must meet specific requirements include:

## Prerequisites to be registered for Methods Courses

(EDUC 311, 320, 330, 345, 350, 351, TESL 330, 346)

- EDUC 210, EDUC 242
- Prerequisites specific to courses listed under individual course descriptions


## Prerequisites to be registered for TESL 370: Field Experience in Reading Instruction

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- TESL 330
- 2.5 or greater overall GPA achieved
- Application approved by Education Department

Prerequisites to be registered for EDUC 338: Field-Based Internship/Practicum

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- One methods course (EDUC 311, 320, 330, 345, 350, 351)
- EDUC 242
- 2.5 or greater overall GPA achieved
- Application approved by Education Department


## Prerequisites to be registered for EDUC 370: Field Based Reading

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- EDUC 330
- 2.5 or greater overall GPA achieved
- Application approved by Education Department


## Prerequisites to be registered for EDUC 490/491/492: Student Teaching

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- Praxis II completed successfully
- 2.5 or greater GPA achieved: overall, in EDUC/PSYC licensure courses, and in major (PK-6) or licensure area content courses (6-12 and PreK-12)
- Application approved by Education Department
- EDUC 338 or competency


## Formal Admission to Teacher Licensure Program

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- 2.5 or greater overall GPA achieved
- Admission to TESL 370, EDUC 338, 370 or EDUC 490/491/492


## Additional Information:

- Application materials for field experience courses are due by: March 1 (for fall) and October 1 (for spring). All prerequisites for these courses must be verified by the Education Department by the appropriate deadline.
- As teachers are both ethically and legally responsible for children, it is imperative that pre-service teachers exhibit professional characteristics and dispositions. Students are required to complete an approved departmental disposition survey and demonstrate the required personal competencies delineated on the survey. A professional growth plan is available.
- GPA requirements for field experience courses refer to the grade point average earned at Roanoke College.
- In exceptional circumstances, a student may present to the Education advisor a formal written appeal asking for additional time to meet minimum requirements or consideration of coursework taken at other colleges.
- School divisions within the educational community may require a criminal background check of students seeking enrollment in field experiences.
- In accordance with state requirements, an applicant must possess the physical and mental health necessary for the tasks to be performed. Violation of a Roanoke College academic integrity or student conduct regulation, as well as convictions of any felony or any misdemeanor laws involving moral turpitude, may be taken as evidence of lack of fitness for admission or for recommendation for licensure. Evidence must be available from appropriate College officials and state government/police officials verifying that the standard has been met. The above described standards for admission to the program must be maintained, or the student may be dropped from the program.


## Professional Licensure Program

Roanoke College offers a Professional Licensure Program (PLP) to graduates of regionally accredited institutions of higher learning. Graduates seeking program admission must meet and maintain all requirements of the Roanoke College teacher licensure program. Roanoke College graduates who return to pursue teacher licensure and who were not admitted to the program prior to completing their degree requirements will be classified as PLP students.

Formal Admission to Professional Licensure Program:

- VCLA and Praxis I math completed successfully or SAT/ACT equivalency
- 2.5 or greater overall GPA and major GPA achieved at the student's graduating institution
- Two references from former instructors or supervisors, describing a candidate's skills and dispositions when working with children or adolescents. If the student is a Roanoke graduate, one reference must come from a Roanoke faculty member if available.
- Interview with Program Director
- Approval of Education faculty

Formal Admission to Teacher Education Program

- Admission to or competency for TESL 370 or EDUC 370, EDUC 338 or EDUC 490/491/492

Additional Information:

- PLP students must meet all teacher licensure program requirements specified in the handbook for admission to methods courses (EDUC 311, 320, 330, 345, 350, 351, TESL 330, 346) and field-based courses (TESL 370 or EDUC 370, EDUC 338, 490/491/492).
- GPA in content courses may be augmented by Roanoke College coursework.
- At time of application for student teaching, a 2.5 GPA must be achieved in Education coursework at Roanoke College.
- No more than half of the student's Education courses may be transferred to Roanoke College, and at least one Education methods course must be taken at Roanoke College. No more than one of the transferred courses can be for EDUC 311, 320, 330, 345, 350, 351.
- EDUC 242 must be taken at Roanoke College.


## Student Teaching

Students seeking one endorsement area are required to student teach for a minimum 13 weeks and a minimum total of 400 hours. Students seeking added endorsements for teacher licensure will be required to extend their student teaching beyond the regular term. A minimum of 16-18 weeks of student teaching will be required if additional endorsements are sought. The course cannot be taken pass/fail. Specific endorsement areas and the required number of weeks of student teaching (noted parenthetically) are listed below:

Elementary: PreK-6 (thirteen weeks)
Secondary: Secondary 6-12 (thirteen weeks)
Foreign Language: PreK-12 (thirteen weeks)
PreK-6 and One Secondary Subject Area (sixteen weeks total): PreK-6 (eight weeks), Secondary subject area (eight weeks)
PreK-6 and Foreign Language (sixteen weeks total): PreK-6 (eight weeks), Foreign Language (eight weeks)
Two Secondary Subject Areas (sixteen weeks total): First subject area (eight weeks), Second subject area (eight weeks)
PreK-12 Art, Music, Theatre or Physical Education (sixteen weeks total): PreK-6 (eight weeks), Secondary (eight weeks)
PreK-12 Art, Music, Theatre or Physical Education and PreK-6 (eighteen weeks total): PreK-6 (six weeks), Subject area PreK-6 (six weeks); Subject area 6-12 (six Weeks)
Note: During the term of student teaching, students may enroll in no more than one unit of credit in addition to student teaching and classroom management.

## Study Away Student Teaching (International and Domestic)

Student teaching candidates who have met all qualifications, including completing the appropriate applications, may seek permission to student teach away. Candidates are not guaranteed this opportunity. The decision to place students outside the Roanoke Valley is made by the Education faculty. Students seeking permission to student teach away should consult the Education Handbook and their education advisors for details on the application process. Additional fees may be required for student teaching outside of the Roanoke Valley.

## Mandated Tests

- Praxis I Math

Minimum Score: 178
Note Score Substitutions
SAT or ACT score substitution will be allowed in lieu of Praxis I math (SAT total score $\geq 1100$ with Math
$\geq 530$ and Verbal $\geq 530$ ) or ACT composite score $\geq 24$ with Math $\geq 22$ and English + Reading $\geq 46$ )

- Virginia Communication and Literacy Assessment (VCLA) Minimum Score: $\qquad$ 470
- Reading for Virginia Educators (RVE) - Elementary Licensure Candidates Only Minimum Score: $\qquad$ 157
- Praxis II Specialty Area Test

Note: Students should take Praxis II in their specialty area based on the guidance of their education advisor. Minimum scores for each Praxis II specialty area tests are available in the Education Handbook.

## Program Completion

Completion of the teacher licensure program is defined as a student's passage of the appropriate Praxis II examination, the Virginia Communication and Literacy Assessment, and for elementary licensure only, the Virginia Reading Assessment (prior to June 30, 2011) or Reading for Virginia Educators (after June 30, 2011) as well as successful completion of student teaching and fulfillment of all course requirements as outlined in the College Catalog. No College recommendation for teacher licensure will be given until requirements are met.

- Policy for Oral Defense Evaluation: For successful completion of the oral defense, the student teacher must achieve an average of 3 or above on each goal. If a pre-service teacher receives an average score below 3 on a goal, he or she will be asked to revise the portfolio for that goal and present it to the college supervisor for reevaluation. The student teacher will not be recommended for licensure until a 3 or above is received as assessed by the college supervisor.
- Policy for EDUC 490/491/492 Student Teaching Grade: The student teacher will not be recommended for licensure if the student teaching grade is below a C -.
- Policy for Student Teacher Evaluation: For successful completion of student teaching and recommendation for licensure, an average of 3 or above must be achieved on each goal listed on the Final Evaluation of Student Teaching Performance. The student teacher's progress is monitored throughout the student teaching experience, and all student teachers are informed by mid-semester if there are any areas of concern. If the student teacher receives a score below 3 on Midterm Evaluation of Student Teaching Performance, he or she must meet with the college supervisor to determine an early intervention plan (EIP) for improvement and compliance. Successful completion of student teaching will be contingent on completion of the EIP. A description of the EIP process is available in the Education Department Handbook.


## 210 Principles of Education

Historical, philosophical, political and social principles of American education. Curricular patterns and objectives with emphasis on present-day changes and legal implications for schools and teachers. (1)
Prerequisite: None
Lecture: 3 hrs/wk.

## 221 The Exceptional Student

Study of the development of children with exceptional needs (e.g., gifted, students with disabilities). (1/2) Prerequisite: EDUC 210.
Lecture: $1^{1 / 2}$ hrs/wk.

## 230 Reading and Literature in the Elementary Classroom

Examination of literature for children and adolescents as a context within which to introduce and strengthen skills that comprise reading: phonemic awareness, phonics, fluency, vocabulary and comprehension. (1)
Lecture: 3 hrs/wk.
Prerequisites: EDUC 210.

## 242 Instructional Technology

Examination of how classroom teachers maximize both instructional efficiency and power with appropriate use of technology, including educational applications and creation of rich-media, html, spreadsheets, word-processors, course management tools, and related applications. (1/2)
Lecture: $1^{1 ⁄ 2}$ hrs/wk.
Prerequisite: EDUC 210 or concurrently.

## 260, 261 Selected Topics in Education

A course offered in various formats, designed to give students instruction in topics not regularly offered, with topics selected on the basis of faculty and student interest. (1, 1/2) Prerequisite: Permission.
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 311 Secondary Curriculum Concepts \& Pedagogy

Examination of key curriculum design and instructional planning elements, including use of technology, organization of the middle and secondary school, and current practices and trends in teaching at the 6-12 level. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: EDUC 242.

## 320 Differentiated Instruction for Elementary Math and Science

Examination of the content knowledge, teaching strategies, methods, and theoretical foundations necessary to teaching math and science effectively in the elementary school. (1)
Lecture: 3 hrs/wk.
Prerequisites: EDUC 242.

## 330 Differentiated Instruction for Elementary Language Arts

Examination of educational theory, pedagogical methods and issues related to teaching reading, writing, spelling and oral communication in the PreK-6 classroom. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: VCLA and Praxis I Math attempted or have met the SAT/ACT established pass score, EDUC 230 and EDUC 242.

338 Field-Based Internship/Practicum
Practical experience in an appropriate level and/or subject area within a public school classroom as a participant observer under the supervision of classroom teachers and an Education faculty member. (1)
Seminar: $1 \mathrm{hr} /$ wk.; Laboratory: Minimum 115 hours in schools.
Prerequisites: EDUC 210, EDUC 242, one methods course, application by October 1st or March 1st, passing score on VCLA and Praxis I math or have met the SAT/ACT established pass score and approval.

## 345 Differentiated Classrooms in the Secondary School

Examination of the processes and strategies of curriculum design and implementation, including
differentiated instruction. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: EDUC 242.
350 Differentiated Instruction for Elementary Social Studies
Examination of goals, content, materials, methods, and technology of teaching social studies in grades PreK-6. (1)
Lecture: 3 hrs/wk.
Prerequisites: HIST 200, EDUC 242.

## 351 Teaching Reading and Writing in the Content Areas, 6-12

Examination of the processes and strategies of curriculum design and implementation for teaching reading, writing, and study skills in the middle and secondary school subject matter areas. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: EDUC 242.

## 370 Field Based Reading, PreK-6

Examination of the use of formal and informal assessment tools to assess reading level, diagnose needs, and monitor student progress. Through field experiences, data organization and analysis will provide information to plan and implement individualized reading based instruction. (1)
Lecture: $1^{1 / 2}$ hrs/wk.; Laboratory: Field experience is required.
Prerequisite: Passing score on VCLA and Praxis I math completed successfully or have met the SAT/ACT established pass score, EDUC 330, and approval. Department approval is required for the course to be taken concurrently with 490, 491, or 492.

## 405, 406, 407 Independent Study and Research

Selected research projects or topics in education carried out under the supervision of the departmental staff. (1/2, 1, 1/2)
Prerequisite: Permission.
480 Strategic Classroom Management in the Elementary School
Examination of the cognitive, physical, social and emotional characteristics of elementary school students through field observation, professional readings, class discussion and construction of comprehensive
classroom management plans. Attention will be given to philosophies and strategies of classroom management proven effective with this age group. (1/2)
Lecture: $1^{1 / 2}$ hrs/wk.
Prerequisites: All admission requirements for EDUC 490 or EDUC 492 student teaching must be met. EDUC 480 must be taken concurrently with EDUC 490.

## 481 Strategic Classroom Management in the Secondary School

Examination of the cognitive, physical, social and emotional characteristics of middle and secondary school students through field observation, professional readings, class discussion and construction of comprehensive classroom management plans. Attention will be given to philosophies and strategies of classroom management proven effective with this age group. (1/2)
Lecture: $1^{1 / 2}$ hrs/wk.
Prerequisites: All admission requirements for EDUC 491 or EDUC 492 student teaching must be met. EDUC 481 must be taken concurrently with EDUC 491.

490 Student Teaching-Grades PreK-6, Elementary
Examination of the processes and strategies necessary to teach effectively in the public or department approved, accredited independent school classroom: planning and implementing instruction, managing classrooms, and collaborating successfully with teachers, administrators, and parents. ( 1,1 )

Seminar: $1 \mathrm{hr} /$ wk.; Laboratory: Minimum 400 hours in schools.
Prerequisite: VCLA and Praxis I math completed successfully or have met the SAT/ACT established pass score, Praxis II completed successfully, EDUC 338 or competency, background check, 2.5 GPA (overall, major, and education/psychology licensure courses) and approval.

## 491 Student Teaching-Grades 6-12, Secondary

Examination of the processes and strategies necessary to teach effectively in the public school or department approved, accredited independent school classroom: planning and implementing instruction, managing classrooms, and collaborating successfully with teachers, administrators, and parents. $(1,1)$
Seminar: $1 \mathrm{hr} / \mathrm{wk}$.; Laboratory: Minimum 400 hours in schools.
Prerequisite: VCLA and Praxis I math completed successfully or have met the SAT/ACT established pass score, Praxis II completed successfully, EDUC 338 or competency, background check, 2.5 GPA (overall, licensure area content courses, and education/psychology licensure courses) and approval.

## 492 Student Teaching-Grades PreK-12, Elementary and Secondary

Examination of the processes and strategies necessary to teach effectively in the public school classroom or department approved, accredited independent school: Planning and implementing instruction, managing classrooms, and collaborating successfully with teachers, administrators and parents
Lecture: $1 \mathrm{hr} / \mathrm{wk}$.; Student Reaching: 35 hrs ./wk.
Prerequisite: VCLA and Praxis I math completed successfully or have met the SAT/ACT established pass score, Praxis II completed successfully, EDUC 338 or competency, background check, 2.5 GPA (overall, licensure area content courses, and education/psychology licensure courses) and approval.

## ENGLISH

Professors Hanstedt, Heller, Hoffman, Kuchar (Chair), Schultz, Turpin; Associate Professors Almeder, Carter, Cooper, W. Larson-Harris, Mallavarapu, McGlaun, Stewart, Whiteside; Assistant Professors Khoo, McGraw, Melican, Tenbrunsel; Lecturer D. Selby

The English Department at Roanoke College houses three majors: Communication Studies, Creative Writing and Literary Studies. All three majors share a common required foundational course, Rhetoric 125: Texts, Rhetoric and Media. See separate listings under Communication Studies, Creative Writing, and Literary Studies for the requirements for the majors and minors in these fields.

## 220 Special Topics

Critical reading and literary analysis of major texts surrounding a focused topic of particular interest to the introductory study of literature. A variety of genres (poetry, prose, and drama, as relevant) will be included. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 240 British Literature

Critical reading and literary analysis of major texts and genres (poetry, prose, and drama) across periods in the British tradition. (1)
Lecture: 3 hrs/wk.

## 250 American Literature

Critical reading and literary analysis of major texts and genres (poetry, prose, and drama) across periods in the American tradition. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 256 The Art and History of Film

Critical study of selected films drawn from a variety of periods and national cinemas. The course will focus on the elements of film and how directors use these elements to achieve their effects and make their meanings. Works will be placed within the history of cinema, allowing attention to how the elements of film art have developed over time. (1)
Lecture: 3hrs/wk; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.

## 260 World Literature

Critical reading and literary analysis of major texts and genres (poetry, prose, and drama) across periods in world literature. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 301 Special Studies in Language and Literature

Concentrated study of a special topic. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 302 Southern Literature

An in-depth survey of major Southern writers and literary trends from the mid-19th century to the present, with emphasis on such figures as Faulkner, Capote, Williams, McCullers, Flannery O'Connor, etc. (1)
Lecture: 3 hrs/wk.
Prerequisite: RHET 125, ENGL 250 and one other 200-level ENGL literature course.

## 304 Appalachian Literature

An in-depth survey of the rich body of literature from the Appalachian region of the United States. The course places the literature in both a cultural and historical context. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET125, ENGL 250 and one other 200-level ENGL literature course.

## 305 Women Writers

A study of literature by women from Sappho to the 20th century, including all genres of writing. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.
308 Author Studies
Concentrated study of a single author or the comparative study of two or three authors. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 310 Literatures of the African Diaspora

An introduction to oral and written literatures of the African Diaspora. Places some of the world's important black writers (DuBois, Hurston, Cesaire, Walcott, Morrison, etc.) in historical and cultural context, with an emphasis on patterns and genres shared across national and linguistic boundaries. (1) Lecture: 3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 312 Studies in the Cross-Cultural Imagination

An in-depth examination of the acts of reading and writing across cultural boundaries. Topics of focus will vary and will be selected from among the following fields of cross-cultural literary inquiry: Ethnic American literatures, postcolonial literatures, and comparative literature. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 315 Research Methods and Critical Perspectives

An introduction to the methods of literary study that engages major debates and issues in the discipline approaches to the elements and conventions of genre, and a sampling of literary perspectives and their critical applications. Students will learn to integrate their arguments with critical sources, bringing the critics' approaches to bear in the interpretation and appreciation of literary texts. This course will help students develop the skills necessary to produce a well researched, scholarly essay. (1)
Lecture: 3 hrs/wk.
Prerequisite: RHET 125, and one additional 200-level ENGL literature course.

## 320 Basic Linguistics

The scientific study and description of language according to the principles of modern linguistics. (1) (Cross-listed as ANTH 320/LING 320)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 321 Advanced Grammar and Style

A study of the structure of contemporary English grammar. Also explores questions of style and usage. Students analyze and diagram sentences and apply principles of grammar and style to their own and others' writing. Designed for English majors and for those preparing to teach language and communication skills. (1)
Lecture: 3 hrs/wk.
Prerequisite: HNRS 105, HNRS 110, INQ 110, INQ 120 or permission

## 322 Composition Theory and Practice

Both an advanced composition course and an introduction to theories of writing and methods of teaching writing, to include perspectives on composing processes, social contexts and purpose for writing, theories of teaching, and successful classroom approaches to creating, responding to, and evaluating composition assignments. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 323 The English Language

A critical and historical study of the forms and usages in English speech and writing. (Recommended for those planning to teach English.) (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 330 Chaucer

Reading and analysis of The Canterbury Tales and Troilus and Criseyde. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ENGL 240 and one other 200-level ENGL literature course.

## 332 Shakespeare

Analysis of selected plays with oral interpretation. (1) (Cross-listed as THEA 332)
Lecture: 3 hrs/wk.; Film Laboratory: 2-3 hrs/wk.
Prerequisite: RHET125, ENGL 240 and one other 200-level ENGL literature course.

## 333 The Literature of Tudor and Stuart England (Virginia Program at Oxford University)

A study of the literature and culture of Tudor and Stuart England through lectures and seminars, offered
off-campus at Ox-ford University and only in conjunction with History 233. (1)
Lecture: 3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 334 Studies in Medieval Literature

Critical study of the literature and culture of Medieval England. The course will focus on a variety of medieval texts from both the Old and Middle English periods. The course may focus on a particular theme, genre, or set of authors. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 335 Studies in Renaissance Literature

Critical study of selected works from the Renaissance period. The course may focus on a particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to the current critical issues surrounding it. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 336 Studies in Restoration and 18th-Century Literature

Critical study of selected works from the Restoration and 18th-century period. The course may focus on a particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to the current critical issues surrounding it. (1)
Lecture: 3 hrs/wk.
Prerequisite: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 337 Studies in Romanticism

Critical study of selected works from the period of literary Romanticism, 1780 to 1835 .The course may focus on a particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to current critical issues. (1)
Lecture: 3 hrs/wk.
Prerequisite: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 338 Studies in Victorian Literature

Critical study of selected works from the Victorian period. The course may focus on a particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to the current critical issues surrounding it. (1) Lecture: 3 hrs/wk.
Prerequisite: RHET 125, ENGL 240 and one other 200-level ENGL literature course.

## 339 Studies in 19th-Century American Literature

Critical study of selected works from 19th-century American literature. Course may focus on particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to current critical issues. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 250 and one other 200-level ENGL literature course.

Critical study of a single genre of literature, such as autobiography, epic, literary non-fiction, lyric, romance, and short fiction. Works will be placed in relationship to literary, social, and historical movements and to current critical issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 351 Studies in 20th-Century Fiction or Poetry

Critical study of selected works from the 20th century. The course may focus on a particular theme, genre, or set of authors, or form a focused survey of the period. Works will be placed in relationship to the literary, social, and historical movements of the era and to the current critical issues surrounding it. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 352 Studies in Contemporary Fiction or Poetry

Critical study of selected works of contemporary fiction or poetry. The course may focus on a particular theme, genre, or set of authors. Works will be placed in relationship to the literary, social, and historical movements and to current critical issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 354 Studies in Drama

Critical study of selected works of drama. The course may focus on a particular time period and/or country of origin, or form a focused survey of the genre. Works will be placed in relationship to relevant literary, social, and historical movements and to current critical issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 356 Studies in Film

Critical study of selected films. The course may focus upon a particular theme, genre, or set of filmmakers. Films will be placed in relation to social and historical movements and to current critical issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ENGL 256.

## 360 Studies in World Literature

A brief history of the concept of world literature and an overview of current debates about the meaning and significance of world literature today. We will analyze texts outside the British and American canon, focusing at the instructor's discretion on a specific theme, author, time period, genre, or national literature. We will pay attention to the importance of location and social and historical context when it comes to understanding and appreciating literature from different parts of the world. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 or 250 and one other 200-level ENGL literature course.

## 390 Studies in Literary Criticism

A study of central texts in the history and theory of literary criticism from the Greeks to the present. The course will focus on the ends and means of critical discussion and writing, the nature of critical theory, and the methods and languages of critical discourse. (1)
Lecture $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: RHET 125, ENGL 240 or 250 and one other 200-level ENGL literature course.

## 405, 406, 407 Independent Study

Guided in-depth study of a topic in literature, language, or critical theory, or film leading to a substantial paper, series of essays, or creative project. ( $1 / 2,1,1 / 2$ )
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 411-412 Seminar

An intensive study of work from English, American, and world literature, examining both their historical settings and their interrelationships. (Required of English majors in the senior year. Students must have completed a total of 25 units before enrolling in ENGL 411. Students wishing to complete their degree program early must meet the following criteria in order to enroll in ENGL 411: (1) have completed at least 20 units, and (2) have an overall GPA of at least 3.25 and a major GPA of at least 3.5. Students who do not meet the stipulated criteria may submit an appeal to the Department Seminar Subcommittee. No credit given for one term. NOTE: Final grade for year given on a cumulative basis. (1, 1)
6 hrs/wk.
Prerequisites: Senior standing or permission; ENGL 411 is a prerequisite for ENGL 412.

## 416 English Internship

Experience in a field of applied writing through programs such as the Washington Semester, public relations, government communications or policy, or various aspects of the media. (1)
Prerequisites: RHET 125, ENGL 240 or 250, and one other 200-level ENGL literature course.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## ENVIRONMENTAL STUDIES

Professor Banschbach (Chair), Associate Professors Cawley, Collins, O'Neill, (Biology), Sarabia (Sociology); Assistant Professors Mihalache-O'Keef (Public Affairs); Lecturer M. Larson-Harris (Religion \& Philosophy).

Environmental Studies examines interrelationships between human activities and the environment, an inherently complex challenge. The B.S. in Environmental Studies is an interdisciplinary major drawn from the natural sciences, social sciences, and humanities. Students specialize by following one of the tracks: Environment and Society or Environmental Science. All students majoring in Environmental Studies are encouraged to consult with their advisors regularly, and to consider internships, research projects, and affiliated coursework that will allow them to select and achieve their postgraduate goals.

## Major in Environmental Studies

Students seeking a B.S. in Environmental Studies are required to complete 13 units: eight core units plus five additional units in one of the tracks.

## The core:

ENVI 130 Introduction to Environmental Studies
ENVI 230 Earth Systems Science
ENVI 240 Environment, Ethics, and Culture
ENVI 250 Environment and Society
ENVI 270 Geographic Information Systems
BIOL 205 Ecology
ENVI 430 Environmental Practicum
One additional unit of ENVI at the 300-level or higher

## Environmental Science Track:

Four additional units from a single discipline and one unit from a second discipline, with courses chosen from

- Any PHYS courses
- Any ENVI courses
- CHEM 111, 112, 221, 270
- Any BIOL courses except BIOL 105
(Students are encouraged to take courses at the whole organism or system levels such as BIOL $125,235,240,265,270,275,280,300$, and 360 . Note that BIOL 125 must be taken first as it is prerequisite to other BIOL courses. BIOL 120 may be needed as it is prerequisite to most BIOL courses as well.)


## Environment and Society Track:

- One unit of social science methods chosen from SOCI 251, POLI 209, and ECON 448
- Two units of environmental applications chosen from SOCI 337, POLI 351, and ECON 287
- Two additional units chosen from ECON 121, 237, 287, ENVI 260, 305, 360, POLI 201, 202, $205,351,333$, SOCI $215,315,335,337,340$ and up to one approved INQ 260. Note that students using courses that don't focus exclusively on environmental topics should undertake environmentally-oriented projects within these courses whenever allowed by course design.


## Minor in Environmental Studies

The minor in Environmental Studies requires six units: four units of ENVI at the 200-level or higher plus any two additional units that are allowed for the Environmental Studies core or tracks.

## 130 Introduction to Environmental Studies

An introduction to the applied field of environmental studies, this course encourages students to develop the interdisciplinary analytical and research skills needed to frame questions, evaluate environmental issues, and work toward solutions that are environmentally sound, economically viable, and socially equitable. Course activities will draw from a number of disciplines including the natural and social sciences with emphasis on sustainability and resource management. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 230 Earth Systems Science

An examination of the interrelationships between matter and energy in the solid, fluid, and living Earth as well as the human interactions with these natural systems. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Laboratory: 3 hrs/wk.

## 232 Physical Geology

In a time of limited resources to support technology and modern Western lifestyles, earth resources become increasingly important. This course presents modern concepts of physical geology and earth systems. The course includes the basic tenets of rock and mineral identification, physical geology rock textures/synthesis, and geologic terrains. This course is also suitable for non-majors with an Earth Science interest. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisites: non-INQ lab science course

## 240 Environment, Ethics, and Culture

An examination of conceptions of Nature, the environment, and sustainability drawn from the Humanities. Insights from these traditions will be used to explore contemporary environmental debates. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 250 Environment and Society

An examination of the major concepts, methodologies, and theoretical frameworks employed in the social sciences to study human ecological relations. The implications of social organization, whether political or economic, for ecosystems will provide an opportunity to examine the impact of individual and collective decisions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 260 Special Topics

Examination of special topics concerning the environment. (1)
Lecture: 3 hrs/wk.

## 265 Special Topics

Investigation of a special topic not regularly offered, with the topic determined by the faculty member. (1)
Lecture: 3 hrs/wk.; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.

## 270 Geographic Information Systems

An exploration of techniques for modeling environmental interactions using a specialized database management system known as Geographic Information System. GIS is a comprehensive set of tools for analyzing patterns, relationships, and trends across the landscape with applications in natural resource management, conservation biology, regional planning, and risk assessment. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 305 Environmental Impact Assessment

This course will examine the development of environmental impact assessment policy in the United States and how such policy is applied to current environmental issues and problems. Examples will be taken from a variety of areas including toxicology, bioremediation, wetland protection and work/home environmental safety. (1)
Lecture: 3 hrs/wk.
Prerequisites: ENVI 200 or 230.

## 307 Appalachian Rocks and Waters

A systematic survey of Appalachian terrains, geology and paleoecology. This course examines
foundational concepts of geology within a chronological scope associated with the Appalachian Mountain Belt. Topics include introduction to rock and mineral types, major index fossils, paleoecology, and basic landform geomorphology and rock process. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ENVI 230.

## 360 Special Topics

Examination of a special topic concerning the environment. (1)
Lecture: 3 hrs/wk.
Prerequisites: Permission

## 370 Landscape Analysis in GIS

An introduction to the spatial analysis of landscapes using remote sensing. This course will address consequences of spatial heterogeneity and include applications in environmental planning, risk assessment, and adaptive management. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ENVI 270.

## 430 Environment Practicum

A team-based project where students work as environmental consultants to solve a real world problem. (1)
Lecture: 3 hrs/wk; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: ENVI 230, 240, 250, and 270.
405, 406, 407 Independent Study and Research
A research or independent study project on an environmental topic that results in the production of a paper and oral presentation. ( $1 / 2,1,1 / 2$ )
Prerequisites: Written proposal and permission.

## 416 Internship

Practical experience in a setting where environmental topics are applied. (1)
Prerequisites: Written proposal and permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance. ( $1 / 2,1,1 / 2$ )
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written
proposal and application must be approved by the committee and program coordinator. . A minimum GPA of 3.4 in the major is required.

## FRENCH

Associate Professor Scaer; Assistant Professor Han; Teaching Associate Clifton

A major in French consists of the completion of 11 units above the 202 level in this language. Majors must complete one period of study abroad. A major must be enrolled in at least one one-unit courses in French during the senior year. Appropriate periods of study abroad include an Intensive Learning or May Term travel course, a summer, semester, or year abroad with a department-approved program such as ISEP, CREPUQ, or another university-sponsored program.

## Majors must take:

One language course from the following:
French 301
French 303
One composition course from the following:
French 302
French 304
One civilization and culture course from the following:
French 311
French 312
French 315
A total of four literature courses; that is, a minimum of one course from four of any of the five periods of literature listed below:

1. Middle Ages: 421
2. Renaissance: 431, 420
3. 17th and 18th Centuries: 441
4. 19th Century: 420, 451
5. 20th Century: 461

In addition, majors must take four French electives to be selected from the courses listed above or from any of the other 300 and 400 level French courses or Linguistics 320. However, no more than two courses taught in English may be applied toward the major.

Students who study abroad should select, in consultation with their advisors, appropriate substitutes for these requirements. With department approval, French 380 and 480 and 406 may count as courses for the above periods if appropriate to the literary period. French 420 may be counted for only one period of literature. Note that French 201 and 202 or their equivalent are prerequisites for all advanced courses in French.

Two 300-level courses are recommended before taking any 400-level literature course. The linguistics course taught in English (Linguistics 320) may be counted towards the major.

It is suggested that majors interested in:
a) French studies in graduate school take French 301, 302, 311, 312, 315, and one literature course from each of the five periods of literature, and acquire a working knowledge of a second foreign language;
b) Teaching French take French 341, French 301, 302, 303, 304, 311, 312 or 315, and enough courses in another subject or a second foreign language to meet licensure requirements in a second area;
c) Business or international diplomacy take French 301, 303, 304, 311 and/or 312 or 315,330 , Business Administration 211, and Political Science 231.

## Minor in French

A minor in French consists of six units, including: French 201 and 202, or two elective units French 301 or 303
French 302 or 304
French 311 or 312 or 315

And one course to be selected from any French course numbered at the 300 or 400 level.

## 101, 102 Elementary French I, II

A study of the fundamentals with emphasis on pronunciation and aural comprehension. Oral and written work. Reading of selected materials. $(1,1)$
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: FREN 101, or its equivalent, is a prerequisite for 102.

## 150 Elementary French Review

A one semester review of the essentials of French grammar and basic vocabulary to promote listening, speaking, reading, and writing skills. Emphasis is on developing conversational skills and cultural awareness to handle topics of everyday life in French. This course is designed for students who have studied French previously, but lack sufficient preparation to enter French 201. Credit cannot be received for both FREN 102 and FREN 150. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk} . ;$ Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: FREN 101 or its equivalent.

## 201, 202 Intermediate French I, II

A review of grammar. Selected reading, conversation, culture and composition. (1, 1)
Lecture: 3 hrs/wk.; Laboratory: 1 hr/wk.
Prerequisite: No prerequisite for FREN 201, but previous study of a modern language is recommended; FREN 201 or equivalent is prerequisite to FREN 202.

NOTE: For any course above the 202 level, FREN 201-202 or the equivalent is a prerequisite. All 300 and 400 level courses are taught in French unless specifically noted otherwise. No more than two courses taught in English may be applied toward the major. The following are taught in French:

## 301 French Conversation II

Improving oral proficiency and listening comprehension skills using contemporary media sources. (1)
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 302 French Composition

Improving command of grammar and writing skills, vocabulary building, and study of idiomatic expressions through selected readings. (1)
Lecture: 3 hrs/wk.; Laboratory: 1 hr/wk.

## 303 Oral Expression and Phonetics

Theory and practice of pronunciation. Systemic analysis of the sounds of French and the techniques to produce them accurately through intonation patterns, phonetic transcription and oral practice. (1)
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 304 The Structure of Modern French

Study of the forms and syntax of French. Perfecting skills in grammar, composition and translation. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 311 Building a Nation: French Civilization and Culture I

The civilization and cultural development of France from the beginning to the French Revolution. Attention is paid to the language, daily life, customs, art, and music of the country. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 312 A Nation Emerges: French Civilization and Culture II

The civilization and cultural development of France from the time of the French Revolution to the 21st century. Attention is paid to the language, daily life, customs, art, and music of the country. (1)
Lecture: 3 hrs/wk.

## 315 Francophone Societies

A study of political, economic, social, literary, and cultural issues in selected contemporary Francophone societies. Three French-speaking countries, selected from Africa, the Caribbean, and the Americas, will be studied in depth. (1)

Lecture: 3 hrs/wk.; Laboratory work.

## 330 Technical and Business French

A study of French technical and business vocabulary, as well as the proper forms of correspondence; practical experience in translating letters and other business documents. (1)
Lecture: 3 hrs/wk.; Computer work.

## 341 Methods of Teaching French

An evaluative study of language teaching methods. Development of teaching aids and a teacher's resource book. PreK-12 levels of instruction will be presented. Assignments will be completed in French. (1) (Cross-listed as LANG 341) Taught in English.
Lecture: 3 hrs/wk.
Prerequisite: FREN 202.

## 380 Special Studies in French Language, Literature, and Culture

Study of a special topic, with subject or theme to be determined by the students and faculty member. Course may be taken more than once. (1)
Lecture: 3 hrs/wk.
Prerequisite: Permission of the instructor.

## 405, 406 Independent Study

Guided reading and research of a particular facet of French language, literature, or culture. (1/2,1)
Prerequisite: By permission.

## 416 Internship

Field placement providing the student with practical experience in work areas in which French is applied. These areas may include embassies, government service, international business, education, industry, and the communications media. (1) May be conducted in French or English. (Cross-listed as LANG 416)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.

## 420 The French Poetic Tradition

A study of the languages and forms of poetry in French, based on reading and analysis of selected works from major poets and poetic movements in French literary history. This course is designed to enable students to become better readers of French poetry and to gain an understanding and appreciation of some of France's greatest poets. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 421 The Medieval World

Selections from French literature of the Middle Ages, with emphasis on understanding the literary, cultural, and aesthetic trends of the period. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 431 Renaissance Vision and Voices

Selections from French literature of the Renaissance, with emphasis on understanding the literary, cultural, and aesthetic trends of the period. (1)
Lecture: 3 hrs/wk.

## 441 Political and Civil Order in 17th- and 18th- Century French Literature

Moving from classicism and the Age of Absolutism to the Enlightenment and the Age of Revolution, this course studies major French authors of the 17th and 18th centuries in the context of French literary and intellectual history. (1)
Lecture: 3 hrs/wk.

451 Romanticism, Realism and Naturalism in 19th- Century Literature
Readings and discussion of major literary works of the period. (1)
Lecture: 3 hrs/wk.

## 461 The Modern Novel and Short Story

Major works of the 20th century including such authors as Gide, Camus, Sartre, Robbe-Grillet, and other francophone writers. (1)
Lecture: 3 hrs/wk.

