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# A Grinnell Education

At the center of a Grinnell education is intensive mentoring of students by the faculty. This mentoring begins in the First-Year Tutorial, the only required course at Grinnell College. While faculty members from all academic departments teach the tutorial and their topics vary widely, every tutorial emphasizes writing, critical thinking and analysis, oral discussion skills, and information literacy. Each tutor also serves as adviser to the tutorial students until they declare a major field of study. Thus, students receive guidance from an instructor with personal knowledge of their academic interests, aptitudes, and needs. The tutorial is usually limited to 12 students, making it smaller than the average class, though similar in intensity to the rest of the curriculum. In keeping with the mentoring approach, Grinnell classes generally are small, with an average enrollment of 16 and fewer than 9 percent of classes above 30 students. Many academic programs offer a Mentored Advanced Project (MAP), either as independent study or in the context of a seminar. The MAP, closely guided by a faculty director, gives upper-level students the opportunity to culminate a sequence of academic work by completing an advanced project in research or creative arts.



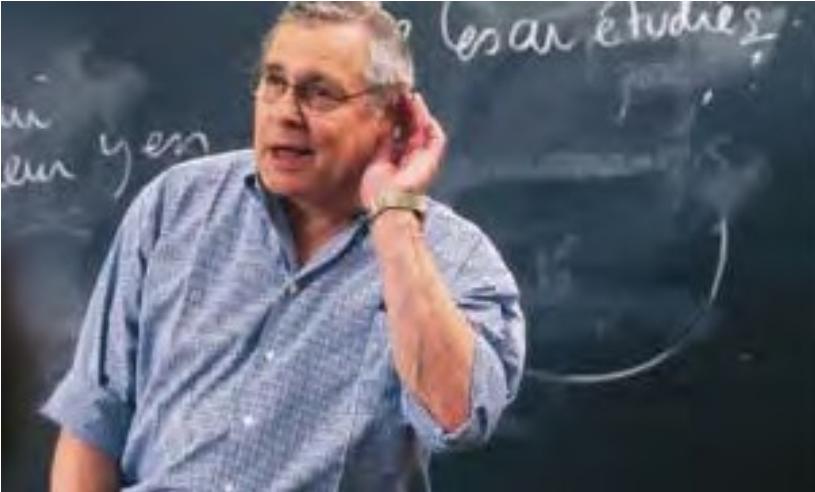
At all levels of the curriculum, Grinnell College students receive an education rooted in active experience. For example, students in science classes engage in discovery-based learning, even at the introductory level. Each area of the fine arts offers opportunities for creative practice alongside the study of history, theory, and formal analysis. Outside the classroom, the Career Development Office has coordinated more than 500 College-funded summer internships for students over the past five years. About a third of students participate in intercollegiate athletics through membership on varsity teams. Student-regulated residence life, another important feature of a Grinnell education, teaches students the pragmatic social skills of self-governance as they live together in community. The College offers a calendar packed with cultural events and activities, including concerts, lectures, theatre, films, and opportunities for volunteer and civic involvement. Grinnell has never had fraternities or sororities; social events are open to all members of the College.

Grinnell's emphasis on active learning extends to participation in the global community. With international students making up more than 10 percent of the student body and domestic students representing every state, Grinnell offers

a geographically and culturally diverse environment for living and learning. A flourishing Center for International Studies coordinates and highlights the many courses and programs at Grinnell College with a global perspective. Even without a language requirement, nearly all students elect to study a foreign language. More than half of Grinnell students (a number matched by very few other colleges) spend a semester in Off-Campus Study. Nearly all of these students decide to live and study outside of the United States.

Above all, Grinnell College entrusts students with an uncommon level of responsibility for their own college experience. Just as self-governance is central to residential life at the College, the responsibility of each student to choose a unique set of courses is central to the way Grinnell organizes its curriculum. Students exercise this responsibility not in isolation, but with the active guidance of their faculty advisers and other faculty mentors.

Intensive teaching, active learning, residence in a community of cultural and global diversity, and self-governance in both social and academic life—these elements come together at Grinnell College to form a distinctive experience of liberal education.



## History of the College

Grinnell's founding was part of the history of the American West. Founded on the prairie, from the beginning the College reflected the pioneering spirit common to the men and women who were part of the movement westward.

The College dates from June 10, 1846, when a group of transplanted New Englanders with strong Congregational and social-reformer backgrounds organized as the Trustees of Iowa College. A few months later, Iowa joined the Union.

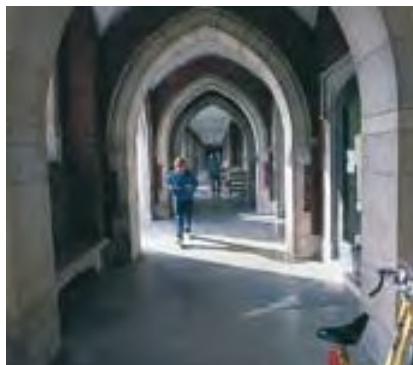
The first 25 years of Grinnell's history saw a change in name and location. Iowa College moved farther west from Davenport, Iowa, to the town of Grinnell and unofficially adopted the name of its new benefactor: an abolitionist minister, Josiah Bushnell Grinnell. The name of the corporation "The Trustees of Iowa College" remained, but in 1909 the name "Grinnell College" was adopted by the trustees for the institution itself.

In its early years, the College experienced setbacks. Although two students received bachelor of arts degrees in 1854 (among the first to be granted by a college west of the Mississippi River), within 10 years the Civil War had claimed

most of Grinnell's students and professors. In the decade following the war, growth resumed: women were officially admitted as candidates for degrees, and the curriculum was enlarged to include then-new areas of academic studies, such as natural sciences with laboratory work.

In 1882, Grinnell College weathered another storm when a cyclone destroyed both College buildings. Rebuilding began immediately, and the determination to expand wasn't limited to architecture: the curriculum was again extended to include departments in political science (the first in the United States) and modern languages. Grinnell became known as the center of the Social Gospel reform movement, while other firsts pointed to the lighter side of college life: the first intercollegiate football and baseball games west of the Mississippi were played in Grinnell, and the home teams won.

As the 20th century began, Grinnell established a Phi Beta Kappa chapter, introduced the major system of study, began Grinnell-in-China (an educational mission that lasted until the Japanese invasion and resumed in 1987), and built a women's residence hall system that became a national model. The social consciousness fostered at Grinnell during these years became evident during



Franklin D. Roosevelt's presidency, when Grinnell graduates Harry Hopkins '12, Chester Davis '11, Paul Appleby '13, Hallie Ferguson Flanagan '11, and Florence Stewart Kerr '12 became influential New Deal administrators. If the future of a college can be found in its past, then concern with social issues, educational innovation, and individual expression will continue to shape Grinnell.

Grinnell's buildings are rich in architectural interest. Thirteen sites in town are listed on the National Registry of Historic Places, including the Louis Sullivan "Jewel Box" bank building and the Walter Burley Griffin "Ricker" house. The city of Grinnell offers members of the campus community a chance to enjoy the quality of life that has earned it a place among the 25 "Best Small Towns in America" in the book of that title.

## Location

Grinnell College has an attractive 120-acre campus of spectacular academic facilities that include the Noyce Science Center, featured in architectural journals; and the Bucksbaum Center for the Arts, designed by Cesar Pelli. The College also owns the 365-acre Conard Environmental Research Area (CERA), located about 14 miles from the campus and used on a regular basis for research and teaching.

The city of Grinnell is a community rooted in agriculture, but also benefits from a long history of international commercial connections and civic pride, leadership, and accomplishment.

Outdoor recreational activities include lakes, prairie preserves, cross country ski trails, and a paved bicycle path connecting Grinnell and Rock Creek State Park. In town, attractions include a downtown triplex cinema, eclectic downtown shopping, coffee shops, bed-and-breakfast inns, weekend antique auctions, restaurants, and diverse city parks.

From Grinnell, it is less than an hour's drive to Des Moines and about an hour to Iowa City, a university community with vibrant cultural attractions and a renowned teaching hospital. The urban amenities of Minneapolis-St. Paul, St. Louis, Kansas City, and Chicago are all accessible within a four- to five-hour drive.

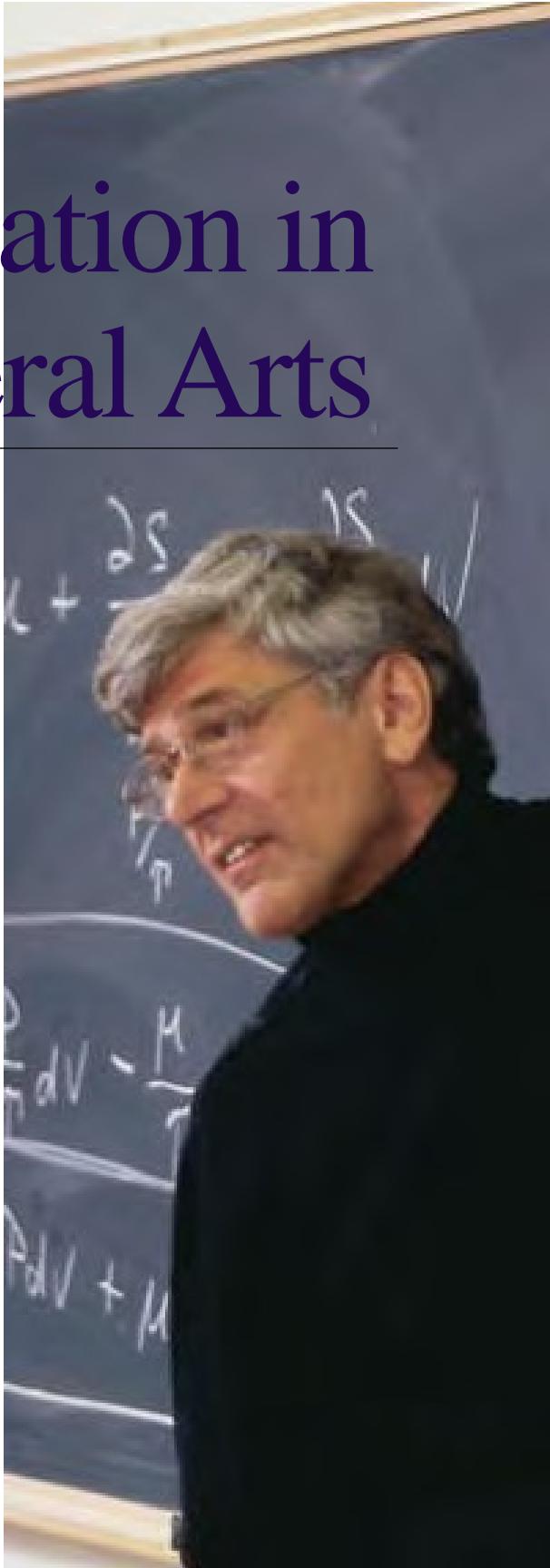
# Education in the Liberal Arts

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liberal arts education has at its center four practices that distinguish it from other kinds of learning: critical thinking, examination of life, encounters with difference, and free exchange of ideas. By offering an education in the liberal arts, Grinnell College asserts the importance of lifelong learning characterized by sustained intellectual curiosity and an open mind for assessing the unfamiliar. At the same time, by using critical thinking to identify assumptions, to test logic, to evaluate evidence, to reason correctly, and to take responsibility for the conclusions and actions that result, a student of the liberal arts can grow personally as well as intellectually. A liberally educated person should be capable of principled judgment, seeking to understand the origins, context, and implications of any area of study, rather than looking exclusively at its application. A liberally educated person should also be skilled at solving problems, drawing together multiple perspectives in the creation of new knowledge.

Because knowledge is lost if it is not shared, both students and teachers of the liberal arts strive to engage in precise and graceful communication. This communication takes place verbally, but

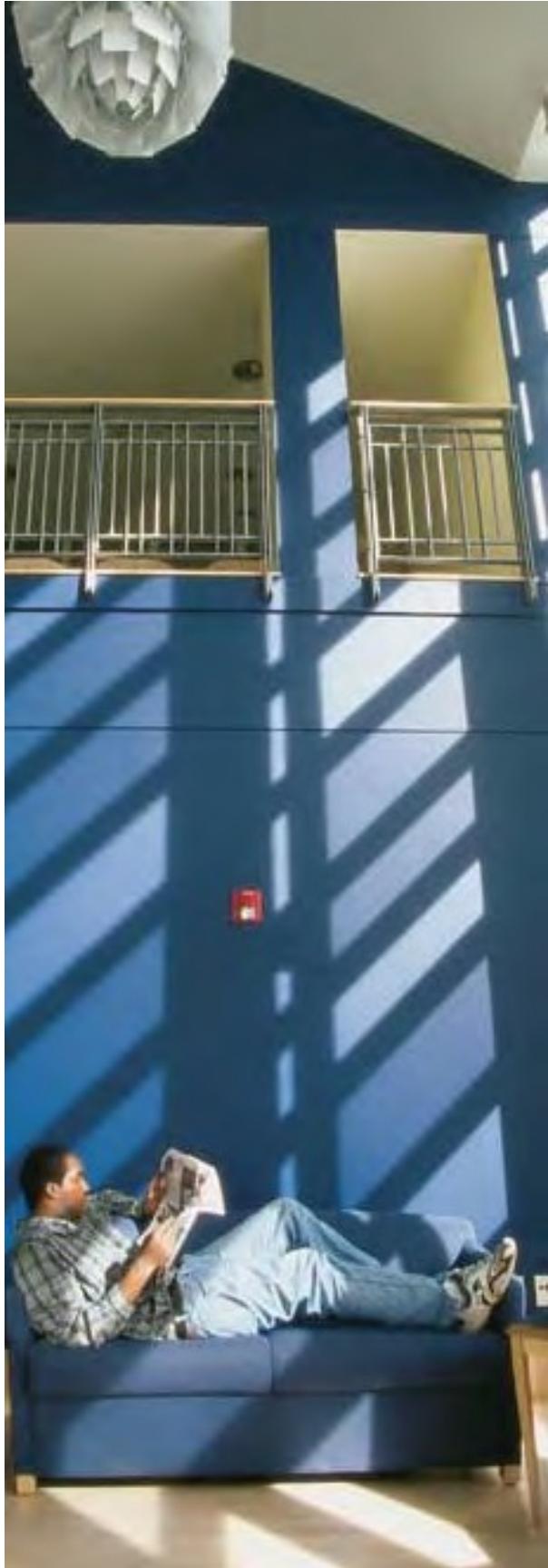


12 also in other ways, including the symbolic and expressive systems of mathematics, music, computer languages, the natural sciences, and the visual and performing arts. By learning and exploring these systems, one may attain an understanding of aspects of human expression, which is a crucial part of liberal education.

In *Cultivating Humanity* (1997), Martha C. Nussbaum speaks of “an education that is ‘liberal’ in that it liberates the mind from the bondage of habit and custom, producing people who can function with sensitivity and alertness as citizens of the whole world.” Nussbaum argues that the central task of liberal education is to activate each student’s mind, so that choices and actions may emerge from independent thought rather than from acceptance of conventional assumptions or dictates. Drawing on Socrates and the Stoic philosophers, Nussbaum sees liberally educated individuals as continually examining themselves and their own traditions. She also urges liberal arts students to gain valuable knowledge by studying alternative perspectives and cultures different from their own.

In the Grinnell College curriculum, the only requirements for graduation are completion of a First-Year Tutorial, 124 credits, and the academic major. This flexibility places significant responsibility on each student to design a coherent and compelling course of study, in conversation with a faculty adviser. Each student declares an academic major at some point during the first four semesters of enrollment. In consultation with an adviser, the student plans a comprehensive program that can incorporate options such as mentored research, off-campus study, teaching certification, an internship, or an interdisciplinary concentration.

The academic major gives a distinctive shape to the four years of undergraduate education. At the same time, it is important for students to balance exploration and focus in their



nonmajor choices. Students need to design a program of study outside the major that reflects thoughtful planning and is consistent with their goals. Working closely with the academic adviser, the student develops a provisional four-year plan that reflects the diversity of academic disciplines while incorporating study at the advanced level in one or more fields. The provisional plan usually requires revision, but with each change the student and adviser consider how the plan reflects the student's evolving sense of what it means to be liberally educated.

Student and adviser will need to discuss areas that the student seems inclined to avoid. Such resistance often points to an area of knowledge or a form of intellectual discipline that will enrich and balance the student's academic program. Skills, methods of inquiry, and knowledge often transfer across disciplines. The creative application of these in new contexts may lead to new insights or solutions. Moreover, the ability to analyze material critically from multiple perspectives may illustrate the limitations of any single theory, however powerful, in explaining a complex range of phenomena. Finally, breadth of study prepares the student to approach new questions not yet formulated, in fields and professions not yet imagined.

What should the liberally educated person know? While each discipline in a liberal arts curriculum has its own rationale and purpose, the heterogeneity of good critical thinking and the free exchange of ideas militate against any single answer to this question. However, as each student works to create a personal definition in the form of the academic plan, the principles outlined below, articulated by the Grinnell College faculty, may serve as a useful guide.