## 480 Advanced Studies in French Language, Literature, and Culture

Concentrated study of a special topic or theme not normally covered by regular course offerings. Students will be expected to read, write, and carry out research at an advanced level in French. Course may be taken more than once. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: FREN 301 or equivalent.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and Department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## GENDER \& WOMEN'S STUDIES CONCENTRATION

Assistant Professor McGraw, Coordinator

Gender \& Women's Studies is born of the historical effort to retrieve from obscurity the realities of women's lives and to advocate for equality for all genders in the modern world. This interdisciplinary field investigates the cultural categories of masculinity and femininity (and the various mixtures of the two) which have developed in and through complex socio-historical processes, and which face the possibility of future transformation. Gender \& Women's studies courses approach the relationship of gender to sex, class, race, sexuality, ethnicity, religion and language in a critical and self-critical spirit.

Students -male or female-from any major may earn a concentration in Gender \& Women's Studies by successfully completing (with a cumulative grade point average of at least 2.0) at least six units. Of these six units one must be GNDR 150. The other five units must come from at least two different disciplines from the course list below. Topics and special studies courses, marked "as appropriate" below, must be approved by the concentration advisors. In accordance with the general rules for concentrations, the six courses taken for the concentration must include at least three units which are not used to satisfy the student's major requirements. While GNDR 150 is not a prerequisite to the other courses, taking GNDR 150 as early as possible is recommended. Students should see the concentration advisor(s) for additional special topics courses, INQ courses, and independent studies that can be counted toward the concentration. No more than two INQ courses may be applied toward the concentration.

## Required Course:

GNDR 150 Introduction to Gender \& Women’s Studies
Elective Courses: (five from at least two disciplines)
ENGL 220 Special Topics (as appropriate)
ENGL 301 Special Studies in Language and Literature (as appropriate)
ENGL 305 Women Writers
ENGL 308 Author Studies (as appropriate)
ENGL 336 Studies in Restoration and $18^{\text {th }}$ Century Literature (as appropriate)
ENGL 356 Studies in Film (as appropriate)
HIST 235 The Witch-hunts of Early Modern Europe
HIST 262 U.S. Women's History

| HIST 290 | Special Studies (as appropriate) |
| :--- | :--- |
| HIST 310-380 | Issues Courses (as appropriate) |
| HIST 490 | Research Seminar (as appropriate) |
| PHIL 260 | Selected Topics (as appropriate) |
| POLI 261 | Selected Topics in Political Science (as appropriate) |
| RELG 290 | Feminist Readings of the Bible |
| RELG 312 | Topics in Biblical Studies and Early Christianity (as appropriate) |
| SOCI 226 | Intimate, Marital, and Family Relationships |
| SOCI 229 | Sociology of Sex and Gender |
| SOCI 329 | Global Perspective on Families |
| SOCI 338 | Women's Lives Around the World: Global Perspectives |
| SOCI 360, 361 Selected Topics in Sociology (as appropriate) |  |

## 150 Introduction to Gender \& Women's Studies

An introduction to key questions, concepts, and debates within the field of Gender \& Women's Studies and a basic grounding in the historical movements in which gender equality is fought for. The fundamentally interdisciplinary nature of Gender \& Women's Studies is emphasized by regular guest lectures from faculty across the curriculum. (1)
Lecture: 3 hrs/wk.

## GEOGRAPHY

Professor M. Miller
A major in geography is not offered at Roanoke College.

## 101 Introduction to Geography

This course will examine the major research traditions of geography. The key elements to be examined include the foundation of geography, mapping, the earth science tradition, the culture-environment tradition, and the area analysis tradition. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 110 World Geography

A geographical analysis of physical and cultural resources, patterns of human occupations, the distribution of population, and the important areas of commodity productions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 120 Geography of North America

A regional study of the continent based upon physical and cultural features. Consideration is given to different kinds of production in the various regions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 140 Urban Geography

A survey designed to acquaint the students with the concepts and principles of urban geography, promote a greater awareness of the spatial structure of cities and metropolitan regions, and provide the student with skills to interpret and explain locational and functional interrelationships and changes in urban areas. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## GERMAN

Professor Ogier
A major in German is not offered at Roanoke College.

## Minor in German

A minor in German consists of six units, including:
German 201 and 202, or two electives
German 301 or 320

German 311 or 314 or 315
Two electives to be selected from German courses at or above the 300 level or Linguistics 320 .
Each minor will be individually tailored to complement the student's interests and major field of study. A period of study abroad is highly recommended.

The following courses are recommended for those seeking teaching licensure in German: for teaching methods- Language 341; for composition and conversation-German 301; for civilization and cultureGerman 311 or 314 or 315 ; for survey literature courses-German 320 and 321 ; for Linguistics- Linguistics 320. For placement and prerequisites at the lower level see "Modern Languages."

## 101, 102 Elementary German I, II

A study of the fundamental structures of German, with emphasis on oral proficiency and communication. Includes cultural topics. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. for each; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$. for each.
Prerequisite: GRMN 101, or its equivalent, is a prerequisite for GRMN 102.

## 110 German for Business

An introduction to the spoken and written language of the German business world. It includes letter writing, grammar review, conversational practice for business situations, and intermediate-level readings on current economic and cultural topics. (1)
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: Two years of secondary school German or GRMN 102 or the equivalent.

## 201, 202 Intermediate German I, II

A review of grammar. Selected reading, conversation, and composition. (1, 1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. for each; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$. for each.
Prerequisite: No prerequisite, but previous study of a modern language is recommended.
The following are taught in German:

## 301 German Composition and Conversation

Practice to improve oral proficiency and writing skills. Vocabulary building through selected readings on cultural topics. (1)
Lecture: 3 hrs/wk.; Laboratory work.

## 311 German Civilization and Culture

The historical, social, and artistic forces which have influenced German life and thought. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 314 The Cultures of the German-Speaking Countries

The development of the culture and politics of modern Austria, Germany, and Switzerland. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 315 The Post-War Germanies

An examination of the political, economic, and cultural developments in East and West Germany from the end of the World War II to the present, including the reunification. (1)
Lecture: 3 hrs/wk.; Laboratory work.

## 320 Age of Goethe: Faust

An introduction to the Age of Goethe through reading and discussion of Goethe's Faust. This course also focuses on improvement of reading skills in German. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 321 Survey of German Literature

Representative works of literature from the Enlightenment to the present. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 335 German Phonetics and Phonology

A systematic analysis of the sounds of German. Stress and intonation patterns of German speech through phonetics transcription and intensive oral practice. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 380 Special Studies in German Language, Literature, and Culture

The study of a special topic not regularly offered. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 405, 406 Independent Study

Guided reading and research of a particular facet of German language, literature, or culture. $(1 / 2,1)$ Prerequisite: By permission.

461 20th-Century Fiction
A study of the works of outstanding modern writers such as Thomas, Mann, Hesse, Kafka, and Grass. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## GREEK

Professor Berenson
A major in Greek is not offered at Roanoke College. Student interested in studying the ancient world should consult the requirements for the concentration in Classics and the Ancient Mediterranean World.

101, 102 Elementary Ancient Greek I, II
A study of the fundamentals of Classical Greek, with emphasis on grammar, vocabulary, and translation. Students will also read selected texts in translation as an introduction to the cultural life of ancient Greece.
$(1,1)$
Lecture: 3 hrs/wk.; Laboratory $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: GREK 101, or its equivalent, is a prerequisite for 102.

## 201 Intermediate Ancient Greek I

A continuing study of Classical Greek, with emphasis on more complex grammatical structures, vocabulary, and translation. Students will read selected excerpts in Greek as part of an ongoing introduction to the cultural life of ancient Greece. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: GREK 102.

## HEALTH AND HUMAN PERFORMANCE

Associate Professors Buriak, Creasy (Chair), J. Maina, M. Maina; Rearick, Assistant Professor Holbrook; Lecturer Edmunds; Teaching Associate Urbanek.

Four majors are offered by the Health and Human Performance Department: Health and Physical Education, Sport Management, Health and Exercise Science and Athletic Training.

## SPORT MANAGEMENT MAJOR

For a Bachelor of Science degree with a major in Sport Management the following units of work are required in the areas of Health and Human Performance (HHP), Business Administration (BUAD) and Economics (ECON). Required courses include:

HHP 200 Foundation of Movement

HHP 207 Health \& Fitness Concepts \& Applications (pre-requisite HHP 160 or permission)

| HHP 221 | Professional Concepts \& Leadership Development |
| :--- | :--- |
| HHP 223 | First Aid and Safety OR competency completed through American Red Cross <br> Certification |
| HHP 225 | Contemporary Issues in Sports Management |
| HHP 301 | Personal and Community Health |
| HHP 315 | Behavioral Perspectives in Sport |
| HHP 412 | Advanced Principles and Practice of Sport Management |
| HHP 418 | Internship OR HHP 405-407 Independent Study |
| BUAD 215 | Accounting Principles |
| BUAD 233 | Marketing Management |
| BUAD 254 | Organizational Behavior Management |
| BUAD 364 | Team Dynamics |
| ECON 120 | Economics (Macro \& Micro combined) OR ECON 121 Principles, Micro |
| *All students must obtain certification in adult, infant and child CPR and standard first aid prior to their |  |
| senior year. The course may be taken through Roanoke College of through an external agency. |  |
| Verification of external agency certification must be presented. |  |
| HEALTH AND EXERCISE SCIENCE MAJOR |  |

For a Bachelor of Science degree with a major in Health and Exercise Science the following units of work are required in the areas of Health and Human Performance (HHP) and Biology (BIOL). Required courses include:

HHP 200 Foundations of Movement

HHP 207 Health Fitness Concepts \& Applications (pre-requisite HHP 160 or permission)

Any two of the following (203-206).

HHP 203 Individual Activities

HHP 204 Team Sports

HHP 205 Non-Traditional Games and Activities

HHP 206 Fundamentals of Rhythms and Dance
HHP 221 Professional Concepts \& Leadership Development

| HHP 223 | First Aid and Safety OR competency completed through American Red Cross <br> Certification |
| :--- | :--- |
| HHP 225 | Contemporary Issues in Sports Management |
| HHP 301 | Personal and Community Health |
| HHP 306 | Motor Behavior (HHP 306L lab required), |
| HHP 315 | Behavioral Perspectives in Sport |
| HHP 403 | Exercise Physiology (HHP 403L lab required) |
| HHP 411 | Exercise Testing and Prescription |
| HHP 418 | Internship OR HHP 405-407 Independent Study |
| BIOL 230 | Human Anatomy and Physiology I |
| BIOL 260 | Human Anatomy and Physiology II |
| *All students must obtain certification in adult, infant and child CPR and standard first aid prior to their |  |
| senior year. The course may be taken through Roanoke College or through an external agency. |  |
| Verification of external agency certification must be presented. |  |

## HEALTH AND PHYSICAL EDUCATION MAJOR

The student desiring to teach health and physical education in elementary/secondary schools may secure credits to satisfy the requirements for licensure in Virginia and other states with which Virginia has reciprocity. For a Bachelor of Science degree with a major in Health and Physical Education the following units of work are required in the areas of Health and Human Performance (HHP) and Biology (BIOL). Required courses include:

HHP $200 \quad$ Foundations of Movement

Any two of the following (203-206):

HHP 203 Individual Activities

HHP 204 Team Sports

HHP 205 Non-Traditional Games and Activities

HHP 206 Fundamentals of Rhythms and Dance

HHP 207 Health Fitness Concepts \& Applications

HHP 221 Professional Concepts \& Leadership Development

HHP 223 First Aid and Safety OR competency completed through American Red Cross Certification

HHP $301 \quad$ Personal and Community Health
HHP 302 Physical Education Methods and Materials I: PreK-6

HHP 305 Adapted and Developmental Physical Education

HHP 306 Motor Behavior (HHP 306L lab required)

HHP 335 Coordinated School Health Program

HHP 403 Exercise Physiology (HHP 403L lab required)

HHP 404 Physical Education Methods and Materials II, 6-12

HHP $409 \quad$ Health Education Methods and Materials, PreK-12

BIOL 230
Human Anatomy and Physiology I (BIOL 230 Lab required)

This program of study is required for students interested in being licensed to teach health and physical education. Other state licensure requirements are also required. (See Education section.)
*All students must obtain certification in adult, infant and child CPR and standard first aid prior to their
senior year. The course may be taken through Roanoke College or through an external agency.
Verification of external agency certification must be presented.

## ATHLETIC TRAINING MAJOR

The Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The program of study is designed to prepare students for BOC certification. Students will begin the course of study during their first year at Roanoke College. Entry level courses will be taken and students will begin to gain clinical experience in the athletic training room through directed observation. During the first semester of their sophomore year, students will formally apply for consideration of acceptance to the Athletic Training major. Outlined below are the course requirements, admission procedures for acceptance into the Athletic Training major and clinical requirements.

For a Bachelor of Science degree with a major in Athletic Training, the following units of work are required:

HHP 200 Foundations of Movement

HHP 207 Health Fitness Concepts \& Applications

HHP $211 \quad$ Clinical I

HHP $212 \quad$ Clinical II

HHP 213 Clinical III

HHP 214 Clinical IV

HHP 221 Professional Concepts \& Leadership Development

HHP 223 First Aid and Safety OR competency completed through American Red Cross Certification

HHP 224 Introduction to Athletic training

HHP $301 \quad$ Personal and Community Health

HHP 306 Motor Behavior (HHP 306L lab required

HHP 307 Athletic Training Administration

HHP 308 Athletic Injury Prevention

HHP 403 Exercise Physiology (HHP 403L lab required)

HHP 413 Therapeutic Exercise

HHP 414 Therapeutic Modalities

HHP $415 \quad$ Evaluation of Injuries

HHP 416 Internship

BIOL 230 Human Anatomy and Physiology I (BIOL 230 Lab required)

BIOL 260 Human Anatomy \& Physiology II (BIOL 260 Lab required)

Note that HHP 223 (or equivalent), 224, 301 and Biology 230 are prerequisite courses for admission to the Athletic Training major. Biology 260 is taken as a prerequisite or co-requisite to all upper level Athletic Training courses.

To be considered for admission to the Athletic Training major, students must meet selection criteria established by the department of Health and Human Performance.

During the first three semesters of study, students will be required to take general education courses and athletic training courses and to accumulate 100 hours of directed observation in the Roanoke College athletic training room or at practices or games. During their third semester, students may apply for admission to the Athletic Training major. Prior to admission, students must also have completed at least 12 units. The following is a list of selection criteria for admission to the Athletic Training major.

The student:

1. Must have completed at least 12 units.
2. Must have a minimum cumulative GPA of 2.5.
3. Must have a minimum 2.5 GPA in HHP 223 (or equivalent), 224, 301, and Biol. 230.
4. Must submit formal application for Athletic Training major.
5. Must have completed 100 directed observation hours during the first three semesters.
6. Must show competency in basic athletic training skills by submitting a signed skills checklist.
7. Must provide two positive recommendations from faculty or staff of Roanoke College.
8. Must perform well in an interview with selection committee.
9. Must perform well on an entrance examination.
10. Must submit a completed technical standards form with the application for admission.

Students applying for admission to the Athletic Training program must meet all criteria listed above. Applications for admission will be submitted during the third semester (fall term only) at Roanoke College, with a deadline of October 15 . Students will be notified of their status no later than January 1. Enrollment into the program will be limited. Students not accepted into the program initially may re-apply the following year.

Transfer students will be considered for admission to the Athletic Training major provided they have completed all prerequisites and have met the criteria listed above.

Athletic Training majors may incur additional costs for uniforms; travel to and from off-campus sites and to attend professional conferences.

## Athletic Training Clinical Requirement

The Athletic Training clinical requirement is an integral part of the educational program for athletic trainers. Once admitted into the program students must complete four clinical courses. Each semester students will be assigned to an approved clinical instructor ( ACI ) and must work with the assigned ACI to complete the clinical proficiencies outlined in the Roanoke College Athletic Training Clinical Manual. In addition, students must obtain 800 hours of field experience under the direct supervision of a certified athletic trainer. The hours must be completed in an athletic training setting and may be divided between high risk sports, low risk sports, and the athletic training room. One hundred hours of directed observation during the first three semesters and 800 athletic training hours during the remaining five semesters, for a total of 900 hours, are required to complete the athletic training clinical requirement. Assessment of psychomotor skills related to athletic training will be an ongoing process throughout the four years of study. Students will also gain valuable field experience working with upper extremity sports, lower extremity sports, equipment intensive sports and general medical situations.

## Physical Education General Education Requirement

All students must successfully complete Health and Human Performance 160 (Fitness for Life). In addition, students must take one other lifetime activity course (Health and Human Performance 101-157). Health and Human Performance 160 is a prerequisite for all other activity classes.

Varsity athletes may receive competency in one lifetime activity but must successfully complete Health and Human Performance 160 (Fitness for Life). Students will receive competency in a varsity sport after successfully completing the varsity season at Roanoke College.

Credit for Health and Human Performance Activities will be in addition to the total units required for graduation. Enrollment for credit in health and human performance activities is limited to the number required for graduation and cannot exceed two. The College has the capacity of offering adaptive health and human performance to individuals with disabilities who must have a modified program.

The Department offers the following one-quarter unit activity courses:
HHP 101-159 General (each 1/4 unit)
HHP 101 Tennis
HHP 102 Beginning Swimming
HHP 106 Badminton
HHP $107 \quad$ Golf (Extra fees required)
HHP 110 Volleyball
HHP 114 Yoga
HHP 116 Tai Chi
HHP 122 Skiing (Extra fee required. Must provide own transportation [arranged in class] to ski slopes.)
HHP 123 Dance-Modern
HHP 124 Dance-Jazz

HHP 128 Karate (Must provide own attire; Completion of yellow belt can be accomplished in the course.)
HHP 130 Scuba Diving (Swimming proficiency is necessary and student may be required to take a swim test. Extra fee required. Must provide own transportation [arranged in class] for open dives. Completion of certification is possible in the course. Must provide own mask, fins, and snorkel. Open dives often scheduled on weekends.)
HHP 136 Racquetball
HHP 141 Fencing
HHP 142 Backpacking (Some Saturday and overnight weekend hikes are scheduled and required. Must provide own transportation [arranged in class]. May be required to provide own equipment.)
HHP 143 Wilderness Sports
HHP 157 Intermediate Golf (May not receive credit for this course and HHP 107. Extra green fees required.)
HHP 158 Mountain Biking (Must provide own mountain bicycle)
HHP 159 Pilates

## 160 Fitness for Life

This course is designed to introduce the student to health and physical fitness components related to developing a healthy lifestyle. It will include physical fitness activities, health risk components, assessment, and the development of a personal health and fitness plan. (1/4)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: None; this course must be taken prior to enrolling in other HHP activity courses.

## 200 Foundations of Movement

Enables students to understand, recognize, demonstrate, and analyze fundamental movement such as locomotor, nonlocomotor, and manipulative skills as well as related movement concepts including space awareness, effort, and relationships. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: None.

## 203 Individual Activities

Enables students to understand, demonstrate and teach individual activities including tennis, strength training, and aerobic conditioning. (1/2)
Lecture: 3hrs/wk.
Prerequisite: None.

## 204 Team Sports

Enables students to understand, demonstrate, and teach team sports including soccer, volleyball, and floor hockey. (1/2)
Lecture: 3 hrs/wk.
Prerequisite: None.

## 205 Non-Traditional Games and Activities

Enables students to understand, demonstrate, and teach non-traditional games and activities including Frisbee, speedball, and other unique activates in physical education. (1/2)
Lecture-Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.

## 206 Fundamentals of Rhythms and Dance

The development of skill and teaching progressions in rhythmic movement, folk, modern, social, and square and aerobic dance. (1/2)
Lecture-Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.

## 207 Health Fitness Concepts and Applications

Provides the prospective physical educator with the physiological, psychological and social bases for engaging in regular physical activity. The emphasis of the course will be on understanding and being able
to create and apply key concepts of health related fitness and wellness. Students will be expected to develop individualized physical fitness programs, perform physical fitness assessments, develop activities to enhance physical fitness across the lifespan, and be engaged in a regular physical fitness program. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: HHP 160.

## 211 Clinical I

Clinical experiences designed to provide students with formal instruction and evaluation in Athletic Training Clinical Proficiencies. Students will work with an Approved Clinical Instructor throughout the semester and must complete 10 hours of clinical experience each week in addition to regular class meetings. The focus of this clinical will be therapeutic exercise and acute care of injury and illness. Completion of Therapeutic Modalities Basics will be required of those students who have not completed HHP 214: Clinical IV. (1/4)
Lecture: $2 \mathrm{hrs} / \mathrm{wk}$; clinical $10 \mathrm{hrs} / \mathrm{wk}$. Prerequisite: Admission to the Athletic Training major.

## 212 Clinical II

Clinical experiences designed to provide students with formal instruction and evaluation in Athletic Training Clinical Proficiencies. Students will work with an Approved Clinical Instructor throughout the semester and must complete 10 hours of clinical experience each week in addition to regular class meetings. The focus of this clinical will be risk management, pharmacology, nutritional aspects of injury and illness and general medical conditions. (1/4)
Lecture: 2hrs/wk; clinical $10 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Admission to the Athletic Training major.

## 213 Clinical III

Clinical experiences designed to provide students with formal instruction and evaluation in Athletic Training Clinical Proficiencies. Students will work with an Approved Clinical Instructor throughout the semester and must complete 10 hours of clinical experience each week in addition to regular class meetings. The focus of this clinical will be injury assessment and evaluation. (1/4)
Lecture: 2hrs/wk; clinical 10 hrs/wk.
Prerequisite: Admission to the Athletic Training major.

## 214 Clinical IV

Clinical experiences designed to provide students with formal instruction and evaluation in Athletic Training Clinical Proficiencies. Students will work with an Approved Clinical Instructor throughout the semester and must complete 10 hours of clinical experience each week in addition to regular class meetings. The focus of this clinical will be therapeutic modalities, psychosocial intervention, health care administration and professional development. Completion of Therapeutic Exercise Basics will be required of those students who have not completed HHP 211: Clinical I. (1/4)
Lecture: $2 \mathrm{hrs} / \mathrm{wk}$; clinical $10 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Admission to the Athletic Training major.

## 221 Professional Concepts and Leadership Development

This course is designed to introduce students to the historical, philosophical, scientific, and professional aspects of health and human performance and to begin to prepare them to be leaders in the profession. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 223 First Aid and Safety

The causes, consequences, and reduction of accidents in all areas of life. First aid procedures including prevention, recognition, and care for injury and sudden illness. (1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. for $1 / 2$ of the term.

## 224 Introduction to Athletic Training

An overview of the profession of athletic training. This course will provide an introduction to injury prevention, recognition, management, and rehabilitation. The role, duties, and responsibilities of an athletic trainer will also be discussed. (1)
Lecture: 3 hrs/wk.

## 225 Contemporary Issues in Sport Management

A study of the sports industry through examination of problems and issues faced by contemporary sport managers. Unique characteristics of sport and resulting social and ethical responsibilities of sport managers are discussed. (1)
Lecture: 3 hrs/wk.
Prerequisite: HHP 221 or permission.

## 270 Science of Training Athletes

This course is designed to give students a strong scientific understanding of principles used to train athletes across all sports. This course is also designed to give students the opportunity to become competent using major multi-joint and dynamic lifting techniques as well as cutting edge assessment tools and analyses that shape program design. The course will use concepts from human physiology and movement science and will synthesize them into a coherent framework for developing and implementing training regiments with athletes. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: HHP 207 or permission.

## 301 Personal and Community Health

An understanding of the principles and problems of personal, school, and community health as applied to everyday living. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 302 Physical Education Methods and Materials I: PreK-7

A progressive program of developmentally appropriate activities for children kindergarten through seventh-grade level. Recommended for PreK-7 licensure. (1)
Lecture: 3 hrs/wk.; Observation in schools.
Prerequisite: HHP 200, 221 or permission.

## 305 Adapted and Developmental Physical Education

Designed to examine appropriate movement/physical education experiences for individuals who have disabling conditions. (1)
Lecture: 3 hrs/wk.
Prerequisite: HHP 200, 221 or permission.

## 306 Motor Behavior

An examination of human motion using concepts from motor control, development and learning. Considerations for study will include basic neurophysiology and mechanics, fundamental human movement skills and their adaptation to various stimuli, and principles of motion analysis. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory $1.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BIOL 230 and HHP 200 or permission.

## 307 Athletic Training Administration

This course is designed to provide students with an understanding of concepts and applications of effective athletic training administration. Topics will include organizing and managing athletic training facilities, facility design, budgeting, record keeping, etc. (1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Admission to Athletic Training major; HHP 221 or permission.

## 308 Athletic Injury Prevention

This course is designed to provide students with an understanding of techniques utilized to prevent athletic injuries. Major topics will include general medical conditions and assessment, pre-participation examinations, pharmacology, physical conditioning techniques, prophylactic taping, bracing, and padding utilized in sports medicine. (1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Admission to Athletic Training major; HHP 221.

## 315 Behavioral Perspectives in Sport

A study of the behavioral factors related to sport participation and coaching athletes. (1)
Lecture: 3 hrs/wk.
Prerequisite: HHP 221 or permission.

## 335 Coordinated School Health Programs

This course is designed to guide prospective health educators in conceptualizing, implementing, and assessing comprehensive, coordinated school health programs in PreK-12 settings. Included will be content and experiences related to the eight component school health program model (Allensworth and Kolbe) and special topics and issues related to implementing effective programs. (1)
Lecture: 3 hrs/wk.
Prerequisite: HHP 221 and 301 or permission.

## 403 Exercise Physiology

An examination of the human physiological response to exercise and physical work. Both acute and chronic adaptations are considered. Standard laboratory techniques are introduced and used to examine physiological change under a variety of exercise conditions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $1.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: BIOL 230, 260 and HHP 207 or permission.

## 404 Physical Education Methods and Materials II: 8-12

This course is designed to prepare students in effective curriculum design, instructional delivery, performance assessment, and classroom management specific to teaching physical education in Grades 8 12. (1)

Lecture: 3 hrs/wk.
Prerequisites: HHP 200 and 221, or permission.
405, 406, 407 Independent Study and Research
A program of advanced intensive study and experience in health and physical education under the guidance of the departmental staff. (Admission with the approval of the faculty of the department and on the recommendation of the directing professor.) $(1 / 2,1,1 / 2)$

## 409 Health Education Methods and Materials: PreK-12

This course is designed to prepare students in effective curriculum design, instructional delivery, performance assessment, and classroom management specific to teaching health education. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: HHP 221 and 301 or permission.

## 411 Exercise Testing and Prescription

An advanced, in-depth examination of exercise testing and prescription as is established by ACSM and NSCA guidelines. The course uses concepts from exercise physiology, motor behavior and health fitness and synthesizes them into a coherent framework for developing exercise training regiments for individuals of all ages and abilities, including both normal and diseased populations.(1)
Lecture: 3 hrs/wk; Laboratory: $1.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: HHP 207 and 403 or permission.

## 412 Advanced Principles and Practice of Sport Management

An in-depth analysis of the sport industry with special emphasis given to the sport manager's roles and functions. Students will develop a thorough understanding of the following principles; facilities
management, event management, risk management, marketing, finances, sponsorship, communications, compliance and career preparation. This course is designed to integrate key concepts from previous courses while requiring a comprehensive understanding of the industry. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: HHP 225.

## 413 Therapeutic Exercise in Sports Medicine

This course is designed to provide students with an understanding of exercise for the prevention and rehabilitation of athletic injuries. It will focus on the design and implementation of functional exercise progressions utilized in the rehabilitation process. (1)
Lecture: 3 hrs/wk.
Prerequisites: Admission to Athletic Training major or successful completion of BIOL 230 and permission.

## 414 Therapeutic Modalities in Sports Medicine

This course is designed to provide students with an understanding of the use of various therapeutic modalities to treat sports related injuries. Theory supporting the use of therapeutic modalities will be studied and hands-on clinical experience will be provided. (1)
Lecture: 3 hrs/wk.
Prerequisites: Admission to Athletic Training major or successful completion of BIOL230 and permission.

## 415 Evaluation of Athletic Injuries

This course will provide students with a thorough understanding of the procedures for evaluation of athletic injuries. Emphasis will be placed on the head, spine, and upper and lower extremities. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Admission to Athletic Training major or successful completion of BIOL230 and permission.

## 416 Athletic Training Internship

An opportunity for students to gain practical work experience in an area related to athletic training. (1)
Prerequisite: Permission of the instructor; completion of HHP 223, First Aid and Safety, or equivalent.

## 418 Internship

Practical experience in a physical education related area such as corporate fitness program, youth activity league, or health/fitness club. (1)
Prerequisite: Permission of department or faculty; completion of HHP 223, First Aid and Safety, or equivalent.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## HEALTH CARE

A major in Health Care is not offered at Roanoke College.

## Health Care Administration <br> Associate Professor Kassens

The Health Care Administration concentration is designed primarily for students interested in Hospital or Health Care Administration. A major in Health Care is not offered at Roanoke College. It is likely that most of these students will pursue (eventually or immediately after graduation) a master's degree in Hospital/Health Care Administration. Ultimately, they would be likely to work for a hospital, health maintenance organization, or public or private medical facility.

A cumulative grade point average of at least 2.0 in all prerequisite course work is required for admission to the Health Care Administration concentration. In addition, the student must earn a 2.0 cumulative grade point average in all course work required to complete the concentration. The concentration is achieved by completion of the following courses:

## Required Courses

| BUAD 110 | Business Connections |
| :--- | :--- |
| BUAD 218 | Information Systems I |
| BUAD 254 | Organizational Behavior and Management |
| ECON 120 | Introduction to Economics or ECON 121 \& 122 Principles, Micro, Macro |
| ECON 227 | Health Care Economics |
| SOCI/PHIL 223 Ethics and Medicine <br> SOCI 323 Health, Illness and Healing <br> In addition, students must complete one unit from Psychology 250 (Industrial-Organizational Psychology)  <br> or Business Administration 354, 416 or Sociology 416 (Internship in health care administration).  l |  |

## Health Care Delivery

Assistant Professors S. Anderson and Morris
The Health Care Delivery concentration is designed to provide multidisciplinary exposure to a variety of perspectives, content, and practices related to the provision of health care services. It is anticipated that upon graduation concentrators will pursue their education in a health professional school (for example, in medicine, pharmacy, nursing, dentistry, veterinary, public health, physical therapy, occupational therapy, counseling, and medical social work) or pursue a career (with the undergraduate degree) in a health-related setting such as a medical clinic, counseling center, voluntary health agency, family planning clinic, nursing home or health insurance company.

## Required Courses

The concentration is obtained by completion of six courses that fulfill the following requirements. No more than three courses may be drawn from any one discipline.
*One developmental psychology course: PSYC 210 (Child Development) or PSYC 211 (Adolescent Development) or Psychology 212 (Adult Development and Aging) or Psychology 215 (Child and Adolescent Development)
*SOCI/PHIL 223: Ethics and Medicine
*SOCI 323: Health, Illness, and Healing
*An internship in a health-related setting (typically taken in the student's major field) and
*Two additional courses from the following list selected in conjunction with the student's major and concentration advisors:

| BIOL 230 | Anatomy and Physiology |
| :--- | :--- |
| BIOL 235 | General Microbiology |
| BIOL 315 | Genetics |
| BIOL 370 | Immunology |
| CHEM 240 | Pharmaceutical Chemistry |
| CHEM 341 | Biochemistry |
| CHEM 370 | Environmental Chemistry |
| ECON 227 | Health Economics |
| ENVI 130 | Introduction to Environmental Studies OR |
| ENVI 200 | Environmental Science |
| HHP 207 | Health Fitness Concepts/Applications |
| HHP 301 | Personal and Community Health |
| HHP 335 | Coordinated School Health Programs |
| NEUR/PSYC 360 Neuropsychology |  |
| PSYC 230 | Abnormal Psychology |
| PSYC 260 | Human Sexuality |
| PSYC 270 | Drugs and Behavior |

PSYC 375 Counseling and Psychotherapy Approaches
SOCI 241 Introduction to Social Welfare
SOCI 337 Environmental Sociology
A health/medicine-related intensive learning course or special topics course (in any discipline) and/or an independent study or honors project (in the student's major field) may be counted toward completion of the two elective courses with approval of the concentration advisor.

## HISTORY

Professors Gibbs, Hakkenberg, Leeson (Chair), M. Miller, J. Selby; Associate Professors Hawke, Henold, Wallace-Fuentes, Willingham, Xu; Assistant Professors Bucher

A major in history requires the completion of 12 units.
These include:
A. Two units at the 100-level, either 110 or 120 , and either 130 or 140.
B. At least one unit from each of the following 200-level groups:

1. Pre-Modern History (pre-1600) 212, 218, 223, 230, 231, 233, 235, 290 (where appropriate)
2. Modern History and US History 200, 205, 206, 207, 241, 242, 243, 244, 245, 246, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 290(where appropriate)
3. Non-Western History 208, 210, 253, 254, 255, 256, 272, 281, 282, 284, 285, 290 (where appropriate)
C. History 300: Historical Methods
D. One unit from 300-level issues pre-modern or non-western courses:
4. Pre-Modern History (pre-1600) 310, 320, 325, 330 OR
5. Non-Western History $350,375,380$
E. History 490: Research Seminar
F. Four electives: two units at the $\mathbf{2 0 0}$ level or higher, and two units at the $\mathbf{3 0 0}$ level of higher, one of which must be a $\mathbf{3 0 0}$-level issues course.

Experiential Learning: all students must have one of their courses serve as an Experiential Learning course. Such Experiential Learning courses are characterized by one or more of the following, (1) the student works on a individually-defined and approved project under the supervision of experts in the field; (2) the student directly engages methodologies that work best outside of the classroom and require significant concentrations of time or interaction with people (such as oral interviews; map-making; historical surveys, etc.); (3) the student typically pursues activities off-campus, such as at a local museum or an archaeological site, etc.; (4) the student will engage imaginative approaches to learning the discipline of History, such as in role playing courses or in Living History reconstructions; (5) the student travels to conduct research or studies abroad.

Current Experiential Learning Courses include: 205, 206, 207, 208, 218, 273, 290 where appropriate, 400 level courses where appropriate and approved by the chair; INQ 177,277 , and 377 where the topic is appropriate and approved by the chair.

The department strongly encourages all majors to explore the possibilities of international study through the May Term Intensive Learning, or summer programs, and semester or year-long study abroad options.

Students planning subsequent graduate study are advised that work in at least one foreign language is very important. Program advisors should be consulted in selecting specific languages to study.

## Minor in European History

A minor in European history requires six units, including two 100-level units, two European units at or above the 200 -level, and two 300 -level units ( $310-340$ ). One history 400 -level course may be substituted for one of the 300 -level courses, with approval of the chair.

## Minor in U.S. History

A minor in U.S. history requires six units, including History 200 and three units of U.S. history at or above the 200 level; at least two units from the 360-370 level courses must be included. One history $400-l e v e l$ course may be substituted for one of the 300 -level courses, with approval of the chair.

## Minor in World History

A minor in world history requires six units, including two 100-level units, two units at or above the 200 level, and two 300-level units (310-380). Three of the 200 and 300 level units must come from the following world areas: East Asia, South Asia, Latin America, or Africa. One history 400-level course may be substituted for one of the 300 -level courses, with approval of the chair.

## 110 Ancient World

This course is a survey of world history from the Mesolithic era to ca. 500 CE , emphasizing a regional and cross-cultural analysis of varying political, economic, social, and religious systems. (1)
Lecture: 3 hrs/wk.

## 120 Medieval World

This course is a survey of world history from ca. 500 CE to ca. 1400 CE , emphasizing a regional and crosscultural analysis of varying political, economic, social, and religious systems. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 130 Early Modern World History

This course is a survey of world history from ca. 1400 CE to ca. 1800 CE , emphasizing a regional and cross-cultural analysis of varying political, economic, social, and religious systems. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 140 The Modern World

This course is a survey of world history from ca. 1800 CE to today, emphasizing a regional and crosscultural analysis of varying political, economic, social, and religious systems. (1)
Lecture: 3 hrs/wk.

## 200 United States History

A broad survey of the forces and structures of American history. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 205 Introduction to Public History

This course uses a combination of scholarship, practice, and theory to introduce the bourgeoning field of Public History. Special focus will be given to museums, archives, oral history, cultural landscapes, and controversial topics. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 206 Historical Archaeology

The course emphasizes how integration of the archaeological record, the archival record, and oral tradition provides insight into the recent past, focusing on issues of class, gender, ethnicity, and race as experienced by peoples living in an era of the global expansion of capitalism. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 207 American Material Culture

This course surveys the origins, functions, and transformations of American material culture. Special focus will be on American housing, furnishings, foodways, adornment, cultural landscapes, and cemeteries. (1)
Lecture: 3 hrs/wk.