## Elements of a Liberal Education

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The original seven liberal arts, in the classical world, consisted of the *trivium* of deductive reasoning comprised of grammar, logic, and rhetoric, and the *quadrivium* of quantitative reasoning, which encompassed geometry, astronomy, arithmetic, and music. In *Rethinking Liberal Education* (1996), Bruce Kimball describes how the medieval European universities added to the seven liberal arts "the three philosophies": natural philosophy (empirical science), moral philosophy (human thought and behavior), and metaphysics (ontology, or the study of being). These categories of the liberal arts, inherited from the medieval European university, find their modern forms in the science, social studies, and humanities divisions into which Grinnell College, like many colleges and universities today, distributes its academic departments. Interdisciplinary programs draw upon multiple departments to examine newer areas of study such as environmental studies, global development, gender and women's studies, technology, and American studies.

Grinnell faculty members have articulated six areas of study in the current curriculum that are important elements of a liberal education. Students should review this list for guidance as they consider their curricular plans.

- 1) Nothing enhances the expression of knowledge better than engaging, clear, and accurate language. Reading closely, thinking clearly, and writing effectively form a web of connected skills, whether practiced in the First-Year Tutorial, in the Writing Lab, in designated writing courses, or in courses ranging from the introductory to the advanced level in almost every discipline. Students planning their academic programs should strive for the ability to convey their ideas with power and grace, to analyze and formulate arguments, and

to adapt each piece of writing to its context and audience.

- 2) Study of a language other than one's own opens the mind to new ways of thinking. Language placement tests are offered during New Student Orientation, and students are asked to determine their appropriate level at that time. Many Grinnell College faculty members urge their advisees to study a nonnative language and its literature, not only for the exposure to a rich alternative world of cultural meanings, but also to gain a valuable perspective (unavailable to the monolingual person) on the workings of language itself. For careful planning, students should note that many off-campus study opportunities, the Alternative Language Study Option, certain academic majors, and many types of postgraduate study require specific levels of demonstrated ability in foreign languages.



- 3) An education in the natural sciences—biology, chemistry, physics, and psychology—introduces techniques of observation and experimentation, the relation of data to hypotheses, and the practice of scientific reasoning. This work trains the mind to relate concrete empirical information to abstract models, stimulating multidimensional and creative habits of thought. Sustained experience in the laboratory and a grasp of basic scientific principles lead to a better understanding of commonly observed phenomena. Nonspecialists who are scientifically literate bring valuable understanding to public discourse and to an increasing number of professional settings.



- 4) Quantitative reasoning, with emphasis on mathematical models and methods above the secondary-school level, aids in the expression of hypotheses, processes, and theoretical relations. A course in statistics can be helpful for all students, and particularly for those

who might work in the social and behavioral sciences. Studies in computer science offer valuable exposure to principles of logic and problem-solving paradigms.

- 5) The study of human behavior and society leads students to investigate their own identities and to gain insight into social categories and relations. Faculty advisers often urge students to take a sustained look at the history of a specific society, and also to examine a contemporary society (or a segment of it) that is unfamiliar. In light of these encounters, students learn to make and evaluate their own political and ethical choices. Whether a student explores anthropology, economics, education, history, philosophy, political science, religious studies, sociology, or interdisciplinary studies, this question will lie near the heart of the inquiry: in what ways have people lived together, and how should they live together?
- 6) Students enlarge their understanding of the liberal arts through the study of creative expression. In the analysis of creative works, whether through historical survey of forms, aesthetic theory, or interpretive practice, the arts occupy the foreground, though knowledge of history and society may inform the analysis. In this way, courses in literature, music, theatre, dance, and the visual arts complement studies in anthropology, history, philosophy, religious studies, and other fields. Students also benefit from learning, through direct instruction in artistic or literary technique, the intense discipline of art and its interplay between conscious intent and unconscious design.

Students of the liberal arts should use this framework as a starting point for intellectual discovery and personal development as they plan their four years of study in consultation with their advisers.

## Ways of Learning

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Students at Grinnell College learn in varied ways, both inside and outside the classroom. They learn by doing, whether in athletic and artistic pursuits, through public presentation and performance, by conducting experiments, or by writing for an audience.

Grinnell College gives faculty members broad freedom to design courses and to develop appropriate methods of instruction. Faculty members regularly experiment with new teaching methods, assignments, and classroom activities. As a result, students encounter a range of academic experiences suited to the subject matter, to different learning styles, and to their capabilities and interests. Small classes, including introductory courses, allow for spirited exchanges between and among faculty and students. Courses do not simply rely on a textbook, but also make use of readings selected and arranged by the instructor, or materials and activities that draw upon the college libraries, laboratories, music studios, art galleries, computing resources, and field sites. In seminars, studio art courses, and departmental colloquia, students present their own work for critical discussion and analysis.

Independent study takes a variety of forms: guided readings, independent projects, mentored summer research, and course-linked projects that add credits to an existing course. High standards of quality are expected in all the forms of instruction for which credit is awarded, and all courses are taught by the Grinnell College faculty.

## 16 The First Year

Every first-year student at Grinnell enrolls in the First-Year Tutorial, a small group of students working with a faculty member to study a subject of interest to both students and tutor. The tutor also is the academic adviser for each student in the group, so that teaching and learning are closely linked with the planning of programs of study. In teaching, the tutor discovers the aptitudes and interests of the students, who in turn receive academic advice, not from an infrequently consulted stranger, but from a teacher who sees them several times each week. In planning a program of study, the student and the tutor balance the cultivation of existing interests with the discovery of new ones. An entering student should regard the first year as a time for gaining breadth in the arts and sciences, confidence in exploring a variety of disciplines, and a more mature understanding of the place of each of these in liberal education as a whole. The following guidelines are helpful in realizing these objectives during the first year.

1. The student should develop his or her command of written English, not only in the tutorial, but also in at least one other suitable course as well.
2. The student should develop his or her knowledge of mathematics, a foreign language, or both.
3. The student should take courses in each of the three main divisions of the curriculum—humanities, science, and social studies—and should take no more than two full courses in any one division in any semester.

## The Later Years: Earning a Bachelor of Arts

The following years of a student's undergraduate career continue to emphasize breadth of learning in the arts and sciences. At the same time, the student gives increasing attention to developing intellectual discipline in the systematic exploration of a major field of study and the design of a comprehensive academic plan. Grinnell offers three types of major programs:

1. A major in one of the traditional disciplines such as economics, physics, or Spanish. The majority of students choose a departmental major program.
2. An interdepartmental major, in which specified amounts of work are taken in more than one academic department. An example of such a major at Grinnell is general science.
3. An independent major, in which the student pursues a program of study designed in consultation with two faculty advisers. Recent examples are comparative literature, urban studies, and architectural history.

When a student selects a major program, a member of the faculty engaged in that study becomes his or her academic adviser. Sometimes this adviser is the same person who was the student's tutor. Even if the student changes advisers, the principle that advising should be linked to teaching and learning continues to be followed. Both student and adviser share an interest in the objects of their study. As the student begins increasingly to consider a career or further study after graduation, he or she profits from the advice of a faculty member aware of opportunities in the student's field of interest. Often, mentored advanced projects are important and appropriate capstone experiences. Preparing for such projects and working to disseminate their results help students gain perspective on the journey they have taken in their undergraduate years and the paths they will follow after graduation.

## Off-Campus Study

Each year, large numbers of Grinnell students, representing over 50 percent of every graduating class, are accepted into a wide range of off-campus study programs both abroad and elsewhere in the United States. Students study abroad throughout the world in Asia, Australia, Latin America, Europe, the Middle East, and Africa. In the United States, programs are available specializing in fine arts, science, social studies, humanities, and education. In addition, the College sponsors a one-semester study opportunity in England, the Grinnell-in-London fall program. In the United States, the Grinnell-in-Washington, D.C., program is offered in the fall semester. Participation is open to all qualified students, regardless of major, and possibilities for study exist in virtually all subject areas.

Off-Campus Study is an opportunity for students to broaden their liberal arts education and enhance their majors, concentrations, or other areas of academic interest. Although Grinnell recognizes that just being and studying in a new and challenging environment is a valuable learning experience, the College believes the opportunity will be even more enriching if closely integrated with coursework on campus. During the application process to study off campus, students will notice that great emphasis is placed on selecting an appropriate program compatible with their academic goals. The student will be working together with academic advisers and the Off-Campus Study Office to choose a program that supplements and enhances a Grinnell education. More detailed information on off-campus study appears in Courses of Study.



## 18 Liberal Education and Careers

Grinnell College exists for the objectives set forth at its founding: "to promote the general interests of education," to qualify young people for the different professions, and "for the honorable discharge of the various duties of life." The presence of Grinnell alumni in a variety of careers and their leadership in their communities prove that Grinnell continues to realize these objectives in its graduates. In addition, this evidence demonstrates that education in the fundamental disciplines of the arts and sciences also is education for professional and social accomplishment.

Students who plan their education in accordance with the principles of liberal education lay a sound foundation for careers of many kinds. Every profession needs women and men who can think logically and imaginatively, who can speak and write their own language with assurance, and who are not strangers to the languages of other peoples. Each profession needs women and men to whom new ways of thinking and new objects of knowledge pose not threats, but opportunities for intellectual and professional growth.

Students who find themselves changing their minds about careers or facing a choice among possible careers also will find that the nature of their liberal arts education has made such change and choice possible. Broad-based education is recognized by the corporate world as quality preparation for management decision-making. And education for "the long run" means that persons who have been so educated have opportunities for change and choice long after their undergraduate education has been completed.

In order to broaden choices and opportunities for careers, a student entering Grinnell needs to keep in mind the importance of early mastery of basic

disciplines. To postpone the study of a foreign language or of mathematics until some time in the indefinite future is to deprive oneself of knowledge and intellectual discipline whose relevance to a particular career may not become apparent until later. The student planning for a career does best by following those principles for planning a liberal education outlined near the beginning of this chapter. Students considering specific careers need to know the qualifications that may be required for those careers. At Grinnell they obtain such information and advice from faculty members designated as preprofessional advisers, from their own faculty advisers, and from the Career Development Office. Professional advice to students also is available through media, internships, alumni networking, and visits to the campus by professionals. Brief explanations of backgrounds conducive to particular careers follow.

### Architecture

A broad education in the liberal arts and sciences is excellent preparation for a career in architecture. Grinnell has a cooperative preprofessional program in architecture with Washington University in St. Louis. During the third year, interested students make known their intent to



transfer and prepare a portfolio based on studio courses. After they complete their third year at Grinnell—having constructed a course of study that meets the general academic and specific major requirements for graduating from Grinnell—students spend their senior year at Washington University, taking specified courses to develop pertinent skills. Graduation from Grinnell occurs after the successful completion of that year, and a three-year graduate course of study completes the program.

### Business

Business looks primarily for confident and self-reliant women and men, not for people who have studied particular aspects of business. Almost any liberal course of study can lead to a career in business. Students who plan such careers are encouraged to major in whatever field is of most interest and to add to that major significant study and internship experience in other areas. In this way they develop basic abilities that can then be transferred to learning on the job. It is important to develop a high level of competence in the use of English, quantitative methods, and computing, whether students plan to go directly into business or to enter a graduate school of business administration. Knowledge of a

modern foreign language is an invaluable asset to anyone whose work may involve international trade.

### Communication/Journalism

A solid grounding in the liberal arts and sciences is the best preparation for a career in communication or journalism. Grinnell gives the prospective journalist an opportunity to gain skills in the arts of communication by studying well the uses to which the finest writers in English have put their language. In addition, the student finds that to the degree he or she knows the special languages of various disciplines—economics, biology, and music, for example—opportunities for effective writing and a rewarding career improve. Above all, liberal education at Grinnell imparts the values of humanity, literacy, critical sympathy, and precision of thought—values vital to communication media in a free society.

For practical experience, Grinnell's extracurricular resources include: the college newspaper, *The Scarlet and Black*; the college radio station, KDIC-FM; the Audio Visual Center; photographic facilities; and extensive internship programs.



## Community Service

Commitment to social responsibility has been a large part of Grinnell's history. In addition to personal satisfaction, contributions to volunteer organizations provide students with opportunities to see public-policy change in action. The Office of Social Commitment, along with the College's Community Service Center, encourages students to link community service to their academic interests. These volunteer activities combined with liberal arts skills can open job opportunities in the private, nonprofit sector, including citizen advocacy groups, grassroots organizations, VISTA, and the Peace Corps.

## Engineering

At Grinnell, students who plan careers in engineering have two options. A student may spend three years at Grinnell and two years in one of the engineering programs with which Grinnell cooperates: Columbia University, California Institute of Technology, Rensselaer Polytechnic Institute, and Washington University. (Special arrangements can sometimes be made with other institutions.) Under normal progress the student receives a B.A. degree from Grinnell at the end of the fourth year and a B.E. degree from the cooperating institution at the end of the fifth year. Alternatively, a student may follow a complete B.A. course at Grinnell and, after graduation, undertake further study at an engineering school.

In either case, the prospective engineer studies the natural sciences as an integral part of a liberal education. Students are required to establish at Grinnell a strong foundation in mathematics, physics, and chemistry. A broad base of knowledge in the humanities and social sciences is also strongly recommended. The required science courses are those taken by any student with a serious interest in science, so a definite commitment to engineering is not necessary until enrollment at the engineering school.

## Government Service

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The diverse and intricate operations of government require competent administrators: educated women and men with interests and abilities in many disciplines, not just the social sciences. Such persons will find opportunities for careers at all levels of government—local, state, national, and international. Seniors interested in the United States Foreign Service should take the Foreign Service Officer Entrance Examination.

Several universities have graduate schools of public administration that provide advanced training for public careers. A law degree also is an asset for many such careers.

## Health Professions

Most schools of medicine, dentistry, and nursing prefer four years of undergraduate preparation leading to a bachelor's degree. They do not specify that the student shall have majored in one of the natural sciences, and they welcome students with strong interests in the humanities and social studies. Students must, however, demonstrate competence in English, mathematics, biology, chemistry, and physics; and their undergraduate programs must include courses specifically listed by the professional schools as requirements for admission.

## Law

Any major field of study offered at Grinnell provides sound preparation for the study of law. In accordance with the statement of policy adopted by the Association of American Law Schools, prelegal education at Grinnell College is "education for comprehension and expression in words, for critical understanding of human institutions and values, and for creative power in thinking. The development of these fundamental capacities is not the monopoly of any one subject-matter area, department, or division."

Students preparing to enter law school should take a four-year course of study. The four-year course of study, which allows a wide range of choice and intellectual experience in the liberal arts curriculum, is the conventional preparation for law school and is recommended. Currently Grinnell has a cooperative program with Columbia University.

### Teaching and Research: Colleges and Universities

Students interested in research and college teaching should investigate the recommendations of graduate schools and the requirements for advanced study in the particular professional fields. A good start in the special field of learning may be a necessary or desirable part of the student's preparation for graduate school, but proficiency in certain basic disciplines, such as written English, foreign language, and mathematics, is equally important. And because most graduate programs are highly specialized, work in complementary disciplines should be stressed in the undergraduate program.

### Teaching: Elementary and Secondary

The College offers programs leading to state licensure in elementary- and secondary-school teaching. Courses serving as an introduction to teaching, with emphasis on the philosophical and psychological foundations of education, are available to students who wish to train elsewhere after graduation from Grinnell. Those interested in later study for such graduate degrees as the master of arts in teaching find this introductory work useful.

Grinnell considers the education of teachers to be a liberal endeavor and encourages students to develop a broad background in the arts and sciences as well as a deep knowledge of the subjects they will teach. The courses in education are a special component of the student's

liberal education. For students who wish to complete their liberal arts curriculum during the standard eight semesters, then continue with education and practice-teaching, Grinnell has implemented a ninth-semester program. The College provides each student in the program with an interest-free loan for ninth-semester tuition and fees. If a student can show evidence of having taught a minimum of one school year full time within three years in an accredited elementary or secondary school, the loan will be forgiven.

### Theology

The American Association of Theological Schools suggests that education in the liberal arts is the best preparation for modern ministry. Within this framework a concentration in any of the social studies or humanities departments is desirable, but any major is acceptable. Some knowledge of Greek is an asset but is not necessarily required by schools of theology.



## Cooperative Programs Leading to Professional Degrees

Four years of undergraduate study are usually the recommended preparation for engineering, law, medicine, dentistry, and other professional programs. However, Grinnell maintains a cooperative relationship with several professional schools that will admit selected students after three years of undergraduate work. These students are awarded the Grinnell B.A. degree after one year at the cooperating institution if they have fulfilled the Grinnell graduation requirements. They also receive a professional degree from the cooperating institution upon completion of the program there. The prerequisites for all applicants are: senior standing (at least 92 credits), a grade point average of at least 2.75 (the California Institute of Technology requires a GPA of at least 3.0), and completion of appropriate preprofessional studies with an approved minimum of courses in a major field, plus any courses especially required for the profession.