## 208 Archaeology of Slavery

This course surveys of the field of African Diaspora Archaeology. Special focus is given to the diverse cultures of enslaved people. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 210 Environmental History

A survey which explores the relationship between history and the environment, with focus on a specific area of the world, and the connection between a people and its habitat through time. (1)
Lecture: 3 hrs/wk.

## 212 Ancient Greece

A survey of the political, intellectual, and cultural history of the Greek world from the Late Bronze Age to the rise of Alexander the Great (1300-336 BCE). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 218 Introduction to Archaeology

An introduction to the theories and methods used by archaeologists to reconstruct the cultural practices of past human societies, from religion and authority to domestic life and trade. Case studies introduce students to archaeological sites in places such as Egypt, Greece, Mesoamerica, and North America. (Crosslisted as ANTH 218/ARTH 218). (1)
Lecture: 3 hrs/wk., Laboratory: 2 hrs/wk.

## 223 Medieval England

An introduction to the history of Roman and medieval England. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 230 The Renaissance

A study of life and thought as reflected in Italian beginnings, transalpine diffusion, and impact upon Europe. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 231 The Reformation

The religious reformations of the 16th century and their environment: political, social, economic, intellectual, and religious. (This course counts toward major credit in the Religion-Philosophy major. History 231 and Religion 212 may not both be taken for credit.) (1) (Cross-listed as RELG 212).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 233 History of Tudor and Stuart England

A study of the history and society of Tudor and Stuart England, through lectures and seminars, offered off campus at the Virginia Program at Oxford University only in conjunction with English 333. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 235 The Witch-hunts of Early Modern Europe

An examination of the intellectual and legal foundations of the great European witch-hunt, as well as elite and popular concepts of magic, witchcraft, and heresy. Case studies focus on continental Europe, but also include England and New England. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 241 Modern Russia

A survey of the cultural, social, political, and economic influences that have shaped modern Russia. Emphasis on the 19th and 20th centuries, the Soviet period, and post-Soviet developments. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 242 Modern Germany

The course will examine the experiences of the Germans in the modern world, from 1871 the founding date of a unified Germany to the present. Issues of nationality, politics, culture and society will be examined against a backdrop of Germans' engagement with their neighbors and their own identity. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 243 Modern Britain

Emphasis is on the emergence of the modern English nation under the Tudors, the evolution of constitutional and parliamentary government, the development of the British Empire and its role in world affairs in the 19th and 20th centuries. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 244 Ireland

A survey of the history of Ireland from the ancient period to modern times. Our focus will be interdisciplinary, examining politics, religion, economic development, culture, and, of course, the very long Irish relationships with Rome and London. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 245 World War II

An introduction to the military, strategic, and diplomatic history of the Second World War. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 246 The Holocaust

An historical account and a philosophical analysis of the Holocaust, including an examination of theological reactions to this event. (1) (Cross-listed as RELG 246).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 253 Africa to 1850

A survey of the history of Africa to 1850, including an examination of the courses and methods employed by historians to assess this period. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 254 Africa from 1850

A survey of Africa's history from 1850 to the present, that focuses on the wide-ranging social, political, and economic changes that took place on the African continent. (1)
Lecture: 3 hrs/wk.

## 255 South Africa

A survey of South Africa's history from the colonial period to the present. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 256 Black Political Thought in Africa and the African Diaspora

This survey offers an intellectual history of black political thought in Africa and the African Diaspora between ca. 1750 and the present. The course traces the major questions and issues that both informed and shaped the development of black political thought, and emphasizes how shared histories of slavery, colonialism, and racism unfolded in different parts of the world. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 260 The South

This course is designed to be an overview of Southern history with a changing focus on various specific issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 261 Civil War

A survey designed to examine the causes of the sectional conflict, the course of events, and the consequences of the war. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 262 U.S. Women's History

A survey of the history of American women from the colonial period to the present. (1)
Lecture: 3 hrs/wk.

## 263 American Frontier

An examination of the American frontier experience. The survey ranges from the colonial wilderness through 19th century migrations to 20th-century perceptions. (1)
Lecture: 3 hrs/wk.

## 264 American Presidents and the Presidency

A study of the institution of the Presidency, and the lives of the individuals who have this office. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 265 American Military Traditions

A survey of America's military experience with an emphasis upon the interrelationship of war and society. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 266 Modern American Diplomatic History

An examination of the emergence and development of the United States as a world power, focusing on its evolving foreign policy. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 267 Victorian America

A social history survey of Americans and their "private lives," 1880-1920. (1)
Lecture: 3 hrs/wk.

## 268 The Vietnam War

An analysis of America's longest war that concentrates on politics and diplomacy, but examines military and social factors as well. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 269 History of Sports in America

A study of the history of sports in America, including examination of statistical evidence, social and cultural attitudes, economic \& political factors, and the impact of owners, players, spectators and fans. (1) Lecture: 3 hrs/wk.

## 272 Latin America

A thematic survey of Latin America's indigenous background, colonization, independence, and national period. (1)
Lecture: 3 hrs/wk.

## 273 Latin American Revolutions

A survey of key revolutionary turning points in Latin America, with special focus on the twentieth century. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 281 Early East Asia

China, Japan, and Korea through the 19th century, with emphasis on social, political, and intellectual developments. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 282 Modern East Asia

China, Japan, and Korea since the late 19th century. (1)
Lecture: 3 hrs/wk.

## 284 Modern Middle East

An examination of the modern political, social, religious, and economic sources of tension and growth in one of the most dynamic and unsettled regions of the world. The course focuses on trends and events in the 20th century. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 285 South Asia

An introduction to the major themes and topics of South Asian culture, and history. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wks}$.

## 290 Special Studies

Investigation of a special topic not regularly offered, with the topic determined by the history faculty. May be repeated for credit with different content. (1)
Lecture: 3 hrs/wk.

## 300 Historical Methods

This course serves as the introduction to the discipline, examining both the theory and practice of history. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Completion of one 100-level HIST course, sophomore standing.

## 310 Issues in Ancient History

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: HIST 300 or permission.

## 320 Issues in the Middle Ages

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 325 Issues in the Renaissance and Reformation

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 330 Issues in Early Modern History

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: HIST 300 or permission.

## 335 Issues in British History

An examination of issues of significance to the period. May be repeated for credit with different content.
(1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 340 Issues in Modern European History

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 350 Issues in Africa

An examination of issues of significance to the period. May be repeated for credit with different content.
(1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 360 Issues in Early America

An examination of issues of significance to the period. May be repeated for credit with different content.
(1)

Lecture: 3 hrs/wk
Prerequisites: History 300 or permission.

## 365 Issues in 19th-Century America

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 370 Issues in Modern America

An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: HIST 300 or permission.
375 Issues in Latin American and Caribbean History
An examination of issues of significance to the period. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisites: HIST 300 or permission.

## 380 Issues in East Asian History

An examination of issues of significance to the field. May be repeated for credit with different content. (1)

Lecture: 3 hrs/wk.
Prerequisite: HIST 300 or permission.

395, 396 Henry H. Fowler Public Policy Seminar
A seminar taught with a scholar-statesperson that deals with a policy issue of public significance. (Made possible by the Henry H. Fowler Endowment. Open to selected students with department permission.) (1, 1/2)

## 401 Archives Practicum

Experience in the field of archives management, under the guidance of the College archivist. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission of the Instructor.

## 402 Historical Journal Editing Practicum

An internship in the 16th-century Journal Book Review Office. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.
403 Museum Practicum
Experience in the field of museum management under the guidance of the Salem Museum director. (1) Prerequisite: Permission of the instructor.

## 404 Library Practicum

Experience in the field of library science under the guidance of the Library staff. (1)
Lecture: 3 hrs/wk.
Prerequisite: Permission.

## 405, 406, 407 Independent Study

Supervised reading and research in a selected historical field. (1/2, 1, 1/2)
Prerequisite: Permission.

## 416 Internship

Experience in a field of applied history, under the guidance of a member of the history faculty. (1) Prerequisite: Permission.

## 490 Research Seminar

A seminar approach to selected topics for advanced students. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## HONORS

Professors Hakkenberg, Hargrove, and Morris

Honors courses address the same learning outcomes as Intellectual Inquiry courses but employ more challenging or sophisticated approaches and include engagement components that reach beyond the classroom. HNRS 110 and HNRS 300 are open to Honors students only. HNRS 120 may also be open, by application, to qualified non-Honors students who are interested in joining the program. The 200-level Honors courses are open to all students with a minimum 3.2 cumulative grade point average. These courses will satisfy the parallel Intellectual Inquiry course requirements without using one of the student's allowed substitutions.

## 110 Honors Seminar

Introduces students to critical thinking in higher education, taking as its starting point a focused topic in a scholarly field. Critical inquiry will be taught in the context of careful reading of important intellectual works, as well as inquiry-based writing assignments. Research and collaborative skills will also be developed in an integrative setting designed to promote a student's journey toward a life of critical inquiry. Includes an engagement component that reaches beyond the classroom. (Credit cannot be received for both HNRS 110 and INQ 110.) (1)
Lecture: 3 hrs/wk.

## Prerequisite: Admission to Honors Program.

## 111, 112 Portfolio Seminar I

A two-semester sequence that connects students to the campus and community through an exploration of cultural, intellectual, and service activities as well as academic and personal goals. Includes initial development of the Honors Portfolio. Pass/Fail (1/4, 1/4)
Lecture: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: Admission to the Honors Program.

113, 114 Portfolio Seminar II

A two-semester sequence that encourages students to develop deeper connections to the campus and community by focusing on a single cultural, intellectual or service activity each semester while further developing academic and personal goals. Provides a foundation for the Distinction Project and continues development of the Honors Portfolio. Pass/Fail (1/4, 1/4)
Lecture: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: Admission to the Honors Program.

## 120 Living an Examined Life

Investigates questions of values, individual and communal, from the standpoint of a particular field of learning. The course will teach reasoning skills through reading, writing, and oral communication by linking key works with broader traditions of critical reflections on the good life. Students will be encouraged to explore ways in which they can use the course material for their own reflections on what it means to live well. Includes an engagement component that reaches beyond the classroom. (Credit cannot be received for both HNRS 120 and INQ 120.) (1)
Lecture: 3 hrs/wk.
Prerequisite: HNRS 110 or permission.

## 240 Statistical Reasoning

Provides an inquiry-focused introduction to statistical methodologies. Students will gain an understanding of how decision making is accomplished using modern statistical techniques. Topics include descriptive statistics, graphical methods, estimation, elementary probability, and statistical inference; students will apply the techniques of data analysis to data sets and statistical studies that address questions of the perspective. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 240 and INQ 240.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 241 Mathematical Reasoning

Further develops the ability to use quantitative, mathematical, and computational reasoning by exploring a problem or issue. Through a focused topic, students gain insight into mathematics or computer science as a mode of inquiry. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 241 and INQ 241.) (1)
Lecture: 3 hrs/wk.
Prerequisite: HNRS 240, INQ 240, or a Mathematics or Statistics course; sophomore standing is recommended.

## 250 Scientific Reasoning I

Introduces the methodologies of the natural sciences through an inquiry-focused approach to a topic. Students will explore the types of questions that science asks and how it attempts to answer them by defining and classifying information, developing models, identifying patterns, and drawing conclusions based upon data. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 250 and INQ 250 from the same discipline.) (1
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.

## 251 Scientific Reasoning II

Further develops the ability to use the methodologies of the natural sciences by exploring a science topic in depth. The course will be narrowly focused within science while allowing connection to a social, political, ethical, or historical issue. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 251 and INQ 251.) (1)

Lecture: 3 hrs/wk.
Prerequisite: HNRS 250, INQ 250, or a laboratory science course; sophomore standing is recommended.

## 260 Social Scientific Reasoning

Introduces the methodologies of the social sciences through an inquiry-focused approach to a topic. The course seeks to develop students' critical thinking skills through the exploration and application of social scientific methods. Individual sections will be taught in a particular discipline. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 260 and INQ 260 from the same discipline.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 270 Human Heritage I

Develops a sense of historical perspective and the ability to use the methodologies of the humanities or the fine arts by exploring a subject drawn from the period before 1500 . Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 270 and INQ 270.) (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 271 Human Heritage II

Develops a sense of historical perspective and the ability to use the methodologies of the humanities or the fine arts by exploring a subject drawn from the period from 1500 to the present. Includes an engagement component that reaches beyond the classroom. Open to Honors students or non-Honors students with a cumulative GPA of at least 3.2. (Credit cannot be received for both HNRS 271 and INQ 271.) (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 300 Contemporary Issues

Asks students to look back on their experiences and their work in the Honors curriculum in order to make explicit, meaningful connections to contemporary issues. In addition to individual written assignments, students will work in small groups to research and develop a proposal concerning a concept, approach, or solution to a problem that will be presented in a formal defense. Includes an engagement component that reaches beyond the classroom. (Credit cannot be received for both HNRS 300 and INQ 300.) Lecture: 3 hrs/wk.
Prerequisite: Admission to the Honors Program and completion of all 100-level and 200-level HNRS requirements.

## 405/406/407 Independent Study

An independent project used as part of the Honors Distinction project, which is conducted under the direction of a faculty member. ( $1 / 2,1,1 / 2$ )
Prerequisite: Junior standing in the Honors Program or permission.

## 416 Internship

An internship used as part of the Honors Distinction project, which is conducted under the direction of a faculty member. (1)
Prerequisite: Junior standing in the Honors Program or permission.

## INTELLECTUAL INQUIRY COURSES

Eleven one-unit courses make up the Intellectual Inquiry Curriculum. To complete degree requirements credit must be received for the two first-year seminar courses, one Intensive Learning Course, the required number of Intellectual Inquiry Perspectives courses, and the capstone. HNRS courses will satisfy the parallel Intellectual Inquiry course requirements without using one of the student's allowed substitutions.

## All INQ courses emphasize critical thinking.

## 110 Intellectual Inquiry

Introduces students to critical thinking in higher education, taking as its starting point a focused topic in a scholarly field. Critical inquiry will be taught in the context of careful reading of important intellectual works, as well as inquiry-based writing assignments. Research and collaborative skills will also be developed in an integrative setting designed to promote a student's journey toward a life of critical inquiry. (Credit cannot be received for both HNRS 110 and INQ 110.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 120 Living an Examined Life

Investigates questions of values, individual and communal, from the standpoint of a particular field of learning. The course will teach reasoning skills through reading, writing, and oral communication by linking key works with broader traditions of critical reflections on the good life. Students will be encouraged to explore ways in which they can use the course material for their own reflections on what it means to live well. (Credit cannot be received for both HNRS 120 and INQ 120.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 177/277/377/477 Intensive Learning

Concentrated study of a special topic from any department. Consult the Courses Offered List for a brief description of each course. Courses that can be used for major credit in a department are cross-listed with departmental offerings. (1)
Prerequisites: Set by the instructor

## 240 Statistical Reasoning

Provides an inquiry-focused introduction to statistical methodologies. Students will gain an understanding of how decision making is accomplished using modern statistical techniques. Topics include descriptive statistics, graphical methods, estimation, elementary probability, and statistical inference; students will apply the techniques of data analysis to date sets and statistical studies that address the course theme. (Credit cannot be received for both HNRS 240 and INQ 240.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 241 Mathematical Reasoning

Further develops the ability to use quantitative, mathematical, and computational reasoning by exploring a problem or issue. Through a focused topic, students gain insight into mathematics or computer science as a mode of inquiry. (Credit cannot be received for both HNRS 241 and INQ 241.) (1)
Lecture: 3 hrs/wk.
Prerequisite: INQ 240, HNRS 240, or a Mathematics or Statistics course; sophomore standing is recommended.

## 250 Scientific Reasoning I

Introduces the methodologies of the natural sciences through an inquiry-focused approach to a topic. Students will explore the types of questions that science asks and how it attempts to answer them by defining and classifying information, developing models, identifying patterns, and drawing conclusions based upon data. (Credit cannot be received for both HNRS 250 and INQ 250 from the same discipline.) (1)

Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.

## 251 Scientific Reasoning II

Further develops the ability to use the methodologies of the natural sciences by exploring a science topic in depth. The course will be narrowly focused within science while allowing connection to a social, political, ethical, or historical issue. (Credit cannot be received for both HNRS 240 and INQ 240.) (1)
Lecture: 3 hrs/wk.
Prerequisite: INQ 250 (or a laboratory course in Biology, Chemistry, or Physics); sophomore standing is recommended.

## 260 Social Scientific Reasoning

Introduces the methodologies of the social sciences through an inquiry-focused approach to a topic. The course seeks to develop students' critical thinking skills through the exploration and application of social scientific methods, individual sections will be taught in a particular discipline. (Credit cannot be received for both HNRS 260 and INQ 260 from the same discipline.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 270 Human Heritage I

Develops a sense of historical perspective and the ability to use the methodologies of the humanities or the fine arts by exploring a subject drawn from the period before 1500. (Credit cannot be received for both HNRS 270 and INQ 270.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 271 Human Heritage II

Develops a sense of historical perspective and the ability to use the methodologies of the humanities or the fine arts by exploring a subject drawn from the period from 1500 to the present. (Credit cannot be received for both HNRS 271 and INQ 271.) (1)
Lecture: 3 hrs/wk.

## 300 Contemporary Issues

Asks students to look back on their experiences and their work in the Intellectual Inquiry Curriculum in order to make explicit, meaningful connections to contemporary issues. In addition to individual written assignments, students will work in small groups to research and develop a proposal concerning a concept, approach, or solution to a problem that will be presented in a formal defense. (Credit cannot be received for both NRS 300 and INQ 300.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Completion of all required 100-level and -200-level INQ courses.

## INTENSIVE LEARNING

The objectives of the Intensive Learning Program are to foster intense and purposeful faculty-student interchange and to encourage thoughtful, creative exploration of a focused topic during a time when students are enrolled in one and only one course. The College provides a wide array of Intensive Learning opportunities, including travel courses as well as on-campus courses. All intensive learning courses emphasize active student participation, for example, in field study, simulations, and laboratory work. The majority of these courses are offered in May, during a three-week term. All students are required to complete at least one unit of Intensive Learning to graduate from Roanoke College.

## INQ 177-277-377-477 Intensive Learning

Concentrated study of a special topic from any department. (1)
Prerequisites: Set by the instructor.
Consult the Courses Offered List for a brief description of each course. Intensive Learning Courses that can be used for major credit in a department are cross-listed with departmental offerings.

## INTERNATIONAL RELATIONS

The Bachelor of Arts degree with a major in international relations is awarded to students who successfully complete 12 units from the program of study outlined below.
I. Core Requirements

Students must complete each of the following:
A. POLI 231
International Politics
B. POLI 247
Theory in International Relations
C. I.R./POLI/CJUS 209
Research Methods in Public Affairs
D. I.R. 401
E. One unit from:

BUAD 211 Introduction to Global Management
BUAD 333
ECON 237
ECON 247
POLI 333
F. One unit from:

POLI 221
POLI 222
POLI $224 \quad$ Comparative Political Systems: Africa
POLI 225 Comparative Political Systems: Latin America

## II. Western Perspectives

A. American Perspectives

One unit from:
HIST 266 Modern American Diplomatic History
HIST 272 Latin America
HIST 273 Latin American Revolutions
POLI 225 Comparative Political Systems: Latin America
POLI 353 The Making of U.S. Foreign Policy
SPAN 315 Contemporary Issues: Spanish America
B. European Perspectives

One unit from:

| GRMN 315 | The Post-War Germanies |
| :--- | :--- |
| HIST 241 | Modern Russia |
| HIST 242 | Modern Germany |
| HIST 243 | Modern Britain |
| HIST 340 | Issues in Modern European History |
| POLI 221 | Comparative Political Systems: Europe |

III. Global Perspectives

One unit from:
GEOG 110 World Geography
POLI 232 International Organizations
POLI 233 International Law
POLI 351 Environmental Public Policy
POLI 352 Human Rights Policy
RELG 130 Living Religions of the World
IV. Non-Western Perspectives

One unit from:
HIST 254
HIST 255
HIST 282
HIST 284
POLI 222 Comparative Political Systems: Asia
POLI 224 Comparative Political Systems: Africa
V. Additional Perspectives

Students must select two additional units from among the previously listed courses and/or from among the following:

| ANTH 101 | Introduction to Cultural Anthropology |
| :--- | :--- |
| CJUS/SOCI 326 | Comparative Corrections |
| FREN 311 | Building a Nation: French Civilization and Culture I or |
| FREN 312 | A Nation Emerges: French Civilization and Culture II or |
| FREN 315 | Francophone Societies |
| GRMN 311 | German Civilization and Culture or |
| GRMN 314 | Cultures of German-Speaking Countries |


| HIST 140 | Modern World |
| :--- | :--- |
| HIST 245 | World War II |
| HIST 268 | The Vietnam War |
| I.R. 261 | Selected Topics in International Relations |
| SOCI 221 | Wealth and Poverty: Economic Stratification in the U.S. and Global |
|  | Context |
| SOCI 335 | Global Population Problems |
| SOCI 338 | Women's Lives Around the World: Global Perspectives |
| SPAN 311 | Civilization and Culture: Spain or |
| SPAN 312 | Civilization and Culture: Spanish America |

Students may also select an approved independent study, internship, intensive learning, honors in major or seminar unit within a relevant discipline. This must be approved by the major coordinator.
No more than 2 units of 100-level courses can be counted toward the major.

## Please note:

1. Political Science 221 (Comparative Political Systems: Europe); Political Science 222 (Comparative Political Systems: Asia); Political Science 224 (Comparative Political Systems: Africa); and Political Science 225 (Comparative Political Systems: Latin America) may each be offered for major credit in only one of the above categories.
2. Political Science 261, History 290, or Religion 270 or any one unit Intellectual Inquiry course other than 110 or 120 may serve toward the major whenever the specific topical focus is international and/or comparative in scope as determined by the major coordinator.
3. History 350,375 or 380 may serve towards the major whenever the specific topical focus is international and/or comparative in scope and falls within a modern era time frame as determined by the major coordinator.
In order to best prepare themselves for international affairs oriented careers and graduate study, majors are strongly encouraged to take, as electives, courses which may enhance communication skills (e.g., foreign languages, computer-based information systems) and to pursue study/travel abroad opportunities.

## 209 Research Methods in Public Affairs

An examination of the research methodologies and techniques used in the study of public policy and politics. The course emphasizes both qualitative and quantitative methods. The lab focuses on statistical applications. (1) (Cross-listed as CJUS 209/POLI 209)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 and one other course in the major, ENVI 250, or permission.

## 261 Selected Topics in International Relations

An examination of selected topics in international relations. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 401 Senior Seminar in International Relations

A multidisciplinary seminar on selected topics in international relations for senior students. (1)
Seminar: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 247, I.R.209, permission of the instructor and senior major status.

## 405, 406, 407 Independent Study

Supervised review of literature and a research project in the area of international relations. (1/2, 1, $1 / 2$ )
Prerequisite: A minimum 3.0 major GPA and both Department and instructor permission. IREL 405 is a prerequisite for IREL 407.

## 416 Internship

A supervised placement providing practical experience in an agency relating to international relations. (1) Prerequisite: A minimum 2.5 major GPA and both instructor permission and major coordinator.

495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. The 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## ITALIAN

Lecturer Chapman
A major in Italian is not offered at Roanoke College.

## 101, 102 Elementary Italian I, II

A basic course in grammar and syntax, with oral and written work. Reading in preparation for literary and cultural appreciation. $(1,1)$
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 201, 202 Intermediate Italian I \& II

These courses build on the foundation established in the Elementary Italian sequence. Basic grammar and vocabulary are reviewed and more complex grammatical structures and advanced vocabulary are introduced. Emphasis is placed on developing good conversational ability, reading comprehension and composition skills. In addition, elements of Italian culture are woven into the curriculum to promote a broader cultural appreciation of Italy. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: ITAL 102 or the equivalent.

## 301 Italian Conversation through Film

An advanced conversation course designed to enable students to improve listening skills and to practice oral communication about a variety of subjects and in a variety of contexts. Contemporary Italian films will be used as the primary "text" for this course; periodic grammar review, exercises, and cultural readings will also be included. Class will be conducted entirely in Italian. (1)
Lecture: 3 hrs/wk; Laboratory/Studio: 2.5 hrs/wk.
Prerequisite: ITAL 202 or its equivalent.
306 Advanced Studies in Italian
Guided independent learning to continue the acquisition of Italian and the study of culture beyond the 202 level. (1)
Lecture: 3 hrs/wk; Laboratory/Studio: $2.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: ITAL 202.

## JAPANESE

A major in Japanese is not offered at Roanoke College.

## 101, 102 Elementary Japanese I, II

A study of the fundamentals of Japanese with emphasis on pronunciation and aural comprehension. Includes oral and written work, cultural material, and selected readings. (1, 1)
Lecture: 3 hrs/wk.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 201 Intermediate Japanese I

A review of the essentials of Japanese grammar with the introduction of advanced structures, continued development of the four essential skills, and further acquisition of vocabulary. An emphasis will be placed on cultural issues and on conversational skills to handle situations of everyday life and to increase the range of personal expression, inclusion of cultural materials. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$, Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: JAPN 102.

## 202 Intermediate Japanese II

A review of the essentials of Japanese grammar with the introduction of advanced structures, continued development of the four essential skills, and further acquisition of vocabulary. An emphasis will be placed on conversational skills to handle situations of everyday life and to increase the range of personal expression, inclusion of cultural materials. The course will also include materials to foster a more sophisticated understanding of the philosophical and cultural foundation of the country. (1)
Lecture: 3 hrs/wk; Laboratory: 1hr/wk.
Prerequisite: JAPN 201.

## 306 Advanced Studies in Japanese

Guided independent learning to continue the acquisition of Japanese and the study of culture beyond the 202 level. (1)
Lecture: 3 hrs/wk; Laboratory/Studio: 2.5 hrs/wk.
Prerequisite: JAPN 202.

## LANGUAGE

Professors Kalinoski (Chair), Ogier, Talbot; Associate Professors Banuelos-Montes, Flores-Silva, Scaer; Assistant Professor Han; Lecturers Chapman, Myers, Stanley; Teaching Associate Clifton

A major in language is not offered at Roanoke College. The following courses may not be counted toward the French or Spanish majors.

## 105, 106 Tutorial

A guided study of a foreign language or level of a foreign language not normally offered at the College. (1, 1)

Lecture: 2 hrs/wk.: Laboratory: 4 hrs/wk.
Prerequisite: Permission of the department.

## 221 English as a Second Language I

Basic English proficiency for intermediate English as a Second Language students. Emphasis is on the appropriate use of academic vocabulary, grammatical structures, verbal expression, and cultural inferences. (1)
Lecture: 3 hrs/wk.
Prerequisites: This course is designed for students with TOEFL scores from 520 through 550. Placement to be confirmed by a Roanoke College proficiency test.

## 222 English as a Second Language II

Improving English proficiency for advanced English as a Second Language students. Emphasis is on the appropriate use of academic vocabulary, complex grammatical structures, organizational patterns, and rhetorical phrases and idioms in academic texts and student writing. (1)
Lecture: 3 hrs/wk.
Prerequisite: LANG 221 or permission.

## 341 Methods of Teaching Foreign Languages

An evaluative study of language teaching methods. Development of teaching aids and a teacher's resource book. Assignments will be made according to the student's major language. PreK-12 levels of instruction will be presented. (1) (Cross-listed as FREN 341/SPAN 341)
Lecture: 3 hrs/wk.
Prerequisite: Permission.

## 405, 406 Independent Study

Guided reading and research of a particular facet of a foreign language, literature, and culture. ( $1 / 2,1,1 / 2$ )
Prerequisite: Permission.

## 416 Internship

Field placement providing the student with practical experience in work areas in which a foreign language is applied. These areas may include embassies, government service, international business, education, industry, and the communications media. (May be taken for major or minor credit.) (1) (Cross-listed as FREN 416/SPAN 416)

## LATIN

Associate Professor J. Hawke
Students interested in studying the ancient world should consult the requirements for the concentration in Classics and the Ancient Mediterranean World. A major in Latin is not offered at Roanoke College.

## 101, 102 Elementary Latin I, II

A study of the fundamentals of classical Latin, with emphasis on grammar, vocabulary, and translation. Students will be introduced to the cultural life of ancient Rome. $(1,1)$
Lecture: 3 hrs/wk.
Prerequisite: LATN 101, or its equivalent, is a prerequisite for LATN 102.

## 201: Intermediate Latin I

A continuing study of Latin, with emphasis on more complex grammatical structures, vocabulary, and translation. Students will read selected excerpts in Latin as part of an ongoing introduction to the cultural life of ancient Rome. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: LATN 102.

## 202 Intermediate Latin II

A continuing study of Latin, with emphasis on more complex grammatical structures, vocabulary, and translation. Students will read selected excerpts in Latin as part of an ongoing introduction to the cultural life of ancient Rome. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: LATN 201.

## LATIN AMERICAN AND CARIBBEAN STUDIES CONCENTRATION

Associate Professors Flores-Silva and Sarabia, Coordinators

Students in any major interested in developing a specialization in Latin America or the Caribbean may earn a concentration in Hispanic/Latin American and Caribbean Studies by successfully attaining the intermediate level of either Spanish (through SPAN 202) or French (through FREN 202). They must also complete six units as follows: two of five core courses, three electives, and a capstone Independent Study approved by the program coordinators. No more than two courses from the student's major may apply to the concentration and no more than three courses can be taken in the same discipline.

```
Core Courses
HIST 272 Latin America OR
HIST 273 Latin American Revolutions
POLI 225 Comparative Political Systems: Latin America
SPAN 312 Civilization and Culture: Spanish America OR
SPAN 323 Introduction to Literature: Spanish America
Electives
*BUAD 333 Global Marketing
*ECON 247 International Trade and Finance
ENGL 220 Special Studies in Language and Literature
ENGL 301 Special Studies in Language and Literature
ENGL 310 Literatures of the African Diaspora
*ENGL 312 Studies in the Cross-Cultural Imagination
FREN 315 Francophone Societies
FREN 330 Technical and Business French
```

FREN 380 Special Studies in French Language, Literature, and Culture
HIST 272 Latin America
HIST 273 Latin American Revolutions
HIST 290 Special Studies
HIST 375 Issues in Latin American and Caribbean History
HIST 490 Research Seminar (as appropriate)
*POLI 352 Human Rights Policy
*RELG 130 Living Religions of the World
*SOCI 224 Race and Ethnicity
SPAN 315 Contemporary Issues: Spanish America
SPAN 330 Commercial Spanish
SPAN 340 Area Studies in Latin America
SPAN $380 \quad$ Special Topics in Hispanic Life and Culture
Special Topics courses, Internships, INQ and IL courses, and Honors courses where applicable and with permission of the program coordinators.
*No more than one of the electives can be general comparative world in focus (see asterisks).

## LEGAL STUDIES

Associate Professor Peppers, Coordinator
The concentration allows students to draw upon a variety of different perspectives regarding the nature of law, the role of law in society, and the law as a tool of social change. The concentration is designed to give students flexibility in selecting the classes that are most relevant to their future career plans.

## Required (4):

CJUS/POLI 214 The Judicial Process
CJUS/POLI 213 Criminal Law or BUAD 227 Legal and Labor Foundations of Business or POLI 312
Civil Liberties
POLI 250 Public Policy
POLI 311 American Constitutional Law or POLI 312 Civil Liberties
Electives (3):
CJUS $227 \quad$ Law and Society
CJUS 325 Comparative Law Enforcement
CJUS/POLI $211 \quad$ Criminal Justice
PHIL 122 Logic
POLI 214 or 311 or 312 or BUAD 227 (if not offered as a requirement above)
POLI 352 Human Rights Policy
PSYC $325 \quad$ Social Psychology
SOCI 238 Juvenile Delinquency
SOCI 334 Criminology
CJUS/POLI/SOCI 261 - (Special Topics when appropriate and approved by the program coordinator); POLI 395, CJUS/POLI 401, 405, 406, 407, 416, or 495 (topics when appropriate and approved by the program coordinator); Any IL 277 or Honors 301 course whose topic is appropriate and approved by the program coordinator.

## LINGUISTICS

Professor Ogier
A major in linguistics is not offered at Roanoke College. Linguistics 320 may count toward a modern language major or minor.

## 320 Basic Linguistics

The scientific study and description of language according to the principles of modern linguistics. (1) (Cross-listed as ANTH 320/ENGL 320)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## LITERARY STUDIES

Professors Hanstedt, Heller, Hoffman, Kuchar (Chair), Schultz, Turpin; Associate Professors Almeder, Cooper, W. Larson-Harris, Mallavarapu, McGlaun, Stewart, Whiteside; Assistant Professors Khoo, McGraw, Tenbrunsel; Lecturer D. Selby

The Literary Studies major provides students with the opportunity to indulge a love of reading and writing and to attain a broad appreciation of how the past lives in present cultural productions. Students master skills in critical reading and writing, analysis, synthesis and problem-solving that can lead to graduate work in literature or careers in journalism, editing and publishing, law, public relations and advertising.

The Literary Studies major requires 12 units of work as detailed below:
I. Required Courses (six units)

| RHET 125 | Texts, Rhetoric and Media |
| :--- | :--- |
| ENGL 240 | British Literature |
| ENGL 250 | American Literature |
| ENGL 315 | Research Methods and Critical Perspective |
| ENGL 411/412 | Seminar (two units) |

II. Additional requirements (at least six units)
A. One additional course from the following list: CRWR 215, CRWR 216, ENGL 220, ENGL 256, or ENGL 260.
B. Two Early Historical Period Courses, chosen from ENGL 330, 332, 333, 334, 335, 336, or from ENGL 301, 308, or 350 with an appropriate topic.
C. Three 300 -level or above English electives. The following may substitute for the 300level or above electives, as appropriate, and with department chair approval: ENGL $405,406,407,416,495,496$, or 497.
NOTE: Literary Studies majors are encouraged to make ENGL 315 one of their first 300level courses.

## Minor in Literary Studies

A minor in Literary Studies requires six units: RHET 125, either ENGL 240 or 250, one other 200-level ENGL course, and three ENGL courses at the 300-level or above.

## MATHEMATICS

Professors R. Minton, Spielman; Associate Professors Lee, Taylor (Chair); Assistant Professors Childers, Robbins, Saoub; Lecturers Bauman, J. Minton, Staniunas

The Bachelor of Science degree with a major in mathematics requires the completion of 13 units of mathematics and related disciplines as outlined below.

## Required Courses (6)

| MATH 122 | Calculus II |
| :--- | :--- |
| MATH 131 | Discrete Mathematics |
| MATH 201 | Linear Algebra |
| MATH 491 | Math Seminar |
| STAT 202 | Probability and Statistics |
| CPSC 120 | Fundamentals of Computer Science I |

## Transitions Course (Choose 1)

MATH 268 Combinatory and Graph Theory
MATH $278 \quad$ Foundations of Geometry
MATH 288 Special Topics in Mathematics

## Applied Courses (Choose 2)

| MATH 311 | Operations Research |
| :--- | :--- |
| MATH 321 | Vector Calculus |
| MATH 331 | Differential Equations |

## Theoretical Courses (Choose 2)

| MATH 361 | Abstract Algebra |
| :--- | :--- |
| MATH 371 | Topology |
| MATH 381 | Real Analysis |

## Elective Courses (Choose 2)

| MATH 271 | Mathematical Problem Solving (0.5 units) \& one of MATH 405 or 407 |
| :--- | :--- |
| MATH 332 | Applied Differential Equations |
| MATH 342 | Numerical Analysis |
| MATH 352 | Complex Analysis |
| MATH 388 | Special Topics in Mathematics |
| MATH 406 | Independent Study (or MATH 405 and MATH 407) |
| MATH 416 | Internship |
| MATH 496 | Honors Project (or MATH 495 and MATH 497) |

Any Transitions, Applied, or Theoretical course in addition to the above requirements Any 300-level STAT course
One of these units may be CPSC 390, PHYS 350, or PHYS 432

Note that MATH 118/119, MATH 121, or equivalent is a prerequisite for MATH 122.

Students intending to pursue graduate study in mathematics should take MATH 361 and MATH 381 as their theoretical courses.

## Minor in Mathematics

A minor in mathematics will require six units, including MATH 119 or 121, 122, 131, 201 plus two additional units in mathematics or statistics. One of these additional units must be at the 200 level or above and the other must be at the 300 level or above.

## 111 Mathematical Models for the Management Sciences

Theory and application of several mathematical models used in business and social sciences. Topics include matrices, linear programming, functions, limits, and derivatives. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
(May not be taken if credit has been received for Mathematics 112 or higher.)

## 112 Concepts and Techniques of Calculus

Primarily for students of biology, business, economics, and the behavioral sciences. Topics include limits, differentiation and integration, optimization problems, numerous applications. (Credit cannot be received for both MATH 112 and 121, nor for both MATH 112 and 118.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 118 Differential Calculus

An introduction to calculus, focusing on limits, derivatives, and the application of derivatives to real-world problems. Review of topics from precalculus and trigonometry are integrated throughout the calculus material. (Credit cannot be received for both MATH 112 and 118.) (1)
Lecture: 3 hrs/wk.

## 119 Integral Calculus

An introduction to calculus focusing on the Fundamental Theorem of Calculus, development of definite and indefinite integrals, and applications of integration including area and volume. Review of topics of precalculus and trigonometry are integrated throughout the calculus material. (Credit cannot be received for both MATH 119 and MATH 121. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 118.

## 121 Calculus I

The analysis of limits, derivatives, integrals and their applications for functions of one variable. (Credit cannot be received for both MATH 112 and 121, or for both MATH 119 and 121.) (1)
Lecture: 3 hrs/wk.
Prerequisite: Placement, or by permission.

## 122 Calculus II

The analysis of integrals, sequences and series, parametric equations and their applications for functions of one variable. (1)
Lecture: 3 hrs/wk.; Laboratory: 1.5 hrs/wk.
Prerequisite: MATH 121.

## 131 Discrete Mathematics

Set theory, number systems, formal logic, functions and relations, and graph theory. (1)
Lecture: 3 hrs/wk.
Prerequisite: MATH 118 or MATH 121.

## 201 Linear Algebra

Linear equations, matrices, vector spaces, linear mappings, determinants, quadratic forms, geometric applications. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 122.

## 268 Combinatorics and Graph Theory

An introduction to graph theory and combinatorics. Topics may include graph colorings, trees, matching problems, binomial and multinomial coefficients, and generating functions. An emphasis will be placed on mathematical exposition and formal arguments as the theory is developed. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 131

## 271 Mathematical Problem-Solving

An introduction to mathematics as a problem-solving discipline. Includes the development of a small research project, and preparation for problem-solving mathematics competitions. (1/2)
Lecture: 3 hrs/wk.
Prerequisite: MATH 122.

## 278 Foundations of Geometry

A review of Euclidean geometry and an introduction to non-Euclidean geometries, with a special focus on the theoretical framework of various geometric systems. (1)
Lecture: 3 hrs/wk.
Prerequisite: MATH 131.

## 288 Special Topics in Mathematics

Special topics in Mathematics, focusing on building the mathematical and logical framework necessary for upper-level mathematics courses. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 131.

## 311 Operations Research

This course provides an introduction to Operations Research: a mathematical approach to decision making based on optimization. Topics include the simplex method, sensitivity analysis, duality, transportation problems, and network models. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 201.

## 321 Vector Calculus

The analysis of functions of several variables, double and triple integrals, line integrals, vector fields, and surface integrals. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 122.

## 331 Differential Equations

Ordinary differential equations with applications. (1)
Lecture: 3 hrs/wk.
Prerequisite: MATH 201 or permission.

## 332 Applied Differential Equations

Series solutions of differential equations. Bessel functions, Legendre polynomials, Fourier series, partial differential equations, boundary value problems. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH 331.

## 342 Numerical Analysis

Numerical integration and differentiation, numerical methods in linear algebra, interpolation; error analysis, stability and conditioning. (1) (Cross-listed as CPSC 342)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: MATH 201, MATH 122, CPSC 120.

## 352 Complex Analysis

The structure of the complex number system; analytic functions, conformal mappings and applications; the theory of complex integration. (1)
Lecture: 3 hrs/wk.
Prerequisite: MATH 122.

## 361 Abstract Algebra

Axiomatic study of selected algebraic structures, including groups and rings. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: MATH 131 and 201; students are strongly encouraged to have completed their Transitions Course requirement before enrolling for this course.

## 371 Topology

Topological spaces, functions, mappings, connectedness, compactness, and metric spaces. (1)
Lecture: 3 hrs/wk.
Prerequisites: MATH 131 and 201; students are strongly encouraged to have completed their Transitions Course requirement before enrolling for this course.

## 381 Real Analysis

The structure of the real number system; selected topics from metric spaces, continuity, differentiation, integration, sequences and series. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: MATH 131 and 122; students are strongly encouraged to have completed their Transitions Course requirement before enrolling for this course.

## 388 Topics in Mathematics

Special topics in Mathematics. (1)
Prerequisites: MATH 131 and 201 or permission.

## 405, 406, 407 Independent Study and Research

Selected topics in mathematics carried out under direction of a member of the department staff.
(Enrollment with the approval of the department.) ( $1 / 2,1,1 / 2$ )

## 416 Internship

Field placement providing practical experience and training in areas in which mathematics is applied. These areas may include industry, government agencies, educational institutions, insurance companies, and a variety of private enterprises. (Permission of the department is required.) (1)

## 491 Math Seminar

Advanced topics in pure and applied mathematics, presentation of math projects, topics in the history of math. (1)
Lecture: 3 hrs/wk.
Prerequisite: Two of MATH 361, MATH 371 and MATH 381.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## MODERN LANGUAGES

Professors Kalinoski, Ogier, Talbot(Chair); Associate Professors Banuelos-Montes, Flores-Silva, Scaer; Assistant Professor Han, Viera; Lecturers Chapman, Myers, Stanley, Teaching Associate Clifton

The Department of Modern Languages offers majors in French and Spanish; minors in French, German, and Spanish; and instruction in Chinese, Italian, Japanese, and Russian. Greek and Latin course offerings, not taught by Modern Languages, may be found in their respective catalog sections.

The majors in French and Spanish consist of the completion of at least 11 units above the 202 level in one language. Specific requirements for each major are provided in the course listings for French and Spanish respectively.

- In order to promote fluency and cultural immersion, majors are required to complete an institutionally-approved course of study abroad. Appropriate periods of study include an INQ

Intensive Learning or May Term travel course, or a summer, semester, or year abroad via ISEP or a university-sponsored program.

- Majors are encouraged to complete an internship--abroad or domestically--related to their language of study (FREN or SPAN 416).
- Majors are required to enroll in at least one one-unit course in the major language during their senior year.
- To broaden their linguistic and cultural competence, majors are encouraged to study an additional modern language.

Minors consist of six units. Specific requirements for each minor are provided in the course listings for French, German, and Spanish respectively.

Modern language majors and minors should also note the courses listed under "Language" and "Linguistics." Language 341 (cross-listed as FREN 341 and SPAN 341) is a methods course primarily intended for those students who plan to teach a foreign language. Linguistics 320 (cross-listed as ENG 320 and ANTH 320) presents the principles of how language functions. It may count toward the French and Spanish majors and the German minor.

All students are required to complete the study of a foreign language through the first semester of the intermediate level (201) as part of the college's general education curriculum. Students may be exempted from all or part of the requirement by demonstrating competency in a foreign language as described in "Competency Standards" in this catalog.

## MUSIC

Professors Marsh, J. Sandborg; Associate Professors Blaha; Teaching Associates Bachelder, M. Sandborg A Bachelor of Arts degree with a major in music requires the completion of a minimum of $111 / 2$ units, including, seven units of core courses beyond Music 150, three units of Applied Music, and one unit of Senior Project.

## Major in Music

Core Courses (seven and one-half units)
MUSC 240 Music in Culture
MUSC 251 Diatonic Harmony*
MUSC 252 Chromatic Harmony
MUSC 261 Music History I: Classical Antiquity through 1700
MUSC 262 Music History II: 1700 to 1900
MUSC 321 Instrumentation and Score Reading (one unit)
MUSC 323 Conducting (1/2 unit)
MUSC 350 20th-Century Theory and Literature
*Completion of or Competency in MUSC 150: Fundamentals of Music is a prerequisite for MUSC 251/251L.

## Senior Project (one unit total)

By the middle of their junior year, students, in consultation with the music faculty, declare their area of concentration (composition, performance, research). By the end of their junior year, students propose a senior project based on these guidelines:

1. Performance: A public recital of no less than 60 minutes in length, with at least three style periods represented (including 20th century). Students will enroll in the appropriate applied music instruction course (one-quarter unit) during Fall of their senior year, and MUSC 420 (one half unit) and a second one quarter unit of applied music instruction during Spring of their senior year.
2. Composition: Creation of an original work or works presented to the public and introduced by the composer. Students will enroll in MUSA 104 (one-quarter unit) during Fall of their senior year, and MUSC 420 (one-half unit) and MUSA 104 (one-quarter unit) during Spring of their senior year.
3. Research: An original thesis tailored to the student's special interests, pursued in consultation with a music faculty member, and culminating in a public lecture. Students will enroll in either MUSC 420 and 422 (two one-half unit courses) or MUSC 421 (a one unit course) during their senior year.

Students may, in consultation with the faculty, propose a senior project combining more than one area of concentration (e.g., performance and composition, performance and research, composition and research).

## Applied Music (three units)

Satisfactory completion of at least five one-quarter units of Applied Music Instruction in voice (MUSA 101), keyboard (MUSA 102), instrumental (MUSC 103), and/or composition (MUSA 104), and at least seven one-quarter units of Applied Music Ensemble (MUSC 109, 111, 112, 113, 114). Individual studios or areas of concentration may require additional one quarter units of Applied Music. Descriptions of the skill levels and literature of these courses are available from the Fine Arts department.

## Applied Music Instruction

Applied music instruction includes private lessons in voice (MUSA 101), keyboard (MUSA 102), instrumental (MUSA 103), and composition (MUSA 104). Each lesson is one hour per week.

## Applied Music Ensemble

Roanoke College ensembles include Concert Choir, Oriana Singers, Wind Ensemble, Jazz Ensemble and various Chamber Ensembles.

## Music Juries and Other Requirements

Juries are held at the end of each semester. Juries are intended for monitoring the progress of students enrolled in MUSA courses, especially those who wish to concentrate in music performance.
In consultation with music faculty, all students majoring in music must demonstrate appropriate progress in their applied studies. All students majoring in music (performance, composition, research) must pass the Music Area's piano proficiency exams before graduation. These exams may be taken any time after completion of MUSC 251. Students who do not pass these exams by the end of their sophomore year may be required to enroll in MUSA 102 (applied piano instruction) or MUSC 106 (Class Piano) until the proficiency exam can be passed.

Attendance and/or participation in department activities such as seminars, master classes and recitals are required of all music major and minor students.

## Music Education: Vocal/Choral

For courses in this sequence or requirements for teacher licensure, the student should consult the college catalog under Education.

## Minor in Music

A minor in music consists of seven units, including the following five units of core course work: MUSC $251,252,261,262$; and either MUSC 240 or MUSC 321 or MUSC 350 . MUSC 150 or competency is a prerequisite for MUSC 251. In addition, a minimum of four one-quarter units of applied music instruction and a minimum of four one-quarter units of applied music ensemble must be completed successfully.

## 105 Class Voice

Fundamentals of voice production including breath control, tone quality, range extension, flexibility, diction, and sight reading. Experiences include singing group exercises, solo songs of all styles, sight reading, and listening to recordings. (May be repeated for credit. This course does not count for credit toward the music major or minor.) (1/4)
Lecture-Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 106 Class Piano

An introduction to functional keyboard skills including transposition, sight-reading, harmonization, and improvisation. Open to all interested students. (May be repeated for credit. This course does not count for credit toward the music major or minor.) (1/4)

## 107 Studio Ensemble

Varying styles of an instrument's repertoire taught on intermediate and advanced levels in a group context. In addition to issues in ensemble playing unique to the instrument, the following is covered: effective execution, physical position, tone production and intonation, extended techniques. (May be repeated for credit. This course does not count for credit toward the music major or minor.) (1/4)
Lecture-Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 109 Oriana Singers

This choir for women explores the Western sacred and secular choral tradition but also those of other cultures. Special attention is given to the development of vocal and music skills. Women can expect travel and collaboration with men's choirs when possible. - (1/4)
Lecture: $3 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: Entrance by audition only.

## 110 Preparation for Music

Studies in music relating to its use in the classroom, grades one through six. (1/2)
Lecture-Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.

## 111 Concert Choir

Training in a cappella and accompanied music from all style periods. (Students must participate in all performances unless excused by the director prior to the performance. May be repeated for credit.) (1/4)
Lecture-Laboratory: $4 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Entrance by audition only.

## 112 Wind Ensemble

Experience in band literature. (Students must participate in all performances unless excused by the instructor. May be repeated for credit.) ( $1 / 4$ )
Rehearsals: 3 hrs/wk.
Prerequisite: Permission of instructor.

## 113 Jazz Ensemble

Experience in jazz instrumental and ensemble. (Students must participate in all performances unless excused by the instructor. May be repeated for credit.) (1/4)
Rehearsals: 3 hrs/wk.
Prerequisite: Permission of instructor.

## 114 Chamber Ensemble

Experience in chamber music of various periods and styles. (Students must participate in all performances unless excused by the instructor. May be repeated for credit.) (1/4)
Rehearsals: 3 hrs/wk.
Prerequisite: Permission of instructor.

## 121 Collegium Musicum

Performance of selected areas of instrumental and vocal music for small groups. Emphasis will be placed on music of the Renaissance and Baroque periods. (May be repeated for credit.) (1/4)
Rehearsals: 3 hrs/wk.
Prerequisite: Entrance by audition.

## 125 Music Appreciation

An introduction to musical styles, forms, and genres, concentrating on the masterworks of the Western tradition. (1)
Lecture: 3 hrs/wk.

## 150 Fundamentals of Music

Pitch and rhythm fundamentals: reading music notation, sight singing, reading chord charts. Focus on intervals, key signatures, scales, meter, and chords. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 199 Special Topics

Ensemble/workshop experience in areas not normally offered, with the focus to be determined by the music faculty. May be repeated for credit. (1/4).
Lecture/Laboratory: hours vary.
Prerequisite: Permission of the instructor.

## 240 Music in Culture

An exploration of the role of music in cultures around the world and throughout history, introducing students to the discipline ethnomusicology. Emphasis will be placed on two aspects of musical culture: non-western (World) music and American popular music. The course includes a fieldwork component. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 251 Diatonic Harmony

Diatonic part writing; melodic harmonization and figured bass realization; basic species counterpoint; introduction to tonal theory, harmonic analysis, and composing simple forms. (1)
Lecture: 3 hrs/wk.; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MUSC 150 or competency.

## 252 Chromatic Harmony

Chromatic part writing and figured bass realization; introduction to contrapuntal techniques. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: MUSC 251.
261 Music History I: Classical Antiquity through 1700
A course of study tracing the development of styles and genres in the canon of Western music from the ancient world to the end of the seventeenth century. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
(Offered in alternate years or as demand indicates.)
Prerequisites: MUSC 150 or permission.

## 262 Music History II: 1700 to 1900

A continuation of Music 261, tracing the development of styles and genres in the canon of Western music produced during the eighteenth and nineteenth centuries. (1)
Lecture: 3 hrs/wk.
Prerequisite: MUSC261 or permission.

## 299 Special Topics

Selected studies in specialized performance, composition or literature/history areas. May be repeated for credit. (1/2)
Lecture/Laboratory: hours vary.
Prerequisite: Permission of the instructor.

## 321 Instrumentation and Score Reading

Survey of the musical instruments and their use in composition and arranging for various ensembles.
Primary emphasis on the study of clef transposition and keyboard reduction; secondary emphasis on arranging short excerpts for diverse ensembles. (1)
Lecture-Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
(Offered in alternate years or as demand indicates.)
Prerequisite: MUSC 252.

## 323 Conducting

Emphasis on practice with beat patterns, cues, phrasing, dynamics, tempo, and accent. Introduction to score preparation, rehearsal techniques for vocal and instrumental groups, balance control, and error detection. (1/2)
Lecture-Laboratory: 3 hrs/wk.
(Offered in alternate years or as demand indicates.)
Prerequisite: MUSC 321 or permission.

## 339 Music Education in the Elementary School

The objectives, content, and materials for the teaching of music in elementary school and kindergarten. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
(Offered in alternate years or as demand indicates.)

## 340 Music Education in Secondary School

Curriculum making, instructional planning, and organization of the secondary school music program. Current practices and trends. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
(Offered in alternate years or as demand indicates.)

## 350 20th-Century Theory and Literature

Historical survey of Western music since Debussy with a focus on analytical techniques, including atonal theory. (1)
Lecture: 3 hrs/wk.
Prerequisite: MUSC 252 or permission.

## 399 Special Topics

A course, offered in various formats, designed to give students instruction in a subject not regularly offered. May be repeated for credit. (1)
Lecture-Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission of the instructor.

## 405, 406, 407 Independent Study and Research

A program of advanced intensive study and experience in music under the guidance of the area staff. The student will submit a written proposal for specific study before the beginning of Examination Week of the term prior to the term in which the work is to be done. Admission by approval of the Music Area faculty on the recommendation of the directing professor. Students are alerted to consult the departmental "Guidelines for Independent Studies/Internships" prior to initiating their planning. (1/2, 1, 1/2) Lecture-Laboratory: Hours Vary.
Prerequisite: Basic through advanced courses in area of interest, or by permission.

## 416 Internship

Practical experience working in or with an artistic organization as participant-observer, leading to the preparation of a report which describes and evaluates that organization's activities. The student will submit a written proposal for specific study before the beginning of Examination Week of the term prior to the term in which the work is to be done. Admission with approval of the faculty professor. Students are alerted to consult the departmental "Guidelines for Independent Studies/ Internships" prior to initiating their planning. (1)
Lecture-Laboratory: 110 hour minimum
Prerequisite: Basic through advanced course in area of interest, or by permission.

## 420, 421, 422 Senior Project

A public presentation by the music major in one of three areas of concentration: composition, performance, or research. $(1 / 2,1,1 / 2)$
Lecture/Studio: Hours vary.
Prerequisites: Approval of the music faculty; Music Major with senior standing.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## NEUROSCIENCE

Assistant Professor Nichols, Coordinator

A concentration in neuroscience will offer students an opportunity to learn about theory and research on the brain and nervous system from a number of perspectives. A tremendous body of knowledge in psychology, intersecting with biology, chemistry, movement science, artificial intelligence, and medical ethics, has been growing rapidly in recent years with the advent of newer techniques in the study of neuroscience. These developments have illuminated multiple areas within the disciplines and filled in knowledge gaps in areas such as mental illness, brain damage, child development, and drug interactions. The Psychology Department houses the concentration, but it is designed to be compatible with majors in biology, chemistry, and health and human performance because neuroscience is an interdisciplinary field. Students will come to understand how developments in chemistry, biology, psychology and related fields alter knowledge and research techniques in the other fields. Students will also learn from faculty in a range of departments and be exposed to a range of research and thus a range of viewpoints. Students from any major may graduate with a concentration in Neuroscience by successfully completing at least six units and earning a cumulative grade point average of at least 2.0. In accordance with the general rules applicable to all concentrations, no more than three courses from a student's major may apply to the concentration and at least three courses in the concentration must be completed at Roanoke College. The courses required for the concentration are listed below:

## Required Courses (4):

NEUR /PSYC 330 Principles of Neuroscience
BIOL 120
BIOL 105
CHEM 111
Principles of Biology OR

General Chemistry I
NEUR/PSYC 430 Research Seminar: Neuroscience OR
NEUR 405, 406, or 407 Independent Study in Neuroscience

## Students must also take two electives from the list below:

## Electives:

NEUR 340
NEUR/PSYC 360
Topics in Neuroscience

PSYC 270
PSYC 350
BIOL 210
Neuropsychology
Drugs and Behavior
Sensation and Perception

BIOL 260 Human Anatomy and Physiology II
BIOL $305 \quad$ Principles of Physiology
BIOL 420 Developmental Biology
CHEM 240 Pharmaceutical Chemistry
CHEM 341 Biochemistry I
HHP 306
Motor Behavior

## 330 Principles of Neuroscience

This course will provide a detailed understanding of neurons and the functional role of different aspects of the human nervous system. A survey of topic areas relevant to psychology and neuroscience related disciplines will also be included. (Cross-listed with NEUR 330). (1)
Lecture: 3 hrs/wk.; Laboratory: 1.5 hrs/wk.

Prerequisites: PSYC 101 or BIOL 120 or permission.
Lecture 3 hrs/wk., \& 1.5 hrs/wk lab.

## 340 Topics in Neuroscience

A thorough examination of a particular topic within the field of neuroscience that is not covered in other regularly offered courses. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: NEUR/PSYC 330 or permission.

## 360 Neuropsychology

Examines the field of neuropsychology through the examination of common disorders found in neuropsychology, assessment techniques, and the application of knowledge of the relevant concepts to the interpretation and solution of disorders of brain-behavior relationships. (Cross-listed with PSYC 360). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: NEUR/PSYC 330 or permission.

## 405, 406, 407 Independent Study

Empirical research project that has a focus in neuroscience, with faculty supervision. (1/2, 1, 1/2)
Prerequisite: Written proposal and application approved by the coordinator.

## 430 Research Seminar: Neuroscience

An advanced, research-oriented seminar in human neuroscience. (Cross-listed with PSYC 430). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: NEUR/PSYC 330 or permission.

## PEACE AND JUSTICE STUDIES CONCENTRATION

Professor Heller and Associate Professor Mallavarapu, Co-Coordinators
The Peace and Justice Studies Concentration offers an interdisciplinary program examining conditions for bringing about a just and peaceful world order. The field of Peace and Justice Studies relates scholarship to practice and challenges those who engage in it to develop new ways of thinking and acting in the world. The concentration complements and builds upon other academic areas to prepare a student for graduate studies or service following graduation and to deepen a student's liberal arts education. Students from any major may earn a Peace and Justice Studies Concentration.

Six units are required. Of these six units, two must be PEAC 201 and 301. For the other four units, students may choose from the list of electives below, and students should see one of the concentration coordinators for additional special topics courses, INQ courses, and independent studies that can be counted toward the concentration. Taking PEAC 201 as early as possible is recommended. The group of courses used to meet the requirements of the concentration must contain at least three units which are not used to satisfy the student's major requirements. Each academic year before fall and spring registration, a list of electives, including courses not listed below, will be advertised by email, posted on fliers, and available through the concentration coordinators.
I. Required Courses (2 units):
PEAC 201
Introduction to Peace and Justice Studies
PEAC 301 Seminal Figures and Issues
II. Elective Courses (Four units, of which a maximum of three may be in one division: humanities, social sciences, or sciences. If taking PEAC 406 or PEAC 416 , remaining electives must be in two or more divisions.)

| CJUS/POLI 214 | Judicial Process |
| :--- | :--- |
| CJUS 326/SOCI 326 | Comparative Corrections |
| COMM 360 | Studies in Intercultural Communication |
| ECON 237 | Comparative Economic Systems |


| ECON 267 | Labor Economics |
| :--- | :--- |
| ENGL 312 | Studies in the Cross-Cultural Imagination |
| ENVI 240 | Environment, Ethics, and Culture |
| ENVI 250 | Environment and Society |
| HIST 246/RELG 246 | The Holocaust |
| HIST 255 | South Africa |
| HIST 262 | U.S. Women's History |
| PEAC 406 | Independent Study |
| PEAC 416 | Peace and Justice Internship |
| PHIL 205 | Moral Philosophy |
| PHIL 206 | Social Philosophy |
| PHIL 212 | Topics in Environmental Philosophy |
| POLI 231 | International Politics |
| POLI 232 | International Organizations |
| POLI 333 | Global Political Economy |
| POLI 351 352 | Environmental Public Policy |
| POLI 352 | Human Rights Policy |
| RELG/PHIL 208 | Buddhism |
| RELG/PHIL 213 | Religions and Philosophies of India |
| RELG/PHIL 218 | Religions and Philosophies of China |
| RELG 220 | Christian Ethics |
| SOCI 215 | Social Movements |
| SOCI 224 | Race and Ethnicity |
| SOCI 234 | Social Problems |
| SOCI 327 | Religion and Culture |
| SOCI 335 | Global Population Problems |
| SOCI 337 | Environmental Sociology |
| SOCI 338 | Women's Lives Around the World: Global Perspectives |

## 201 Introduction to Peace \& Justice Studies

An introduction to the interdisciplinary field of peace and justice studies, examining the major areas within the field. (1)
Lecture: 3 hrs/wk.

## 301 Seminal Figures and Issues

This course aims at deepening our understanding of peace and social justice through a focus on specific thinkers and activists and/or significant historical events and movements. (1)
Lecture: 3 hrs/wk.
Prerequisite: PEAC 201 or permission.

## 406 Independent Study

Taught on an individual basis arranged by the student with the professor in the relevant academic discipline, in coordination with the director of the Peace and Justice Studies concentration. Requirements will be in line with other independent studies supervised in that academic discipline. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PEAC 201.

## 416 Peace and Justice Internship

Supervised by the director of the Peace and Justice Studies concentration. Requirements will be in line with other internship courses and will include the following: the student will fulfill 110 hours at the work site; gain a better understanding of workplace culture through at least 10 hours of meetings and/or equivalent with coordinator and/or fellow interns; track internship experience through a daily journal; prepare an internship report that adheres to standard writing practices and discusses the internship
experience; begin a digital portfolio on the internship work; and attend an exit interview with the Internship Coordinator. (1).
Lecture: 3 hrs/wk.
Prerequisite: PEAC 201.

## PHILOSOPHY

Professors Hinlicky, Wisnefske, Zorn; Associate Professors B. Adkins (Chair), Vilhauer; Lecturer M. Larson-Harris

The study of philosophy examines certain unavoidable questions for human existence: "What does it mean to be a human being?" "What is the best kind of life to live?" "What is the difference between right and wrong?" "Is life meaningful or meaningless?" "What is truth?" Being a good philosopher does not mean having ready-made answers to these questions but having the ability to ask and answer them selfconsciously, self-critically, and with clarity and consistency. The skills essential for being a good philosopher are not unique to philosophy, and so are useful in every aspect of life. In particular, the philosophy program at Roanoke College teaches the core skills of analytic reading, thinking, and writing, which involve breaking down ideas, discovering their interrelation, and evaluating their worth in such a way that they may be clearly communicated to others.

A major in Philosophy requires completion of 9 units:
One course in Logic:

| PHIL 122 | Logic |
| :--- | :--- |
| PHIL 215 | Symbolic Logic |

Two History of Philosophy survey courses, including at least one of Philosophy 251 or 255 :
PHIL $213 \quad$ Philosophies

PHIL 218 Religions and Philosophies of China
PHIL 251 Early Western Philosophy
PHIL 253 Medieval Philosophy
PHIL 255 Modern Western Philosophy
One Senior Thesis:
PHIL 410, 411, 412 (1/2, 1, 1/2) Senior Thesis
PHIL 495, 496, 497 (1/2, 1, 1/2) Honors Project
A minimum of five additional courses in Philosophy, at least two of which must be at the 300 level or above. Only one course at the 100 level in addition to PHIL 122 may be counted toward the major.

Courses in other disciplines that address philosophical topics may be substituted for Philosophy courses with the approval of the department.

Since the skills and subject matter of philosophy are foundational to many other academic subjects, students who major in philosophy are encouraged to enrich their education by pursuing minors, concentrations, or second majors in other disciplines. Students who plan to do graduate work in philosophy will find it helpful to take PHIL 215, 251, and 255, along with more than the required number of advanced ( 300 level) courses. They should also attain competence in French or German at the advanced intermediate (202) level. Students whose primary interest is classical philosophy should consider taking Greek.

## Minor in Philosophy

A minor in philosophy requires completion of 6 units:
One course in Logic: PHIL 122 or 215
One History of Philosophy survey course: PHIL 213, 218, 251, 253, or 255
A minimum of four additional courses in philosophy, at least two of which must be at the 300-level or above. Only one course at the 100-level, other than PHIL 122, may be counted toward the minor.

Courses in other disciplines that address philosophical topics may be substituted for Philosophy courses with the approval of the department.

## 105 Socrates, Jesus, and the Buddha

A survey of the main figures in the philosophical and religious traditions of the Western world, as well as major figures in Eastern philosophy and religion. All members of the department of Religion and Philosophy will contribute lectures. (1) (Cross-listed as RELG 105)
Lecture: 3 hrs/wk.

## 122 Logic

This course seeks to develop skills in formulating and evaluating arguments. Topics covered include the nature and types of arguments, patterns of fallacious reasoning, inductive logic, and systems of deductive logic. (1)
Lecture: 3 hrs/wk.

## 205 Moral Philosophy

An introduction to the most influential ethical thinkers of Western philosophy. The course follows the search for a common ethical standard from its beginnings in Ancient Greece with Socrates, Plato, and Aristotle, to the modern period of Hume, Kant, and Mill, and finally into the overarching critique of this long tradition and attempt to rethink ethics with Friedrich Nietzche. . (1)
Lecture: 3 hrs/wk.

## 206 Social Philosophy

An introduction to social-political philosophy. Taking the social nature of human life as its basic premise, this course aims to investigate who we are as political animals, what effect the social order in which we live has upon us, and what type of social order would enable us to achieve our highest human potential. The course considers such issues as: the fit ruler and the just state; the social contract; rights, laws, and duties; individual freedom; equality, diversity, and tolerance; representation and participation in political life. (1)
Lecture: 3 hrs/wk.
208 Buddhism This course will encounter the varieties of one of the oldest and most diverse religions as it developed in India, China, Japan, Tibet, and the United States. The course will examine Buddhism's history, philosophy, ethics, Art, literature, and ritual practices. First, we will study the life and awakening of the Buddha, how the Buddha's perception of reality transforms our relationships to ourselves and to each other, and how it directs us to live a life of compassion for others. Second, we will see how the Buddha's core teachings changed as they spread to other countries. The course is divided into three parts: Foundations, which provides an introduction to the Buddhist world view; Development, which charts the changes and elaborations made to that world view under the Mahayana philosophers; and Literature, which explores how Buddhist ideas have been expressed in poetry, the novel, and film. (1)
Lecture: 3 hrs/wk.

## 212 Topics in Environmental Philosophy

An introduction to environmental philosophy. It will focus on philosophical questions germane to the relationship between humans and the environment. What is the environment? What is the appropriate relation between humans and the environment? Does technology help or hinder this relationship? What responsibilities do humans have with regard to natural resources? (1)
Lecture: 3 hrs/wk.

## 213 Philosophies of India

An examination of the philosophical traditions of South Asia. Topics include the central ideas of these traditions, their historical development, their styles of reasoning, and the relationship between religion and philosophy. (1) (Cross-listed as RELG 213).
Lecture: 3 hrs/wk.

## 215 Symbolic Logic

An introduction to truth functional logic including truth tables, and natural deduction in propositional and predicate logic. (1)

Lecture: 3 hrs/wk.

## 218 Religions and Philosophies of China

An interdisciplinary examination of the philosophical and religious traditions of East Asia. Topics include the central ideas and practices of these traditions, their historical development, their styles of reasoning, and the relationship between religion and philosophy. (1) (Cross-listed as RELG 218).
Lecture: 3 hrs/wk.

## 221 Faith and Philosophy

An examination of fundamental questions concerning rationality and religious belief. The course addresses questions such as whether it is rational to believe in God and whether we can know anything about God, along with different ways of answering these questions and the different views of reason and religious faith the answers imply. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 222 Business Ethics

An examination of normative questions arising from business practice and decision-making, focusing on the analysis of theories of ethical action and character, and their application to contemporary business issues. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 223 Ethics and Medicine

An examination of ethical issues in medicine and the moral principles that might be employed to resolve ethical dilemmas. (1) (Cross-listed as SOCI 223)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101.

## 231 Religion, Philosophy, and Science

An examination of the confrontations, compatibilities, and cooperation among religious thought, philosophy, and scientific inquiry. Topics will include philosophical analyses of science, the debates between the natural sciences and Western religion, recent developments in the social sciences, and insights from Eastern religions. (1) (Cross-listed as RELG 231).
Lecture: 3 hrs/wk.

## 251 Early Western Philosophy

An analysis of the history of Western thought from the rise of classical philosophy with the pre-Socratic philosophers and the pivotal figures of Socrates, Plato, and Aristotle, through the evolution of classical thought in Hellenistic philosophies and medieval thinkers such as St. Augustine and St. Thomas Aquinas. (1)

Lecture: 3 hrs/wk.

## 253 Medieval Philosophy

An examination of the way in which thinkers in the middle ages developed the heritage of the classical world, produced a sophisticated intellectual heritage of their own, and laid the groundwork for modern philosophy. The course follows the development of medieval thought with special attention to the work of St. Augustine and St. Thomas Aquinas, as well as the pivotal work of Arabic-speaking philosophers such as Ibn Sina. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 255 Modern Western Philosophy

A study of the attempts of thinkers such as Bacon, Hobbes, Descartes, Leibniz, Spinoza, Locke, Hume, and Kant to come to terms with the scientific, political, and religious changes in the modern world. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 260 Selected Topics in Philosophy

The study of a particular issue, theme, or philosopher of current interest. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 265 American Philosophy

The development of American philosophy from the colonial period to contemporary thinkers. Particular emphasis will be placed on the pragmatist tradition, including 19th-century thinkers such as Peirce, James, and Dewey, and contemporary figures such as Quine, Davidson, and Rorty. (1)
Lecture: 3 hrs/wk.

## 266 Contemporary French Philosophy

An examination of contemporary French thinkers, such as Michel Foucault, Gilles Deleuze, and Jacques Derrida. Each of these thinkers represents an important aspect in the development of what has been variously called post-structuralist and postmodernist discourse as it has developed in France since the May 1968 student riots. The purpose of this course is to introduce the student to some important trends in French thought since 1968. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 267 Philosophy and Film

An introduction to the interaction between philosophy and film. Whether implicitly or explicitly every film makes claims about the nature of reality, human nature, society, politics, ethics, and aesthetics. This makes film an excellent place to explore philosophical questions. The course will focus on a director, theme, or genre of film with the goal that film and philosophy mutually explicate one another. (1)
Lecture: 3 hrs/wk.

## 301 Plato

An introduction to Plato. Through an examination of key texts in Plato's corpus, students will be exposed to major issues in Plato's thought. These include Socratic method and education, dialogue and dialectic, philosophy and rhetoric, the Forms, recollection, justice and the good life, love and friendship, art and images, myth and reason. As Plato's corpus is quite large, the particular selection of texts and the thematic lens through which these major issues in Plato are examined may vary. (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous PHIL course or permission.

## 302 Aristotle

A detailed examination of a topic or theme in Aristotle's philosophy. Specific topics might include logic, theory of knowledge, natural philosophy, metaphysics, psychology, ethics, or political philosophy. This course will be an elective within the "Advanced" category of the Philosophy, Religion and Christian Studies majors and minors. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 310 Kant’s Critical Philosophy

A consideration of the philosophical questions Kant addressed his answers to them, and their impact on existentialism, pragmatism and language philosophy. Focusing on his major works it considers the viability of Kant's philosophy today. (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous PHIL course or permission.

## 315 Hegel

An introduction to the thought of G.W.F. Hegel. Through examination of his central writings, students will encounter the major questions of his thought: Where does philosophy begin? Does it have any presuppositions? What is the method appropriate to philosophy? What is the purpose of philosophy? (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous PHIL course or permission.

## 320 Nietzsche

An introduction to the thought of Friedrich Nietzsche. Through an examination of key texts in Nietzsche's corpus students will be exposed to the major questions of Nietzsche's thought. What is life? What is the relationship between art and life? Where do values come from? What is power? What is interpretation?
(1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Previous PHIL course or permission.

## 321 Topics in Philosophy of Religion

A detailed examination of a topic in the philosophy of religion. Topics for any given semester will be chosen from among such issues as the problem of suffering, the epistemology of religious belief, religious language, and philosophical theology. May be repeated for credit. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Previous PHIL course or permission.

## 325 Heidegger

An introduction to the thought of Martin Heidegger. Through an examination of key texts in Heidegger's corpus students will be exposed to the major questions of Heidegger's thought. What is existence? What is time? What is death? What is truth? What is interpretation? (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous PHIL course or permission.

## 330 Wittgenstein

An introduction to Wittgenstein. Through an examination of key texts in Wittgenstein's corpus, students will be exposed to major issues in Wittgenstein's thought. In his early work these include the picture theory of language, what can be said versus what can only be shown, sense, truth and falsity, and about what we must remain silent. In his late work these include the use theory of language, language games and forms of life, rule following, privacy, nonsense, and therapy. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Previous PHIL course or permission of instructor.

## 332 Topics in Metaphysics

A detailed examination of a topic in metaphysics. Topics for any given semester will be chosen by the instructor from among such issues as idealism and realism, language, the philosophy of mind, substance, and time. (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous PHIL course or permission.