### Architecture

Arrangements with Washington University in St. Louis. CHASSON, Preprofessional Adviser.

### Engineering

Arrangements with California Institute of Technology, Columbia University, Rensselaer Polytechnic Institute, and Washington University (St. Louis). TJOSEM, Preprofessional Adviser.

### Law

Arrangements with Columbia University Law School. STAFF, Preprofessional Adviser.



## 24 Special Programs

### Center for International Studies

Come to Grinnell, explore the world. Grinnell College is pervasively global, committed to bringing the world to Grinnell and taking Grinnell students, faculty, and alumni to the world. Established in 2000, the Center for International Studies supports this commitment, planning, coordinating, and administering ongoing international programs and promoting new opportunities for developing international understanding, knowledge, and experiences for students, faculty, staff, and alumni. The center administers the John R. Heath Professorship, which brings to campus for a semester a distinguished international scholar; coordinates the International Fellows Program, which sponsors short-term visits by scholars, writers, and other international figures; organizes international faculty development seminars; supports symposia and other events; promotes new curricular initiatives; reviews and develops off-campus study opportunities and works with the various student groups to integrate off-campus study and international experiences with on-campus life and the academic program. In these and other activities, the center promotes Grinnell's traditional commitment to thinking and acting internationally across languages, cultures, and geographical boundaries.

### Center for Prairie Studies

The Center for Prairie Studies at Grinnell College was established in 1999 to increase awareness, appreciation, and understanding of our region. Faculty members associated with the center represent the humanities, sciences, and social studies divisions. The center is committed to helping students, faculty, and members of the community uncover the natural and cultural life of the prairie by offering courses and course components,

and sponsoring public lectures, symposia, art exhibits, musical and theatrical performances, academic-year and summer student internships, faculty development, field trips, and a variety of publications. The center maintains a close relationship with the College's Conard Environmental Research Area (CERA), a 365-acre field station 11 miles west of Grinnell. The Center for Prairie Studies also collaborates with the Grinnell school system and numerous community and regional organizations in furthering its mission.

### Center for the Humanities

The Center for the Humanities at Grinnell College was founded in 2001. The purpose of the center is to draw attention to and support superlative research and teaching in the humanities at Grinnell, to provide Grinnell faculty with an opportunity to be in dialogue with humanities scholars from around the world, to be an ongoing forum for sustained communication between the humanities and academic endeavors in social sciences and sciences at Grinnell, and to provide selected students with the opportunity for intensive intellectual collaborations with faculty. The activities of the center each year focus on a broad theme selected by the center's advisory board in connection with the research interests of the Visiting Professors in the Humanities. Each year, the visiting professors—in residence on campus for the fall semester—offer an upper-level interdisciplinary seminar open to third-year students and seniors and direct a faculty seminar. In addition, he or she will offer a public lecture at the College and will return to Grinnell in the spring semester as keynote speaker at a major humanities symposium devoted to a topic related to the fall's faculty seminar. The visiting professor also works closely with the Ninth Semester Post-Baccalaureate Fellow in the Humanities, selected annually from the preceding year's graduating class to participate in the faculty seminar and undertake a semester-long independent research project.

In fall 2001, Visiting Professor in the Humanities Peter Dews taught a seminar and directed a faculty seminar that explored the question of “Modernity and the Problem of Evil.” In fall 2002, Visiting Professor Vyacheslav Ivanov taught a seminar on “Literature and Cinema,” and directed a faculty seminar on “Semiotic Approaches to the Total Work of Art.” In fall 2003, Visiting Professor in the Humanities Jeffrey T. Nealon taught a seminar on “Language and Cultural Studies,” and directed a faculty seminar titled “Post-Postmodern: Globalization, Symbolic Capital, and Resistance.” In fall 2004, the center sponsored visits by four Visiting Professors in the Humanities, each of whom taught a three-week module of a seminar on “Feminist Scholarship Today”: Kristin Ross, Susan Bordo, Amy Hollywood, and Rosi Braidotti. In 2005–06, the center organized a number of events around the theme of the New World Disorder, including symposia on “Intolerance,” “The Resurgence of Anti-Semitism in the West,” and “Religion and Violence,” and three-week visits and short courses by Visiting Professors Sander Gilman, Veena Das, and Coco Fusco.

In 2006–07, the center’s activities focused on the theme of “Pleasure” with three-week visits by Visiting Professors Carolyn Dean (History), Shuen-fu-Lin (Chinese literature), Jennifer Doyle (English), and Claire Colebrook (English literature).

In 2007–08, the center’s activities will focus on the theme “Thinking Interdisciplinarity,” with three-week visits in the fall by Visiting Professors Robert J. Richards (history of science and medicine), Lawrence Grossberg (cultural and media studies), Lennard Davis (disability studies), and M. Jacqui Alexander (women’s and gender studies). More information about the center’s activities is available at <[www.grinnell.edu/academic/CentHumanities](http://www.grinnell.edu/academic/CentHumanities)>.



## The Louise R. Noun Program in Women's Studies

The Louise R. Noun Program in Women's Studies was endowed by the College in 1986. Operating through an endowed chair and interdisciplinary committee of students and faculty, the Noun program has sponsored national symposia, speakers, and events aimed to further understanding of local and global concerns about women, feminisms, and gender relations. The Noun program also initiated faculty colloquia, curricular development grants, a collaborative "Feminist Seminar" of scholarly readings, and plans for the gender and women's studies concentration.

To introduce the "new" scholarship on gender and women in the 1980s, Noun sponsored such conferences as "Reading and Writing the Female Body," and "Rethinking the Family from Multicultural Perspectives," and cosponsored student conferences such as "Secrets of the Orient: Reconstructing Asia/Asian American Sexuality" and the "Women in Development Symposium."

Over the past decades, prominent international scholars, artists, and writers have visited Grinnell under the sponsorship of the Noun program. They include: Lani Guinier, Gwendolyn Brooks, Elizabeth Fox-Genovese, Gayatri Spivak, Angela Carter, Catharine Stimpson, Jessica Mitford, Naomi Schor, Florence Howe, Meridel LeSueur, Anne Fausto-Sterling, Harry Brod, Paula Gunn Allen, Ruth Seidel, Darlene Clark Hine, Rev. Walter Ong, Dale Spender, David Halperin, Patricia Hill Collins, Margaret Randall, Ntosake Shange, Tillie Olsen, Trinh T. Minh-ha, and Peggy Whitson.

Since 1992 Noun summer internships have enabled students to work at sites including the Women's Research Institute, Meijin; GLV (Gay Men and Lesbians Opposing Violence) in Washington, D.C.; the Women's Oral History Project in Monteverde, Costa Rica; The Feminist Majority

in Arlington, Va.; and the literacy project at the Midwest Women's Center in Chicago. Each year, Noun's Jeanne Burkle Award, named for a prominent local feminist, honors the senior woman who has contributed significantly to the cause of women.

## The Rosenfield Program in Public Affairs, International Relations, and Human Rights

The Rosenfield Program was established in 1979 to honor the Rosenfield family of Des Moines, particularly longtime trustee Joseph Rosenfield '25, who was a leader in promoting responsible and progressive action in public affairs, international relations, and human rights. The program's two purposes are to promote campus discussion of important policy issues and to encourage civic responsibility among students. The program sponsors or co-sponsors four three-day symposia each year. Recent topics have included, "Culture, Politics, and Change in Contemporary Cuba"; "The Palestinian-Israeli Conflict in Perspective"; "New Faces in Iowa: The Challenges and Prospects Created by Recent Immigration"; "Iraqi Culture and the Diaspora"; "Women, Politics, and Leadership for the 21st Century"; and "Water: Conflicts and Trade-offs." In addition, the program sponsors the annual Rosenfield foreign policy lectures and brings to campus a series of speakers and weeklong visitors from the United States and abroad, who address important policy issues from diverse government, academic, and private sector perspectives. The program provides stipends for about 10 students each year to undertake summer internships related to the three areas of focus.

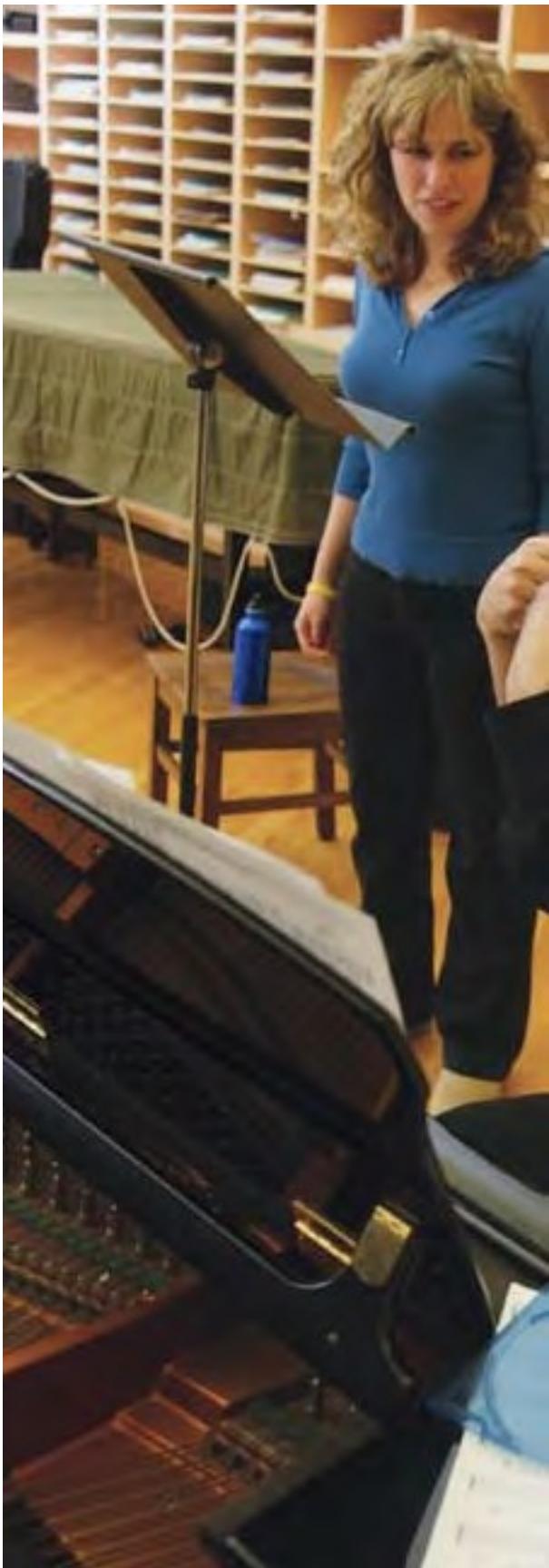
## Donald L. Wilson Program in Enterprise and Leadership

Established through a generous gift by Donald L. Wilson (1904-1986), a life trustee of Grinnell College, the Donald L. Wilson Program in Enterprise and

28 Leadership supports the theory and practice of socially responsible innovation, enterprise, and leadership in the business, government, and nonprofit sectors, with the goal of empowering students to explore diverse career options. The program supports interdisciplinary courses that critically examine theories and case studies of innovation and leadership. During the academic year, the Wilson program invites College alumni to return to campus to offer three-week short courses and to visit classes, both to share their expertise and to reflect on creative careers in business, government, and the nonprofit sectors. Recent short courses include Kirsten Tretbar '89, "Making Documentary Films: From Concept to Marketing," Jim Diers '75, "Local Activists and Local Government," Clint Korver '89, "Ethics in Business and in Life," and David Rosenbaum '78, "Intellectual Property and Its Role in Global Socioeconomic Shifts." Each summer the Wilson program funds student internships for eight weeks in a variety of organizations throughout the world. During spring break, the Wilson program also funds short-term externships, enabling current students to "life shadow" alumni hosts for up to a week. The Donald L. Wilson Professor of Enterprise and Leadership administers the program with the assistance of a faculty committee.

### Peace Studies Program

The Peace Studies Program was established in 2004, when the Iowa Peace Institute, which had been based in the city of Grinnell since 1987, transferred its assets to Grinnell College to endow a new academic program that would continue and expand the institute's legacy of international peacemaking and interpersonal dispute resolution. The Peace Studies Program builds upon Grinnell College's long history of social commitment and civic engagement, as it seeks to promote understanding of the causes of conflict and exploration of creative strategies for the peaceful resolution of





conflict in our community, our nation, and our world. Through a variety of campus presentations, curricular innovations, and experiential opportunities for students, the Peace Studies Program provides academic perspectives on conflict and peacemaking, as well as training in practical applications of conflict resolution, such as mediation training, meeting-facilitation workshops, and internships. Events sponsored by the Peace Studies Program have included a symposium on “Divided Land, Divided Hearts: The Struggle for Peace in the Middle East,” a panel of state legislators discussing ways of “Building Consensus in the Iowa State Legislature,” and talks by prominent mediators and experts on negotiation, such as Bernie Mayer and Jayne Seminare Docherty. Each summer, three peace studies-related internships are sponsored by the Peace Studies Program. Recent awards supported internships at the Center for Victims of Torture, Nonviolent Peaceforce, Minneapolis Safe Zone Collaborative, and Prevent Genocide International.

## Academic Skills Services

Several services are available to all students wishing to improve their writing, reading, study skills, and competency in science and mathematics. In addition, these offices support the academic program of the College by helping students who have difficulty with general academic skills and/or particular course material. Full-time professionals in these offices offer one-on-one assistance free of charge to students.

### Mathematics Laboratory

The Mathematics Laboratory provides help with the quantitative problem-solving skills needed to succeed in calculus and statistics courses.

## Reading Laboratory

The Reading Laboratory develops more efficient reading and study strategies, with emphasis on improving vocabulary, reading comprehension, and rate.

## Science Learning Center

The Science Learning Center provides practice and training in the analytic and quantitative skills required in the sciences as well as content-based study sessions for introductory courses in biology, chemistry, and physics.

## Writing Laboratory

The Writing Laboratory helps students improve their writing skills through supportive consultations with writing specialists.

## Academic Advising Office

Individual tutoring services are available in all other subjects through the Academic Advising Office, which also provides assistance with time management and study skills.

## Audio Visual Center

The Audio Visual Center includes language and learning laboratories, a media-based classroom, and diverse facilities for media preparation and presentation, including instructional multimedia.

The language and learning laboratories support either directed study with a class and an instructor, or individual work. A range of equipment for using tape, disk, or network sources is integrated in the laboratories. This equipment can be used flexibly for listening or viewing, for skills exercises or composition, and for interactively mixing audio, video, and electronic text.

The audio visual classroom is equipped to accommodate various forms of presentation—film, video, audio, and computer display. Its use is scheduled hour-to-hour through the AV Center. Both faculty and students can reserve the use of this facility.

In addition to equipment, the AV Center maintains materials used in many different courses and departments. Audio course materials can be duplicated for student use outside the AV Center. Video material from camera recording or satellite transmission from other countries can be transferred and edited into a usable form for classroom presentation and instruction.

## Faulconer Gallery

The Faulconer Gallery in the Bucks Center for the Arts and the Print and Drawing Study Room in Burling Library are state-of-the-art facilities dedicated to the exhibition of fine art at Grinnell. The Faulconer Gallery, which opened in 1999, encompasses 7,420 square feet of space for the presentation of exhibitions curated by the professional staff, as well as exhibitions traveling nationally and internationally.



Recent shows have focused on contemporary painting, sculpture, installation art, and video. Most exhibitions are accompanied by a published catalogue.

The Faulconer Gallery also presents the annual Student Art Salon and new work by the College's art faculty. The staff of the gallery works with students in a variety of ways to program the gallery, and brings prominent artists, curators, and critics to campus to speak and conduct workshops and classes. An internship each semester gives students hands-on experience in various aspects of museum operations, and the director of the gallery teaches a Museum Studies course through the Department of Art.