## 340 Topics in Contemporary European Philosophy

A detailed examination of a topic or single thinker in 20th and 21st Century European Philosophy. Depending on the focus of the professor, topics or thinkers might include (but are not limited to): Hermeneutics; Critical Theory; Deconstruction; Gadamer; Habermas; Derrida. May repeat for credit. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Previous PHIL course or permission.
405, 406, 407 Independent Study and Research
Selected topics in philosophy carried out under the direction of a member of the departmental staff.
Enrollment with the approval of the department. (1/2, 1, 1/2)

## 410, 411, 412 Senior Thesis

At the end of the junior year every major will register with a member of the department to study and write a major paper in the final year. Guidelines, requirements and dates are explained in "The Senior Thesis." ( $1 / 2,1,1 / 2$ )

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee .A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## PHYSICS

Professor Grant (Coordinator); Associate Professors Balasubramanian, Fleenor; Assistant Professor Robb; Lecturer Price

The Bachelor of Science degree with a major in physics requires the student to complete a minimum of 13 $1 / 2$ course units in physics and related fields. These must include Physics 190, 201, 202, 203, 315, 350, 370, 390, 432, 480, and Mathematics 331. Three additional units chosen from the following with two of these three units at the 400-level: Any 400-level physics course; PHYS 205; MATH 332, 342; CPSC 120, 170; CHEM 111, 112; BIOL 120, 210. Note: Mathematics 121 (or 118) and Mathematics 122(or 119) are prerequisites for Physics 201 and 202, respectively.

A Bachelor of Arts degree with a major in physics requires the student to complete a minimum of $91 / 2$ course units in physics and related fields. These must include: PHYS 201, 202, 203, 315, 370, 480; CHEM 111, 112 and one unit of Biology (BIOL 120 or above). Note: Mathematics 121 (or 118) and Mathematics 122 (or 119) are prerequisites for Physics 201 and 202, respectively.

## Minor in Physics

The minor in Physics requires the student to complete $6 \frac{1}{2}$ units of Physics and Mathematics including PHYS 190, 201, 202, 203, 315, Math 122, plus one additional one unit PHYS course at the 300 -level or above. Note: MATH 118 or 121 is a prerequisite for PHYS 201.

## 101 Concepts

Please see description under INQ 250. The Intellectual Inquiry Curriculum was implemented beginning fall term, 2009. Students who completed this course in an earlier term should refer to the 2007-2009 academic catalog for the course description.

## 103 Fundamental Physics I

Algebra- and trigonometry-based introduction to classical mechanics including the equations of motion, forces, energy, momentum, rotation, fluid dynamics, waves, and sound. (May not be taken for credit by students who have completed PHYS 201.) (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.

## 104 Fundamental Physics II

Algebra-and trigonometry-based introduction to thermal physics, electricity, magnetism, light, and optics. (May not be taken for credit by students who have completed PHYS 202.) (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: PHYS 103 or PHYS 201.

## 190 Physics \& Engineering Colloquium

An on-going discussion of the differences between physics, engineering, and other sciences, all within the context of problem-solving, disciplinary content, the scientific process, the role and boundaries of science, new discovery and cutting-edge technology, and historical biography. (1/2)

Lecture: 2 hrs/wk.

## 201 Newtonian Mechanics

Calculus-based, introduction to classical mechanics including forces and motion, energy, momentum, rotation, fluid dynamics, waves and sound. (1)
Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.

Prerequisite: MATH 118 or MATH 121.

## 202 Electricity and Magnetism

Calculus-based introduction to electricity, magnetism, light, and optics including interference phenomena. (1)

Lecture: 3 hrs/wk.; Laboratory: 3 hrs/wk.
Prerequisite: PHYS 201 and MATH 119 or 122.

## 203 Modern Physics

Calculus-based introduction to relativity, quantum phenomena, atomic and nuclear structure, and cosmology. (1)
Lecture: 3 hrs./wk.; Laboratory: 3 hrs./wk.
Prerequisites: PHYS 202.
205 Research Experience
A research project in physics. May be repeated for credit. (1/2)
Prerequisite: Permission of the Department.

## 315 Experimental Analysis

Laboratory experiments related to advanced and modern topics in physics. Data analysis, error propagation, and written and oral scientific presentation skills. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PHYS 202.

## 350 Electromagnetic Theory

Developed examination of electrostatics, potential theory, dielectric media, magnetostatics, and an introduction to Maxwell's equations. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: PHYS 202.

## 370 Thermal Physics

Examination of the thermal behavior of systems, equations of state, phase transitions, and elements of continuum and statistical approaches. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PHYS 202.

## 390 Quantum Mechanics

Introductory examination of the wave formulation and notation in solving the time-dependent and timeindependent Schrödinger equations including reflection/transmission, barriers, and the hydrogen atom. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PHYS 202.

## 405, 406, 407 Independent Study in Physics

A research project in physics that results in the production of a scholarly paper and an oral presentation. May be repeated for credit. ( $1 / 2,1,1 / 2$ )
Prerequisite: Permission from instructor.

## 416 Internship

Field experience in a physics-related area such as health physics in an appropriate industry or business. Permission of the department. (1)

## 432 Theoretical Mechanics

Developed examination of central force motion, coupled systems, rigid body motion, and the Lagrangian and Hamiltonian formulations. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

Prerequisites: PHYS 202 and MATH 331.

## 452 Biophysics

Examination of the role of physical theory, models, and experimental techniques in the study of biological systems. Topics may include biomechanics, membrane transport, electromagnetic properties of cells and organisms, and medical instrumentation. (1)
Lecture: 3 hrs/wk.
Prerequisite: PHYS 202.

## 456 Astrophysics

An introduction to the foundational theories and unifying nature of the subject of astrophysics. Principles to be studied include interstellar and radiative theory, stellar formation and evolution sequence, galaxy observations and environments, and cosmology. (1)
Lecture: 3 hrs/wk.

## 457 Physics of Materials

An introduction to the physics of materials including the collective behavior of atoms and molecules, crystal structure, mechanical, electrical, thermal, magnetic properties of metals, electronic materials, composites, and nanostructures. (1)
Lecture: 3 hrs/wk.
Prerequisite: PHYS 202.

## 458 Optics and Spectroscopy

A theoretical introduction to optical phenomena which includes wave motion, geometric principles, polarization, and inference. A significant amount of the course will also be dedicated to the principles of spectroscopic physics, including both optical and non-optical feature generation. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PHYS 202.

## 480 Senior Seminar: Physics Capstone

Advanced study in selected topics in a seminar format. Scientific presentation skills and review of all areas of physics. (1)
Prerequisite: Permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisite: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## 499 Special Topics

A course offered in various formats designed to give students instruction in a subject not regularly offered.
(1)

Lecture: 3 hrs/wk.
Prerequisite: Permission of the instructor.

## POLITICAL SCIENCE

Professors Rubongoya, Wilson; Associate Professor Peppers; Assistant Professors Garrison, MihalacheO'Keef

The Bachelor of Arts degree with a major in political science is awarded to students who successfully complete 12 units from the program of study outlined below:
I. Core Requirements (students must complete each of the following):

101 Introduction to Political Science

209 Research Methods (POLI 209/I.R. 209)
231 International Politics
250 Public Policy
401 Seminar in Public Policy
II. American Perspective and Public Law (at least one from category):

201 State and Local Government
202 American Political Behavior
205 American Political Institutions
214 The Judicial Process
270 Public Administration
311 American Constitutional Law
312 Civil Liberties
III. Comparative Politics (at least one from category)

221 Comparative Political Systems: Europe
222 Comparative Political Systems: Asia
224 Comparative Political Systems: Africa
225 Comparative Political Systems: Latin America
IV. Political Theory (at least 1 from category)

242 Western Political Theory
243 American Political Theory
247 Theory in International Relations

## Electives (four)

These can be selected from any of the other Political Science courses not listed among the core requirements, or one from among INQ 260 PS or INQ 177, 277 or 377 with approval of the department chair, or any Honors 301 course whose topic is appropriate and approved by the department chair.

## Minor in American Politics

A minor consists of six units:
Required:
POLI 101 Introduction to Political Science
POLI 250 Public Policy
POLI 311 American Constitutional Law or POLI 312 Civil Liberties
Electives (three)
POLI 201 State and Local Government
POLI 202 American Political Behavior
POLI 205 American Political Institutions
POLI 214 The Judicial Process
POLI $\quad 270$ Public Administration
POLI 351 Environmental Public Policy
POLI $\quad 353$ The Making of U.S. Foreign Policy
Courses from among Political Science 260-262, 395-396, 401, 406, and 416, and 495-497 or one from among INQ 260 PS or INQ 177, 277 or 377may be substituted when they include topics related to American politics with approval of the department chair, or any Honors 301 course whose topic is appropriate and approved by the department chair.

## Minor in Foreign Politics

A minor consists of six units:
Required:
POLI 231 International Politics
POLI 247 Theory in International Relations
POLI 353 The Making of U. S. Foreign Policy
Electives (three) from among the following; at least one of which must be a comparative politics unit:
POLI 209 Research Methods in Public Affairs (CJUS 209/I.R. 209)
POLI 221 Comparative Political Systems: Europe

```
POLI 222 Comparative Political Systems: Asia
POLI 224 Comparative Political Systems: Africa
POLI 225 Comparative Political Systems: Latin America
POLI 232 International Organizations
POLI 233 International Law
POLI 333 Global Political Economy
POLI 351 Environmental Public Policy
POLI 352 Human Rights Policy
```

Courses from among Political Science 260-262, 395-396,401, 406,416, and 495-497 or one from among INQ 260 PS or INQ 177, 277 and 377 or any Honors 301 course may be substituted when they include topics related to international politics; whose topic is appropriate and approved by the department chair.

## 101 Introduction to Political Science

An introduction to the science of American and global politics with emphasis on concepts, methods and principles. (1)
Lecture: 3 hrs/wk.

## 201 State and Local Government

An examination of the politics, structures, and policies of American state and local governments. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 101, or ENVI 250, or permission.

## 202 American Political Behavior

An analysis of the political process in the United States, including political parties, interest groups, public opinion, elections, and voting behavior. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 101, or ENVI 250, or permission.

## 205 American Political Institutions

An examination of the power, restraints, and politics of the Presidency, the Congress and the Supreme Court. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 101, or ENVI 250, or permission.

## 209 Research Methods in Public Affairs

An examination of the research methodologies and techniques used in the study of public policy and politics. The course emphasizes both qualitative and quantitative methods. The lab focuses on statistical applications. (1) (Cross-listed as CJUS 209/I.R. 209).

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$; Laboratory: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 and at least one other course in the major or ENVI 250, sophomore status, or permission.

## 211 Criminal Justice

An introductory analysis of the criminal justice system in the United States, its structure, processes, and problems. (1) (Cross-listed as CJUS 211)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 213 Criminal Law

A study of the criminal justice system at work in the courtroom setting, emphasizing the relationship between substantive criminal law, criminal procedure, and the rules of evidence. (1) (Cross-listed as CJUS 213)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 214 The Judicial Process

An exploration of the politics of the American judicial system. This includes such topics as the structure of courts, selection of judges, actors who participate in the judiciary, judicial behavior, and the civil and criminal varieties of courts. (1) (Cross-listed as CJUS 214)

Lecture: 3 hrs/wk.

## 221 Comparative Political Systems: Europe

The government and politics of Great Britain, France, Germany, Russia, and selected other European states as well as the operations of the European Union. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.

## 222 Comparative Political Systems: Asia

The government and politics of Japan, China, and Indonesia and ASEAN. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.

## 224 Comparative Political Systems: Africa

The government and politics of Sub-Saharan African politics. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 101 or permission.

## 225 Comparative Political Systems: Latin America

The government and politics of Latin America, including Central America and the Caribbean. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 101 or permission.

## 231 International Politics

An examination of the nature of the international political system, the perspectives and behaviors of nation-states, and the role and influence of both intergovernmental organizations and non-governmental actors. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.

## 232 International Organizations

An examination of global, regional, and functional organizations. The nature and functions of both governmental and non-governmental institutions will be discussed. A model United Nations Security Council simulation exercise is an integral course component. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Permission.

## 233 International Law

An examination of the nature, structure, functions and evolution of the international legal system. The impact of international law on the behavior of international actors and the dynamics of the international system will be explored. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$
Prerequisite: POLI 101 or permission.

## 240 Public Opinion Polling

Supervised participation in a large scale survey research project. Course includes interviewing, data analysis, and report writing. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$
Prerequisite: Permission.

## 242 Western Political Theory

A study of western political theory from Plato to Rawls, emphasizing the modern period. (1)
Lecture: 3 hrs/wk.
Prerequisites: POLI 101 or permission.

## 243 American Political Theory

A survey of American political theory from colonial precursors to the present. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.

## 247 Theory in International Relations

In-depth examination of the theoretical lenses in the field of International Relations, complemented by the application of the theories to contemporary global issues. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 231 or permission.

## 250 Public Policy

An examination of the scope, nature and outcomes of the American public policy decision-making process.
(1)

Lecture: 3 hrs/wk.
Prerequisite: POLI 101.
260, 261, 262 Selected Topics in Political Science
Student research, reports, and discussion on selected problems and themes. (1/2, 1, 1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 270 Public Administration

A survey of the role of public administration in the modern state, with emphasis on the development of bureaucracy, organizational theory, and management functions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 250 or permission.

## 311 American Constitutional Law

An introduction to decision-making in the Supreme Court and its past and present roles in American government. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: POLI 101 and one additional course in American politics (201, 202, 205, 270) or permission.

## 312 Civil Liberties

An examination of Supreme Court decisions dealing with the Bill of Rights with emphasis on the First Amendment. (1)
Lecture: 3 hrs/wk.
Prerequisites: POLI 101 and one additional course in American politics (201, 202, 205, 270) or permission.

## 333 Global Political Economy

An introduction to the relationship between politics and economics at the theoretical and policy levels. (1)
Lecture: 3 hrs/wk.
Prerequisite: POLI 231.

## 351 Environmental Public Policy

An examination of environmental policy-making and environmental issues at local, national, and international levels. (1)
Lecture: 3 hrs/wk.

Prerequisite: POLI 101, or ENVI 250, or permission.

## 352 Human Rights Policy

An introduction to the principles of human rights from a comparative policy-making perspective. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.
353 The Making of U.S. Foreign Policy
An introduction to the foreign policy process of the United States. Selected issues in United States foreign policy in The Cold War and post-Cold War eras will also be analyzed. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: POLI 101 or permission.

## 395, 396 Henry H. Fowler Public Policy Seminar

A seminar taught with a scholar-statesperson that deals with a policy issue of public significance. (Made possible by the Henry H. Fowler Endowment. Open to selected students with department permission.) (1, 1/2)

## 401 Seminar in Public Policy

Supervised review of a literature and research project in the discipline of political science. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Permission of the instructor; senior major status; POLI 209 and 250.

## 405, 406, 407 Independent Study

Supervised reading and research which results in a monograph on a particular aspect of political science.
(1/2, 1, 1/2)
Prerequisite: A minimum 3.0 major GPA and both Departmental and instructor permission. POLI 405 Is a prerequisite for POLI 407.

## 416 Public Internship

Practical experience in working with a public agency or non-governmental organization as a participantobserver, leading to the preparation of an experience report which describes and evaluates that agency's activities. (1)
Prerequisites: A minimum of 2.5 major GPA and both instructor and major coordinator permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## PSYCHOLOGY

Professors Early, Lynch, Pranzarone; Associate Professors Buchholz, Camac, Friedman (Chair), Whitson; Assistant Professors Nichols, Osterman; Lecturer Allen

It is strongly recommended that students declaring a major in psychology have at least a 2.0 GPA in psychology at the time of the declaration of the major. Students who have taken three or more psychology courses and have not achieved at least a 2.0 GPA in psychology should seriously reconsider their intention to major in psychology.

## Bachelor of Arts in Psychology

Students pursuing the Bachelor of Arts degree with a major in psychology are required to complete a minimum of 12 units, including 101, 204, 205, 450 and one unit of 420 or 430 . Of the remaining seven units, two units must be selected from Group A and two from Group B:

Group A: Development-Abnormal-Learning: 210 or 211 or 212 or 215; 230, 290.
Group B: Personality-Social-Physiological-Cognitive: 315 or 325, 330, 340, 350

The final three units required may be selected from all Psychology courses offered except only one Internship (PSYC 316/317) and only one unit of Mentored Research course (PSYC 318/319, 405/406/407, 495/496/497) may be applied to the major. PSYC 210 may not be counted towards the major if 215 has been taken. Students wishing to complete the Concentration in Human Development should take 210 and 211. It is recommended that students complete at least two 200-level psychology courses before enrolling in courses numbered 300 or higher. INQ 260PY may count as one of the electives.

## Bachelor of Science in Psychology

Students pursuing a Bachelor of Science degree in Psychology are required to complete a minimum of 13 units in psychology and four additional math and science units including Biology 120 and INQ 240. The psychology courses include 101, 204, 205, 290, 450 as well as two units of research seminar (420, 430). PSYC 300, 1 unit of an empirically based independent study ( 406 or 405 and 407) or 1 unit of Honors Project ( 496 or 495 and 497) may be substituted for the second unit of the research seminar requirement. In addition, three units must be selected from Group B, and three Psychology electives may be chosen from all Psychology courses offered except only one Internship (316/317) or Research Practicum (318/319 may be applied to the major. Psychology 210 may not be counted towards the major if 215 has been taken. Students wishing to complete the Concentration in Human Development should take 210 and 211. INQ 260PY may count as one of the electives.

Group B: Personality-Social-Physiological-Cognitive: 315, 325, 330, 340, 350, 360
The four additional math and science units must include BIOL 120, INQ 240 and two units from:
Group C: BIOL 125, 210, 230, 260, 340; CHEM 111, 112, 221, 222, 341; CPSC 120, 170, INQ 241(CPSC); MATH 111 or higher; PHYS 103, 104; STAT 202, 301, 403, 404.
(Note that many of these courses are prerequisites to others; some do not receive credit if a higher-level course is taken. These restrictions apply.)

## Enrollment in Internship and Mentored Research

For enrollment in an Internship (PSYC 316/317), a written application must be submitted to the Director of the Internship Program and approved by the department faculty prior to registration. Contact the Internship Director for more information about the application process. For enrollment in Mentored Research (Research Experience PSYC 305/306, Research Practicum PSYC 318/319, Independent Study PSYC 405/406/407, or an Honors Project PSYC 495/496/497), a written application must be submitted to the department chairperson and approved by the department faculty prior to registration. Information about the application process for Internships and Mentored Research can be found under the Research and Internships section of the department website.

## Minor in Psychology

The Psychology minor requires six courses in Psychology: two designated courses and four chosen from the Psychology curriculum. Requirements include:

PSYC 101 Introduction to Psychology
One of the following Methods courses:
PSYC 205 Research Methods in Psychology or
SOCI 251 Research Methods (for students majoring in Sociology) or

CJUS/POLI/I.R. 209 Research Methods in Public Affairs (for students majoring in Criminal Justice, Political Science or International Relations)

Four courses chosen from the psychology course offerings excluding Internship (PSYC 316/317) and Mentored Research (Research Experience PSYC 305/306, Research Practicum PSYC 318/319, Independent Study PSYC 405/406/407, or an Honors Project PSYC 495/496/497); two of the four courses must be at the 300 level or higher. Only one PSYC 240 (Special Topics) course may be applied to the Minor.

## Concentration in Human Development <br> Professor Jan Lynch, Coordinator

The Concentration in Human Development has two purposes: (1) to provide focused coursework for students who plan to pursue a post-graduate degree in counseling psychology or school psychology, and (2) to prepare students for entry-level positions in a variety of careers that involve designing and/or implementing programs for children, adolescents, and/or the elderly.

To apply for the concentration, students must have a GPA of 2.0 or higher in the courses completed at the time of application. Successful completion of the following seven courses is required:
PSYC 101 Introduction to Psychology*
One of the following methods courses:
PSYC 205 Research Methods in Psychology or
SOCI 251 Research Methods or
CJUS/POLI/I.R. 209 Research Methods in Public Affairs
PSYC $210 \quad$ Child Development
PSYC 211 Adolescent Development
PSYC 212 Adult Development and Aging
Two courses chosen from PSYC 300 (Test and Measurements), PSYC 315 (Personality), PSYC 316 (Internship), PSYC 325 (Social Psychology), and PSYC 340 (Cognition)
Students who have competency in PSYC 101 will take only six courses for the concentration.
Psychology 101 is a prerequisite for all other courses in the department. Some courses have additional prerequisites, which are indicated in the course descriptions that follow.

## 101 Introduction to Psychology

An overview of the field of psychology with emphasis on basic processes in human behavior. (Except where noted, this course is a prerequisite for all other courses in the department.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 204 Quantitative Methods in Psychology

An examination of techniques used by psychologists to measure behavior and to analyze and interpret the data. The course includes an introduction to computer data analysis. (1)
Lecture: 3 hrs/wk.; Laboratory: $11 / 2 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 205 Research Methods in Psychology

An examination of the research methods used in the fields of psychology. Topics include introductions to and evaluations of observational, relational and experimental research methods and designs. Ethics and research, communication and research, the development of research ideas and the reliability and validity of research are also examined. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 210 Child Development

Behavior and development of the child from conception to puberty. (1) (PSYC 210 may not be counted towards the major if PSYC 215 has been taken. Students wishing to complete the Concentration in Human Development should take 210 and 211).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 211 Adolescent Development

Behavior and development of the individual from puberty to early adulthood. (1) Students wishing to complete the Concentration in Human Development should take 210 and 211).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 212 Adult Development and Aging

Behavior and development of the individual from early adulthood to old age. (1)
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.

## 215 Child \& Adolescent Development

An examination of development from conception through adolescence. Physical, cognitive and socioemotional development will be discussed in the context of psychological theories, research, current applications and historical events. Psychology 215 may not be counted towards the major if 210 or 211 has been taken. Students wishing to complete the Concentration in Human Development should take 210 and 211. (1)
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.
220 Creative Thinking and Problem-Solving. An introduction to creative thinking and creative problemsolving, including definitions, theories, and assessment of creativity as well as research about creativity and the creative process. Attention will be given to skills of creative thinking and presentation of a creative problem-solving model. (1)
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.

## 225 Cross-cultural Psychology

The study of human behavior and mental processes, including both differences and consistencies, across different cultures. The aim is to examine systematic relations between cultural factors and behavior, as well as the generalizability of psychological principles across cultures.
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.

## 230 Abnormal Psychology

Study of individual psychopathology and deviant behavior, including diagnosis, theories, causes, and treatments. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 240 Special Topics in Psychology

A course offered in various formats, designed to give students instruction in a subject not regularly offered.
(1)

Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission. May be repeated for credit.

## 250 Industrial-Organizational Psychology

Application of principles and methods of psychology to business, industry, and other organizations, with emphasis on selection of employees and organizational behavior. (1)
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.

## 260 Human Sexuality

Human reproduction and sexual behavior; contemporary and historical norms; dysfunction; cross-cultural perspective; the bonding function of sexuality; and its expression in the arts, religion, ethics, and law. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 270 Drugs and Behavior

An examination of the mechanisms of actions, uses, effects and abuse liability of range of drugs. Both therapeutic drugs (such as antidepressants and antipsychotics) and recreational drugs (such as alcohol, stimulants and marijuana) will be addressed. (1)
Lecture 3 hrs/wk.
Prerequisite: PSYC 101 or PSYC 330.

## 280 Evolutionary Psychology

Why do some humans like spicy food and drinking alcohol? Why are younger women attracted to older men? Why would we risk our life to save a total stranger? Evolutionary psychology suggests that a considerable amount of human activity can be explained as evolutionary adaptations. Human beings, like other animals on this planet, evolved certain traits, preferences, and abilities to deal with their environment. This class will explore the latest research applying evolution to human psychology. (1)
Lecture: $3 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: PSYC 101 or permission.

## 290 Learning

Principles of learning processes, classic and contemporary theories, and methods of research. (1)
Lecture: 3 hrs/wk.
Prerequisite: PSYC 101 or permission.

## 300 Tests and Measurements

Principles and methods of psychological measurement and test construction, with consideration of administration and psychometric evaluation of representative tests. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: PSYC 204 or permission.

## 305, 306 Research Experience

Directed experience conducting empirical research under the supervision of a faculty member. Open to all students (majors and non-majors). ( $1 / 4,1 / 4$ )
Prerequisite: Written application approved by department.

## 315 Personality

Theories of personality, applications, and extensions of these theories, current research on individual differences, and methods and issues in personality measurement. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

Prerequisite: PSYC 101 or permission.
316, 317 Internship
Practical experience in a setting in which psychology is applied. Placements in mental health facilities and other community agencies and institutions. Seminar on relevant topics. (One unit may be counted as an elective in the major). $(1,1)$
Prerequisite: Written application approved by department.

## 318, 319 Research Practicum

Directed study and empirical research under the supervision of a faculty member. (Open to majors with the approval of the department. One unit may be counted as an elective in the major). $(1,1)$
Prerequisite: Written application approved by department.

## 325 Social Psychology

Study of the influence of people on each other's behavior, including social influence and social interaction. (1)

Lecture: 3 hrs/wk.
Prerequisites: PSYC 101or permission.

## 330 Principles of Neuroscience

This course will provide a detailed understanding of neurons and the functional role of different aspects of the human nervous system. A survey of topic areas relevant to psychology and neuroscience related disciplines will also be included. (Cross-listed with NEUR 330). (1)
Lecture: 3 hrs/wk.; Laboratory: 1.5 hrs/wk.
Prerequisites: PSYC 101 or BIOL 120 or permission.

## 340 Cognition

An examination of the research and theory of complex cognitive processes. Topics covered include memory, cognitive development, language, thinking, concept formation, pattern recognition, and problem solving. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: PSYC 101or permission.
350 Sensation and Perception
Study of the functionality of the different senses and how perception arises within the human brain. (1)
Lecture: $3 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: PSYC 101 or NEUR 330.

## 360 Neuropsychology

Examines the field of neuropsychology through the examination of common disorders found in neuropsychology, assessment techniques, and the application of knowledge of the relevant concepts to the interpretation and solution of disorders of brain-behavior relationships. (Cross-listed with PSYC 360). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: NEUR/PSYC 330 or permission.

## 375 Counseling and Psychotherapy Approaches

An exploration of several of the most important models of counseling and psychotherapy. Approaches examined will include psychodynamic, Adlerian, person-centered (Rogerian), existential, behavioral, cognitive and cognitive-behavioral, reality, constructivist, and integrative. Videos will show master therapists working with actual clients. Students will learn several criteria for evaluating each therapeutic approach, write analytical responses after viewing each video presentation, and keep an analytical/critical thinking journal on the approaches and examples used. Attention is also given to describing the nature of training and education received by various kinds of helping professionals, the nature and scope of problems and issues dealt with by counselors, and values in the field of counseling and psychotherapy. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Lab: $2 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: PSYC 101; PSYC 230 or PSYC 325

## 405, 406, 407 Independent Study

Empirical research project or extensive literature review, with faculty supervision. (1/2, 1, 1/2)
Prerequisite: Written proposal and application approved by department.

## 420 Research Seminar: Psychology

An advanced, research-oriented seminar where students in small groups propose and carry out an empirically based research study. (1)
Lecture: 3 hrs/wk.
Prerequisites: PSYC 204 and a 300 level PSYC course.

## 430 Research Seminar: Neuroscience

An advanced, research-oriented seminar in human neuroscience. (Cross-listed with NEUR 430). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: NEUR/PSYC 330 or permission.

## 450 History of Psychology

Examination of the major systems in psychology with an emphasis on its 19th-century origins to the present. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Senior standing or by permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance. ( $1 / 2,1,1 / 2$ ) Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. At least 1 unit of Independent Study $(405,406$, or 407) is a prerequisite to 495, 496, and 497.

## PUBLIC HISTORY CONCENTRATION

## Professor Leeson, Coordinator

Students in any major interested in developing a specialization in Public History may earn a concentration in Public History by successfully completing (with a cumulative grade point average of at least 2.0) at least six units. Of these, three units must be from the list of core courses, two units can be from the list of electives, and one unit must be a capstone Independent Study, Internship, or practicum approved by the concentration's coordinator.

Students may count courses from the list of core courses as electives.
Special topics courses, IL courses, Intellectual Inquiry and Honors courses may apply toward the concentration when applicable and with the permission of the concentration coordinator. Of the six units of study, four must be classroom based.

Any course listing that is followed by "*" must be approved by the concentration coordinator.

## I. Core Courses

| A. Required Courses (3) |  |
| :--- | :--- |
| HIST 205 | Introduction to Public History |
| HIST 200 | History of the United States |
| HIST 416 | Internship |
| B. Required capstone (1) |  |
| HIST 401 | Archives Practicum |
| HIST 402 | Historical Journal Editing Practicum |


| HIST 403 | Museum Practicum |
| :--- | :--- |
| HIST 404 | Library Practicum |
| HIST 405, 406, 407 | Independent Studies |
| HIST 416 | Internship |
|  |  |
| II. Electives (2) |  |
| ANTH/ARTH/HIST 218 | Introduction to Archaeology |
| ANTH 310 | Global Storytelling: Exploring the Ethnographic Process |
| ARTH 276 | Arts of the U.S. |
| HIST 206 | Historical Archaeology |
| HIST 207 | American Material Culture |
| HIST 208 | Archaeology of Slavery |
| HIST 360 | Issues in Early America* |
| HIST 365 | Issues in 19th Century America* |
| HIST 370 | Issues in Modern America* |
| HIST 490 | Seminar* |

## RELIGIOUS STUDIES

Professors Berenson, Hinlicky, McDermott, Peterson, Wisnefske; Lecturer M. Larson-Harris

The Religious Studies major at Roanoke College explores the diversity of religious traditions by encountering their world views and practices in the cultural and historical contexts. Students discover how practitioners of different religious communities view themselves and their world by reading their sacred texts, experiencing and analyzing their rituals, studying their literature, and comprehending each religious system as a holistic way of life.

A major in religious studies requires completion of 9 units:
A. One $\mathbf{1 0 0}$ level survey in Religion

RELG 105 Socrates, Jesus, and the Buddha
RELG 130 Living Religions of the World
B. Two 200-level courses in Religion, each of which must address a different religious tradition outside the Judeo-Christian tradition:

RELG 204
RELG 205
Islam
RELG 205 -
RELG 213 Philosophies of India
RELG 206 Buddhism OR
RELG 218 Religions and Philosophies of China
RELG 207 Native American Religions
C. RELG 295 Methods and Theories in the Study of Religion
D. One senior thesis

RELG 410, 411, 412 (1/2, 1, 1/2) Senior Thesis
RELG 495, 496, 497 (1/2, 1, 1/2) Honors Project
A minimum of four additional courses in Religion at the 200 level or above, including at least two courses at the 300 level or above. Courses in other disciplines that address topics in religion may be substituted for Religion courses with the approval of the department.

## Minor in Religious Studies

A minor in religious studies requires completion of six units:
RELG 105 or 130
RELG 295
Two Religion courses at the 200-level
Two Religion courses at the 300 -level or above

Courses in other disciplines that address topics in religion may be substituted for Religion courses with the approval of the department.

## Concentration in Parish Youth Leadership

The concentration in Parish Youth Leadership requires seven units:
Required:
PSYC 101 Introduction to Psychology
PSYC 211 Adolescent Development
RELG 225 The Religious Life of Young Adults
RELG 416 Internship
One of:
RELG 102 Introduction to Christian Theology
RELG 317 Systematic Theology
RELG 325 Modern Theology
One of:
RELG 201 Israelite Patriarchs, Prophets, Princes and Priests
RELG202 New Testament Christianities
One of:
RELG 220 Christian Ethics
RELG 240 Religious Interpretation of Film
RELG 250 New Religions in America

## 102 Introduction to Christian Theology

An examination of the basic tenets of Christian belief, its scriptures, its moral teachings, and way of life.
(1)

Lecture: 3 hrs/wk.

## 103 The Jewish Tradition

An overview of the history of Judaism, its teachings, and its traditions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 105 Socrates, Jesus, and the Buddha

A survey of the main figures in the religious and philosophical traditions of the Western world, as well as major figures in Eastern religion and philosophy. (1) (Cross-listed as PHIL 105).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 130 Living Religions of the World

The major living religions of the world; their sources, nature, and attempt to deal with certain human problems. (1)
Lecture: 3 hrs/wk.

## 201 Israelite Patriarchs, Prophets, Princes and Priests

An historical and critical study of the religion, history, and literature of ancient Israel. Particular attention will be given to understanding the differences between historical and faith-based modes of interpreting scripture. (1)
Lecture: 3 hrs/wk.

## 202 New Testament Christianities

An historical and critical study of the earliest Christian communities and their literature. Particular attention will be given to understanding early Christians' complicated relationship with Judaism and Greco-Roman society. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 204 Islam

This course will not only be a introduction to the Qur'an, the Muslim faith, and the fabric of Islamic societies, starting with the life of Muhammad, but we will explore Islamic cultures around the world as incredibly varied living traditions. We will study Islamic political and intellectual history from the "liberal" end of the spectrum through the "ultraconservative" Islamist (and "militant") end of the spectrum, and examine Islamic practices, both early and contemporary, and will also work in our classroom and in area mosques to get to know Muslims themselves, through examining Islamic spirituality, art, culture and family life (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 205 Hinduism

This course will be a survey of Hindu traditions from the early Indus Valley, through the Vedic, Epic and Puranic eras to the medieval and modern eras. We will focus on Hindu texts, rituals, aesthetics and philosophies, and social and family structures. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 207 Native American Religions

This class explores the interface between religious ideas and practices and literary form. We will do close readings of a variety of literary works to determine how their forms have adapted to traditional religious ideas. Each unit will begin with an exploration of a religious tradition to familiarize students with the traditions essential concepts, symbols, and practices. We will then read various works that express these in new ways through literary conventions and analyze how literary techniques specific to poetry, narrative, and film shape these expressions. (1)
Lecture: 3 hrs/wk.

## 208 Buddhism

This course will encounter the varieties of one of the oldest and most diverse religions as it developed in India, China, Japan, Tibet, and the United States. The course will examine Buddhism's history, philosophy, ethics, Art, literature, and ritual practices. First, we will study the life and awakening of the Buddha, how the Buddha's perception of reality transforms our relationships to ourselves and to each other, and how it directs us to live a life of compassion for others. Second, we will see how the Buddha's core teachings changed as they spread to other countries. The course is divided into three parts: Foundations, which provides an introduction to the Buddhist world view; Development, which charts the changes and elaborations made to that world view under the Mahayana philosophers; and Literature, which explores how Buddhist ideas have been expressed in poetry, the novel, and film. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 210 Early Christian Conflicts and Community Life

A study of the development of Christianity from a Jewish sect in the late first century to the dominant religion of the Roman Empire in the fourth century. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 211 Hellenistic Cults, Magic, and Mystery Religions

An examination of the diversity of religions in the Greco- Roman world following the conquests of Alexander the Great. The course will examine individual, familial, and civic religious expression as well as the rise of the mystery religions and the new communities of Judaism, Christianity, and Gnosticism. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 212 The Reformation

The Protestant Reformation of the 16th century and the Roman Catholic reaction. (RELG 212 and HIST 231 may not both be taken for credit.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 213 Philosophies of India

An examination of the philosophical traditions of South Asia. Topics include the central ideas of these traditions, their historical development, their styles of reasoning, and the relationship between religion and philosophy. (1) (Cross-listed as PHIL 213).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 214 Religion in America

An investigation and examination of the distinctive beliefs and practices of mainstream religious groups and their influence upon the development of America. (1)
Lecture: 3 hrs/wk.

## 215 The Life and Teachings of Jesus

Examination of the life and teachings of Jesus in the light of recent Biblical scholarship. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 216 Pauline Christianity

A study of the Apostle Paul's teachings and the development of his churches through a critical examination of his writings. Particular attention will be given to exploring new scholarly methods of studying early Christianity. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 217 Topics in Israelite and Early Jewish Religion

An examination of a major subfield within the Hebrew Scriptures and early Judaism. Designed to provide students with the opportunity to study a single aspect of Israelite or Jewish religion. (1)
Lecture: 3 hrs/wk.

## 218 Religions and Philosophies of China

An interdisciplinary examination of the philosophical and religious traditions of East Asia. Topics include the central ideas and practices of these traditions, their historical development, their styles of reasoning, and the relationship between religion and philosophy. (1) (Cross-listed as PHIL 218).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 220 Christian Ethics

An examination of Christian moral values and their relation to the issues of contemporary personal and social life. (1)
Lecture: 3 hrs/wk.

## 225 The Religious Life of Young Adults

An introduction to the faith development of young adults and their psychological and social characteristics. This course will identify and foster communication skills for effectively communicating with adolescents. The role of adult leadership in youth groups will be examined. Finally, the course will consider resources for developing and implementing youth ministry programs in congregations. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 230 Introduction to the Theology of Martin Luther

A critical reading of the major theological texts of Martin Luther, considering historical context and the texts' significance for church and society. (1)
Lecture: 3 hrs/wk.