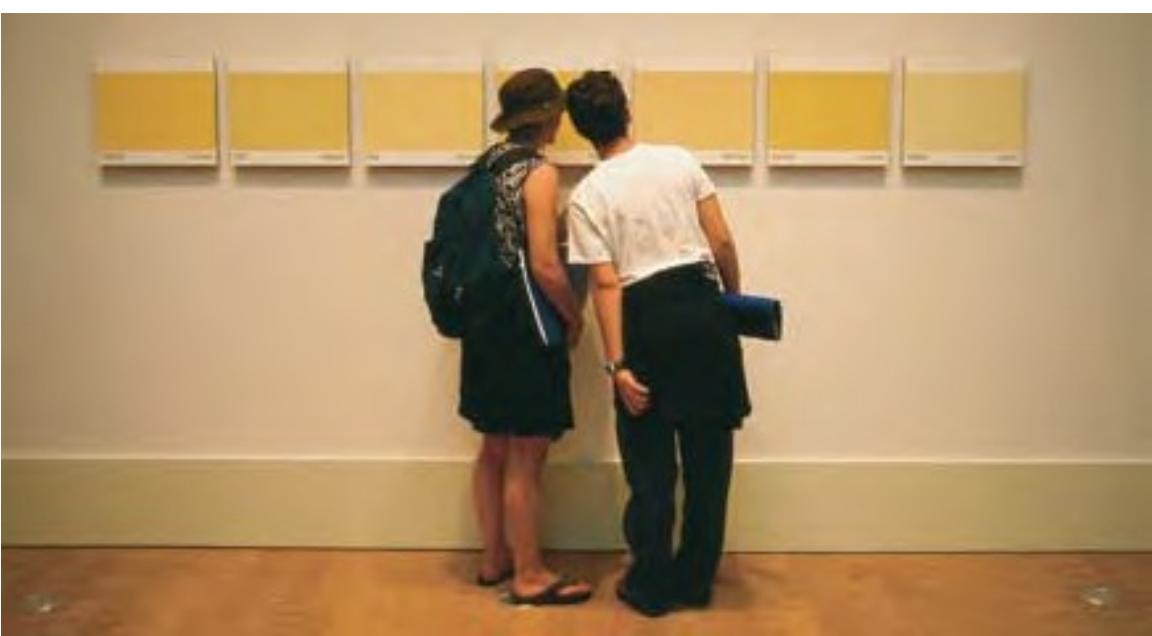
The strength of the College's permanent art collection is in prints and drawings, although the collection also includes paintings, sculpture, African art, and photography. In 2001, the College acquired a collection of over 70 German Expressionist prints. The overall collection is a unique teaching resource and research tool for students and faculty alike.

The Print and Drawing Study Room, under the auspices of the Faulconer

Gallery, is designed to house, preserve, and exhibit works on paper. The space is primarily for study and research, though it also functions as a place to exhibit portions of the collection on a rotating basis. Through direct examination of original works of art in a secure, well-appointed facility, students, faculty, and staff have access to information and material not available through reproductions. The space is used frequently by classes, scholars both on and off campus, and students doing research.

### Information Technology Services (ITS)

Computing is an integral part of the academic environment at Grinnell College—a resource analogous to library resources. The College provides an exemplary computing environment in which all members of the college community can use computing to enhance educational activities. The College's goals are for every student to attain familiarity with computing concepts, to use computers as tools to accomplish educational goals, and to develop an understanding of the impact that computers have on society.



Access for students, faculty, and staff is provided through approximately 1,000 personal computers and workstations located in residence halls, classrooms, offices, laboratories, Burling Library, and at off-campus locations. Distributed printing devices include laser and ink jet printers. All residence hall rooms have high-speed network connections and wireless access.

Linux workstations in the Department of Mathematics and Computer Science provide an outstanding graphics and programming environment. These workstations are available for use by all Grinnell students. A fiber-optic backbone connects all academic buildings and provides a connection to the central systems in Lazier Hall and to the Internet.

All students regularly take advantage of the free and almost unlimited computer access during their years at Grinnell. Also, nearly all faculty members use computing extensively in teaching and research activities. Student organizations such as the Student Government Association, KDIC radio station, and the *Scarlet and Black* student newspaper have found computing helpful in their activities.

Each semester, ITS hires 30 to 35 student user consultants. The user consultants work in the computer laboratories, providing assistance to computer users experiencing problems using the systems. Student assistants often are employed during the summer months as well. The summer positions offer a unique opportunity for students to work on advanced computing projects and develop computing and consulting skills, working in close cooperation with faculty members and ITS staff members. A Student Technology Advisory Committee, representing student computer users, serves as an advisory group to ITS. The committee meets regularly to discuss computing policies and procedures, and advises the staff about matters affecting student computer use.

The College is committed to having an academic computing program that is among the very best in the country. Substantial resources are devoted to building the College's program in quantitative studies, developing new computer applications in the humanities, and constructing a network of computing hardware and software resources that supports the continuing growth of academic computing applications.

## Libraries

The Grinnell College Libraries—The Grinnell College Libraries—Burling Library, the Windsor Science Library, and the Curriculum Library—hold some 732,000 volumes, 31,000 audio and video recordings, 23,800 microforms, and have active subscriptions to 2,600 serial titles in paper and microform and 17,800 electronic journal titles. Library services, which emphasize working closely with students to develop fluency in the use and evaluation of information sources as they conduct research and other intellectual investigations, and include individualized research assistance (library labs), classroom instruction, and drop-in reference assistance.

The libraries provide more than 470 individual student study spaces, access to networked computers (both PC and Mac), a listening/viewing room for music and video recordings, specialized collections in African American, East Asian, and Latino history and culture, and prairie studies; and the College Archives. Books and journal articles not held by the libraries may be acquired through interlibrary services. The libraries' website, accessible from on and off campus, provides information about the libraries and access to electronic and print resources (journals, books, websites, and more) both through direct links and through the libraries catalog.

# The Academic Program

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# Academic Policies

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## Requirements for Graduation

The requirements for graduation and the most important academic regulations are contained in this section. More information on academic policies and procedures can be found in the *Student Handbook*, distributed to all students each fall.

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### Tutorial

All entering first-year students are required to take the tutorial. Students select a tutorial from the list of those to be offered each year (see Tutorials). The tutorial is graded on an “A” through “F” basis; with no S/D/F option (a designated replacement course for the tutorial also has no S/D/F option).

A student must complete the tutorial with a grade of “C” or higher to meet the tutorial graduation requirement and to be eligible to enroll in a “Plus-2” or independent project (297, 299, 387, 397, 399, and 499). Any student earning a grade of “D” or “F” in the tutorial will be placed on academic probation. A student earning a grade of “D” or “F” in the tutorial will be required to complete an appropriate course determined by the associate dean of the College and the director of academic advising in order to fulfill the tutorial requirement. This course must be completed with a grade of “C” or higher during his or her next semester at Grinnell. After the successful completion of this course and removal from academic probation, the student will be eligible for a “Plus-2” or independent study project. The previous work of transfer students is evaluated for possible exemption from this requirement; third-year transfers are automatically exempted.

### The Major Field

Satisfactory completion of a major field is required. Most departmental programs require a minimum of 32 credits, but may include more. At the department's discretion, up to 8 credits from related fields may be counted toward the major. The requirements for each major program are listed in Courses of Study. Academic departments normally expect that the majority of courses constituting the major, and all required courses, will be completed at Grinnell. A course in the student's major field cannot be elected for grading on the “S/D/F” basis. Any course elected for such grading before the student's declaration of a major or interdisciplinary concentration does not count toward the minimum credit requirement for the major or concentration.

A student declares a major by preregistration for the fifth semester and is held to all major requirements in effect at the time of declaration. The head of the department in which the major is declared, or a designated colleague, then becomes the student's adviser. Most students choose a departmental or an interdepartmental major. However, a student may arrange a special program as an independent major or may be permitted a second major.

## Total Credits

To be eligible for graduation, a student must have at least 124 credits, a 2.00 cumulative GPA, and must have satisfactorily completed the tutorial and a departmental, interdepartmental, or independent major. Transfer students must earn at least 62 credits in residence at Grinnell. No more than 48 credits in any one department or 92 credits in any one division may be included in these 124 credits.

A maximum of 8 practica credits may count toward the degree, with no more than 4 credits of these being in Physical Education 100 or 101.

A maximum of 16 credits in Theatre 104, 204, Music 120, 122, 220, 221, and 420 may count toward graduation. Credits in Music 101, 220, and 420 may not exceed a total of 6 in any one semester. Only 12 credits of independent-study projects (297, 387, 397) in one discipline may be counted, and a maximum of 8 credits in internship study may be counted.

No credit earned with a grade below "C" may count toward the satisfaction of any requirement for a major or an interdisciplinary concentration. (This includes all extra-departmental and cognate courses, e.g., mathematics, statistics, and languages.)

A maximum of 16 credits of "D" grades may count toward satisfying the 124-credit graduation requirement.

Although students are not limited in the total number of Individual Study/Directed Research courses (Plus-2, 297, 299, 397, 399, and 499) they may take, they may apply only 12 of these credits in any one department toward satisfaction of graduation requirements.

## Transfer Credits

Students matriculating as first-time first-year students after June 2002 are limited to a maximum of 24 pre- and post-matriculation transfer credits (AP, IB, college credit). For students with an approved program to study off campus for one semester, the program credits are excluded from the 24-credit limit of transfer credits, and the semester off campus is counted toward the residency requirement. For students approved for yearlong off-campus programs, only one semester of off-campus study will count toward the residency requirement, although the credits from both semesters will be accepted.

Transfer students who enter Grinnell College after June 2002 will be required to complete the following minimum number of credits at Grinnell College:

**A transfer student who enters as a:      Must complete at Grinnell at least:**

Second-semester first-year	92 credits
First-semester second-year	78 credits
Second-semester second-year	62 credits
First-semester third-year	62 credits

At the time of admission, transfer students are classified (as second-semester first-year, first-semester second-year, etc.) on the basis of the transfer credits, if any, which are accepted by the College. Subsequent class status is determined by the

number of semesters in residence at Grinnell, plus semesters of off-campus study.

## College Residence Requirement

Because a residential college seeks to create an environment in which students and faculty benefit from the exchange of insights, ideas, and experiences, a residence requirement provides adequate time for such an exchange for the student's development both inside and outside the classroom. Contemplative study, maturation, and time for reading and discussion in the college community all are considered important to a student's development.

All students are expected to complete eight full-time college semesters, a specified number of which must be in residence at Grinnell. Students who enter Grinnell after June 2002 as first-semester first-year students or who transfer to Grinnell as second-semester first-year students are required to complete at least six semesters of full-time enrollment in residence at Grinnell. One semester of approved off-campus study may count toward the six-semester residency requirement. Transfer students who enter as first-semester second-year students, as second-semester second-year students, or as third-year students must complete at least four semesters of full-time residence at Grinnell. Full-time enrollment is enrollment for at least 12 semester credits. The only off-campus programs that can be counted toward residency for second-year and third-year transfer students are those operated by Grinnell College (currently Grinnell-in-London and Grinnell-in-Washington, D.C.).

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Students who enter Grinnell as first-semester first-year students may develop degree programs of six, seven, or eight semesters of full-time enrollment. The major adviser and the Committee on Academic Standing must approve the student's plan for accelerated graduation. In completing the application, students should consult the "Elements of a Liberal Education" of the college catalog. A completed application must be submitted no later than Friday of the first full week of classes of the semester proposed for graduation. However, it is in a student's interest to apply for accelerated graduation no later than the time of registration two semesters prior to the expected date of accelerated graduation, so that the student has two semesters in which to address any academic deficiencies identified by the Committee on Academic Standing. Students may graduate after six or seven semesters if they have satisfied requirements for the degree, including the requirements for major, residence, and total credits, and if they have demonstrated a commitment to a strong program of liberal education, normally including three four-credit courses in each of the three major divisions of the College. The last full semester of work before graduation must be completed at Grinnell, except for students participating in cooperative programs leading to professional degrees (see Cooperative Programs).

A student who is attempting to follow an approved accelerated program to graduate in fewer than eight semesters is not reclassified forward on the basis of credits earned until his or her final semester. The credits necessary to remain in good academic standing are determined by a student's actual class status, not by the accelerated program he or she is attempting.

If an eighth-semester student in good standing leaves the College with eight or fewer nonmajor credits to complete toward the degree, these credits may be completed at another accredited college or university, as long as the minimum residency credit requirement has been met and prior approval has been granted by the student's

adviser and the registrar. Degrees are not conferred beyond three years after the date a student leaves Grinnell.

All students are expected to complete their academic programs within eight full-time semesters. Some students may be permitted to take more time. Examples would include students with disabilities that prevent them from carrying a full course load; students who have fallen behind normal progress as determined by the Committee on Academic Standing; or students whose comprehensive academic program would be substantially enhanced by another semester of work. In all cases of extended study, the student must secure prior approval from the Committee on Academic Standing. The Committee on Academic Standing will review such requests in consultation with appropriate administrative offices. The College reserves the right to refuse college housing to students beyond eight semesters, and the College will not provide its own aid funds to students who exceed eight semesters of college residence.

## **Interdisciplinary Concentrations**

Interdisciplinary concentrations are organized programs a student may choose to complete in addition to a major. Concentrations are offered in American Studies; East Asian Studies; Environmental Studies; Gender and Women's Studies; Global Development Studies; Latin American Studies; Linguistics; Neuroscience; Russian, Central, and Eastern European Studies; Technology Studies; and Western European Studies. Each concentration includes work in several departments and culminates in an interdisciplinary seminar or research project in the senior year. Completion of a concentration is entered on a student's permanent record and transcript. Students declare their intention to pursue a concentration by preregistration for their sixth semester. A course in the student's interdisciplinary concentration cannot be elected for grading on the "S/D/F" basis. Any course elected for such grading before the student's declaration of a major or interdisciplinary concentration does not count toward the minimum credit requirement for the major or concentration.

## **Students with Disabilities**

Grinnell College is committed to making reasonable academic accommodations for students with physical or learning disabilities. These accommodations may include reduced course loads, untimed exams, notetakers or readers, and student tutors. Planning for accommodations is the responsibility of the student in conjunction with his or her adviser and the director of academic advising. Students requesting accommodations must provide the College with current written diagnostic evaluations of their disabilities that include recommendations for appropriate academic accommodations.

## **Course Loads**

The normal course load for students graduating in eight semesters is 16 credits per semester. To remain in good standing, all students are expected to register for and complete a minimum of 12 credits per semester. The maximum load is 18 credits, including music performance and all practica. A student requests permission to carry more than 18 credits in a semester (or fewer than 12 credits) by submitting a written request to the registrar for action by the Committee on Academic Standing. Students

registered for more than 18 credits per term are billed the per credit rate for the credits in excess of 18. Studio instruction in music or theatre or sport performance is not counted when determining credits in excess of 18.

Some first-year students may be advised to enroll for fewer than 16 credits. Students will not be allowed to drop below 8 credits.

## Normal Progress

Good academic standing is defined as making normal academic progress with GPA and credits and having no disciplinary or academic restrictions regarding participation in the academic program. Suspension removes a student from good standing, but warning, probation, or strict probation does not.

A student's normal progress is based on the number of credits earned at Grinnell and the cumulative grade point average. A student is making normal progress toward graduation if he or she has earned the credits and cumulative grade point average listed below by the end of each specific semester at Grinnell.

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	First Semester		Second Semester	
	Credits	GPA	Credits	GPA
First-year Student*	12	1.70	28	1.80
Second-year Student	44	1.90	60	2.00
Third-year Student	76	2.00	92	2.00
Fourth-year Student	108	2.00	124	2.00

\*Some first-semester students may be advised to enroll for fewer than 16 credits.

## Grading System

Grinnell uses the following grading system:

Grade	Description	Grade Points
A	Excellent	4.00
A-	Excellent	3.67
B+	Good	3.33
B	Good	3.00
B-	Good	2.67
C+	Satisfactory	2.33
C	Satisfactory	2.00
D	Passing	1.00
F	Failing	0.00
S	Satisfactory (A-C without grade-point equivalent)	

All grades are entered on a student's permanent transcript. The grading system for the tutorial is on an "A" through "F" basis.

Grades are reported to students, their faculty advisers, and the vice-president for student services at the end of each semester. Under the Family Educational Rights and Privacy Act of 1974, as amended (often referred to as the "Buckley Amendment"), the College has a responsibility to maintain the privacy of academic records. Ac-

cordingly, the record of grades is mailed directly to students. A student may request in writing that final grades be sent to the parent(s). The College informs the parent(s) of a dependent student when that student is warned for poor performance, placed on probation, suspended, or dismissed. Instructors are asked to inform the director of academic advising whenever a student's work in a course becomes unsatisfactory during the semester.

## Dean's List

A student will be placed on the Dean's List if she or he attains a term grade average for the semester of 3.75 or higher. In order to qualify for the Dean's List, a student must complete 16 credits, 14 of which must be taken for a letter grade. Only credits completed at Grinnell and those programs directly administered by Grinnell will be used in determining eligibility. A student cannot earn Dean's List recognition if he or she has an incomplete or an NGR (no grade reported). A student whose incomplete or NGR is later converted to a letter grade and who thereby becomes eligible for the Dean's List will be placed on the Dean's List retroactively.

## Phi Beta Kappa

In the spring semester, the local Phi Beta Kappa chapter, Beta of Iowa, selects high-achieving third-year and senior students from among the candidates for election. All candidates for election as members-in-course shall meet successfully the following requirements of their academic course of study:

- **Foreign language.** Completion of a course at or beyond the third-semester level of a modern foreign language, or the second-semester level of a classical language, or proficiency beyond such level as demonstrated by the candidate's educational history, e.g., years of education in a non-English-speaking country.
- **Mathematics.** Completion of the course Mathematics 124 or 131, or a mathematics course for which Mathematics 124 or 131 is a prerequisite.
- **General distribution.** At least 12 semester credits of study in the divisions of humanities, sciences, and social studies as defined at Grinnell College, with no more than eight divisional credits counted to come from any one academic department, and completion of at least one science course with a laboratory experience. A letter grade will be required in courses used to satisfy distribution requirements for election to Phi Beta Kappa, except for courses only offered S/D/F. Courses accepted as transfer credits by the Office of the Registrar may be used to satisfy distribution requirements, even though no letter grade appears on the student's transcript for these courses. In any case, only courses designated to one of the three academic divisions by the Office of the Registrar will count toward the distribution requirements. For courses cross-listed in two or more divisions (such as Mathematics 115/Social Studies 115), the student should ensure that the course is designated to the desired division on his or her transcript. Academic skills courses (including writing lab, reading lab, math lab, Library 100) do not count toward satisfying divisional requirements.