## 231 Religion, Philosophy, and Science

An examination of the confrontations, compatibilities, and cooperation among religious thought, philosophy, and scientific inquiry. Topics will include philosophical analyses of science, the debates between the natural sciences and Western religion, recent developments in the social sciences, and insights from Eastern religions. (1) (Cross-listed as PHIL 231).
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 235 Religion and Literature

This class explores the interface between religious ideas and practices and literary form. We will do close readings of a variety of literary works to determine how their forms have adapted to traditional religious ideas. Each unit will begin with an exploration of a religious tradition to familiarize students with the traditions' essential concepts, symbols, and practices. We will then read various works that express these in new ways through literary conventions and analyze how literary techniques specific to poetry, narrative, and film shape these expressions. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## $\mathbf{2 4 0}$ Religious Interpretation of Films

This course aims at probing the meaning of contemporary films from several perspectives-social, political, artistic-but especially from a theological point of view. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 246 The Holocaust

An historical account and a religious analysis of the Holocaust, including an examination of theological reactions to this event. (1) (Cross-listed as HIST 246).
Lecture: 3 hrs/wk.

## 250 New Religions in America

A study of non-traditional religious communities in America, such as the Mormons, New Age, Scientology, and Branch Davidians. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 270 Explorations in Religion and Society

A study of the interaction between religion and society in a selected country or region. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 282 Augustine and His Legacy

In this course we read primary texts, discuss and work together orally and in writing on the critical interpretation of the formative Western theology of Augustine of Hippo and investigate its legacy through the time of the Reformation. In the process we reflect on how contemporary thinkers (beginning with ourselves!) appropriate, develop, critique, or extend this classical stance in modern projects of learning, inquiry, practice and/or devotion. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 284 Luther and His Legacy

In this course we read in the primary sources, discuss and work together orally and in writing on the critical interpretation of the Reformation theology of Martin Luther and investigate its legacy through the time of the Reformation. In the process we reflect on how contemporary thinkers (beginning with ourselves!) appropriate, develop, critique, or extend this classical stance in modern projects of learning, inquiry, practice and/or devotion. (1)
Lecture: 3 hrs/wk.

## 286 The Legacy of Modern Theology

A study of ways Christian theologians responded to the intellectual and cultural challenges of the modern world (1650-the present). (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 290 Feminist Readings of the Bible

An investigation into the historical origins of the Bible and the ways in which texts from the Bible relevant to women's lives have been interpreted throughout history. The course will then focus on the responses of feminist readers to these difficult passages from the Bible and their varied attempts to understand the
realities of women's lives in the ancient world and to address the ongoing influence of these biblical texts in women's lives today. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 295 Methods and Theories in the Study of Religion

By comparing early theories of religion, testing classic definitions and concepts, we appreciate and evaluate modern and postmodern methods and theories in religious studies. Along the way we gauge the implications of thinking about religious studies as a distinct subject, but also think reflectively about our role as observers of the world's religions as part of vast landscapes of human experiences and cult. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One prior RELG course.

## 304 Islamic Mysticism

This course will be an advanced exploration of Islamic Sufi mysticism as holistic intellectual and spiritual systems enacted through living ritual practices, embodied moral service and creative expressions in music, art and literature. We will survey Islamic mystical thought, literature and practices from their roots in preIslamic Arabia, in the life story of Muhammad and in the Qur'an and Hadith, and in early Sufi orders, before finally spending time with modern Islamic mystical movements and practices in the Arab world, Asia and America. (1)
Lecture: 3 hrs/wk.
Prerequisite: RELG 130, 204 or permission of instructor.

## 305 Hindu Ritual Cultures

This course will be an advanced exploration of Hindu ritual cultures from the ancient Vedic world, through the rise of classical devotional practices, including the development of medieval temple cultures, through to modern modes of performance. We will explore Hindu ritual cultures as modes of identity building at individual, social and cosmic levels. Through a combination of textual and visual cultural work along with experiential opportunities at an area Hindu temple, students will gain an appreciation of Hindu ritual cultures as central to living Hindu identities in cultures from ancient India to contemporary America.
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$
Prerequisites: RELG 130, 205 or permission of instructor

## 312 Topics in Biblical Studies and Early Christianity

An examination of issues of current significance to the study of the Hebrew Scriptures, the New Testament or early Christianity. Topics for any given semester will be chosen by the professor in consultation with students interested in taking the course. (1)
Lecture: 3 hrs/wk.
Prerequisite: RELG 201, 202, 215, 216 or 217.

## 317 Systematic Theology

A study of the interrelationships between the main Christian articles of faith in the thought of major 19th and 20th century theologians. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Previous course in RELG or PHIL or permission.

## 330 Christian Theology and the World Religions

An examination of religious pluralism, with special attention to three problems: the truth status of competing religious claims, salvation of religious others, and whether God has been revealed in other religions. (1)
Lecture: 3 hrs/wk.
Prerequisite: Previous course in RELG or PHIL or permission.

## 340 Seminar in Contemporary Christian Studies

This course will investigate a topic in contemporary Christian Studies chosen by the instructor. The course will be conducted as a seminar. (1)
Lecture: 3 hrs/wk.
Prerequisite: One 200-level course in the department.

## 405, 406, 407 Independent Study and Research

Selected topics in religion carried out under the supervision of the department staff. ( $1 / 2,1,1 / 2$ )

## 410, 411, 412 Senior Thesis

At the end of the junior year every major will register with a member of the department to study and write a major paper in the final year. Guidelines, requirements and dates are explained in "The Senior Thesis." ( $1 / 2,1,1 / 2$ )
Lecture: 3 hrs/wk.
Prerequisite: Senior standing.
416, 417 Internship
A supervised placement in a local church, clinical setting, or social service agency, in which the student would be required to make a practical application of theological and ethical insights. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## RHETORIC

A major in Rhetoric is not offered at Roanoke College. The following is a common course shared by the Communication Studies, Creative Writing, and Literary Studies Majors.

## 125 Texts, Rhetoric and Media

An exploration of the common rhetorical principles that are foundational in the fields of Communication Studies, Creative Writing, and Literary Studies. Students will learn the basic rhetorical terminology used in the different fields, and learn to apply them in the critical analysis of a variety of cultural texts from the three points of view. (1)
Lecture: 3 hrs/week

## ROANOKE

Professor Grant, Director of Experiential Learning
Courses in this area provide students with opportunities for individual development through campus and off-campus activities that require application of academic knowledge and skills. This internship will NOT qualify for Intensive Learning credit. This internship is NOT intended to count toward the requirements for any major.

## 125 Self, Culture and Civic Responsibility through Service-Learning

The focus of this service-learning course is on gaining a greater understanding of how students view themselves as members of a diverse community and the responsibilities that come with living in a democratic society. The first half of the semester prepares students to serve on a weeklong Alternative Break trip and the second half of the semester is focused on gaining greater understanding of their service experience. Through direct service, intensive reflection, readings, interviews and a photo journal, students will gain a greater understanding of how they view themselves as a contributing member of society and will learn how they wish to advocate for change in a world of need. (1/2)

Lecture: $1.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: One semester at Roanoke College, a minimum GPA of 2.0, and instructor approval.

## 216 Internship

A supervised placement at a work setting providing practical experience in a potential career field that requires application of academic knowledge and skills. These areas may include industry, government agencies, on-campus opportunities, and a variety of private enterprises. ( $1 / 2$ ) This course can be repeated for credit. Student must be enrolled in this course for the semester when the internship takes place. Prerequisites: At the time of the internship, students must have a GPA of at least 2.0. At the start of the internship, students must have completed at least 4 units at Roanoke College.

## 218, 219 Digital Storytelling for Global Learning I and II

These courses are designed for students who study abroad to enhance engagement while abroad and to help process the experience. ROA 218 begins in the latter half of the semester before the study abroad experience to provide a foundation in narrative and cultural identity, intercultural competency, and storytelling. Students will develop short stories exploring their identity and their understanding of self in relation to difference prior to departure. During the semester while studying abroad, students will engage in a local project of community engagement to understand an "other" and create a photo-story of that local person. The students' projects will be supported by online discussion and supplemental writing exercises and readings. The final semester when students return from studying abroad (ROA 219) will focus on reflection of the experience and changes in self-identity through the process of creating a digital story. $(0.5,0.5)$
Lecture: $1.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: Study abroad application submitted for following semester is a prerequisite for ROA 218; ROA 218 is a prerequisite for ROA 219.

## RUSSIAN

A major in Russian is not offered at Roanoke College.

## 101, 102 Elementary Russian I, II

A study of the fundamentals of Russian with emphasis on pronunciation and oral communication. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.

## 201, 202 Intermediate Russian I, II

A comprehensive study of the grammar; in-depth development of listening, speaking, reading and writing skills; cultural component included. $(1,1)$
Lecture: 3 hrs/wk.; Laboratory; $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: RUSS 101-102 or permission of the instructor.
306 Advanced Studies in Russian
Guided independent learning to continue the acquisition of Russian and the study of culture beyond the 202 level. (1)
Lecture: 3 hrs/wk; Laboratory/Studio: 2.5 hrs/wk.
Prerequisite: RUSS 202.

## SOCIOLOGY

Professors Berntson (Chair), K.L. Hoffman; Associate Professors Dunn, Mehrotra, Sarabia; Assistant Professors S.Anderson, Destro, Morris; Lecturer Brogan

A major in sociology requires a minimum of 11 units, including:
SOCI 101 Introduction to Sociology
SOCI 251 Research Methods
SOCI 252 Data Analysis
SOCI 353 Social Theory
SOCI 454 Senior Seminar

Six additional units in sociology, at least three of which must be at or above the 300 level. Sociology 416 (Community Internship) may not be used to satisfy this requirement.

Sociology 101 or INQ 260SO or permission of the instructor is the minimal prerequisite to all other sociology courses. One INQ 260SO may count as a 200 -level elective. Sociology 101 and one 200 -level sociology course are the minimal prerequisites to Sociology 251 , which begins the core sequence in the major. Sociology 251 (or permission) is prerequisite to Sociology 252 and Sociology 252 (or permission) is the prerequisite to Sociology 353. The completion of all required core courses and senior status are prerequisites to Sociology 454. Students majoring in sociology are encouraged to take Sociology 251 and 252 in the sophomore year. Sociology 353 is strongly recommended for the junior year, prior to enrolling in Sociology 454 in the senior year. The prerequisite for most 300 -level courses will be SOCI 101 and one 200 -level sociology course, or permission of the instructor. The prerequisite for all 400 -level courses is SOCI 353 or permission of instructor.

Three of the following Anthropology courses: ANTH 101, ANTH 212, ANTH 261, ANTH 310, ANTH 361, and ANTH 380- may count as electives in the major (but only one 300-level ANTH course).

## Concentration in Crime, Deviance, and Social Control

Associate Professor K.L. Hoffman and Lecturer Brogan, Coordinators
A concentration in Crime, Deviance, and Social Control offers students the opportunity for focused study on the behaviors designated by societies as deviant and criminal as well as methods and forms of control used to manage these behaviors. In this interdisciplinary concentration, students will examine crime deviance, law enforcement, legal systems, and corrections from a variety of perspectives. In addition, students will gain a better understanding of offenders and their motives, as well as critique society's efforts to control deviance and crime. This interdisciplinary concentration requires six units incorporating three disciplines: Sociology, Criminal Justice, and Psychology.

## Sociology - Select two requirements

1) SOCI 237: Deviant Behavior
2) SOCI 238: Juvenile Delinquency
3) SOCI 334: Criminology

Note that SOCI 101 or INQ 260SO is a prerequisite for all of these courses. Certain sections of INQ 260SO may count for one of these requirements; see the coordinator of details.
Criminal Justice and Social Control - Select two requirements

1) CJUS/POLI 211: Criminal Justice
2) CJUS 227: Law and Society
3) CJUS 231: Juvenile Justice
4) CJUS 325: Comparative Law Enforcement
5) CJUS/SOCI 326: Comparative Corrections

Note: See the catalog listing for CJUS/SOCI 326 for additional prerequisites.

## Psychology - Select one requirement

1) PSYC 230: Abnormal Psychology
2) PSYC 270: Drugs and Behavior

Note that PSYC 101 is a prerequisite for all of these courses. Certain sections of PSYC 240 Special Topics may count for one of these requirements, see the coordinator for details.
Experiential Learning - Select one requirement

1) Internship (SOCI 416, CJUS 416, or PSYC 316)
2) Independent Study and Research (SOCI 406, CJUS 406, or PSYC 406)
3) Departmental Honors Project (SOCI 496, CJUS 496, or PSYC 496)

Note that approval of the coordinator is required for any of the three of these to count in the concentration; students must complete four of the requirements in the other categories before completing this requirement.

## Concentration in Information Analysis

## Associate Professor Dunn, Coordinator

The concept of the information analyst blends the traditional liberal arts education with some specific skills in the acquisition, analysis, and dissemination of information. It calls attention to skills that sociology majors already learn and provides additional coursework in areas related to the collection, analysis, and communication of information. Sociology majors may earn a concentration in information analysis by successfully completing the six one-unit courses listed below.
COMM 202 Mass Communication or
POLI 240 Public Opinion Polling or
CPSC 101 Introduction to Computers
PHIL 122 Logic
SOCI 251 Research Methods
SOCI 252 Data Analysis
SOCI 365 The Information Society
SOCI 406 Independent Study and Research
Recommended:
INQ 240 Statistical Reasoning

## Minor in Sociology

A minor in sociology requires six units in Sociology, including: Sociology 101; Sociology 251 (or any other social science methods course such as CJUS/I.R./POLI 209 or PSYC 205); and four additional units in Sociology, with at least two at the 300 level or above (excluding 416). One INQ 260SO may count as a 200-level elective. Two of the following Anthropology courses: ANTH 101, ANTH 212, ANTH 261, ANTH 310, ANTH 361, and ANTH 380 - may count as electives in the minor (but only one 300 -level ANTH course).

## 101 Introduction to Sociology

An introduction to the field of sociology with an emphasis on the study of social groups and how they influence human behavior and society. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 215 Social Movements

Study of the social and political context of social movements. Topics include conditions hindering or facilitating movements, organization, participation and recruitment, framing, tactics and strategies, influence of the state and other movements, and social change. (1)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101or INQ 260SO, or ENVI 250 or permission of the instructor.
221 Wealth and Poverty: Economic Stratification in U.S. and Global Context
An analysis of economic inequality and the related unequal distribution of power and prestige in the United States, and in and between other societies. Topics include systems of stratification such as class, estate, and caste; social classes; individual and social outcomes of economic stratification; poverty in the United States; global poverty. (1)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 or INQ260SO.

## 223 Ethics and Medicine

An examination of ethical issues in medicine and the moral principles that might be employed to resolve ethical dilemmas. (1) (Cross-listed as PHIL 223)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 224 Race and Ethnicity

A study of racial, religious, and nationality minority groups in the United States. Topics include prejudice, racism, and discrimination; immigration and assimilation; and current public policy issues. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260 SO or permission of the instructor.

## 226 Intimate, Marital, and Family Relationships

An analysis of intimate, marital, and family interaction patterns in contemporary American society, with a focus on the social institutions and structures that shape them. Topics include courtship and dating, cohabitation, selection of long-term partners and issues related to marital and parent-child relationships. Multiple family structures such as nuclear families, egalitarian marriages, gay and lesbian relationships, single parenting, and stepfamilies are examined. (1)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 or INQ 260SO or permission of instructor.

## 229 Sociology of Sex and Gender

An introduction to a critical approach to examining the social construction of sex, gender, and sexuality. Topics of study include classical and current perspectives on sex, gender, and sexuality; significant emphasis on the social construction of gender inequality; and the role of social institutions such as family, work, the economy, and media in shaping multiple experiences of gender and gender relations in society. Attention is also given to heterosexism and other systems of inequality dealing with sexuality. (1)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 234 Social Problems

An exploration of the interconnectedness of many of our society's most pressing social issues that contextualizes them in patterns of social organization at global, societal, and local levels. This course provides a conceptual frame of reference for defining and analyzing major contemporary social problems.
(1)

Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 235 Social Psychology

An examination of social interaction and the social factors that influence behavior, attitudes and selfconcept. Topics include how the self develops, socialization processes, social roles, stigma, and social inequality. Topics include the development of the self, socialization processes especially as they apply to attitude formation, and how social psychological processes contribute to the construction of inequalities.
(1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 236 Popular Culture

An analysis of popular culture as a reflection of society, a factor in socialization, and an economic institution. Topics include popular music, television and films, comics and cartoons, and sports and games. (1)

Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 237 Deviant Behavior

An examination of the concept of deviance and the various sociological perspectives on deviant behavior. Sociological, biological, and psychological theories of causation are used to study behaviors such as drug addiction and alcoholism, deviant sexual behavior, and mental illness. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 238 Juvenile Delinquency

An analysis of the nature and types of juvenile offenses, sociological theories of delinquency and causation, and an examination of the juvenile justice system. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260 SO or permission of the instructor.

## 241 Introduction to Social Welfare

Analysis of the historical development, structure, and functions of contemporary social welfare agencies. Observation of local agencies. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 251 Research Methods

An examination of the research techniques used by sociologists. Attention is given to research design, survey research, sampling, field research, experimental research, and the ethics of research. Understanding the basics of research and mastery of research skills are both emphasized. (1)
Lecture: 3 hrs/wk.
Prerequisite: SOCI 101 and one 200-level sociology course, or ENVI 250.

## 252 Data Analysis

An examination of the basic skills involved in the descriptive and inferential analysis of social research data, including an introduction to analysis using computer software. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 251 or permission of the instructor.

## 260, 261 Selected Topics in Sociology

An examination of special topics in sociology, with topics selected on the basis of faculty and student interest. $(1 / 2,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 101 or INQ 260SO or permission of the instructor.

## 315 Political Sociology

An analysis of power, politics, the state, and international entities from a sociological perspective. Topics include power and authority, political and economic systems, inequality, political parties, social movements, nation-states, and globalization. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 320 Education and Society

An exploration of social issues related to education in the United States from a sociological perspective focusing in the social context of educational settings, key social-structural forces, and how social inequality affects opportunities and experiences in schools. Specific topics include interaction patterns among teachers and students, academic cheating, harassment and violence, and the influence of family, community, cultural and politics on schools. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 323 Health, Illness and Healing

An analysis of the social context of health, illness, and healing including the influence of the social environment on disease and illness patterns, interaction among health care providers and patients, and types of health care systems. Special focus is given to social inequalities in the American health care system. (1)
Lecture: 3 hrs/wk.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 326 Comparative Corrections

An exploration of philosophies, rationales, and models of adult corrections. Historical and existing correctional systems in select countries, e.g., the U.S., Canada, England, France, Japan, Mexico, Sweden, and the former U.S.S.R. will be examined. (1) (Cross-listed as CJUS 326).

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: CJUS 211 or POLI 211 or 200-level SOCI course or permission.

## 327 Religion and Culture

An examination of the relationship between religion and society. Topics include definitions and theories of religion; analysis of historical and contemporary religious groups; the influence of religion on attitudes and behaviors; and the role of religion in social change. (1)
Lecture: 3 hrs/wk.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 329 Global Perspectives on Family

Family is often defined as a cultural universal; that is, it is an institution found in almost all societies, yet the forms it takes, its impact on the individual and society, and its relationships with other social institutions vary. This course takes comparative and transnational approaches to understand the diversity in family patterns and practices and how these are gendered around the world. (1)
Lecture: 3 hrs/wk.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 334 Criminology

An analysis of the social causes of crime and criminal behavior with a focus on drug, property, white collar and violent crime. Theoretical explanations of criminal behavior and a critique of selected aspects of the American criminal justice system are discussed. Programs for crime prevention and rehabilitation are examined. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 335 Global Population Problems

An analysis of population structure and dynamics as influenced by cultural, political, economic, and environmental factors. This course focuses attention to the social determinants of population problems, while exploring their consequences and policy implications for individuals, their societies, and the world. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One 200-level SOCI course or ENVI 250, or permission of the instructor.

## 337 Environmental Sociology

An examination of the interrelationships between societies and their environments, and an analysis of sociological aspects of environmental problems. This course will focus on the population and organizational aspects of environmental problems as well as elements of social change involved with environmental social action. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: One 200-level SOCI course, or ENVI 250, or permission of the instructor.

## 338 Women's Lives Around the World: Global Perspectives

In this course, we will examine similarities as well as divergences in the experiences of various groups of women, especially in countries that are part of the "developing" world. The course will begin with an analysis of the notion of global sisterhood and its criticisms. We will then move on to specific issues such as work, family and household, representations in media, and violence. We will end the semester with an evaluation of the possibilities of and opportunities for transnational movements for gender equality. (1)
Lecture: 3 hrs/wk.
Prerequisites: SOCI 101 and one 200-level SOCI course or permission of the instructor.

## 340 Crowds, Panics, and Disasters

An analysis of emergent, comparatively unstructured, and spontaneous collectivities and social processes within societies. The course gives special attention to social behavior during normative breakdowns, crisis
situations, and periods of dissent. Group behavior during riots and disasters is examined, along with the dynamics of panics and rumor. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 353 Social Theory

An examination of the ideas and important contributions of major sociological theorists to the discipline of sociology. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SOCI 252 or permission.

## 360, 361 Selected Topics in Sociology

An examination of special topics in sociology, with topics selected on the basis of faculty and student interest. $(1 / 2,1)$

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: One 200-level SOCI course or permission of the instructor.

## 365 The Information Society

An examination of theory, research, and debate concerning the nature of and change in information in contemporary society. Topics covered will include traditional and critical theory, information theory, theories of mass communication and mass society, innovation and diffusion as well as postindustrial and post modern perspectives. Media ethics, privacy controversies, and policy implications are also considered. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 395, 396 Henry H. Fowler Public Policy Seminar

A seminar taught with a scholar-statesperson that deals with a policy issue of public significance. (Made possible by the Henry H. Fowler Endowment. Open to selected students with department permission.) (1, 1/2)

## 405, 406, 407 Independent Study and Research

A supervised research project or extensive literature review. (1/2, 1, 1/2)
Prerequisite: SOCI 353 and written proposal approved by the department.

## 416 Community Internship

Practical experience in a social service agency, correctional facility, health institution, business, or other community setting in which sociology is applied. May not be used to fulfill the 300-level or above requirement for the major or minor. (1)
Prerequisite: Written proposal approved by the department.

## 454 Senior Seminar

A capstone course for the sociology major that includes an in-depth review and analysis of major themes within sociology. (1)
Prerequisite: SOCI 353 and senior status.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee .A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## SPANISH

Professors Kalinoski (Chair), Talbot; Associate Professors Banuelos-Montes, Flores-Silva; Lecturers Myers, Stanley

A minimum grade point average (GPA) of 2.0 overall and 2.0 in Modern Languages courses is required to declare a major in Spanish.

A major in Spanish consists of the completion of at least 11 units above the 202 level in this language. A major must complete at least one one-unit course in Spanish during the senior year.
Spanish majors are required to complete a departmentally approved course of study abroad as part of their major. Appropriate periods of study include an Intensive Learning or May Term travel course, or a summer, semester, or year abroad with a department-approved program such as ISEP or another university-sponsored program.

Spanish majors are required to complete Spanish 303, 304, 311, 312, 320, 323, 402 or 403, two additional
 272 or Political Science 225, and Linguistics 320 (these last three taught in English). However, no more than two courses taught in English may be applied toward the major. It is recommended that students take two 300-level units taught in Spanish before or concurrent with enrolling in a Spanish literature course. Note that Spanish 201 and 202 or their equivalent are prerequisites for all advanced courses in Spanish. For native speakers of the language, Spanish 304 will be waived as a requirement and will not count toward the major; another upper-level course unit must be substituted for Spanish 304. Students who study abroad should select, in consultation with their advisors, appropriate substitutes for these requirements. It is highly recommended that all majors planning to teach take Spanish 341 as an elective. Spanish 341 will be considered as one of the two possible courses taught in English that may be applied toward the Spanish major. Students planning to teach may satisfy their training in methods through Spanish 341.

For placement and prerequisites at the lower level, see "Modern Languages."
Minor in Spanish
A minor in Spanish consists of six units, including: Spanish 201 and 202, or two electives, Spanish 303 and 304, Spanish 311 or 312 or 315 and one elective unit to be selected from Spanish courses numbered at or above the 300 level. Each minor will be individually tailored to complement the student's interests and major field of study. A period of study abroad is highly recommended.

## 101, 102 Elementary Spanish I, II

A study of the essentials of Spanish grammar and basic vocabulary to promote speaking, listening, reading, and writing skills. Emphasis on developing the conversational skills and cultural awareness to handle topics of everyday life in Spanish. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. for each; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$. for each.

## 150 Elementary Spanish Review

A one-semester review of the essentials of Spanish grammar and basic vocabulary to promote speaking, listening, reading, and writing skills. Emphasis on developing conversational skills and cultural awareness to handle topics of everyday life in Spanish. (This course is designed for students who have studied Spanish previously, but lack sufficient preparation to enter Intermediate Spanish 201.) (1)
Lecture: 3 hrs/wk; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$.
Prerequisite: SPAN 101 or the equivalent. Credit cannot be received for both SPAN 102 and SPAN 150.

## 201, 202 Intermediate Spanish I, II

A review of the essentials of Spanish grammar with the introduction of advanced structures. Continued development of the four essential skills, and further acquisition of vocabulary. Emphasis on conversational skills to handle situations of everyday life with increased range of personal expression. Inclusion of cultural material. $(1,1)$
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. for each; Laboratory: $1 \mathrm{hr} / \mathrm{wk}$. for each.
Prerequisite: No prerequisite, but previous study of a modern language is recommended. (For any course above the 202 level, 201-202 or the equivalent is a prerequisite.)

## 303 Spanish Composition

Practice in written expression with an intensive review of Spanish grammar. Introduction to the principles of Spanish style and techniques of formal writing and translation. (1)
Lecture: 3 hrs/wk.
Prerequisite: SPAN 202 or equivalent.

## 304 Spanish Conversation

Practice in oral self-expression and listening comprehension. (This course is for non-native speakers of Spanish.) (1)
Lecture: 3 hrs/wk.; Laboratory work.
Prerequisite: SPAN 202 or permission.

## 311 Civilization and Culture: Spain

The civilization and cultural development of Spain. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303, 304 or permission.

## 312 Civilization and Culture: Spanish America

An overview of the historical and cultural development of Spanish America from its pre-Colombian roots through the colonial era and up to contemporary times. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303, 304 or permission.
315 Contemporary Issues: Spanish America
A survey of current political, economic, and cultural issues that are regional and global in scope. (1)
Lecture: 3 hrs/wk.; Laboratory work.
Prerequisite: SPAN 303, 304 or permission.

## 320 Introduction to Literature: Spain

A study of literary works by major Spanish writers from medieval through contemporary times with a careful consideration of contexts and analysis of literary style. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303 and 304, or permission. Completion of SPAN 311 is recommended.

## 323 Introduction to Literature: Spanish America

A study of literary works by major Spanish-American writers from the colonial era through contemporary times with a careful consideration of contexts and an analysis of literary style. (1)
Lecture: 3 hrs/wk.
Prerequisite: SPAN 303 and 304 or permission.

## 330 Commercial Spanish

Fundamentals of practical commercial Spanish, effective reports and letters applicable to business usage, as well as the language of advertising, foreign trade, transportation, banking, and finance. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303 and 304 or permission.

## 335 Spanish Phonetics and Phonology

The theory and practice of pronunciation. A systematic analysis of the sounds of Spanish. Stress and intonation patterns of Spanish speech through phonetics transcription and intensive oral practice. (1) Lecture: 3 hrs/wk.
Prerequisite: SPAN 303 and 304 or permission.

## 340 Area Studies in Latin America

Focused and in-depth cultural studies on selected regions of Latin America. (1)
Lecture: 3 hrs/wk.

Prerequisite: SPAN 303 and 304 or permission.
May be repeated for credit with different content.

## 341 Methods of Teaching Foreign Languages

An evaluative study of language teaching methods. Development of teaching aids and a teacher's resource book. PreK-12 levels of instruction will be presented. Assignments will be completed in Spanish. (1) (Cross-listed as LANG 341) Taught in English.
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 380 Special Topics in Hispanic Life and Culture

Class study of a special topic, with topic to be determined by the students and the faculty member. May be repeated for credit with different content. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303 and 304 or permission.

## 402 The Structure of Modern Spanish

Study of complex structures and problematic aspects of Spanish language focusing on morphology, syntax, and semantics. Emphasis is placed on direct application to composition, translation, and oral expression.

Lecture: 3 hrs/wk.
Prerequisite: SPAN 303 and 304 or permission.

## 403 Translation and Interpretation

Introduction to the field of professional translation and interpretation focusing on theoretical and methodological issues. Emphasis is placed on conventions, techniques, problems and best practices in translation and interpretation both from Spanish into English and from English into Spanish. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: SPAN 303 and 304, or permission.

## 405, 406 Independent Study

Guided reading and research of a particular facet of the Spanish or Spanish-American language, literature, and culture. $(1 / 2,1)$
Prerequisite: Permission of the instructor.

## 410 Medieval and Golden Age Hispanic Literature

Close readings of texts by writers from Spain and/or Spanish America. Emphasis on major literary styles of the period: Medieval, Renaissance, and Baroque. May be repeated for credit with different content. (1) Lecture: 3 hrs/wk.
Prerequisite: SPAN 320 and 323 or permission.

## 416 Internship

Field placement providing the student with practical experience in work areas in which Spanish is applied. These areas may include embassies, government service, international business, education, industry, and the communications media. (1) (Cross-listed as LANG 416) May be conducted in Spanish or English.
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 420 18th- and 19th-Century Hispanic Literature

Close readings of texts by writers from Spain and/or Spanish America. Emphasis on major literary styles of the period: Neoclassicism, Romanticism, Realism, and Naturalism. May be repeated for credit with different content. (1)
Lecture: 3 hrs/wk.
Prerequisite: SPAN 320 and 323 or permission.

## 430 20th-Century Hispanic Literature

Close readings of texts by writers from Spain and/or Spanish America. Emphasis on major literary styles from the early part of the century up to contemporary times. May be repeated for credit with different content. (1)
Lecture: 3 hrs/wk.
Prerequisite: SPAN 320 and 323 or permission.

## 480 Advanced Studies in Hispanic Language and Culture

Concentrated study of a special topic or theme of Hispanic language and/or culture as manifested in creative and historical literature, music, art, film, etc. Historical and/or national boundaries are crossed whenever the nature of the topic permits. May be repeated for credit with different content. (1)
Lecture: 3 hrs/wk.
Prerequisite: SPAN 320 and 323 or permission.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department .A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## STATISTICS

Professor Spielman; Associate Professors Lee, Taylor (Chair); Assistant Professor Childers; Lecturers Bauman, J. Minton, Staniunas

Roanoke College does not offer a major in Statistics.

## Concentration in Statistics

## Required Courses (3)

| STAT 202 | Probability and Statistics |
| :--- | :--- |
| STAT 301 | Mathematical Statistics |
| STAT 302 | Statistical Methods |

## Elective Courses (Choose 2)

| STAT 303 | Experimental Design |
| :--- | :--- |
| STAT 304 | Applied Regression Analysis |
| STAT 406 | Independent Study (or STAT 405 and 407) |
| STAT 416 | Internship |
| MATH 388 | Topics in Mathematics (pending approval of the department) |

## 202 Probability and Statistics

Data analysis, descriptive statistics, sets, sample spaces, random variables, probability distributions.
Chebyshev's inequality, central limit theorem, sampling and estimation, tests of hypotheses. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: MATH122.
(May not enroll in INQ 240 if STAT 202 has been completed.)
301 Mathematical Statistics
Probability, discrete and continuous distributions, moments and moment-generating functions, sampling theory, and estimation. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: STAT 202.

## 302 Statistical Methods

Descriptive statistics, sampling procedures, simulation, estimation of parameters, tests of hypotheses, nonparametric methods, regression, and correlation. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: STAT 202.

## 303 Experimental Design

Analysis of variance, analysis of covariance, multiple-range tests, completely randomized and randomized block designs, Latin squares, factorial designs, and split-plot designs. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: STAT 202.

## 304 Applied Regression Analysis

Applied statistical methods with emphasis on interpretation of regression models, data analysis, statistical computation, and model building. Specific topics covered include: simple and multiple linear regression, non linear regression, correlation, use of dummy variables, the diagnoses of residuals, selection of variables, and time series techniques. There will be a significant use of statistical software. (1)
Prerequisite: STAT 202.

## 405, 406, 407 Independent Study and Research

Selected topics in statistics carried out under the direction of a member of the departmental staff. Enrollment with the approval of the department. (1/2, 1, 1/2)

## 416 Internship

Field placement providing practical experience and training in areas in which statistics is applied. These areas may include industry, government agencies, educational institutions, insurance companies, and a variety of private enterprises. Permission of the department is required. (1)

## TEACHERS OF ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Associate Professor Stallions

Roanoke College does not offer a major in TESL.

## Concentration in Teachers of English to Speakers of Other Languages (TESL)

The concentration in TESL serves the needs and interests of Roanoke College students who are interested in teaching English to speakers of other languages both in the United States and abroad. Students may earn the concentration by completing six courses.

ANTH/LING/ENGL 320 Basic Linguistics
ENGL 321 Advanced Grammar and Style
LANG 341 Methods of Teaching Foreign Languages OR
EDUC 311 Secondary Curriculum Concepts and Pedagogy
TESL 220 Cross-Cultural Learning \& Communication: Understanding the Needs English Language Learners in Elementary Schools OR
TESL 221 Cross-Cultural Learning \& Communication: Understanding the Needs English Language Learners in Secondary Schools
TESL 330 Reading and Principles of Second Language Acquisition
TESL 346 Curriculum and Assessment for the ESL Teacher
In addition, students must complete two units of modern language study in the same language.
(Competency will be accepted based on College Competency Standards).

## 220 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Elementary Schools

Examination of the history, meanings, implications, and application of various ideologies and beliefs related to multiculturalism as they relate to teaching, learning and communication in PreK-6 Elementary Education. (1)
Lecture: 3 hrs/wk.
Prerequisite: None

## 221 Cross-Cultural Learning and Communication: Understanding the Needs of English Language Learners in Secondary Schools <br> Examination of the history, meanings, implications, and application of various ideologies and beliefs related to multiculturalism as they relate to teaching, learning and communication in secondary schools. (1) <br> Lecture: $3 \mathrm{hrs} / \mathrm{wk}$. <br> Prerequisite: None

## 330 Reading and Principles of Second Language Acquisition

Examines the processes involved in learning and using a second language, as well as how these processes differ from those involved in first language acquisition. The course addresses the five major areas of reading instruction (phonemic awareness, phonics, fluency, vocabulary and text comprehension) as they apply to English language learners. (1)
Lecture: 3 hrs/wk.
Prerequisite or co-requisite: TESL 220 or 221.

## 346 Curriculum and Assessment for the ESL Teacher

Analysis of current curricular approaches and assessment trends in ESL instruction. The course provides opportunities for students to devise their own assessments and curricular projects. (1)
Lecture: 3 hrs/wk.
Prerequisite or Co-requisite: EDUC 242 and TESL 220, 221 or 330.
370 Field Experience in Reading Instruction and Diagnosis for English Language Learners
Examines the techniques which can be used by the classroom teacher in evaluating reading progress and discovering the needs of English language learners, with methods for meeting these needs through differentiation of instruction and remediation in the classroom. (1/2)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: EDUC 242, TESL 330 or TESL 346. Passing score on VCLA and Praxis I math or have met the SAT/ACT established pass score; application and approval by the Education Department.

## THEATRE ARTS

Professor Partin; Associate Professor Warren; Teaching Associate Arthur; Lecturer Ruhland
A total of 11.5 units is required for a major in Theatre Arts. These must include the following Theatre courses: 125 (Stagecraft), 150 (Play Analysis), either 211 or (with permission of the faculty) 212 (Acting I or Acting II), 315 (Theatre History I), 316 (Theatre History II), 350 (Performance Theory), one unit of Dramatic Literature (i.e. 332, or appropriate 399), and 1.5 units of theatre workshop (THEA 103). In addition to the 8.5 units above, a theatre arts major must select one of the following three areas of concentration:

Performance: THEA 111 (Voice and Diction), a second unit of acting (THEA 211 or THEA 212) and 450 (Directing);

Design: Two of the following three classes: THEA 225 (Scene Design), THEA 325 (Lighting Design), THEA 335 (Costume Design for the Stage) or one of the following course units in visual arts: ARTH 150
(Art, Culture, \& Society I), ARTH 151 (Art, Culture, \& Society II), ART 151 (Two Dimensional Design), ART 111 (Drawing I), or ART 181 (Sculpture I);
Dramaturgy: Two additional units of Dramatic Literature and THEA 320 (Playwriting).