Advanced Placement (AP) and transfer credits may be used to satisfy any eligibility requirement, provided that the Office of the Registrar has determined them to be equivalent to the relevant courses at Grinnell. A maximum of four AP credits may be used to satisfy the distribution requirement in each division. The student is responsible for ensuring that the appropriate credits are listed on his or her transcript.

Transcripts will be evaluated after the add/drop period of spring semester courses. Courses that are in progress will count toward the eligibility requirements. Before the induction ceremony each year, the chapter may verify the eligibility of students to be elected by requesting that the Office of the Registrar notify the chapter if a student has withdrawn from a course needed to satisfy eligibility requirements. The chapter initiates the consideration of third-year students and seniors for membership without action by the students. Students will be notified by the chapter if they are to be offered membership in Phi Beta Kappa.

## **Graduation with Honors**

Each department recommends for graduation with honors those senior majors who have clearly distinguished themselves within their major field of study. In order to qualify for recommendation, a student must, after seven semesters of college work, have achieved at least a 3.50 grade point average in the major field and a cumulative grade point average of at least 3.40. Students convicted of academic dishonesty are not eligible for honors, except students who commit only one offense and receive a less-than-normal penalty for the offense. The required seven semesters of study to qualify for honors need not all be completed at Grinnell; however, only credits completed at Grinnell, Grinnell-in-Washington, D.C., and Grinnell-in-London will be used in determining grade point eligibility.

These are minimum, College-wide criteria for honors. Students should consult the individual department listings in this catalog for departmental minimum criteria for honors and may consult with the chair of the major department for further clarification, if needed.

## **Commencement Participation**

Students may participate in only one Commencement program. Students who plan to graduate in December are typically included in the following May Commencement program. Some December graduates, however, may wish to participate in the Commencement program immediately preceding their final semester. Students who have remained in good academic standing the previous two semesters, and who can reasonably complete all requirements by the end of the following December, may be allowed to participate in Commencement. These students will not receive a diploma until after their degree has been conferred. Students who wish to graduate early should notify the Office of the Registrar no later than March 1.

# Courses of Study

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## General Provisions

### Numbering

A three-digit system is used for numbering courses. The first digit indicates the level of the course. The course levels are:

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- 100** Courses open to all students unless otherwise noted
- 200** Courses for which students should have completed work in an appropriate discipline at the 100 level
- 300** Courses for which students should have completed work in an appropriate discipline at the 200 level
- 400** A small group of courses, such as advanced seminars primarily for majors, for which students should have completed 300-level work

The College realizes that exceptions occasionally should be made to these expectations. Under appropriate circumstances, permission of the instructor will entitle a student to direct entry into courses above the 100 level. The majority of departments follow this pattern; however, there are occasional exceptions.

The term “course” indicates one semester’s work. A hyphen between numbers indicates a two-semester sequence organized as a unit. Admission to the second semester of a sequence without the first semester’s work may require the permission of the instructor. Credit is given for the work of the first semester without the second unless the course description states otherwise.

The semester in parentheses following course titles indicate the semester of offering—i.e., (Fall), first semester; (Spring), second semester; (Fall or Spring), both semesters; and (Fall and Spring), two courses in a two-semester sequence. The Schedule of Courses issued by the registrar each spring lists courses to be offered in each semester the following year. Though the need seldom arises, the administration may withdraw a course when there is not sufficient registration for it or when circumstances necessitate its withdrawal.

A plus sign (+) following the word “credits” in the title line of course descriptions indicates a “Plus-2” option (see Independent Study in the section immediately following Special Topics Courses).

### Special Topics Courses

Special topics courses (195, 295, 395) provide flexibility in the curriculum to meet a variety of situations. Courses may be designed to meet the interests of a group of students, to fit the talents of a visiting professor, to study a current problem, or to meet similar educational situations. Special topics courses may be offered in any department and are normally semester-long courses for two or four credits. Special topics may also be offered, however, as short courses by visiting professors for one or two credits. Special topics courses offered are listed in the registration material for each semester.

<b>195 Introductory Special Topics (Fall or Spring)</b>	<b>1, 2, or 4 credits</b>
May be repeated for credit if different topics are offered.	
<b>295 Special Topics (Fall or Spring)</b>	<b>1, 2, or 4 credits</b>
May be repeated for credit if different topics are offered.	
<b>395 Advanced Special Topics (Fall or Spring)</b>	<b>1, 2, or 4 credits</b>
May be repeated for credit if different topics are offered.	

## Individual Study

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The College encourages students to develop initiative and take responsibility for their own education through a variety of means: Plus-2, Independent Study, Directed Research, and Mentored Advanced Projects.

### Plus-2

A course-related independent study option referred to as the “Plus-2” permits a student to choose an independent study component that adds two credits to a regular course. With the approval of the instructor, this option is available in most courses above the introductory (100) level. The Plus-2 provides opportunities for more extensive work in some aspect of a course, for more extensive exploration of general literature of a course, for additional studio or laboratory activity, or for other corollary work.

### Independent Study

Guided Reading 297 and Independent Study 397 provide an opportunity for a student to explore an academic area not part of the present College offerings. Either might include reading of a body of literature, reproducing published scientific experiments, learning advanced techniques, or exploring an art. The design of an independent project is very much in the hands of the student, with advice from the faculty director. Guided Reading and Independent Study, in comparison to projects conducted under the rubric of a Mentored Advanced Project, have less formal application procedures, require significantly less faculty direction, and do not have the expectation of producing results intended for dissemination to the wider scholarly community.

### 297 Guided Reading 2 credits

Guided Reading focuses on the reading of a body of literature under the direction of a faculty director and may culminate in a paper, examination(s), or other gradable product. A student is expected to meet once a week with the faculty director for discussion and analysis of the readings. Prerequisite: second-year standing; proposals must be approved by the faculty director, the academic adviser, and the dean of the College.

**397 Independent Study****2 or 4 credits**

Independent Study is intended for select students who are competent to participate in a program of study under faculty supervision. Independent Study culminates in at least one product (a paper, laboratory report, work of art, etc.). A student is expected to meet at least once a week with the faculty director. Prerequisite: second-year standing; proposals must be approved by the faculty director, the academic adviser, and the dean of the College.

**Directed Research**

The College also encourages students to engage in faculty directed research projects. Directed Research (299 or 399) is an opportunity for a student to work under the continuous direction of a faculty member on a research project, often of the faculty director's design. Directed research, in comparison to projects conducted under the rubric of a Mentored Advanced Project, has less formal application procedures and does not necessarily have the expectation of producing results intended for dissemination to the wider scholarly community.

**299 Directed Research****2 or 4 credits**

Directed Research at the 200-level is intended for select students who have the appropriate academic preparation to benefit from an early research experience. The research project may be pursued in Grinnell or on a field excursion, always under the direct and continuous supervision of a Grinnell faculty member. Directed research will involve a search of the necessary literature and result in a written report. Offered during the academic year and summer. Prerequisite: completion of the first year and coursework related to the topic of the research project; proposals must be approved by the faculty director, the academic adviser, and the dean of the College.

**399 Directed Research**

Directed Research at the 300 level is intended for select students who are competent to participate in an advanced research program. The research project may be pursued in Grinnell or on a field excursion, always under the direct and continuous supervision of a Grinnell faculty member. Directed research will involve a search of the necessary literature and result in a written report. Offered during the academic year and summer. Prerequisite: completion of second year and coursework related to the topic of the research project; proposals must be approved by the faculty director, the academic adviser, and the dean of the College.

**Mentored Advanced Projects**

At the time of declaring a major, students submit a comprehensive plan that lists the coursework they have completed and outlines a plan for the remaining semesters of study. At this time, it is appropriate for interested students to discuss with their advisers how a Mentored Advanced Project, or MAP, might help shape their program by culminating a sequence of academic work.

Mentored Advanced Projects provide a chance to work closely with a faculty member on scholarly research or the creation of a work of art. A MAP can be

the capstone of the academic major or a concentration, or it can culminate a separate sequence not recognized as a formal program. The MAP may be done individually, conducted with a research team, or developed in the context of an advanced seminar. In many fields, MAPs are connected with the faculty member's scholarship and may contribute to ongoing faculty research. The MAP opportunity is made available by specific programs and individual faculty members at their discretion, so students should not expect to set the terms for a particular MAP. Sound planning and attentiveness to the available opportunities are recommended to students who seek a chance to culminate their undergraduate work in a creative or scholarly way. Products of MAPs are expected to contribute to the original scholarship of the field of study and may be disseminated professionally through a scholarly publication or presentation.

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### **499 Mentored Advanced Project**

**2 or 4 credits**

A Mentored Advanced Project is an approved course of faculty-directed scholarly or creative work that is the culmination of significant preparatory work and aims to produce results that merit presentation to the College community or the wider scholarly world. The Mentored Advanced Project takes place under the direct and continuous supervision of a Grinnell faculty member. Since MAPs are advanced and intensive, the first component of a multiterm MAP must earn four credits. Subsequent portions (such as a "follow-up" MAP) may earn two or four credits. Each component of a multiterm MAP will receive a grade. Prerequisite: completion of second-year student status; approval by the faculty director, the academic adviser, and the academic program in which the MAP takes place. Specific MAP offerings are described in greater detail by departments, concentrations, divisions, and nondepartmental majors.

### **Group Projects**

Any instructor may permit students to work or meet together if joint work will be advantageous to all the students. Applications for all students in a group project should be submitted together, with the student statement attached to each application.

### **General Regulations for Plus-2, Independent Study, Directed Research, and MAPs**

Independent Study, Directed Research, or a MAP may not substitute for a course regularly offered by Grinnell College, even though the course is not offered every year.

Directed Research 299 may be undertaken after completion of the first year; Independent Study (297 or 397) and Directed Research 399 may be undertaken when a student has attained second-year standing. A MAP may be undertaken after completion of the second year.

Students having less than third-year standing who have satisfied the tutorial requirement or its equivalent may take one Plus-2 or an Independent Study/Directed Research course (297, 299, 397, 399, and 499) per semester. There is no semester limit for third- and fourth-year students.

Although students are not limited in the total number of Individual Study/ Directed Research courses (Plus-2, 297, 299, 397, 399, and 499) they may take, they may apply only 12 of these credits in any one department toward satisfaction of graduation requirements.

An application for Independent Study, Directed Research, or a MAP must be completed with the required project statement and with all faculty signatures before submission to the Office of the Registrar. All applications are subject to the approval of the dean of the College.

The S/D/F grading option is **not** available for Plus-2, Independent Study, Directed Research, or MAPs.

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## **General Application Procedures for Independent Study, Directed Research, and MAPs**

An application for a Guided Reading (297) requires a description of the topic accompanied by a bibliography. Arrangement for a Guided Reading project must be made before the work is done; credit is not given for reading done in the past.

An application for Independent Study (397) or Directed Research (299 or 399) requires a thesis statement or equivalent, an outline of the project, and a bibliography. After consultation with the potential faculty director, a student submits an application first to his/her academic adviser for approval, and then to the proposed faculty director, who will decide whether or not to accept the application. The registration process is completed when the application is accepted by the faculty director and is approved by the dean of the College.

A Mentored Advanced Project (499) has the most formal and developed application. In consultation with the potential faculty mentor, a student develops a thorough description of the topic and project, a clear statement of the relation of the project to his or her previous studies, a bibliography or list of sources, and an explanation of the planned product of the project. After securing the approval of the faculty mentor, a student submits the application for approval to the faculty adviser, the academic program in which the MAP takes place, and the dean of the College. The final product of a MAP should be worthy of dissemination to the wider scholarly community.

An application for Independent Study, Directed Research, or a MAP (297, 299, 397, 399, and 499) is due the term prior to that in which such work is to be performed. All such applications for the following term will be due in the Office of the Registrar two school days after the end of preregistration for each term. A completed application for a summer Directed Research or a MAP is due in early June.

## **Foreign Language Across the Curriculum**

Students are encouraged to study a foreign language at Grinnell and to extend the use of foreign languages into other disciplinary areas. Students may apply their foreign language skills to the discovery of content in a variety of disciplines which make use of translated material. There are a number of opportunities regularly

available for students who wish to use their language skills in nonforeign language classes across the curriculum. Courses or “Plus-2” options designated as having a foreign language option make it possible for students to do some of the readings for those courses in the original language rather than in translation. Offerings with the foreign language option are listed in the registration material for each semester.

## Interdisciplinary Concentrations

A liberal education should include both depth of study in one discipline and breadth of study in several. The required completion of a major fulfills the first requirement. The interdisciplinary concentrations offered at Grinnell provide one way to fulfill the second, for each was conceived as an integral part of a liberal education.

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Each recognized concentration includes an organized cluster of courses drawn from several disciplines and related to a common focus of interest. Thus, each provides a structured introduction to a broad area of study while including sufficient flexibility to adapt each program to a student’s particular focus of interest. Each culminates in an interdisciplinary senior seminar in which students and faculty draw upon their work in the several disciplines. In most of the programs, the senior seminar provides time for pursuit of a research topic appropriate to the field and to the student’s level of accomplishment in the relevant disciplines.

Concentrations may be related to a student’s major, but this is not required; when the two are related, up to 8 credits of work included in a student’s major may also be counted toward an interdisciplinary concentration. Completion of a concentration is entered on a student’s permanent record together with the student’s major.

A student who wishes to pursue a concentration is expected to declare his or her intention by the beginning of the third year, but such students should consult with the program chair earlier if possible. A list of courses that fulfill each section of a program, including courses in addition to those shown on the following pages, may be obtained from each program chair.

## Practica

Some departments also offer practica. These include performance in musical groups, theatrical productions, physical education activities, Chinese calligraphy, and anthropology fieldwork. See departmental course descriptions.

## Summer Programs

All summer courses, whether overseas or in the United States, must be approved in advance by the student’s academic adviser and the registrar. Prior approval ensures the transfer of credit to Grinnell. A maximum of 18 semester credits will be accepted for courses taken during the three summers prior to graduation, with a maximum of nine semester credits for any one summer.

## Organization of the Curriculum

The College is organized into three divisions as follows:

**Humanities:** Art, Chinese and Japanese, Classics, English, French, German, Music, Philosophy, Religious Studies, Russian, Spanish, and Theatre.

**Science:** Biological Chemistry, Biology, Chemistry, Computer Science, Library, Mathematics Laboratory, Mathematics and Statistics, Science Laboratory, Physics, and Psychology.

**Social Studies:** Anthropology, Economics, Education, History, Physical Education, Political Science, Reading Laboratory, Sociology, and Writing Laboratory.

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### Additional academic programs include:

- Alternate Language Study Option (ALSO) Program
- Foreign Language Across the Curriculum
- General Literary Studies Program
- General Science, an interdepartmental major program
- Grinnell-in-London and Grinnell-in-Washington, D.C.
- Humanities and Social Studies, divisional course offerings
- Interdisciplinary Concentrations: American Studies, East Asian Studies, Environmental Studies, Gender and Women's Studies, Global Development Studies, Latin American Studies, Linguistics, Neuroscience, Russian, Central, and Eastern European Studies, Technology Studies, and Western European Studies
- Tutorials

Courses listed in this catalog are subject to change through normal academic channels.

## Academic Departments, Majors, Concentrations, and Programs

\* indicates nonteaching faculty

## Academic Skills Program

### Library

#### 100 Library Research Techniques (Fall) 2 credits

A practical introduction for students wishing to develop their understanding of library resources and become more effective researchers in college and afterward. Students will discover strategies for finding and evaluating sources of information in a variety of formats, including print indexes, online databases, government documents, and the World Wide Web. Students will also learn to compare these sources in terms of reliability and usefulness for their research. Issues relating to information ethics and information policy, such as copyright, plagiarism, and privacy will also be addressed. Burling Library's interactive classroom provides the opportunity for hands-on experience. STAFF.

\*Not offered every year.

## Mathematics Laboratory

Katherine McClelland, Director

### 100 Mathematics Laboratory (Fall or Spring) 1 credit

Individual or small group instruction in math skills at the precalculus level. Specific content for the course determined for the individual student based on his or her math background and needs. This course is open to any student who has not completed a math course at the 124 level or higher. Students must have permission of instructor to register. May be repeated once for credit, with permission of the director. Note: Instruction in basic math skills is available without credit for all students. S/D/F only. MCCLELLAND.