## Minor in Dramaturgy

A minor in Dramaturgy requires six and one-half units, to include THEA 150, THEA 315, THEA 316, THEA 350, one unit of Dramatic Literature (332, 344, or appropriate 399), and two one-quarter credit courses in theatre workshop (one may be Pass/Fail, one must be graded). The final unit must be chosen from: THEA 125, THEA 211, THEA 212, or THEA 320.

## Minor in Theatre Performance

A minor in theatre performance requires six and one-half units, including THEA 111,THEA 150,THEA 211,THEA 212, and two one-quarter credit courses in Theatre Workshop (one may be Pass/Fail, one must be graded). The final two units must be chosen from: THEA 350,THEA 399 (appropriate to the minor), THEA 315 , THEA 316 , or THEA 450.

## Minor in Theatrical Design

A minor in theatrical design requires six and one-half units, including THEA 125 and THEA 150, two of the following three classes: THEA 225,THEA 325, or THEA 335, and two one-quarter credit courses in theatre workshop (one may be Pass/Fail, one must be graded). The final two units must be chosen from ART 111, ART 151, ART 181, ARTH 150, ARTH 151, THEA 315, THEA 316, and any one of THEA 225 , THEA 325 , or THEA 335 not already taken.

## Theatre Arts Education

For courses in this sequence or requirements for teacher licensure, the student should consult the college catalog under Education.

## 101 Appreciation of Theatre

A survey of various aspects of the theatre with emphasis on theory of the art. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 103 Theatre Workshop

Laboratory work designed to give the student experience in mounting a play on the stage. May be repeated for credit. (1/4).
Lecture: None; Laboratory: Approximately 50 hours/term.
Prerequisite: Permission.

## 111 Voice and Diction

An overview of the use of voice in the theatre. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 114 Make-up for the Stage

Lectures on and practical experience with the techniques used in stage make-up. Covers the materials and techniques for traditional stage make-up application, 3-D special effects, and prosthetics. (1)
Lecture-Laboratory: 4 hrs/wk.
Prerequisite: Permission.

## 125 Stagecraft

Techniques and principles of scenery construction and other elements of technical production. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.; Laboratory: $70 \mathrm{hrs} /$ term.

## 150 Play Analysis

A study of methods used by actors, playwrights, directors, and designers to critically examine a play for production purposes. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 199 Special Topics in Theatre and Drama

Workshop experience in such production activities as audition techniques, stage combat, movement for the stage, and stage makeup. (1/4). May be repeated for credit.
Lecture/Laboratory: hours vary.
Prerequisite: Permission.

## 210 Performance of Literature

More advanced work on the oral presentation of prose and poetry. Designed to develop further the vocal skills learned in Theatre Arts 111. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: THEA 111.

## 211-212 Acting I, II

The practical application of the fundamental principles of acting, including voice, movement, analysis, and scene work. $(1,1)$
Lecture: $4.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: THEA 211 or permission for THEA 212.

## 225 Scene Design

Techniques and principles for designing scenery for the stage. Model building is central to project work as is basic drafting. Thumbnail and perspective sketching are incorporated in this class. (Extra materials required.) (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: THEA 125 or permission.

## 299 Special Topics in Theatre and Drama

Selected studies in specialized design, performance, or dramaturgical activities. May be repeated for credit. (1/2).
Lecture/Laboratory: hours vary.

## 311 Video Field Production

The study and practice of the fundamentals of professional videography. Students will receive instruction in practical applications in the areas of videography, editing, production, and media literacy. (1) (Crosslisted as COMM 311)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Any COMM200-level course or permission.

## 312 Acting III

Advanced application of the principles of acting covered in THEA $211 \& 212$, with an emphasis on indepth work leading to mature interpretation and performance.
Lecture: $4.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: THEA 212.

## 315 Theatre History I

A study of the history and literature of theatre from its primitive origins to ca. 1700. It covers major developments in production conventions and dramatic literature, with attention given to theatre's connections to society. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 316 Theatre History II

A study of the history and literature of theatre from ca. 1700 to present. It covers major developments in production conventions and dramatic literature, with attention given to theatre's connections to society. (1) Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 320 Playwriting

A practical introduction to the techniques of dramatic writing. Readings and possible studio productions of students' work. (1)

Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 325 Lighting Design

Lighting theory and basic electrical principles for stage applications, including drafting of light plots and the development of instrument schedules, cue sheets, etc. Students will use the computerized lighting system to gain experience in cue writing and data entry. (Extra materials required.) (1)
Lecture: 3 hrs/wk.
Prerequisites: THEA 125 or permission. (THEA 225 recommended)
332 Shakespeare
Analysis of selected plays with oral interpretation. (1)(Cross-listed as ENGL 332)
Lecture: 3 hrs/wk. Film-Laboratory: 2-3 hrs/wk.
Prerequisites: RHET 125, ENGL 240 and one other 200-level ENGL literature course; or by permission.

## 335 Costume Design for Stage

A study of techniques and principles for designing costumes for the stage through the analysis of scripts and characters, research, thumbnail drawings and final drawn and/or painted renderings. (Extra Material required.) (1)

Lecture: 3 hrs/wk.

## 344 Modern Drama

Traces major modern movements in theatrical theory and dramatic literature beginning in the mid-19th century with particular emphasis on the first half of the 20th century. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 350 Performance Theory

A course for advanced students focusing on theatrical, dramatic, and performance theory in the 20th century in relation to actual stage practice. (1)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.

## 399 Special Topics

Advanced studies in specialized design, performance, or dramaturgical activities. (1) May be repeated for credit.

Lecture-Laboratory: hours vary.

## 405, 406, 407 Independent Study and Research

A program of advanced intensive study and experience in theatre under the guidance of the departmental staff. The student must submit a written proposal to the Department before the beginning of Examination Week of the term prior to the term in which the work is to be done. See departmental guidelines. ( $1 / 2,1$, 1/2)
Lecture-Laboratory: hours vary
Prerequisites: Departmental approval of proposal and three graded (not P/F) one-quarter units of Theatre Workshop; THEA 405 or 407 is prerequisite to THEA 406.

## 416 Internship

Practical experience working in or with an artistic organization as participant-observer, leading to the preparation of a report which describes and evaluates that organization's activities. The student must submit a written proposal to the department before the beginning of Examination Week of the term prior to the term in which the work is to be done. See departmental guidelines. (1)
Lecture-Laboratory: hours vary
Prerequisite: Departmental permission.

## 450 Play Direction

The principles, problems, and techniques of directing plays. (1)
Lecture: $4.5 \mathrm{hrs} / \mathrm{wk}$.
Prerequisites: THEA 211.

## 495, 496, 497 Honors Project

A program of independent study culminating in a paper, artistic creation, or performance.
Prerequisites: To qualify for consideration to receive honors in the major, a student in his/her senior year or in the Summer prior to the senior year, must work under the guidance of his/her committee. A written proposal and application must be approved by the committee and department. A minimum GPA of 3.4 in the major is required. 495 Honors Project is prerequisite for 497 Honors Project. (1/2, 1, 1/2)

## WRITING

Associate Professor McGlaun, Writing Center Director
Students from all academic disciplines may enroll in writing courses.

## 306 Tutoring Across the Curriculum

A study of writing and tutoring theory and pedagogy that provides the knowledge, skills, and strategies to support one on one and small group tutorials, writing-based workshops, and research projects in writing issues across the academic disciples. Enrolled students work as Writing Center tutors. (1)(Cannot be repeated for credit.)
Lecture: $3 \mathrm{hrs} / \mathrm{wk}$.
Prerequisite: Intellectual Inquiry 110 and permission of instructor.

## 405, 406, 407 Independent Study

Guided in-depth study of a topic in writing center research and pedagogy leading to a substantial paper, project, or conference presentation in the discipline. ( $1 / 2,1,1 / 2$ )
Prerequisite: WRIT 306

## BOARD OF TRUSTEES

## Officers

MORRIS M. CREGGER, JR. '64 Chair
KATHRYN S. HARKNESS ‘ 73 Vice Chair
JAMES F. MAUNEY Secretary
MARK P. NOFTSINGER Treasurer
MICHAEL C. MAXEY President

## Trustees

KENNETH J. BELTON, SR. '81
President, Your Church Partner, Inc.
SALEM, VA, 2015
PARIS D. BUTLER, M.D. '00
Division of Plastic Surgery, University of Pennsylvania Health System
PHILADELPHIA, PA, 2016
PAMELA L. CABALKA '76
CEO and President, Schaper, Inc.
EDINA, MN, 2014
M. PAUL CAPP, M.D. '52

Executive Director (Retired), The American Board of Radiology
TUCSON, AZ, 2017
JOANNE LEONHARDT CASSULLO ' 78
President \& Director, The Dorothea L. Leonhardt Foundation, Inc.
DALLAS, TX, 2017
W. MORGAN CHURCHMAN ' 65

President (Retired), Central Atlantic Distributors, Inc.
PHILADELPHIA, PA, 2014
MALON W. COURTS '92
President, Atlantic Investment Company
ATLANTA, GA, 2016
MORRIS M. CREGGER, JR. '64
CEO, Cregger Company, Inc.
COLUMBIA, SC, 2014
LYNN DALE
Owner, Lynn Dale Events Co-Chair, Parent Leadership Council bOSTON, MA, EX-OFFICIO

DAVID L. GUY `75 Developer, GS Carolina CHARLOTTE, NC, 2017 MICHAEL P. HALEY '73 Advisor/Managing Director, Fenway Partners/Fenway Resources MARTINSVILLE, VA, 2016 JUDITH B. HALL '69 Vice President (Retired), General ReInsurance Corp. NEW YORK, NY, 2015 KATHRYN S. HARKNESS '73 Professor, Northern Virginia Community College ANNANDALE, VA, 2014 RICHARD S. HATHAWAY ` 73
Managing Director, J.P. Morgan
atLanta, GA, 2017
PEGGY FINTEL HORN '78
Managing Partner, Morneau Shepell SBC Ltd.
ATLANTA, GA, 2017
DONALD J. KERR '60
Chairman and CEO, Kerr Industries, Inc., Dakota Brands International Inc., Jamestown, North Dakota, and Bright Harvest Sweet Potato Co.
CLARKSVILLE, AR, 2016
JOHN E. LANG ` 73
President and CEO, Pinnacle Development Group
SCOTTSDALE, AZ, 2014
PATRICK L. LEARDO
Partner (Retired), Global Real Estate; Consultant, Price Waterhouse, Coopers
NEW YORK, NY, 2014

```
JAMES F. MAUNEY, D.D.
Bishop, Virginia Synod, Evangelical Lutheran Church in America
SALEM, VA, 2014
SHAUN M. MCCONNON ‘66
CEO, Bitsite
WAYLAND, MA, 2016
OLIN R. MELCHIONNA, JR.
Attorney, Spilman Thomas \& Battle, PLLC
ROANOKE, VA, 2015
NANCY B. MULHEREN '72
President and CEO, Rumson Management Company, Inc.
RUMSON, NJ, 2014
DIEDRICH D. OGLESBEE, JR. '95
Alumni Executive Council President; Vice President, Merrill Lynch CHARLOTTE, NC, EX-OFFICIO
ROGER A PETERSEN ` 81
General Counsel - Litigation, Norfolk Southern
NORFOLK, VA, 2017
JAMES CHRISTOPHER PRICE '75
Senior Pastor (Retired), Epiphany Lutheran Church
RICHMOND, VA, 2017
J. TYLER PUGH '70
Managing Director/Investments Manager (Retired), Wells Fargo Securities
ROANOKE, VA, 2015
DALE C. SARJEANT '74
Territory Manager, Virginia and North Carolina, (Retired) A-Dec Incorporated CHARLOTTE, NC, 2015
BISHOP THEODORE F. SCHNEIDER `56
ELCA Representative, Bishop (Retired), Metro Washington DC Synod WASHINGTON, DC, 2017
FRANK V. WISNESKI, JR.
Founder \& Partner (Retired), Wellington Management Co-Chair, Parent Leadership Council
BOSTON, MA, EX-OFFICIO
MICHAEL C. MAXEY
President, Roanoke College
SALEM, VA, EX-OFFICIO
MARK P. NOFTSINGER
Treasurer, Roanoke College
ROANOKE, VA, EX-OFFICIO
```


## Trustees Emeriti

RICHARD F. BANSEMER, D.D.

Bishop (Retired), Virginia Synod, Evangelical,
Evangelical Lutheran Church in America
SALEM, VA
HELEN C. BARRANGER '67
ROANOKE, VA
G. O. CLEMENS

Judge (Retired), Twenty-Third Judicial Circuit of Virginia SALEM, VA

SIGMUND E. DAVIDSON '43
CEO and Chairman of the Board (Retired), Davidson's ROANOKE, VA

HARRY I. JOHNSON, JR., M.D. '48
President, Johnson Family Investment Corporation
ROANOKE, VA
HEIDI F. KRISCH ' 71
Chairman Emeritus, Krisch Hotels
ROANOKE, VA
KENNETH C. LAUGHON ‘65
President and CEO (Retired), Carter Machinery Company ROANOKE, VA

WILLIAM J. LINKOUS, JR. '51
Attorney, Managing Partner, Powell, Goldstein, Frazer \& Murphy
atlanta, GA
VIRGIL A.MOYER, JR., D.D. '43
Bishop (Retired.), Virginia Synod ELCA
waynesboro, va
ALBERT L. PRILLAMAN '68
Chairman of the Board (Retired), Stanley Furniture Company
STANLEYTOWN, VA
THOMAS L. ROBERTSON
Chairman (Retired), Carilion Biomedical Institute
NAPLES, FL
FREDRICK K. SHAFTMAN
President, (Retired), BellSouth Business
atlanta, GA
JOHN S. SHANNON '52
Executive Vice President-Law (Retired), Norfolk Southern Corporation
NORFOLK, VA
J. DONALD SHOCKEY, JR. `64

President, The Shockey Companies
WINCHESTER, VA
T. D. STEELE

Real Estate Developer; President, Lynn Brae Farms, Inc. ROANOKE, VA

CAROL M. SWAIN PH.D.' 83
Professor, Vanderbilt University Law School
NASHVILLE, TN

GLENN O.THORNHILL, JR.
Vice President Integrated Textile Solutions, Inc. SALEM, VA

JOHN R.TURBYFILL '53
Vice Chair (Retired), Norfolk Southern Corporation BONITA SPRINGS, FL

NANCY G.WITT, M.D. '51
Psychiatrist (Retired)
FISHERSVILLE, VA
ROBERT E. WORTMANN '60
Owner/Secretary-Treasurer (Retired), VRH Construction Corp.
UPPER SADDLE RIVER, NJ

## President Emeriti

DAVID M. GRING, PH.D.
MONETA, VA
NORMAN D. FINTEL, PH.D.
SIMPSONVILLE, SC

## FACULTY

Members of the faculty are listed alphabetically within rank. The date given indicates the year of appointment to the faculty.

MICHAEL C. MAXEY
President

## PROFESSORS

```
W. KEVIN BAKER
Professor of Business Administration
B.B.A., ROANOKE COLLEGE; M.B.A., RADFORD UNIVERSITY; PH.D.,
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1993-
VALERIE S. BANSCHBACH
Professor of Environmental Studies
B.A., POMONA COLLEGE, PH.D., UNIVERSITY OF MIAMI. 2014-
JENNIFER K. BERENSON
Professor of Religion
A.B., STANFORD UNIVERSITY; M.A., PH.D., HARVARD UNIVERSITY.
1996-
MARIT A. BERNTSON
Professor of Sociology
B.A., ST. OLAF COLLEGE; PH.D., UNIVERSITY OF MINNESOTA. 2002-
J. BROOKS CROZIER
Professor of Biology
B.S., ROANOKE COLLEGE; M.S., PH.D., VIRGINIA POLYTECHNIC
INSTITUTE AND STATE UNIVERSITY. 2000-
CHARLES E. EARLY
```

```
Professor of Psychology
A.B., GROVE CITY COLLEGE; M.S.ED., UNIVERSITY OF SOUTHERN
CALIFORNIA; M.A., WESTERN WASHINGTON UNIVERSITY; PH.D.,
PENNSYLVANIA STATE UNIVERSITY. 1988-
GARRY A. FLEMING
Professor of Economics
B.S., M.A., PH.D., UNIVERSITY OF KENTUCKY. 1987-
GARY G. GIBBS
Professor of History
B.A., M.A., UNIVERSITY OF FLORIDA; PH.D., UNIVERSITY OF VIRGINIA. 1990-
RICHARD G. GRANT
Professor of Physics
B.SC., UNIVERSITY OF TORONTO, ONTARIO; M.S., FLORIDA
INSTITUTE OF TECHNOLOGY; M.S., PH.D., OLD DOMINION
UNIVERSITY. 1996-
MICHAEL A. HAKKENBERG
Professor of History
B.A., CALVIN COLLEGE; M.A., PH.D., UNIVERSITY OF CALIFORNIA, BERKELEY. 1990-
PAUL S. HANSTEDT
Professor of English
B.A., LUTHER COLLEGE; M.A., IOWA STATE UNIVERSITY; PH.D., OHIO STATE UNIVERSITY. 1996-
R. SCOTT HARDWIG
Professor of Art
B.A., SWARTHMORE COLLEGE; B.F.A., M.F.A., NEW YORK STATE
COLLEGE OF CERAMICS AT ALFRED UNIVERSITY. 1977-
MICHAEL A. HELLER
Professor of English
B.S., UNITED STATES MILITARY ACADEMY; M.A., GEORGE WASHINGTON UNIVERSITY; PH.D., ARIZONA STATE UNIVERSITY. 1988-
PAUL R. HINLICKY
Rev. J. Marshall Tise Professor of Lutheran Studies
B.A., CONCORDIA SENIOR COLLEGE; M.DIV., CHRIST SEMINARY-
SEMINEX; PH.D., UNION THEOLOGICAL SEMINARY. 2000-
KATHERINE A. HOFFMAN
Professor of English
B.A., CARLETON COLLEGE; M.A., PH.D., NORTHWESTERN
UNIVERSITY. 1989-
KRISTI L. HOFFMAN
Professor of Sociology
B.A., UNIVERSITY OF VIRGINIA; M.S., PH.D., VIRGINIA
POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1995-
W. GARY HOLLIS, JR.
Professor of Chemistry
B.S., PH.D., UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
1995-
DARWIN D. JORGENSEN
```

```
Brian H. Thornhill Professor of Biology
B.S., IOWA STATE UNIVERSITY-AMES; M.S., UNIVERSITY OF SOUTH
CAROLINA; PH.D., IOWA STATE UNIVERSITY. 1992-
CHARLENE F. KALINOSKI
Professor of Spanish
B.A., COLLEGE OF WILLIAM AND MARY; M.A., PH.D., UNIVERSITY
OF PENNSYLVANIA. 1988-
MARTHA A. KUCHAR
Professor of English
B.A., SUNY-ALBANY; M.A., PH.D., CORNELL UNIVERSITY. 1994-
WHITNEY A. M. LEESON
Professor of History and Anthropology
B.A., COLLEGE OF WILLIAM AND MARY; M.A., PH.D., UNIVERSITY
OF VIRGINIA. 1999-
JANE C. LONG
Joanne Leonhardt Cassullo Professor of Art History
A.B., BROWN UNIVERSITY; M.A., PH.D., COLUMBIA UNIVERSITY.
1996-
JAN H. LYNCH
Professor of Psychology
B.S., COLUMBUS COLLEGE; M.S., PH.D., UNIVERSITY OF GEORGIA 1980-
LARRY A. LYNCH
Professor of Business Administration
B.S.E.E., VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY; M.B.A., LYNCHBURG COLLEGE; PH.D., VIRGINIA
POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1978-
GORDON E. MARSH
Professor of Music
B.MUS., EASTMAN SCHOOL OF MUSIC; M.F.A., UNIVERSITY OF
CALIFORNIA, IRVINE; PH.D., UNIVERSITY OF CHICAGO. 1996-
CHRISTINA D. McCART
Professor of Business Administration
B.S., M.B.A., PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY. 1990-
GERALD R. McDERMOTT
Jordan - Trexler Professor of Religion
B.A., UNIVERSITY OF CHICAGO; B.S., NORTH DAKOTA STATE
UNIVERSITY; M.R.E., GRAND RAPIDS BAPTIST SEMINARY; PH.D., UNIVERSITY OF IOWA. 1989-
MARK F. MILLER
Professor of History and Geography
B.A., LOYOLA UNIVERSITY OF LOS ANGELES; M.A., PH.D.,
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL. 1979-
ROLAND B. MINTON
M. Paul Capp \& Constance Whitehead Professor of Mathematics and Physics B.S., VIRGINIA COMMONWEALTH UNIVERSITY; M.S., PH.D., CLEMSON UNIVERSITY. 1986-
LESLIE D. MURRILL
Professor of Education
```

B.S., GRACE COLLEGE; M.S.ED., PURDUE UNIVERSITY; PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1992-

ALI A. NAZEMI
Professor of Business Administration
B.S., UNIVERSITY OF ILLINOIS; M.S.E.E., M.S.E.M., M.B.A., PH.D., FLORIDA INSTITUTE OF TECHNOLOGY. 1988-

JAMES M. OGIER
Professor of German and Linguistics
B.A., LEHIGH UNIVERSITY; M.A., PH.D., UNIVERSITY OF

PENNSYLVANIA. 1988-
BRUCE L. PARTIN
Professor of Theatre
B.A., MILLSAPS COLLEGE; M.A., MEMPHIS STATE UNIVERSITY;

PH.D., OHIO STATE UNIVERSITY. 1990-
JAMES C. PETERSON
Charles and Helen Schumann Professor of Christian Ethics;
Director of the Center for Religion \& Society
B.A., NORTHWESTERN UNIVERSITY; M.DIV., GORDON-CONWELL THEOLOGICAL

SEMINARY; M.A., UNIVERSITY OF IOWA; PH.D., UNIVERSITY OF VIRGINIA. 2011-
GALDINO F. PRANZARONE
Professor of Psychology
B.S., LOYOLA UNIVERSITY; M.A., PH.D., GEORGE PEABODY

COLLEGE OF VANDERBILT UNIVERSITY. 1972-
LEONARD D. PYSH
Brian H. Thornhill Professor of Biology
A.B., WABASH COLLEGE; PH.D., UNIVERSITY OF CALIFORNIA, SAN DIEGO. 1998-

JOSHUA B. RUBONGOYA
Professor of Political Science
B.A., MAKERERE UNIVERSITY, UGANDA;
M.A., PH.D., UNIVERSITY OF DENVER. 1991-

JEFFREY R. SANDBORG
Naomi Brandon and George Emery Wade Professor of Music B.A., KNOX COLLEGE; M.MUS., D.M.A., UNIVERSITY OF ILLINOIS. 1985-

ROBERT D. SCHULTZ
John P. Fishwick Professor of English
B.A., LUTHER COLLEGE; M.F.A., M.A., PH.D., CORNELL UNIVERSITY.

2004-
JOHN G. SELBY
John R. Turbyfill Professor of History
B.A., UNIVERSITY OF ARIZONA; M.A., PH.D., DUKE UNIVERSITY.

1986-
ANIL M. SHENDE
Professor of Computer Science and Mathematics
M.SC., BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE; M.S., PH.D., SUNY-BUFFALO. 1995-

RICHARD A. SMITH
Professor of Political Science

```
B.A., WHITTIER COLLEGE; M.A., PH.D., UNIVERSITY OF ROCHESTER.
2009 -
JEFFREY L. SPIELMAN
Professor of Mathematics
B.S., M.A., PH.D., BOWLING GREEN STATE UNIVERSITY. 1986-
GAIL A. STEEHLER
Professor of Chemistry
B.S., OHIO STATE UNIVERSITY; PH.D., UNIVERSITY OF WISCONSIN.
1984-
LYNN K. TALBOT
Professor of Spanish
B.A., UNIVERSITY OF CALIFORNIA, DAVIS; M.A., MIDDLEBURY COLLEGE; PH.D., UNIVERSITY OF WISCONSIN. 1987-
ANITA J. TURPIN
Professor of English
B.A., UNION COLLEGE; M.A., PH.D., SOUTHERN ILLINOIS
UNIVERSITY. 1989-
HARRY L.WILSON
Professor of Political Science
B.A., M.A., PENNSYLVANIA STATE UNIVERSITY; PH.D., RUTGERS
UNIVERSITY. 1986-
NED P. WISNEFSKE
Charles and Helen Schumann Professor of Lutheran Theology
B.A., UNIVERSITY OF WISCONSIN; M.DIV., YALE UNIVERSITY
DIVINITY SCHOOL; PH.D., THE UNIVERSITY OF CHICAGO. 1985-
HANS M. ZORN
Professor of Philosophy
B.A., VALPARAISO UNIVERSITY; M.DIV., CHRIST SEMINARY-SEMINEX;
M.A., SAINT LOUIS UNIVERSITY; PH.D., NOTRE DAME. 1990-
```


## ASSOCIATE PROFESSORS

BRENT A. ADKINS
Associate Professor of Philosophy
B.TH., OZARK CHRISTIAN COLLEGE; M. PHIL., INSTITUTE FOR CHRISTIAN STUDIES AT TORONTO; PH.D., LOYOLA UNIVERSITY, CHICAGO. 2002-

MELANIE M. ALMEDER
Associate Professor of English
B.A., UNIVERSITY OF VIRGINIA; M.F.A., UNIVERSITY OF

MASSACHUSETTS; M.A., PH.D., UNIVERSITY OF FLORIDA. 1999-
RAMA BALASUBRAMANIAN
Associate Professor of Physics
B.S., M.S., UNIVERSITY OF MADRAS (INDIA); PH.D., OLD DOMINION UNIVERSITY. 2005-

JOSÉ F. BAÑUELOS-MONTES
Associate Professor of Spanish
B.A., CALIFORNIA STATE UNIVERSITY (SAN BERNARDINO); M.A., PH.D., UNIVERSITY OF NEW MEXICO. 2006-

JOSEPH BLAHA

```
Associate Professor of Music
B.M., M.A., UNIVERSITY OF IOWA; D.M.A., UNIVERSITY OF
OKLAHOMA. 2002-
CHRISTOPHER T. BUCHHOLZ
Associate Professor of Psychology
B.S., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY;
M.A., APPALACHIAN STATE UNIVERSITY; PH.D., FLORIDA ATLANTIC
UNIVERSITY. 2004-
JAMES BURIAK
Associate Professor of Health and Human Performance & Athletic Trainer
B.S., LOCK HAVEN STATE COLLEGE; M.S., UNIVERSITY OF ILLINOIS
1981-
MARY K. CAMAC
Associate Professor of Psychology
B.A., UNIVERSITY OF DELAWARE; M.A., PH.D., PRINCETON
UNIVERSITY. 1992-
THOMAS J. CARTER
Associate Professor of English
B.A., M.A., GEORGIA SOUTHERN COLLEGE; PH.D., UNIVERSITY OF
TENNESSEE. 1994-
JON C. CAWLEY
Associate Professor of Environmental Science
B.S., PENNSYLVANIA STATE UNIVERSITY; M.S., PH.D., VIRGINIA
POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 2000-
RACHEL J. COLLINS
Associate Professor of Biology
B.S., NORTH CAROLINA STATE UNIVERSITY; M.S., MIAMI
UNIVERSITY; PH.D., UNIVERSITY OF PITTSBURGH. 2007-
ERICA F. COOPER
Associate Professor of Communications
B.A., M.A., UNIVERSITY OF WISCONSIN - MILWAUKEE;
PH.D., INDIANA UNIVERSITY. 2004-
JOHN W. CREASY
Associate Professor of Health and Human Performance
B.S., M.S., PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY. 2005-
M. GILBERT DUNN
Associate Professor of Sociology
B.A., OHIO WESLEYAN UNIVERSITY; M.A., TULANE UNIVERSITY;
PH.D., UNIVERSITY OF VIRGINIA. 1993-
M. LISA EARP
Associate Professor of Education
B.S., RADFORD UNIVERSITY; M.A., PH.D., VIRGINIA POLYTECHNIC
INSTITUTE AND STATE UNIVERSITY. 2002-
MATTHEW C. FLEENOR
Associate Professor of Physics
B.S., M.S., UNIVERSITY OF TENNESSEE - KNOXVILLE,
M.S., UNIVERSITY OF MASSACHUETTS - BOSTON;
PH.D., UNIVERSIY OF NORTH CAROLINA - CHAPEL HILL. 2006-
DOLORES FLORES-SILVA
```

```
Associate Professor of Spanish
B.A., UNIVERSITY OF VERACRUZ; M.A., OHIO UNIVERSITY; PH.D.,
UNIVERSITY OF KENTUCKY. 2001-
DENISE FRIEDMAN
Associate Professor of Psychology
B.S., AVERETT UNIVERSITY; M.S., PH.D., VIRGINIA POLYTECHNIC
INSTITUTE AND STATE UNIVERSITY. 2007-
SHARON C. GIBBS, CPA
Associate Professor of Business Administration
B.S., M.A.; VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY. 2002-
MICHELLE B. HAGADORN, CPA
Associate Professor of Business Administration B.B.A., ROANOKE COLLEGE; M.A., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 2004-
JASON G. HAWKE
Associate Professor of History
B.A., UNIVERSITY OF UTAH; M.A., PH.D., UNIVERSITY OF WASHINGTON. 2011-
ELIZ. K. HEIL
Associate Professor of Art
B.A., UNIVERSITY OF LOUISVILLE; M.F.A., NORTHERN ILLINOIS
UNIVERSITY. 1981-
MARY J. HENOLD
Associate Professor of History
B.A., UNIVERSITY OF DETROIT MERCY; PH.D., UNIVERSITY OF ROCHESTER. 2005-
```


## TIM JOHANN

```
Associate Professor of Chemistry
B.A., HAMLINE UNIVERSITY; PH.D., CALIFORNIA INSTITUTE OF
TECHNOLOGY. 2008-
ALICE L. KASSENS
John S. Shannon Associate Professor of Economics
B.A., COLLEGE OF WILLIAM AND MARY; PH.D., NORTH CAROLINA STATE UNIVERSITY. 2005-
WENDY R. LARSON-HARRIS
Associate Professor of English
B.A., GUSTAVUS ADOLPHUS COLLEGE; M.A., PH.D., UNIVERSITY
OF WISCONSIN MADISON. 2002-
CHRISTOPHER S. LASSITER
Associate Professor of Biology
B.S., FURMAN UNIVERSITY, PH.D., DUKE UNIVERSITY. 2005-
CHRISTOPHER R. LEE
Associate Professor of Mathematics
B.A., ST. OLAF COLLEGE; M.S., PH.D., CLEMSON UNIVERSITY. 1994-
JULIE S. MAINA
Associate Professor of Health and Human Performance
B.S., SLIPPERY ROCK UNIVERSITY; M.ED., PH.D., FLORIDA STATE UNIVERSITY. 2005-
MICHAEL P. MAINA
Associate Professor of Health and Human Performance
B.S., M.ED., SLIPPERY ROCK UNIVERSITY; PH.D., FLORIDA STATE
UNIVERSITY. 2005-
```

SRIKANTH MALLAVARAPU
Associate Professor of English
B.S., ST. JOSEPH'S COLLEGE (INDIA); M.A., UNIVERSITY OF HYDERABAD (INDIA); PH.D., STATE UNIVERSITY OF NEW YORK
(STONY BROOK). 2009-
SANDEE K. MCGLAUN
Associate Professor of English and Director of the Writing Center B.A. AGNES SCOTT COLLEGE; M.A., PH.D., OHIO STATE UNIVERSITY. 2006-

## MEETA MEHROTRA

Associate Professor of Sociology
B.A., ST. XAVIER'S COLLEGE, CALCUTTA UNIVERSITY; M.S., PH.D, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1998-

EDWARD NIK-KHAH
Associate Professor of Economics
B.A., ROCKHURST UNIVERSITY; M.A., PH.D., UNIVERSITY OF NOTRE DAME. 2005-

KATHERINE O'NEILL
Associate Professor of Environmental Science
B.S., COLLEGE OF WILLIAM AND MARY; PH.D., DUKE UNIVERSITY.

2008-
TODD C. PEPPERS
Henry H. and Trudye H. Fowler Associate Professor of Public Affairs
B.A., WASHINGTON AND LEE UNIVERSITY; J.D., UNIVERSITY OF VIRGINIA; PH.D., EMORY UNIVERSITY. 2002-

## DOROTHYBELLE POLI

Associate Professor of Biology
B.S., UNIVERSITY OF PITTSBURGH; PH.D., UNIVERSITY OF

MARYLAND. 2006-

## STEVEN POWERS

Associate Professor of Biology
B.S., GEORGETOWN COLLEGE; M.S., EASTERN KENTUCKY

UNIVERSITY; PH.D., UNIVERSITY OF ALABAMA. 2008-
MARILEE A. RAMESH
Associate Professor of Biology
B.S., UNIVERSITY OF WISCONSIN-STEVENS POINT;

PH.D., INDIANA UNIVERSITY. 2002-
MATTHEW P. REARICK
Associate Professor of Health and Human Performance
B.S., SHIPPENSBURG UNIVERSITY, M.S., PH.D., PENNSYLVANIA

STATE UNIVERSITY. 2005-
DANIEL SARABIA
Associate Professor of Sociology
B.A., M.A., HUMBOLT STATE UNIVERSITY,

PH.D., OKLAHOMA STATE UNIVERSITY. 2005-
CATHERINE A. SARISKY
Associate Professor of Chemistry
B.A., NEW COLLEGE OF THE UNIVERSITY OF SOUTH FLORIDA;
M.S., PH.D., CALIFORNIA INSTITUTE OF TECHNOLGY. 2007-

DAVID O. SCAER
Associate Professor of French
B.A., HOPE COLLEGE; M.A., PH.D., UNIVERSITY OF VIRGINIA. 2000-

KATHERINE E. SHORTRIDGE
Associate Professor of Art
A.B., DARTMOUTH COLLEGE; M.F.A., INDIANA UNIVERSITY. 2003-

MARIA STALLIONS
Associate Professor of Education
B.S., M.S., PH.D. BARRY UNIVERSITY. 2008-

VIRGINIA R. STEWART
Associate Professor of English
B.A., DAVIDSON; M.A., PH.D., UNIVERSITY OF IOWA. 1991-

DAVID G. TAYLOR
Associate Professor of Mathematics
B.S., LEBANON VALLEY COLLEGE, M.S., PH.D.; UNIVERSITY OF

VIRGINIA. 2007-
ELISABETH C. GILSTER VELAZQUEZ
Associate Professor of Business Administration
B.A., UNIVERSITY OF NEW MEXICO; M.A.T., SCHOOL FOR INTERNATIONAL TRAINING; PH.D., UNIVERSITY OF ARIZONA 1995-

MONICA VILHAUER
Associate Professor of Philosophy
B.A., LEWIS \& CLARK COLLEGE; M.A., PH.D., NEW SCHOOL FOR SOCIAL RESEARCH. 2008-

IVONNE WALLACE FUENTES
Associate Professor of History
B.A., SOUTHWESTERN UNIVERSITY; M.A., PH.D., DUKE

UNIVERSITY. 2006-
LISA C.WARREN
Associate Professor of Theatre
B.F.A., WILLIAM WOODS COLLEGE; M.A., UNIVERSITY OF KANSAS; PH.D., UNIVERSITY OF GEORGIA. 1985-

DANA-LINN WHITESIDE
Associate Professor of English
B.A., CALIFORNIA STATE UNIVERSITY-CHICO; M.A., Ph.D.,

STATE UNIVERSITY OF NEW YORK - BINGHAMTON. 2002-
EDWARD R.WHITSON
Associate Professor of Psychology
B.S., PENNSYLVANIA STATE UNIVERSITY; M.ED., ANTIOCH

GRADUATE SCHOOL; M.A., PH.D., SUNY-BUFFALO. 1994-
GARY L. WHITT
Associate Professor of Education
B.S., M.A., PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 2002-

ROBERT A. WILLINGHAM
Associate Professor of History
B.A., FORT LEWIS COLLEGE, M.A., PURDUE UNIVERSITY; PH.D., UNIVERSITY OF TEXAS - AUSTIN. 2004-

STELLA Y. XU
Associate Professor of History
B.S., BEIJING UNIVERSITY OF CHEMICAL TECHNOLOGY (CHINA)

STUDIES AT PEKING UNIVERSITY; M.A., KOREA UNIVERSITY SOUTH KOREA; PH.D., UNIVERSITY OF CALIFORNIA -
LOS ANGELES. 2006-

## ASSISTANT PROFESSORS

KELLY ANDERSON
Assistant Professor of Chemistry
B.S., UNIVERSITY OF PUGET SOUND, TACOMA, WA; PH.D., UNIVERSITY OF MINNESOTA. 2009-

## SHANNON ANDERSON

Assistant Professor of Sociology
B.A., TULANE UNIVERSITY; M.A., PH.D., UNIVERSITY OF VIRGINIA. 2010-

DURELL BOUCHARD
Assistant Professor of Computer Science
B.A., HAVERFORD COLLEGE; M.S.E., PH.D., UNIVERSITY OF

PENNSYLVANIA. 2008-
WILLIAM E. BRENZOVICH, JR.
Assistant Professor of Chemistry
B.S., COLLEGE OF WILLIAM AND MARY; PH.D., THE SCRIPPS RESEARCH INSTITUTE. 2011-

## JESSE BUCHER

Assistant Professor of African History
B.A., THE COLLEGE OF NEW JERSEY; PH.D., UNIVERSITY OF MINNESOTA. 2012-.