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## Reading Laboratory

Joan Mohan, Director

### 100 Reading Laboratory (Fall or Spring) 1 credit

Individual and small-group instruction in reading and study skills, emphasizing reading efficiency, vocabulary building, and methods of effective study (concentrating, time management, preparing for tests, etc.). Recommended to students who have difficulty keeping up with reading assignments or understanding and remembering what they read. Also helpful for those international students who want to improve their English language proficiency and pronunciation. Diagnostic test administered to determine individual needs. May be repeated once for credit, with permission of the director. Note: Students may work at the Reading Lab without registering. S/D/F only. MOHAN.

## Science Laboratory

Minna Mahlab, Director

### 100 Science Laboratory (Fall or Spring) 1 credit

Individual or small group instruction emphasizing problem-solving skills. This class must be taken in conjunction with first-year sequences in physics, chemistry, or biology. Consultation with the related course instructor and permission of the director of the science lab are required. May be repeated once for credit with permission of the director. Note: Instruction is available without credit to students who cannot take the course or who need only occasional assistance. S/D/F only. MAHLAB.

### 240 Science Education Methods\* 1 credit

This discussion seminar is open to all students who have taken at least one year of science, and is encouraged for those students who are biology and chemistry student mentors, science laboratory teaching assistants, or students interested in pursuing a career in science teaching. This class will review some of the current literature in science education and focuses on examining the stages of the teaching and learning process and tools for improving teaching and learning. Prerequisite: one year (two semesters) of biology, or chemistry, or mathematics/computer science, or physics, or psychology; and permission of the instructor. MAHLAB.

## Writing Laboratory

Judith Hunter, Director, Janet Carl, Kevin Crim, Claire H. Moisan, Helyn Wohlwend

### 100 College Writing (Fall or Spring) 1 credit

Individual instruction in writing using written work assigned by tutors and other instructors across the curriculum. Prerequisite: permission of the laboratory instructor. May be repeated once for credit with permission of director.

Note: Similar instruction is available without credit to students who need only occasional help with their writing. S/D/F only. STAFF.

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## Alternate Language Study Option (ALSO) Program

Daniel Gross, Director

The Alternate Language Study Option Program is designed for those self-motivated and self-disciplined students who want to prepare for off-campus study and/or want to enrich their major and liberal arts education.

The program provides a four-semester, two-year sequence of beginning-level self-instructional study in a variety of languages. The specific languages offered depend on student interest (a minimum of three students is needed to inaugurate the study of a language) and the availability of materials and native tutors.

ALSO students use standard texts and accompanying multimedia programs, and are expected to set up and adhere to a schedule of intensive daily individual study, supplemented by three practice sessions per week conducted by a native speaker of the language. The native tutor, trained and monitored by the director, leads students in exercises on assigned material, corrects them, and aids in the development of oral-aural skills. The student's progress is tested twice a semester by an outside examiner, a qualified instructor of the designated language in an established university-level program. Final grades are assigned by the outside examiner in conjunction with the director. ALSO courses use the current grading scale without the S/D/F option.

In applying for the ALSO Program, students must state their reasons for studying the language of their choice, and they must submit a letter of recommendation from their adviser and from a member of the foreign language faculty at Grinnell. Prerequisite: second-year standing, satisfactory completion of one year of a foreign-language course or Linguistics 114 (Introduction to General Linguistics) at Grinnell, and a cumulative grade point average of 2.75.

## American Studies Concentration

Henry Rietz, Chair

American studies is an evolving interdisciplinary field that is anchored by the inter-related study of race, gender, ethnicities, classes, sexuality, religion, and political culture. An acute sensitivity to the historical context of intellectual and social movements, influenced by both regional and global events, is at the core of such a pursuit and constitutes the purpose of a concentration in the 21st century.

The introductory course in the foundations in American studies explores themes through historical and literary documents and other resources. In addition to completing four required courses (the introduction, two theory courses, and the senior seminar), students plan a structured sequence of courses selected from core and elective lists representing a variety of disciplines in the arts, humanities, and social sciences.

**Required, 24 credits as follows:**

1. Required Courses
  - American Studies 130 American Beliefs and Cultural Values 4 credits
  - American Studies 225 Theory and Method in American Studies 4 credits
  - American Studies 235 Anthropology of American Culture 4 credits
  - American Studies 495 Senior Seminar 4 credits
2. Elective Courses
  - Two 4-credit courses, one course from social studies and one course from humanities

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One 4-credit course chosen from the following:

- English 227 American Literary Traditions
- English 228 American Literary Traditions
- History 111 American History I
- History 112 American

History II And

One 4-credit course chosen from the following list or a 4-credit course with a primary focus on American society, which has been approved by the American Studies Concentration chair.

Additional courses in this category will be listed each semester in the registrar's Schedule of Courses.

- Art 232 Art Since 1945
- Art 233 American Art
- Economics 229 American Economic History
- Education 101 Educational Principles in a Pluralistic Society
- English 229 The Tradition of African American Literature
- English 326-328 Studies in American Poetry I & II
- English 329 Studies in African American Literature
- \*English 330-331 Studies in American Prose I & II
- History 211 Colonial and Revolutionary America 1450-1788
- History 212 Democracy in America 1789-1848
- History 214 The American Civil War and Reconstruction
- History 221 The American West 1803-1912
  - History 222 The History of Women in the United States
  - History 227 African American History
  - History 228 The Promised Land: U.S. Immigration History
  - History 229 American Economic History

\*Varying content requires the approval of the concentration committee. Special topics courses (195, 295, and 395) and other variable content courses may be counted toward core course requirements with approval from the American

- Philosophy 392 Advanced Studies in Anglo-American Philosophy
- Political Science 219 Constitutional Law and Politics
- Sociology 240 Social Movements
- Sociology 260 Human Sexuality in the United States
- Theatre 203 American Theatre
- Theatre 310 Studies in Dance

**130 American Beliefs and Cultural Values (Fall and Spring) 4 credits**

An examination of selected beliefs and values that have been central to the shaping of American life and culture. Core values such as equality, individualism, success, freedom, a sense of special mission, pastoralism, and others treated in topical units that range over the totality of American experience. Prerequisite: none. BARLOW, SCOTT.

**211 The Africanist Presence in American Studies (Fall) 4 credits+**

This interdisciplinary course introduces issues and themes related to the experience of people and communities of the African diaspora. The readings are particularly intended to foster critical thinking about “race,” “identity,” and “communities of meaning”; and to introduce the political implications of constructing narratives about the African diaspora. Prerequisite: second-year standing or permission of the instructor. GIBEL MEVORACH.

**225 Theory and Method in American Studies (Fall) 4 credits**

An interdisciplinary survey of contemporary theory and method in American Studies, in light of some historic precursors, with special emphasis on sociohistorical and literary approaches to the study of American culture. Prerequisite: American Studies 130 and second-year standing. SCOTT.

**235 The Anthropology of American Culture (Spring) 4 credits**

See Anthropology 235.

**275 Topics in American Culture (Fall) 4 credits+**

An interdisciplinary investigation of selected problems, trends, or themes in American culture, such as regionalism, popular culture, mass communication, minority cultures, women’s lives, and other engaging issues central to American experience. Prerequisite: American Studies 130 and second-year standing. SCOTT.

**391 Advanced Topics in American Studies (Spring) 4 credits+**

An advanced investigation engaging modes of cultural and historical analysis in American studies. Content may vary, and will be announced in advance each year. Prerequisite: American Studies 130 and 225, or permission of instructor. GIBEL MEVORACH.

**495 Senior Seminar (Fall or Spring) 4 credits**

An interdisciplinary seminar for students completing the concentration in American studies. Topics vary, with broad application of methodological skills. Prerequisite: American Studies 225 or permission of instructor.

## Anthropology

Member of the Division of Social Studies

Vicki Bentley-Condit, Chair, Jonathan Andelson, Eric Carter, Douglas Caulkins, Brigitte French, Katya Gibel Mevorach, Kathryn Kamp, J. Montgomery Roper, Maria Tapias, John Whittaker

Anthropology, the study of humankind, strives to take the broadest possible perspective on the human condition. Anthropologists explore peoples and cultures around the world, past and present, to become familiar with and understand our common humanity, cultural diversity, the organization of social life, societal change, the evolution of our species, our place in the natural world, and our affinities with other species. Anthropology approaches culture holistically, studying the interrelationships among the many facets of human life: family, kinship, language, gender, exchange, ritual, myth, technology, socialization, power, privilege, and subsistence. Archaeologists concentrate on cultures of the past, ethnologists on those of the present, and biological anthropologists on the complex interrelationship between cultural and biological factors in human life, past and present. Anthropological research is often conducted outside the context of Western society, but increasingly anthropologists have applied their perspectives to the study of questions in the West.

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Anthropology is conceptually rich, drawing on theories and methods from the sciences, the humanities, and other social sciences. As such, it constitutes a bridging discipline, itself interdisciplinary, and serves as an excellent basis for a liberal arts education. Anthropology is good preparation for further study in such diverse fields as law, social work, museology, medicine, urban and regional planning, journalism, and business. Many of the department's graduates have gone on to further study in anthropology. They can be found working at the top graduate research universities, in museums, and for government agencies. However, today anthropologists are also active in settings such as industries, public health, education, and various kinds of social survey research and community service.

Anthropology 104 is the general introduction to the field and is normally a student's first course and a prerequisite for upper-level courses. Students with special interests who wish to enroll in upper-level courses, but who have not taken Anthropology 104, should consult with the department about the preparation that will be assumed.

Anthropology, as an integrative science, has links with many other disciplines, such as biology, history, linguistics, religion, and other social-behavioral sciences. Anthropology students should select other offerings appropriate for an interdisciplinary program of study. Because of the importance of language in the study of any culture, qualified students are recommended to do work in a foreign language within designated courses in the department.

### The Major

**A minimum of 32 credits.** With permission, up to eight of the 32 credits may be taken in related studies outside the department. Required are:

- Anthropology 104 Introduction to Anthropology
- Anthropology 280 Theories of Culture

At least four credits at the 200 level from each of the following areas:  
Archaeology and Biological Anthropology  
Cultural Anthropology and Linguistics  
Methods

And either:

- a) Two 300-level courses in anthropology
- Or
- b) One 300-level course in anthropology and a departmentally approved 499 MAP for which the student will write and present a thesis

In addition:

- a) One year of a foreign language (or demonstration of equivalent competence by examination)
- And
- b) Mathematics 115 or 209

**NOTE:** Courses listed under Methods may not be used to satisfy the distribution requirement for Archaeology and Biological Anthropology or Cultural Anthropology and Linguistics.

Field research—such as that offered in the Archaeological Field School, Costa Rica: Tropical Field Research, and Grinnell-in-London—or an internship is strongly recommended. Because of the breadth of the discipline, majors are expected to demonstrate some familiarity with subdisciplines of anthropology and with research methods and techniques before they take a synthesizing seminar.

To be considered for honors in anthropology, graduating seniors, in addition to meeting the College's general requirements for honors, must exemplify professionalism in fulfilling commitments voluntarily undertaken within the department. In addition, they must have conducted original research judged worthy of honors.

### **General Introductory Course**

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#### **104 Introduction to Anthropology (Fall and Spring) 4 credits**

Anthropology as a holistic discipline embracing human biological and cultural evolution and the differences and similarities among human cultures. The sub-fields of anthropology are surveyed. Prerequisite: none. STAFF.

### **Archaeology and Biological Anthropology**

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#### **205 Human Evolution\* 4 credits+**

An in-depth examination of the evolution of humankind as part of an evolutionary continuum of primates stretching back approximately 65 million years with an emphasis on the hominids of the past 4 million years. There is a heavy emphasis on comparative anatomy. Topics covered include bipedalism, molecular data, the brain and language, and various interpretations of hominid origins. Prerequisite: Anthropology 104 or permission of instructor.  
BENTLEY-CONDIT.

\*Not offered every year.

**221 Primate Behavior and Taxonomy\*** **4 credits+**

A comparative survey of the taxonomy, behavior, and ecology of nonhuman primates. Topics include demography and life-history patterns, feeding behavior and competition, social organization, sexual behavior, infant development, communication, and cognition. Prerequisite: Anthropology 104 or permission of instructor. BENTLEY-CONDIT.

**225 Human Variation\*** **4 credits**

This course explores the interaction of genetics and culture with our understanding of human evolution through a) an examination of human differentiation and genetic variation between and within human groups and b) an exploration of how human evolution has been shaped by this interaction. Possible topics include: simple and complex inheritance, population genetics, human migration, gene frequencies, genetics and disease, genetics and IQ, race, gene therapy, designer babies, cloning, and the Human Genome Project. Prerequisite: Anthropology 104 or permission of instructor. BENTLEY-CONDIT.

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**261 Agriculture, Religion, and Empire:  
Old World Prehistory (Fall)** **4 credits+**

An archaeological perspective on major themes and trends in the development of Old World civilizations: agricultural origins, trade and migration, metal and other technological innovations, role of ideology and symbol systems in social change, religion as a power base, rise of elite leadership, and state-level society. Covers much of Old World with emphasis on particular areas. Prerequisite: Anthropology 104 or permission of instructor. WHITTAKER.

**262 Archaeology of North America\*** **4 credits+**

Archaeological record from human entry into the area to European domination: hunting, gathering, and agricultural developments. Geographical and physical anthropological backgrounds presented. Prerequisite: Anthropology 104 or permission of instructor. WHITTAKER.

**267 Aztecs, Incas, and Mayas\*** **4 credits+**

An examination of Aztec, Inca, and Maya cultures, including economics, politics, and religion. Concentrates on the dynamics of early states and explores reasons for their rise and fall. Prerequisite: Anthropology 104 or permission of instructor. KAMP.

**325 Biological Basis of Human Society\*** **4 credits**

An assessment of biological factors in human social behavior through an examination of the social behavior of nonhuman primates and evidence from human ethnology and sociobiology. Topics include reproductive behavior, aggression, dominance, sex roles, and altruism. Prerequisite: Anthropology 280 or permission of instructor. BENTLEY-CONDIT.

**375 Experimental Archaeology and Ethnoarchaeology (Fall)** **4 credits**

Experiments with artifacts and observations of living peoples provide archaeologists with the basis for interpreting the remains of past cultures. This course examines the theoretical basis and practice of experimental archaeology and ethnoarchaeology. Course includes lab work and projects. Prerequisite: Anthropology 280 or permission of instructor. KAMP, WHITTAKER.

**Cultural Anthropology and Linguistics**

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**200 Cultural Politics of Hybridity\*** **4 credits+**

This course examines anthropology's contribution to the taxonomy and representations of "race" and "culture" and its role in prescribing and proscribing the idea of interracial intimacy. Over the course of the semester, we will examine how the topic of mixing and miscegenation was invented, elaborated, and obsessed over by anthropologists, philosophers, judges, policymakers, film directors, and people raced as "mixed." Primary attention will be given to ideas about mixing in the United States as a location from which to compare perspectives of social difference, "purity," and "hybridity" in other countries. Prerequisite: Anthropology 104, or Sociology 111, or permission of instructor. GIBEL MEVORACH.

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**210 Illness, Healing, and Culture\*** **4 credits**

This course examines beliefs about illness, healing, and the body across cultures. We will examine how the body, illness, health, and medicine are shaped not only by cultural values, but also by social, political, and historical factors. The class will draw attention to how biomedicine is only one among many culturally constructed systems of medicine. Prerequisite: Anthropology 104 or permission of instructor. TAPIAS.

**235 The Anthropology of American Culture** **4 credits**

Also listed as American Studies 235. Focus on the U.S. American cultural meanings about national identity and citizenship, intersections of race and class consciousness, and the power of media to shape social attitudes, values, lifestyles, and political opinions. Prerequisite: American Studies 130, or Anthropology 104, or permission of instructor. GIBEL MEVORACH.

**238 Cultural and Political Ecology\*** **4 credits+**

Reviews various cultural anthropology approaches to understanding human/environment interactions. Focus placed on case studies of small-scale societies from distinct environmental regions, the adaptations to those environments, how subsistence practices relate to other aspects of culture, and how these cultures and environments are affected by increasing integration into the world system (e.g., such as through globalization). Prerequisite: Anthropology 104, or Global Development Studies 111, or permission of instructor. ROPER.

**240 Intentional Communities** **4 credits+**

A cross-cultural and historical survey of attempts to achieve social harmony by creating small communities. Topics include: ideological foundations, alternative economic and political arrangements, experiments with sexuality and gender roles, responses of the wider society, and reasons for success and failure. Groups include the first century Essenes, the Shakers, Amana, the Hutterites, the Amish, the kibbutzim, Japanese communes, hip communes, monastic groups, and New Age communities. Prerequisite: Anthropology 104 or permission of instructor. ANDELSON.

\*Not offered every year.

**242 African Cultures****4 credits+**

Peoples and cultures of sub-Saharan Africa. Emphasis on the thought systems that underlie specific economic, political, and religious expressions in agricultural, pastoral, and gathering and hunting cultures. An overview of the continent and its peoples along with close study of a few peoples. Prerequisite: Anthropology 104 or permission of instructor. ROPER.

**246 Peoples of the Middle East\*****4 credits+**

The modern Middle East in anthropological and historical perspective. Topics include nomadic, village, and urban lifestyles; ethnic interactions; Islam and its role in the social and political systems; the role of women; and cultural change. Prerequisite: Anthropology 104 or permission of instructor. KAMP.

**247 Contemporary Europe\*****4 credits+**

A survey of community and regional studies on such topics as gender relations, rural depopulation, ethnic relations, regionalism, urbanization, and urban planning. Appropriate for student preparing for off-campus program in Britain or Europe. Prerequisite: Anthropology 104 or permission of instructor. FRENCH.

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**251 Native North American Indian Cultures\*****4 credits+**

Historical and ethnological survey of aboriginal cultures of North American Indians and the impact of European civilization. Indian history, ethnography, and the contemporary situation. Prerequisite: Anthropology 104 or permission of instructor. ANDELSON.

**252 Culture and Agriculture\*****4 credits+**

An overview of the relationship of agriculture to other aspects of culture, through time and cross-culturally. The origins of agriculture, the role of agriculture in subsistence and trade, and its connection to social structure, religion, and values. The rise of industrial agriculture and agriculture in Iowa. Prerequisite: Anthropology 104 or permission of instructor. ANDELSON.

**253 Anthropology of Ethnicities\*****4 credits+**

Examination of shifts in theory and approach to studies of ethnicities. Topics include history of key concepts, including "ethnicity," "ethnic identities," and "culture," as well as perspectives on racism as a system, education and acculturation, class and ethnicity, and nationalism. Prerequisite: Anthropology 104 or permission of instructor. GIBEL MEVORACH.

**257 Latin American Cultures\*****4 credits+**

Ethnographic and historic study of Latin American cultures. Description and analysis of native cultures and colonialism's impact on native peoples' lives. Current trends in Latin America analyzed, including family, economy, religion, environment, urbanism, and social issues. Women and gender issues in Latin America also considered. Prerequisite: Anthropology 104 or permission of instructor. STAFF.

**260 Language, Culture, and Society\*****4 credits+**

Language in its sociocultural context. Cultural behavior as communication.

Language in relation to cultural systems of cognition, values, and symbols.

Prerequisite: Anthropology 104, or Linguistics 114, or permission of instructor. STAFF.

**310 Postmodernism and Beyond\*** **4 credits+**

This course explores the meanings of postmodernism, including the historical moment in which the concept emerged to describe a crisis in the social sciences. We will read anthropologists' comments on the impact of postmodernist approaches on methodologies and theories in the discipline and examine texts that interrogate the relationship between power and knowledge, representations and ethnographic authority, the question of subjectivity and objectification and the consequences of globalization on dominant concepts that ground the discipline of anthropology. This course includes ethnographic films and commercial movies that register the condition of postmodernity. Prerequisite: Anthropology 104 and Anthropology 280, or permission of instructor. GIBEL MEVORACH.

**326 Anthropology of Religion\*** **4 credits+**

Also listed as Religious Studies 326. The role and nature of religion. Origin of religious beliefs and customs. Structure and function of religious systems: beliefs, practitioners, supernatural power, totemism, and ritual change. Prerequisite: Anthropology 280 or permission of instructor. ANDELSON.

**Methods****290 Archaeological Field Methods (Spring)** **4 credits+**

Archaeological survey, excavation, and artifact analysis as tools for reconstructing the lifestyles of extinct societies. Lab work includes lithic, faunal, and ceramic analysis. Field labs provide practice in finding, mapping, recording, and interpreting archaeological sites. Prerequisite: Anthropology 104, or upper-level (200 or 300) archaeology course, or permission of instructor. WHITTAKER.

**291 Methods of Empirical Investigation (Spring)** **4 credits+**

See Sociology 291.

**292 Ethnographic Research in Complex Societies (Fall)** **4 credits+**

Also listed as Sociology 292. The processes by which ethnographers construct an understanding of human behavior; what questions they ask and how they answer them. Students engage in ethnographic field studies. Prerequisite: permission of instructor. TAPIAS.

**298 Archaeological Field School (Summer)** **4 credits**

A six-week field course in archaeological method and theory emphasizing practical experience. Intensive field research in the American Southwest, including both excavation and preliminary processing of artifacts in the field lab. Field trips to areas of ethnographic and archaeological interest. KAMP, WHITTAKER.

**Theory****280 Theories of Culture (Fall and Spring)** **4 credits+**

A survey of the history of anthropological theory from the Enlightenment to the present. Prerequisite: Anthropology 104 and at least one 200-level anthropology course, or permission of instructor. ANDELSON, ROPER.

## Other Courses

<b>399 Directed Research</b>	<b>4 credits</b>
See Directed Research. STAFF.	
<b>490 Senior Thesis (Fall or Spring)</b>	<b>4 credits</b>
The preparation, writing, and public presentation of a piece of theoretical anthropological research in any of the subfields of anthropology. Students must obtain department approval the semester before thesis credits are taken. Two advisers/readers will supervise each thesis. Prerequisites: Anthropology 280, senior standing, and prior departmental approval. STAFF.	

## Art

Member of the Division of Humanities

Susan Strauber, Chair, Jenny Anger, Timothy Chasson, Lydia Diemer, Matthew Kluber, Bobbie McKibbin\*, Lee Emma Running, Lesley Wright, Emma Zghal

The Department of Art provides curricular opportunities for the development of technical skills, aesthetic judgment, and historical understanding. Participation in both studio and art history courses stimulates critical thinking and refines creative potential in the visual arts. The Grinnell College Art Collection of approximately 5,000 original works of art and the changing exhibitions of the Faulconer Gallery and the Print and Drawing Study Room supplement formal course study.

Students who major in art may elect a studio or an art history concentration, with opportunities for advanced work in Art 336-342, Art 400, and Art 499. Students with strong backgrounds in visual art may submit a portfolio of their best work to the department for review for possibly qualifying out of a 100-level studio course. Students who receive a 5 on the Advanced Placement exam in Art History will be exempted from Art 103. Students with a score of 4 may, upon consultation with the department, be exempted from Art 103. Students electing an art history concentration must consult with the department about appropriate foreign language study. Majors are expected to enrich their concentration through selected courses offered by other departments. For example, appropriate courses in history, literature, philosophy, and religious studies, or syntheses of these materials in Humanities courses contribute to the art history concentration. Furthermore, anthropology, economics, and the sciences, especially chemistry, promote possibilities for careers in art conservation and arts management, in addition to teaching and research.

Students are encouraged to consider the advantages of a semester abroad in an approved program. Off-campus programs in this country also are available to majors with adequate preparation for advanced study. There are opportunities for academic internships at the Faulconer Gallery and at the Des Moines Art Center. Competitive summer internships at national museums and institutions are open to qualifying students with considerable preparation in art history. A competitive scholarship in studio art allows for a ninth semester of portfolio preparation. Finally, students interested in preparing for a career in architecture should bear in mind the cooperative program between Grinnell and Washington University in St. Louis (see Cooperative Preprofessional Programs).

## The Major

**A minimum of 32 credits.** Required for the studio concentration are Art 234, two others of series 200, two of series 300 or above, one other studio art course, Art 103, and one other art history course. For the art history concentration, required are 28 credits in art history, which must include Art 103 and Art 400, and may include Art 499, and four credits in studio art. Art history concentrators are required to take one course from each of the following groups: Art 214 or 227 or 230; Art 221 or 222; Art 231 or 232. With permission, up to eight credits in the art history concentration may be taken in related studies outside the department. At least 20 credits of coursework must be taken with the Department of Art at Grinnell. No more than 16 credits within a single medium or art history area may count toward the major unless approved in advance by the department. Beginning in Fall 2006, both senior projects in studio art and senior theses in art history will be considered Art 499 and must follow the College's procedures for Mentored Advanced Projects (MAPs) as well as departmental procedures. Only one Art 499 (four credits) may count toward the major. Pre-architecture students must include one semester each of laboratory physics and calculus and are advised to fulfill the studio concentration, though other majors are possible.

To be considered for honors in art, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate, by departmental consensus, superior performance in coursework combined with superior breadth or depth of curriculum.

## History and Theory

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### 103 Introduction to Art and Art History (Fall and Spring) 4 credits

A thematic and cross-cultural study of art and architecture as expressions of diverse social, intellectual, religious, and aesthetic values, primarily in Western societies since antiquity, with reference to certain East Asian and African traditions. Emphasis on developing critical skills. Use of Grinnell College Art Collection. Prerequisite: none. STAFF.

### 210 Women, Art, and History\* 4 credits+

An introduction to the history of women's involvement in the visual arts. Concerned with ways of analyzing changing relationships among gender, culture, and creativity. The focus is on a historical study of women as producers of art, with emphasis on the various ways women have responded to social conditions determining the production of art, and on defining the issues and methods of investigations, based on feminist critiques of conventional art historical approaches. Prerequisite: Art 103, or Gender and Women's Studies 111, or permission of instructor. STRAUBER.

### 214 Monastery and Cathedral in Medieval Europe\* 4 credits+

Study of major developments in architecture and art from the Carolingian through Gothic periods (9th–14th centuries). Primary focus on architectural design and structure (as at Durham, Canterbury, Lincoln, Cluny, Paris, Chartres, Amiens), including the roles of sculpture and manuscript painting within their social, political, religious, and intellectual climates. Option of executing projects in architectural design or doing reading in French, German, Italian, Latin, or Spanish. Prerequisite: Art 103 or permission of instructor. CHASSON.

\*Not offered every year.

**221 19th-Century Painting: Romanticism and Realism\*** **4 credits+**

Examination of 19th-century Romantic and Realist painting as critical responses to the period's dramatic political, industrial, and cultural transformations and as the foundation of artistic "modernity." Emphasis on issues of high and mass culture; art and political voice; representations of non-Europeans; relevance of the canon; tensions between the urban and natural worlds; and creation of the avant-garde. Prerequisite: Art 103 or permission of instructor. STRAUBER.

**222 Impressionism and Post-Impressionism\*** **4 credits+**

A study of major artists, works, and issues in European Impressionist and Post-Impressionist painting and sculpture (c. 1865–1900). Specific movements include Impressionism, Post-Impressionism, Symbolism, Art Nouveau. Prerequisite: Art 103 or permission of instructor. STRAUBER.

**227 Italian Renaissance Art\*** **4 credits+**

A study of Italian culture from the late 13th through the late 16th centuries as expressed in painting, sculpture, architecture, and urban design. Emphasis on political, social, religious, and intellectual factors shaping artistic theory and expression in Florence, Siena, Rome, Venice, and the courts at Mantua and Urbino. Option of doing some reading in French, German, Italian, or Latin. Prerequisite: Art 103 or permission of instructor. CHASSON.

**230 Northern Renaissance Art\*** **4 credits+**

Primarily a study of Netherlandish and German painting and printmaking of the 15th and 16th centuries (Van Eyck, Bosch, Gruenewald, Duerer, Baldung Grien, Holbein, Bruegel). Emphasis on the functions and audiences for religious and secular work in light of original sources and recent criticism. Use of late medieval and Renaissance images and prints in the College Art Collection. Option of doing some reading in French, German, or Latin. Prerequisite: Art 103 or permission of instructor. CHASSON.

**231 Modern Art in Europe, 1900–1940 (Fall)** **4 credits+**

An examination of major movements in European art from 1900–1940, including Fauvism, Expressionism, Cubism, Futurism, Dada, Surrealism, Constructivism, and Socialist Realism. Focus upon the historical contexts of art production and reception. Readings range from contemporary criticism to historical analysis. Investigation of recurrent problems such as primitivism, gender, authorship, and cultural politics. Prerequisite: Art 103 or permission of instructor. ANGER.

**232 Art Since 1945 (Spring)** **4 credits+**

An examination of developments primarily in American and European art since 1945, from Abstract Expressionism to current trends such as the globalized art market. Particular attention to art since 1960: Pop, Happenings, Black Art, Minimalism, Conceptualism, Earth Works, Feminist Art, Video, and Installation. Readings range from contemporary criticism to historical analysis from a variety of perspectives (e.g., formal, multicultural, deconstructive). Prerequisite: Art 103 or permission of instructor. ANGER.

**233 American Art\*** **4 credits+**

A survey of American art within its cultural, philosophical, and social contexts. Topics include: Colonial portraiture; history painting, landscape, and vernacular expressions in the 19th century; the sources and development of modernism and postmodernism. Prerequisite: Art 103 or permission of instructor. ANGER.

<b>248 Greek Archaeology and Art* (Spring)</b> See Classics 248.	<b>4 credits+</b>
<b>250 Roman Archaeology and Art* (Spring)</b> See Classics 250.	<b>4 credits+</b>
<b>251 Architecture and Urban Planning in Papal and Fascist Rome*</b> Study of major buildings and concepts of urban development from the late Imperial age of early Christianity (4th century) through the height of papal power in the Renaissance, Baroque, and Rococo periods (18th century). We conclude with the vast urban reconstructions under Mussolini and their legacy in the contemporary city. Use of historical maps in the College Art Collection. Option of executing design projects or doing some reading in French, German, Italian, or Latin. Prerequisite: None, although Art 250 or History 256 is helpful. CHASSON.	<b>4 credits+</b>
<b>260 Museum Studies: The Art Museum*</b> An examination of the history of museums, museum operations, funding, ethics, and the philosophical and intellectual issues raised by the contemporary museum. The course will focus on art museums, but many of the topics will pertain to history, ethnographic, science, and other types of museums. Prerequisite: Art 103 or permission of instructor. WRIGHT.	<b>4 credits+</b>
<b>316 Architecture and Urbanism in Paris* (Fall)</b> See French 316.	<b>4 credits</b>
<b>360 Exhibition Seminar* (Fall)</b> An exploration of the materials and methods of primary art historical research and museum practice through the organization and presentation of an exhibition. Students work directly with art objects, using works in the Grinnell College Art Collection and/or borrowed from lenders. Topic and instructor vary; see current Schedule of Courses. Course may be repeated once for credit. Prerequisite: One 200-level art history course or permission of instructor. STAFF.	<b>4 credits</b>
<b>400 Seminar in Art History (Spring)</b> An intensive study of selected problems with emphasis on research, methodology, and critical evaluation of a special area as announced in the current Schedule of Courses. May be repeated for a maximum of 8 credits if different topics are taken each time. Prerequisite: Senior standing in art history concentration or permission of instructor. STAFF.	<b>4 credits</b>
<b>499 Mentored Advanced Project (Fall or Spring)</b> Senior Thesis: The preparation, writing, and public presentation of a piece of art-historical research in any area of history. Seniors must obtain prior approval of the project by a primary and a secondary adviser (the former from within the department of art). A MAP application must be completed with the required project statement and with all faculty signatures before submission to the Office of the Registrar. All applications are subject to the approval of the dean of the College. Prerequisite: Senior standing and departmental approval of official MAP proposal before the end of the preceding semester. STAFF.	<b>4 credits</b>

**Studio**

**136 Introduction to Studio: Printing Processes (Fall or Spring) 4 credits**  
STAFF.

**138 Introduction to Studio: Painting Processes (Fall or Spring) 4 credits**  
STAFF.

**140 Introduction to Studio: Ceramic Processes (Fall or Spring) 4 credits**  
SCHRIFT.

**142 Introduction to Studio: Sculpting Processes (Fall or Spring) 4 credits**  
RUNNING.

**148 Introduction to Studio: Digital Art (Fall or Spring) 4 credits**

This introductory course provides a foundation for art-making methods, design composition skills, and digital image creation. The course will focus on two-dimensional images, making use of both raster and vector graphics software programs. This course will introduce students to the new vitality of digital imaging and encourage reflection on the computer as a visual-thinking tool.

Prerequisite: none. STAFF.

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Incorporated into each of the media-oriented problems of these courses listed above are drawing and design components that ensure each student's recognition of the relationship among drawing, design, and the designated medium. These courses develop important and useful skills in these areas.

**234 Drawing (Fall or Spring) 4 credits**

Studio assignments in color and black and white, designed to continue the development of visual skills and concepts as they pertain to drawing. Folios include figurative and nonfigurative work. The concept of drawing as a complete and finished work explored and emphasized. Prerequisite: Art 136, or 138, or 140, or 142, or permission of instructor. STAFF.

**236 Printmaking (Spring) 4 credits**

Prerequisite: Art 136, or 138, or 148, or permission of instructor. KLUBER.

**238 Painting (Spring) 4 credits**

Prerequisite: Art 136, or 138, or 148, or permission of instructor. STAFF.

**240 Ceramics (Fall or Spring) 4 credits**

Prerequisite: Art 140, or 142, or permission of instructor. STAFF.

**242 Sculpture (Spring) 4 credits**

Prerequisite: Art 140, or 142, or 148, or permission of instructor. RUNNING.

The above studio courses build on skills introduced in the 100-level studio courses and present new processes and challenges for the students in these areas.