ADAM CHILDERS
Assistant Professor of Mathematics and Statistics
B.S., JAMES MADISON UNIVERSITY; M.S., PH.D.,

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
2009-
LANE M. DESTRO
Assistant Professor of Sociology
B.A.; PENNSYLVANIA STATE UNIVERSITY; M.A., PH.D., DUKE UNIVERSITY. 2012-

PAMELA GALLUCH
Assistant Professor of Business Administration
B.B.A., UNIVERSITY OF KENTUCKY; M.S., MIDDLE TENNESSEE

STATE UNIVERSITY; PH.D., CLEMSON UNIVERSITY. 2009-
JUSTIN GARRISON
Assistant Professor of Political Science
B.A., MERCYHURST COLLEGE; M.A., PH.D., CATHOLIC UNIVERSITY. 2013-

PATRICIA S. HAN
Assistant Professor of French
B.A., HAVERFORD COLLEGE; M.A., M. PHIL., PH.D., COLUMBIA UNIVERSITY. 2010-

JAMES HARGROVE
Assistant Professor of Art History
B.A., NEW YORK UNIVERSITY; M.A., UNIVERSITY OF LEEDS;

PH.D., UNIVERSITY OF PENNSYLVANIA. 2009-
ELIZABETH HOLBROOK

```
Assistant Professor of Health and Human Performance
B.S. SUNY CORTLAND COLLEGE; M.S., PH.D.; MIDDLE TENNESSEE
STATE UNIVERSITY. 2010-
STEVEN HUGHES
Assistant Professor of Chemistry
B.A., CONNECTICUT COLLEGE; PH.D., UNIVERSITY OF CALIFORNIA-BERKELEY. 2013-
RICHARD KEITHLEY
Assistant Professor of Chemistry
B.S., VIRGINIA COMMONWEALTH UNIVERSITY; PH.D., UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL. 2013-
GUAN-SOON KHOO
Assistant Professor of Communications
B.S., SUSQUEHANNA UNIVERSITY; M.S., LEHIGH UNIVERSITY; PH.D., PENNSYLVANIA STATE UNIVERSITY. 2013-
KEN MCGRAW
Assistant Professor of English
B.A., BOWLING GREEN STATE UNIVERSITY; M.A., NEW MEXICO
STATE UNIVERSITY; PH.D., CASE WESTERN RESERVE UNIVERSITY.
2009-
DEBRA B. MELICAN
Assistant Professor in Communication Studies
A.B., UNIVERSITY OF MICHIGAN; J.D., WAYNE STATE UNIVERSITY SCHOOL OF LAW;
M.P.A., KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY; PH.D., UNIVERISTY
OF MICHIGAN. 2011-
ANDREEA S. MIHALACHE-O'KEEF
Assistant Professor of Public Affairs
B.A., RANDOLPH-MACON WOMAN'S COLLEGE; M.A., PH.D.,
PENNSYLVANIA STATE UNIVERSITY. 2009-
CHAD MORRIS
Assistant Professor of Anthropology
B.S., CENTRE COLLEGE, M.A., UNIVERSITY OF MEMPHIS, PH.D.,
UNIVERSITY OF KENTUCKY. 2009-
DAVID NICHOLS
Assistant Professor Psychology
B.A., M.A., PH.D., FLORIDA ATLANTIC UNIVERSITY. 2009-
LINDSEY OSTERMAN
Assistant Professor of Psychology
B.S., UNIVERSITY OF SOUTHERN MISSISSIPPI, M.S., PH.D., UNIVERSITY OF OKLAHOMA. 2013-
BRYAN M PARSONS
Assistant Professor of Political Science
B.A., APPALACHIAN STATE UNIVERSITY, PH.D., UNIVERSITY OF SOUTH CARLOINA. 2014-
DANIEL T. ROBB
Assistant Professor of Physics
B.S., WILLIAMS COLLEGE; M.A., PH.D., UNIVERSITY OF TEXAS AT AUSTIN. 2012-
HANNAH ROBBINS
Assistant Professor of Mathematics
B.A., REED COLLEGE; PH.D., UNIVERSITY OF MICHIGAN. 2011-
KARIN SAOUB
Assistant Professor of Mathematics
B.A., WELLESLEY COLLEGE; M.A., PH.D., ARIZONA
```

STATE UNIVERSITY. 2010-
WILLIAM J. TENBRUNSEL
Assistant Professor of English
A.B., BOSTON COLLEGE; M.A., PH.D., RUTGERS UNIVERSITY. 1993-

CAROLINA VIERA
Assistant Professor of Spanish
B.A., INSTITUTO DE PROFESSORS (URUGUAY); M.A., UNIVERSITY OF NEW MEXICO; PH.D., UNIVERSITY OF CALIFORNIA-DAVIS. 2013-

LESLIE A. WARDEN
Assistant Professor of Art History and Archaeology
B.A., UNIVERSITY OF CALIFORNIA - DAVIS; M.A., PH.D., UNIVERSITY

OF PENNSYLVANIA. 2012-

## LECTURERS

ANGELA ALLEN
Psychology
B.A., UNIVERSITY OF NORTH CAROLINA AT WILMINGTON;

PH.D., UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL. 2001-

## KATHY H. BAUMAN

Mathematics
B.S., ROANOKE COLLEGE; M.A.ED., VIRGINIA POLYTECHNIC

INSTITUTE AND STATE UNIVERSITY. 2004-
FRANCES E. BOSCH
Biology
B.S., ROANOKE COLLEGE; M.S., FORDHAM UNIVERSITY. 2004-

DIANE V. BROGAN
Sociology and Public Affairs
B.A., ROANOKE COLLEGE; M.S., RADFORD UNIVERSITY. 2005-

GIULIANA F. CHAPMAN
Italian
B.A., UNIVERSITY OF CHICAGO; M.A., UNIVERSITY OF VIRGINIA.

CYNTHIA E. EDMUNDS
Health and Human Performance
B.S.ED., M.S.ED., VIRGINIA POLYTECHNIC INSTITUTE AND

STATE UNIVERSITY. 2000-
MICHAEL S. HUTKIN
Business Administration
B.S.E.E., DREXEL UNIVERSITY; M.B.A., LYNCHBURG COLLEGE. 2003-

MARWOOD LARSON-HARRIS
Religion and Philosophy
B.A., REED COLLEGE; M.T.S., PH.D., BOSTON UNIVERSITY. 2004-

STEPHANIE LIVINGSTON
Chemistry
B.S., GEORGE FOX UNIVERSITY; PH.D., UNIVERSITY

OF VERMONT. 2009-
JAN G. MINTON
Mathematics

```
B.S., UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL;
```

M.S., CLEMSON UNIVERSITY. 1995-

ARNICA W. MULDER
Accounting and Finance
B.A., HOGESCHOOL VAN UTRECHT; M.B.A., M.S., OLD DOMINION UNIVERSITY.

IRIS P. MYERS
Spanish; Language Resource Center, Director
B.A., NATIONAL UNIVERSITY; M.S., STATE UNIVERSITY

OF NEW YORK. 1995-
BONNIE J.W. PRICE

## Physics

B.S., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY;
M.S., UNIVERSITY OF NORTH CAROLINA. 1998-

DAVID W. ROBERTSON
Business Administration and Economics, Director of CLEI
B.A., ROANOKE COLLEGE, M.A.L.S., HOLLINS UNIVERSITY. PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE

UNIVERSITY. 2014-
JENNIFER N. RUHLAND
Theatre
B.S., RADFORD UNIVERSITY; M.F.A., UNIVERSITY OF VIRGINIA.

2006-
DEBORAH H. SELBY
English, Communications
B.A., MCMURRY COLLEGE; M.A., SAINT LOUIS UNIVERSITY. 1993-

GREGORY R. SHAFF
Business Administration
B.B.A., M.S., JAMES MADISION UNIVERSITY. 2002-
C. MICHAEL SMITH

Business Administration
B.B.A., ROANOKE COLLEGE; M.B.A., PH.D., VIRGINIA POLYTECHNIC

AND STATE UNIVERSITY.
CLAIRE M. STANIUNAS
Mathematics, Statistics
B.A., UNIVERSITY OF SOUTH FLORIDA; M.S., VIRGINIA

POLYTECHNIC INSTITUTE AND STATE UNIVERSITY. 1996-
CHRISTINE S. STANLEY
Spanish
B.A., M.A.ED., VIRGINIA POLYTECHNIC AND STATE UNIVERSITY.

LINDY THIBODEAUX
Biology
B.S., JAMES MADISON UNIVERSITY; M.S., COLLEGE OF

CHARLESTON. 2008-

## TEACHING ASSOCIATES

GEORGE N. ARTHUR

## Theatre Arts

A.B., LENOIR RHYNE; M.F.A., UNIVERSITY OF NORTH CAROLINA

1978-

ELIZABETH Y. BACHELDER
Music, Resident Artist
B.MUS., M.MUS. D.M.A., EASTMAN SCHOOL OF MUSIC. 1983-

ALISON M. CLIFTON
French
B.A., STETSON UNIVERSITY; M.A., UNIVERSITY OF FLORIDA;

PH.D., UNIVERSITY OF ILLINOIS. 2012-
KATHRYN ELMORE
Education
B.S., M.A.ED., VIRGINIA POLYTECHNIC INSTITUTE AND

STATE UNIVERSITY. 2000-
MARIANNE M. SANDBORG
Music, Resident Artist
B.S., OLD DOMINION UNIVERSITY; M.MUS. UNIVERSITY OF ILLINOIS AT URBANACHAMPAIGN. 1993-

## LISA STONEMAN

Education
B.A., ROANOKE COLLEGE; M.S.ED., PH.D., VIRGINIA POLYTECHNIC

INSTITUTE AND STATE UNIVERSITY.
SHAWN URBANEK
Health and Human Performance
B.S., MARIETTA COLLEGE; M.S., VIRGINIA POLYTECHNIC INSTITUTE

AND STATE UNIVERSITY. 2011-

## EMERITI FACULTY

BOBBYE G. AU
Professor of English, Emerita
B.A., EMORY \& HENRY; M.A., ARIZONA STATE UNIVERSITY;
M.A., PH.D., CLAREMONT GRADUATE SCHOOL.

BILLIE JEAN BEAMER
Associate Professor of Physical Education, Emerita
B.S., ROANOKE COLLEGE; M.ED., UNIVERSITY OF VIRGINIA.

ROBERT D. BENNE
Jordan-Trexler Professor of Religion, Emeritus, and Research Associate
B.A., MIDLAND LUTHERAN COLLEGE; M.A., PH.D., UNIVERSITY OF
chicago.
C. RANDOLPH BENSON

Professor of Sociology, Emeritus
B.A., M.A., UNIVERSITY OF VIRGINIA; PH.D., LOUISIANA STATE

UNIVERSITY.
JOHN V. BRUST
Associate Professor of Art, Emeritus
B.S., UNIVERSITY OF CINCINNATI; M.F.A., UNIVERSITY OF

GEORGIA.
ELAINE H. BUDDE
Professor of Physical Education, Emerita
B.S., ILLINOIS STATE UNIVERSITY; M.A., UNIVERSITY OF MICHIGAN;

PH.D., UNIVERSITY OF WISCONSIN. PENNSYLVANIA.
RONDA J. CARPENTER

```
Professor of Psychology, Emerita
B.A., UNIVERSITY OF ARKANSAS; M.A., PH.D., UNIVERSITY OF
DENVER.
ROBERT D. DENHAM
John P. Fishwick Professor of English, Emeritus
B.A., DAVIDSON COLLEGE; M.A., PH.D., UNIVERSITY OF CHICAGO.
WILLIAM D. ERGLE
Professor of Mathematics and Statistics, Emeritus
B.S., CLEMSON UNIVERSITY; M.S., UNIVERSITY OF SOUTH
CAROLINA; PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND
STATE UNIVERSITY.
KENNETH R. GARREN
Professor of Mathematics, Emeritus
B.S., ROANOKE COLLEGE; M.A., COLLEGE OF WILLIAM AND
MARY; PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY.
INEZ E. GOOD
Associate Professor of Modern Languages, Emerita
M.A., UNIVERSITY OF ERLANGEN, GERMANY.
ANDREW J. GORDON
Associate Professor of Business Administration, Emeritus
B.S., M.A., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
GENE GRUBITZ III
Associate Professor of Biology, Emeritus
B.S., M.S., UNIVERSITY OF OKLAHOMA; PH.D., UNIVERSITY OF ARKANSAS.
R. PAUL HENRICKSON
Dean of the Chapel, Emeritus
B.S., M.S., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY; M.DIV., HAMMA SCHOOL OF THEOLOGY
WITTENBURG UNIVERSITY.
C.WILLIAM HILL, JR.
Henry H. and Trudye Fowler Professor of Public Affairs, Emeritus
B.A., SHEPHERD UNIVERSITY; M.A., PH.D., THE AMERICAN
UNIVERSITY.
BENJAMIN P. HUDDLE, JR.
Professor of Chemistry, Emeritus
B.S., LENOIR-RHYNE COLLEGE; PH.D., UNIVERSITY OF NORTH
CAROLINA AT CHAPEL HILL.
ROBERT C. HUDSON
Associate Professor of Physics, Emeritus
B.A., DUKE UNIVERSITY; M.A., GEORGE PEABODY COLLEGE FOR
TEACHERS; M.S., UNIVERSITY OF NORTH CAROLINA.
ROBERT E. JENKINS
Professor of Biology, Emeritus
B.S., ROANOKE COLLEGE; PH.D., CORNELL UNIVERSITY
PATRICIA L. JORDAHL
Professor of French, Emerita
B.A., SIENA HEIGHTS COLLEGE; M.A., PH.D., FLORIDA STATE
UNIVERSITY.
```

```
DENIS A. LAPE
Professor of English, Emeritus
B.A., YALE UNIVERSITY; M.A., PH.D., UNIVERSITY OF MINNESOTA.
DANIEL L. LARSEN
Associate Professor of Psychology, Emeritus
B.A., UNIVERSITY OF NORTH DAKOTA; M.A., PH.D., UNIVERSITY
OF KANSAS.
EDWARD L. McCLELLAND
Associate Professor of Business Administration, Emeritus
B.S., M.S., VIRGINIA POLYTECHNIC INSTITUTE AND STATE
UNIVERSITY.
GAIL H. McKEE
Associate Professor of Business Administration, Emerita
B.A., DAVIS AND ELKINS COLLEGE; M.ED., UNIVERSITY OF MISSOURI; M.B.A., UNIVERSITY OF SOUTH DAKOTA; PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
VERNON R. MILLER
Associate Professor of Chemistry, Emeritus
B.A., MANSHESTER COLLEGE; PH.D., SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE.
SUSAN P. MILLINGER
Professor of History, Emerita
B.A., WELLESLEY COLLEGE; M.A., PH.D., UNIVERSITY OF
CALIFORNIA, BERKELEY.
DONALD G. MOE
Associate Professor of Music, Emeritus
B.S., UNIVERSITY OF WISCONSIN; M.MUS., INDIANA UNIVERSITY; PH.D., UNIVERSITY OF IOWA.
FRANK E. MUNLEY
Associate Professor of Physics, Emeritus
B.S., UNIVERSITY OF SCRANTON; PH.D., JOHNS HOPKINS
UNIVERSITY.
RONALD R. OETGEN
Professor of Chemistry, Emeritus
B.A., M.S., PH.D., CASE WESTERN RESERVE UNIVERSITY.
MAMIE S. PATTERSON
Professor of Modern Languages, Emerita
B.S., UNIVERSITY OF PUERTO RICO; M.A., UNIVERSITY OF NORTH
CAROLINA AT CHAPEL HILL; PH.D., UNIVERSITY OF KENTUCKY.
R. DAN RICHARDSON
Professor of History, Emeritus
B.A., GEORGE WASHINGTON UNIVERSITY; M.A., PH.D., UNIVERSITY OF MARYLAND.
JANICE M. SAUNDERS
Associate Professor of History, Emerita
B.A., MEREDITH COLLEGE; M.A.L.S, HOLLINS UNIVERSITY; PH.D., VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
C. FREEMAN SLEEPER
Professor of Religion, Emeritus
B.A., COLBY COLLEGE; B.D., YALE DIVINITY SCHOOL;
```

PH.D., VANDERBILT UNIVERSITY.
EBERLE L. SMITH
Associate Professor of Social Work, Emerita
B.A., ROANOKE COLLEGE; M.S.W., VIRGINIA COMMONWEALTH

UNIVERSITY.
LUCILE D. SNOW
Librarian, Emerita
B.A., UNIVERSITY OF ALABAMA; M.A., GEORGE PEABODY.

JOHN V. SPITZ
Professor of Business Administration and Economics, Emeritus
A.B., DUKE UNIVERSITY; PH.D., UNIVERSITY OF TENNESSEE.

ROBERT F. STAUFFER
Associate Professor of Economics, Emeritus
B.A., WASHINGTON \& LEE; M.A., DUKE UNIVERSITY; PH.D., VIRGINIA

POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.
DONALD M. SUTTON
Director of Alumni Records, Emeritus
B.S., ITHACA COLLEGE.

JESSE C. THOMPSON JR.
Professor of Biology, Emeritus
B.S., HAMPDEN-SYDNEY COLLEGE; PH.D., UNIVERSITY OF VIRGINIA.

HOWARD WARSHAWSKY
Professor of Political Science, Emeritus B.A., QUEENS COLLEGE; M.A., PH.D., UNIVERSITY OF VIRGINIA.

GREGORY L.WEISS
Professor of Sociology, Emeritus
B.A., WITTENBERG UNIVERSITY; M.S., PH.D., PURDUE UNIVERSITY.

JOHN MACK WELFORD
Associate Professor of Education, Emeritus
B.S., UNIVERSITY OF ALABAMA; M.ED., ED.D. UNIVERSITY OF VIRGINIA.

## ADMINISTRATION

MICHAEL CREED MAXEY, M.A.ED., CAGS
President
JOYCE A. SINK, A.A.
Executive Assistant to the President

## ACADEMIC AFFAIRS

RICHARD A. SMITH, PH.D.
Vice President and Dean of the College; Professor of Political Science
JENNIFER K. BERENSON, PH.D.
Associate Dean for Academic Affairs and Administration; Professor of Religion
PIPER L. CUMBO, M.A.; M.L.I.S.
Instruction \& Reference Librarian
DIANNE N. EARY

Administrative Assistant
KIMBERLY L. FILER, PH.D.
Director of Institutional Effectiveness and Assessment
JESSE C. GRIFFIN, M.S.
Director for Civic Engagement
EDWARD J. HAMILTON, PH.D.
Director of Academic Grants and Foundation Relations
HANY HOSNY, M.L.S.
Lending Services Librarian
DEBORAH M. LANDIS, A.A.
Administrative Assistant to the Dean
C. ALLAN LOCKETT, JR., M.A.L.S.

Assistant Registrar
TONI D. MCLAWHORN, M.S.
Director of Career Services
LINDA ANGLE MILLER, M.A.
Archivist and Curator, Henry Fowler Collection
PATRICIA J. POWELL, M.L.S.
Catalog Librarian
LEAH L. RUSSELL, M.A.L.S.
Associate Dean and Registrar
PAMELA SEROTA COTE, ED.D.
Director of International Education
GAIL A. STEEHLER, PH.D.
Associate Dean for Academic Affairs and General Education; Professor of Chemistry
JACK K. STEEHLER, PH.D
Director of Institutional Research and Planning
WILLIAM J. TENBRUNSEL, PH.D.
Associate Dean; Director of the Goode-Pasfield Center for Learning \& Teaching
STAN F. UMBERGER, M.L.S.
Director of the Library
DAVID C. WISEMAN, M.L.I.S.
Manager of Library Information Systems

## ADMISSIONS, FINANCIAL AID, AND ENROLLMENT MANAGEMENT

BRENDA PORTER POGGENDORF, M.A.L.S., M.B.A., PH.D.
Vice President for Enrollment \& Dean of Admissions and Financial Aid
ELISE BENNETT, B.A.
Associate Director of Admissions and Director of International Student Recruitment
THOMAS BLAIR, B.B.A.
Director of Financial Aid
TRAVIS G. CARTER, B.B.A

```
Assistant Director of Admissions
EMILY G. COHEN, M.ED
Assistant Director of Admissions
TRACIE N. GILMER, B.S.
Web & Communications Coordinator/Admissions Counselor
MELISSA LACOMBE, B.A.
Associate Director of Financial Aid and Director of Enrollment Research
PATRICIA N. LEDONNE, B.A.
Director of Admissions
TRACY LIVELY, B.A.
Assistant Director of Admissions
KASHA KLINEGORES, M.ED.
Assistant Director of Admissions
BRITTANY KONIECZNY, B.A.
Admissions Counselor
COURTNEY A. PENN, M.A.
Director of Recruitment
BRYAN D. RYBERG, M.ED.
Associate Dean for Student Success Initiatives
SHERRIE S. STRENG, B.A
Director of Operations for Admissions and Financial Aid
BUSINESS AFFAIRS
MARK P. NOFTSINGER, M.A.
Vice President Business Affairs
CATHY DICKERSON, B.S., SPHR
Director of Human Resources
VIRGINIA DOOLEY, B.S.
Director of Dining and Auxiliary Services
SANDRA JACKSON
Business Office (Student Accounts) Manager
WILLIAM MARTIN
Manager of Landscaping and Grounds
TRINA MITCHELL
Administrative Assistant
ADAM R. NEAL, M.B.A.
Comptroller
WILLIAM C. SPHAR
Manager of Housekeeping
KATHRYN ANN VANNESS, M.B.A.
Director of Finance & Budget
MICHAEL VAUGHT
Manager of Plant Operations
PAIGE WYGAL
```

```
Payroll Manager
```


## DEPARTMENT CHAIRS

BRENT A.ADKINS, PH.D.
Christian Studies, Philosophy, and Religious Studies
MARIT A. BERNTSON, PH.D.
Sociology
DENISE FRIEDMAN, PH.D.
Psychology
JOHN W. CREASY, PH.D.
Health and Human Performance
W. GARY HOLLIS, JR., PH.D.

Chemistry
CHARLENE F. KALINOSKI, PH.D.
Modern Languages
MARTHA KUCHAR, PH.D.
English
WHITNEY A.M. LEESON, PH.D.
History
ALI A. NAZEMI, PH.D.
Business Administration and Economics
LEONARD D. PYSH, PH.D.
Biology
RICHARD A. SMITH, PH.D
Public Affairs
KATHERINE E. SHORTRIDGE, M.F.A.
Mathematics, Computer Science and Physics
DAVID G. TAYLOR, PH.D.
Mathematics, Computer Science and Physics
GARY L. WHITT, PH.D.
Education

## INFORMATION TECHOLOGY

REBECCA SANDLIN, M.A.
Chief Information Officer
TERRI M. AUSTIN, B.S.
Director of Client Services
JACOB A. JACKSON, M.A.
Director of IT Business Services
KIMBERLY D. JOHNSON, M.S.
Senior Database \& Applications Programmer Analyst
MICHAEL V. KLUGE, B.S.
Desktop Integration Specialist
NATHAN D. MAY, B.S.
Database Administrator

DAVID H. MULFORD, M.A.
Media Technology Director
BARRY NICHOLS, B.A.
Network Engineer
MARK D. POORE, M.S.
Director of IT Projects
MICHAEL G. SANTOROSKI, M.S.
Director of Web\& Software Development Services
ROBERT D. SEBESTA, B.S.
Senior Programmer Analyst
SCOTT SMITH, B.F.A.
Senior Audio-Visual Specialist
MITZI B. STEELE, M.A.
Database Director
BRADLEY C. STONE, B.A.
Director of Network and Telecommunications
RANDY P. STUBSTAD, B.S.
Systems Manager
JASON SUDDARTH, M.B.A.
Database Analyst
CAROLYN T. TRAIL, A.S.
Telecommunications Manager
SUZANNE L. TRYON
Print Shop Coordinator

## RELIGIOUS AFFAIRS

CHRISTOPHER M. BOWEN, M.DIV.
TIMOTHY L. PICKLE, JR. and TIMOTHY L. PICKLE, III
Dean of the Chapel

## RESOURCE DEVELOPMENT AND PUBLIC RELATIONS

MS. CONNIE K. CARMACK, B.S.
Vice President for Resource Development
PEGGY H. AKERS, A.A.S.
Administrative Assistant to the Vice President for Resource Development
WHITNEY S. ANDERSON, B.A.
Internet Communications Manager, Public Relations
JENNIFER KINCAID BOONE, M.S.
Public Relations Specialist
LISA JAMISON BOWLING M.B.A.
Assistant Vice President for Resource Development
JAINA L. DIOTALEVI, B.A.
Assistant Director of Alumni \& Family Relations

STEPHEN A. ESWORTHY, M.A.
Associate Director of Development

JAMES FRANCE, B.ARCH.
Graphic Designer
BLAIR GARLAND, B.S.
Director of College Marketing
TERESA T. GEREAUX, B.B.A.
Director of Public Relations
KEVIN HALLMARK, B.A.
Director of Research and Prospect Management
SUZANNE W. HINER, B.S.
Director of Roanoke Fund

ALICE F. LAWRENCE, B.A.
Director of Advancement Services
JONATHAN E. LEE, M.A.
Director of Development \& Alumni Relations
RICHARD J. POGGENDORF, M.S.
Director of Gift Planning
SHALEEN T. POWELL, M.B.A.
Associate Director for Campaign and Volunteer Relations
KELLY R. SHAVER, B.A.
Associate Director

LESLIE D. TAYLOR, B.A.
College Editor
MARY GRACE THEODORE, M.A.
Assistant Vice President for Development and Campaign Director
JACK WILLIAMS, M.S.
Director of Regional Programs

## STUDENT AFFAIRS

AARON L. FETROW, M.A., J.D.
Vice President for Student Affairs \& Dean of Students
M. SCOTT ALLISON, M.ED.

Athletic Director
REBECCA ARMSTRONG
Administrative Assistant
BRIANA BANKS, B.S
Women's Field Hockey
PHIL BENNE, M.P.S.
Men's Tennis Coach and Women's Soccer Coach
TERESA P. BLETHYN, M.S.
Director of Residence Life and Housing
TODD BOWYER, M.S.
Director of Campus Recreation
RICHMOND BRAMBLET, M.S.

```
Assistant Director of Sports Information
BRIAN T. CHISOM, PH.D.
Associate Dean of Students
J. R. HAP COX, PH.D.
Director of Counseling Center
SUSAN DUNAGAN, M.S.
Women's Basketball Coach
JOHN FARMER, B.S.
Athletic Coordinator
JOHN GRISETTI, B.B.A.
Assistant Director of Campus Safety
GREGORY HANLON, M.A.
Assistant Director of Student Activities
JULIET JORDAN LOWERY, M.A.
Director of Multicultural Affairs
SANDRA W. McGHEE, F.N.P., M.S.N.,
Director of Student Health Services
PAGE MOIR, M.ED.
Men's Basketball Coach
BRAD MOORE, M.ED.
Assistant Athletic Director for External Relations
MARK T. PETERSEN, M.S.
Director of Colket Center and Student Activities
RYAN PFLUGRAD, M.ED.
Men's Soccer Coach
WILLIAM PILAT, M.S.
Men's Lacrosse Coach
FINN D. PINCUS, PH.D.
Cross Country and Track and Field Coach
COLLEEN A. QUIGLEY, LPC
Staff Counselor
THOMAS A. RAMBO. M.A.
Director of Campus Safety
KODY ROTHER, M.S.
Area Coordinator - Residence Life
ROBIN STROSNIDER, R.N.C.
Assistant Director of Health Services
MARY SCHWARTZ, B.A.
Women's Lacrosse Coach
```


## CORRESPONDENCE/SERVICES DIRECTORY

You are invited to write or call the following departments for further information The mailing address is:

# ROANOKE COLLEGE 

## 221 College Lane

Salem, Virginia 24153-3794
The Roanoke College Homepage:
http://www.roanoke.edu
AREA CODE 540
Academic Advising - Fintel Library ..... 375-2247
Academic Affairs - Administration Building ..... 375-2204
Admissions (1-800-388-2276; e-mail: admissions@roanoke.edu) Roselawn ..... 375-2270
Adult Students - Fowler Alumni House ..... 375-2303
Alumni Relations - Resource Development. ..... 375-2237
Art Galleries - Olin Hall. ..... 375-2354
Athletics - Bast Center ..... 375-2338
Bequests, Gifts, Grants - Resource Development ..... 375-2230
Basketball Arena - Bast Center ..... 375-2338
Boardroom - Fintel Library ..... 375-2200
Bookstore - Colket Center ..... 375-2317
Business Office - College Hall. ..... 375-2255
Campus Activities - Colket Center. ..... 375-5125
Campus Safety - 9 North College ..... 375-2310
Campus Recreation - Colket Center ..... 375-5219
Career Services - Fowler Alumni House. ..... 375-2303
Chaplain's Office - Morehead Hall ..... 375-2300
Church Relations - Resource Development ..... 375-2268
Colket Center. ..... 375-5125
Commons/Dining Room - Colket Center ..... 375-2328
Community Programs/Special Events ..... 375-2323
Computer Services - Trexler. ..... 375-2225
Counseling Center - Morehead Hall ..... 375-2302
Dean of the College - Administration Building ..... 375-2203
Dean of Students Office- Alumni Gym ..... 375-2592
Dining Services - Colket Center. ..... 375-2328
Disability Support Services - Library ..... 375-2248
Financial Aid - Roselawn ..... 375-2235
Financial Matters - College Hall ..... 375-2265
Fitness Center - Bast Center. ..... 375-2554
General College Affairs. ..... 375-2500
Goode-Pasfield Center for Learning and Teaching - Fintel Library. ..... 375-2247
Hall of Fame (Athletic) - Bast Center ..... 375-2338
Health Services - see map ..... 375-2286
Human Resources - College Hall ..... 375-2455
Information Technology - Trexler Hall ..... 375-2225
International Programs - Administration Building ..... 375-2299
Language lab - Lucas Hall ..... 375-2091
Library - Fintel. ..... 375-2294
Media/News Service/Public Relations - West Hall Annex ..... 375-2242
Multicultural Affairs - Alumni Gym ..... 375-2099
Parking Information - 9 North College ..... 375-2310
Payroll Office - College Hall ..... 375-2014
Pool - Alumni Gym ..... 375-2327
Post Office (Campus) - Colket Center ..... 375-2315
President's Office - Administration Building ..... 375-2200
Print Shop - Life Science ..... 375-2250
Public Relations - West Hall Annex ..... 375-2282
Recreation/Fitness - Bast Center ..... 375-2554
Registrar- Administration Building ..... 375-2211
Residence Life and Housing - see map ..... 375-2308
Resource Development - see map ..... 375-2230
Student Activities - Colket Center ..... 378-5125
Student Center - Colket Center ..... 375-5125
Student Organizations \& RC Engage - Colket Center ..... 375-2327
Telephone/reception (day) - Trexler Hall ..... 375-2500
Telephone/reception (evening) - 9 North College ..... 375-2500
Theatre - Olin Hall ..... 375-2354
Transcripts, Academic Records - Administration Building ..... 375-2211
Tutoring Center - Fintel Library ..... 375-2247
Veterans Affairs - Administration Building ..... 375-5232
Virginia Lutheran Synod - Bittle Memorial Hall ..... 389-1000
Visitor Center (day) - 9 North College ..... 375-2500
Visitor Center (evening) - 9 North College ..... 375-2500
Writing Center - Fintel Library ..... 375-2580

## DESTINATION ROANOKE COLLEGE

## By Car

If you are driving to Roanoke from outside the region, take Roanoke College Exit 140 off Interstate 81. Turn right on Route 311 (Thompson Memorial Drive). Take a right on Peery Drive and a left on High Street. Roselawn, the Admissions and Financial Aid Office, is located on High Street. Visitor parking is available in the Upper Olin Hall lot (P-10) on High Street and directly in front of Roselawn (P-20).

## By Air

The Roanoke Valley Regional Airport is served primarily by USAir, United Express, and Delta Commuter Airlines. Persons wishing to fly to Roanoke will find flights available from such cities as: Atlanta, Baltimore, Charlotte, Chicago, New York, Washington D.C., and many others. Roanoke College is located six miles from the airport, and transportation to the College is available through limousine service, taxi or by rental car.

## By Bus

The Roanoke Valley is serviced by Greyhound Bus Lines, which is located in downtown Roanoke, a 15minute drive to the College. Call toll-free 1-800-231-2222 for information.

## Regional Highway System

From northern New England, take I91 south to I-84 west at Hartford, CT, to I-81 south near Scranton, PA.
From New York City, take I-95 to the New Jersey Turnpike south to I-78 west at Newark, NJ, to I-81 south near Harrisburg, PA.

From Philadelphia, take I-76 (Pennsylvania Turnpike) west to I-81 south near Harrisburg, PA.
From directly east at Richmond, VA, take I-64 west to I-81 south near Staunton, VA.
From south of Virginia, take I-85 north from Atlanta (or I-95 north from Savannah, GA, and I-26 west) to I-77 north at Columbia, SC, to I-81 north near Wytheville, VA.

From west of Virginia, take I-64 east to I-81 south or I-40 east to I-81 north.

## ROANOKE COLLEGE

 2014-2015 Calendar
## Fall Term

| August | 23 | Saturday | New Students Move In/Check In |
| :---: | :---: | :---: | :---: |
|  | 24 | Sunday | Orientation for New Students |
|  | 25 | Monday | Orientation for New Students; Residence Halls Open For Returning Students |
|  | 26 | Tuesday | Registration/Check-In; Evening classes begin |
|  | 27 | Wednesday | Day Classes Begin |
| September | 26-28 | Fri-Sun | Family Weekend |
| October | 10 | Friday | Fall Break Begins After Last Class |
|  | 20 | Monday | Classes Resume at 8:00 a.m. |
| November | 25 | Tuesday <br> evenin | Thanksgiving Break Begins After Last Class; No classes will be held |
| December | 1 | Monday | Classes Resume 8:00 a.m. |
|  | 5 | Friday | Last Day of Classes |
|  | 6 | Saturday | Reading Day |
|  | 8-12 | Mon.-Fri. | Exams |
|  | 15 | Monday | Grades Due at Noon |
| Spring Term |  |  |  |
| January | 10 | Saturday | Residence Halls Open For Spring Term |
|  | 11 | Sunday | Registration/Check-In |
|  | 12 | Monday | Classes Begin |
| February | 27 | Friday | Spring Break Begins After Last Class |
| March | 9 | Monday | Classes Resume 8:00 a.m. |
| April | 3 | Friday | Good Friday; no classes |
|  | 10-12 | Friday-Sunday | Alumni Weekend |
|  | 20 | Monday | Last Day of Classes |
|  | 21 | Tuesday | Reading Day |
|  | 22 | Wednesday | Exams Begin |
|  | 28 | Tuesday | Exams End |
|  | 29 | Wednesday | Senior Grades due at noon |
| May | 2 | Saturday | Graduation |
|  | 4 | Monday | Final Grades due at noon |
| Intensive Le | ing Ter |  |  |
| May | 11 | Monday | Intensive Learning Term Begins |
|  | 29 | Friday | Intensive Learning Term Ends 255 |

## Summer Terms

| June | 1 | Monday | Summer Session I begins |
| :--- | :---: | :--- | :--- |
|  | 26 | Friday | Last Day of Summer Session I Classes |
| 27 | Saturday | Summer Session I Exams |  |
| July | 29 | Monday | Summer Session II Begins |
|  | 3 | Friday | Independence Day; College closed |
|  | 23 | Thursday | Last Day of Summer Session II Classes |
|  | $24-25$ | Friday-Saturday | Summer Session II Exams |

TENTATIVE - SUBJECT TO CHANGE