**334 Advanced Drawing (Spring) 4 credits+**

Using subject matter and media similar to those employed in Art 234, this studio course presents advanced problems in drawing as an independent art form. Prerequisite: Art 234 or permission of instructor. STAFF.

**336 Advanced Printmaking (Spring)** **4 credits+**

Prerequisite: Art 236 or permission of instructor. KLUBER.

**338 Advanced Painting (Spring)** **4 credits+**

Prerequisite: Art 238 or permission of instructor. STAFF.

**340 Advanced Ceramics (Fall or Spring)** **4 credits+**

Prerequisite: Art 240 or permission of instructor. STAFF.

**342 Advanced Sculpture (Spring)** **4 credits+**

Prerequisite: Art 242 or permission of instructor. RUNNING.

The above studio courses build on skills developed in the 200-level courses in these areas and present advanced problems in each.

**499 Mentored Advanced Project (Fall or Spring)** **4 credits**

Senior Project: A concentrated focus within a specific medium in which the student has extensive experience. This course is aimed at the establishment of a personal direction in content and personal expression while developing a mature portfolio in preparation for an advanced degree. The project includes preparation, creation, and public presentation of a body of artwork. Seniors must obtain approval of a department member for the desired medium as supervisor of the project. A MAP application must be completed with the required project statement and with all faculty signatures before submission to the Office of the Registrar. All applications are subject to approval of the dean of the College. Prerequisite: 300-level studio course, senior standing, and departmental approval of official MAP proposal before the end of the preceding semester. STAFF.

## **Biology**

Member of the Division of Science

Vincent Eckhart, Chair, Jonathan Brown, Rafael Cabeza, David Campbell, Benjamin DeRidder, Leslie Gregg-Jolly, Shannon Hinsa-Leasure, Tricia Humphreys, Kathryn Jacobson, Peter Jacobson, Clark Lindgren, Vida Praitis, Diane Robertson, Charles Sullivan, Bruce Voyles

Biology investigates the processes of life at the molecular, cellular, organismal, population, and ecosystem levels. The department believes that the study of biology helps all students to become more scientifically literate and exposes them to the diverse ways in which biologists pose questions and gather and interpret data. Aside from its contribution to a liberal education, the biology curriculum may be an introduction to a career in research, education, environmental science, the health professions, conservation, or a range of other fields.

The department recommends that students considering a biology or biological chemistry major take both Biology 150 Introduction to Biological Inquiry and Chemistry 129 General Chemistry in their first year. These courses may be taken in either order. It also recommends that students take calculus (Mathematics 123–124 or 131) during their first year. In the first semester of their second year, students should take both Biology 251 Molecules, Cells, and Organisms and Chemistry 221

Organic Chemistry I. Students continuing as biology majors should then enroll in Biology 252 Organisms, Evolution, and Ecology in the second semester. These core courses prepare students to continue with advanced-level courses of their choice and to undertake independent research projects. Since the focus of the curriculum at all levels is on the process of discovery in biology, classroom activities emphasize experimental design, analysis of data, and reading from the scientific literature, while laboratories emphasize student-designed experiments or projects and writing scientific papers and posters. All majors are encouraged to conduct independent study or summer research in association with Grinnell faculty or at an off-campus site or program. In such cases, careful advanced planning with an adviser will make it easier to take advantage of these opportunities. Students also are encouraged to develop their skills in written and oral communication through investigative reports, class presentations, or a departmental seminar.

Excellent laboratory and field facilities support the biology program. Instrumentation available for courses and research includes laser scanning confocal and fluorescence microscopes, high-speed and ultra high-speed centrifuges, a liquid scintillation spectrometer, photodocumentation systems, scanning UV-visible spectrophotometers and plate reader, electrophysiological suites, a C/N and AutoAnalyzer, as well as equipment for DNA synthesis, sizing, sequencing, and the polymerase chain reaction. The department also manages the Conard Environmental Research Area (CERA), a 148-hectare (365-acre) biological field station 11 miles from campus, which includes restored oak woodland, oak savanna, and tallgrass prairie habitats; a diversity of aquatic habitats; and several long-term experimental areas. The newly constructed Environmental Education Center supports teaching and research in biology, the arts, and other subjects at CERA with excellent classroom, collection, and greenhouse facilities.

## The Major

### **A minimum of 32 credits in biology including:**

- Biology 150 Introduction to Biological Inquiry
- Biology 251 Molecules, Cells, and Organisms
- Biology 252 Organisms, Evolution, and Ecology
- Twenty additional credits of biology at the 200 level or higher, 12 of which must be at the 300 level or higher. Not more than four of the 20 credits may be from Biology 297, 299, 397, 399, or 499, Science 300, or independent study done elsewhere.

#### Also required:

- Chemistry 129 General Chemistry
- Chemistry 221 Organic Chemistry I
- Mathematics 124 Functions and Integral Calculus or 131 Calculus I

Chemistry 222, Physics 131 and 132, and Mathematics 133 and 209 are recommended.

**NOTE:** Biology 220 does not count for major credit.

With prior approval, a maximum of four credits of advanced work in a related field may be applied toward the major. At least half of the credits applied toward the biology major must be taken in residence at Grinnell.

To be considered for honors in biology, graduating seniors, in addition to meeting the College's general requirements for honors, must conduct an independent research project (either at Grinnell or elsewhere) and share their findings with fellow biologists in a departmental seminar. The award of honors is not based solely on grades and achievement in the classroom or lab. It signifies, in addition, an underlying commitment to the discipline as evidenced by participation in departmental affairs and activities (e.g., acting as a teaching assistant or mentor, or serving on the SEPC), including regular attendance at departmental seminars.

**150 Introduction to Biological Inquiry (Fall and Spring) 4 credits**

An introduction to how biologists pose questions, design experiments, analyze data, and communicate scientific information, for prospective biology and biological chemistry majors as well as nonmajors. Although individual sections will have different topics and formats, all sections will involve intensive student-directed investigation and include a laboratory component. Prerequisite: none. STAFF.

**220 Biotechnology and Its Social Impact (Fall) 4 credits**

An investigation of genetic engineering techniques and products as applied in agriculture, medicine, industry, law, and the environment, as well as the social, economic, and technical implications of their use. Topics include genetically engineered plants and animals, gene therapies, in vitro fertilization and human cloning, DNA fingerprinting, and genetic testing. Does not count toward the major. Prerequisite: second-year standing. ROBERTSON.

**251 Molecules, Cells, and Organisms (Fall) 4 credits**

Investigations of the cellular and molecular basis of organismal structure and function, including studies of how organisms acquire and expend energy, acquire and transport materials, regulate internal conditions, transmit information, reproduce, develop, grow, and move. Three lectures and one scheduled lab each week. Prerequisite: Biology 150, Chemistry 129, and completion of or concurrent registration in Chemistry 221; or permission of instructor. STAFF.

**252 Organisms, Evolution, and Ecology (Spring) 4 credits**

Investigations of the evolutionary causes and ecological consequences of organismal structure and function, including studies of why organisms acquire and expend energy, acquire and transport materials, regulate internal conditions, transmit information, reproduce, develop, grow, and move. Three lectures and one scheduled lab each week. Prerequisite: Biology 251 and Mathematics 124 or 131. STAFF.

**301 History of Biological Thought\* (Spring) 4 credits**

This seminar course will consider how biological theories emerge and change in a complex environment of empirical knowledge and social/political concerns. Areas of study may include reproductive biology, evolution, genetics, ecology and conservation, and medicine. Three lecture/discussion sections each week. Prerequisite: Biology 252 or permission of instructor. BROWN.

**305 Evolution of the Iowa Flora\* (Fall) 4 credits+**

Investigations of the history of Iowa's plant diversity from three perspectives: (1) taxonomy and systematics; (2) paleoecology and community assembly; and (3) population structure, biogeography, and conservation. Three lectures and one laboratory each week. Prerequisite: Biology 252 or permission of instructor. ECKHART.

\*Not offered every year.

**325 Fungal Biology\* (Fall) 4 credits**

An integrative survey of the fungal kingdom, emphasizing current topics in developmental biology, physiology, genetics, evolution, systematics, ecology, and human interactions with fungi. Combined lecture/lab periods meet two times each week for three hours. Emphasis is on interactive learning through field and laboratory investigations. Prerequisite: Biology 252 or permission of instructor. K. JACOBSON.

**334 Plant Physiology\* 4 credits**

Plant functions emphasizing the physiology of photosynthesis, respiration, translocation, control of growth, and major processes of the living plant. Three lectures, one laboratory each week. Prerequisite: Biology 252 or permission of instructor. DERIDDER.

**339 Biogeochemistry\* (Fall) 4 credits**

Study of the effects of life on the Earth's chemistry. This course will examine the interactions among biological and chemical processes that determine the cycling of biologically significant elements in soils, sediments, waters, and the atmosphere. Lectures and discussions focus on current topics, with particular emphasis on the effects of human activity on biogeochemical cycles. Field and laboratory investigations emphasize quantitative analysis and experimental design. Three lecture/discussions and one laboratory per week. Prerequisite: Biology 252, or Biological Chemistry 262, or permission of instructor. P. JACOBSON

**340 Aquatic Biology\* (Spring) 4 credits**

An examination of the biology of freshwater systems, including lakes, rivers, and streams, and the linkages between aquatic and terrestrial environments. Lectures and discussions focus on current topics in freshwater biology. Laboratory and field investigations emphasize quantitative analysis and experimental design and include an independent project. One laboratory meeting and two lecture/discussion sessions each week. Prerequisite: Biology 252 or permission of instructor. P. JACOBSON.

**345 Advanced Genetics\* (Fall) 4 credits**

Genetics is an experimental approach that has been applied to questions in all areas of biology, answering fundamental questions about inheritance, cell mechanics, human disease, and evolutionary change. This course will introduce students to advanced genetic principles and techniques. We will then explore how these techniques have been applied to answer fundamental questions in biology by reading both classic and recent papers from the primary literature that utilize genetic approaches. We will also discuss some of the limitations of genetics as a scientific approach. The laboratory will emphasize multiweek projects using genetic techniques to study biological problems. Two three-hour meetings per week. Prerequisite: Biology 252, or Biological Chemistry 262, or permission of instructor. PRAITIS.

**350 Animal Development\* (Spring) 4 credits**

An examination of the cellular and molecular aspects of development in a variety of organisms, with a focus on animals. The experimental basis for our current knowledge of developmental processes is presented. The laboratory includes work with vertebrate and invertebrate embryos. Three lectures, one laboratory each week. Prerequisite: Biology 252 or permission of instructor. SULLIVAN.

**355 Developmental Genetics\* (Spring) 4 credits**

We explore how scientists identify and characterize the genes required for animal and plant development, by reading and discussing papers from the primary literature that utilize molecular and classic genetic techniques. Topics include axis determination, cell fate decisions, tissue formation, sex determination, environmental influences on development, and evolutionary conservation of developmental mechanisms. In the laboratory, students do independent research projects on the model system *C. elegans*. Two three-hour meetings per week. Prerequisite: Biology 252, or Biological Chemistry 262, or permission of instructor. PRAITIS.

**360 Plant Development\* (Spring) 4 credits**

An examination of the molecular, structural, hormonal, and environmental aspects of differentiation in plants. The main emphasis is on differentiation in higher plants, but developmental systems in the algae, fungi, and bryophytes are also examined. The laboratory includes plant tissue culture methods as tools for morphogenetic studies. Three lectures, one laboratory each week. Prerequisite: Biology 252 or permission of instructor. DERIDDER.

**363 Neurobiology\* (Fall) 4 credits**

This course examines the structure, function, and development of the nervous system. Cellular and molecular mechanisms are emphasized and examples are drawn from throughout the animal kingdom. Three lectures and one scheduled laboratory each week. Prerequisite: Biology 251 or permission of instructor. CABEZA, LINDGREN.

**364 Animal Physiology\* (Spring) 4 credits**

This course examines the integrated function of tissues, organs, and organ systems from a molecular, cellular, and organismal perspective. Emphasis is placed on mechanisms underlying physiological processes found throughout the animal kingdom. Three lectures and one laboratory each week. Prerequisite: Biology 252 or permission of instructor. LINDGREN.

**365 Biology of Prokaryotes\* (Fall) 4 credits**

The structure, physiology, and genetics of the prokaryotes. Lectures include discussion of papers from the current literature. Laboratory features multi-week investigations. Two lectures and one laboratory each week. Prerequisite: Biology 251. Biological Chemistry 262 is recommended. HINSA.

**368 Ecology\* (Fall) 4 credits**

Study of the distribution and abundance of organisms and of relationships between organisms and environments. Laboratories emphasize quantitative analysis and experimental design in ecology and include several field projects. Lectures focus on the development of ecological concepts and theory. Three lectures and one laboratory per week. Prerequisite: Biology 252 or permission of instructor. ECKHART.

**370 Advanced Cell Biology\* (Fall) 4 credits**

This course examines selected topics that are the focus of current research describing the molecular biology of eukaryotic cells. Events occurring in the nucleus, cytoplasm, and at the cell surface are considered. Laboratories emphasize techniques to study proteins in a variety of cell types including cells growing in culture. Prerequisite: Biology 251 or permission of instructor. SULLIVAN.

\*Not offered every year.

**373 Mechanisms of Evolution\* (Spring) 4 credits**

This course examines the mechanisms of evolutionary change at both the micro and macroevolutionary scales. Topics include the maintenance of genetic variation, population structure and speciation, molecular evolution, systematic methods and applications, and macroevolution. Three two-hour sessions per week. Prerequisite: Biology 252 or permission of instructor. BROWN.

**380 Molecular Biology (Spring) 4 credits**

An examination of the molecular biology of the cell and associated technology. The application of techniques such as molecular cloning, PCR amplification, DNA sequencing and hybridization to contemporary issues in biology are emphasized in lecture and laboratory. Two lectures and one laboratory per week. Prerequisite: Biology 252, or Biological Chemistry 262, or permission of instructor. GREGG-JOLLY.

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**385 Virology\* (Spring) 4 credits**

The biology of bacterial, animal, and plant viruses: mechanisms of entry and release of virions, replication and expression of genomes, effects on host cells, with emphasis on current scientific literature. Laboratory includes multiweek investigations based on aspects of the life cycles of bacterial and animal viruses. Three lectures, one scheduled lab each week. Prerequisite: Biology 251 or permission of instructor. STAFF.

**399 Directed Research 2 or 4 credits**

See Directed Research. STAFF.

**Biological Chemistry**

Member of the Division of Science

Vida Praitis, Chair (Biology), Rafael Cabeza (Biology), Leslie Gregg-Jolly (Biology), Mark Levandoski (Chemistry), Clark Lindgren (Biology), Elaine Marzluff (Chemistry), Andrew Mobley (Chemistry), Stephen Sieck (Chemistry), Charles Sullivan (Biology), Elizabeth Trimmer (Chemistry), Bruce Voyles (Biology)

Biological chemistry studies the chemical basis of biological processes. As such, it is an interdisciplinary combination of biology and chemistry requiring a distinct subset of material from both fields. The core courses of the major introduce students to methods of inquiry into biological chemistry and consider the structure and function of nucleic acids, proteins, lipids, and carbohydrates, and how these molecules mediate chemical processes in the cell. These core courses are designed jointly by members of the biology and chemistry departments to emphasize the interrelationships of the topics being presented. Elective courses enable students to consider specific topics within the broad range of biological chemistry in greater depth.

All of the instrumentation in both the biology and chemistry departments is available for the courses and research projects of biological chemistry majors. Majors are encouraged to participate in research projects with faculty in biology or chemistry.

## The Major

A minimum of 32 credits.

Core requirements (28 credits):

- Biology 150 Introduction to Biological Inquiry
- Chemistry 129 General Chemistry or Chemistry 210 Inorganic and Analytical Chemistry
- Biology 251 Molecules, Cells, and Organisms
- Chemistry 221 and 222 Organic Chemistry I and II
- Biological Chemistry 262 Introduction to Biological Chemistry
- Chemistry 363 Physical Chemistry

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Advanced electives from this list (4 credits):

- Biology 345 Advanced Genetics\*
- Biology 365 Biology of Prokaryotes\*
- Biology 370 Advanced Cell Biology\*
- Biology 380 Molecular Biology
- Biology 385 Virology\*
- Chemistry 330 Enzyme Mechanisms\*
- Chemistry 332 Biophysical Chemistry\*
- Chemistry 358 Instrumental Analysis

▪ Also required: Mathematics 133 and Physics 131 and 132

To be considered for honors in biological chemistry, graduating seniors, in addition to meeting the College's general requirements for honors, must complete an independent research project, present the work in a public format at Grinnell, and demonstrate, by committee consensus, excellence in the work. Achieving honors also requires that you contribute substantially to the program in other ways, for example, by regularly attending seminars, being a teaching assistant or mentor, serving on the SEPC, or participating in outreach activities. The faculty believes that honors signify both academic excellence and an unusually high commitment and dedication to the discipline. Graduating with honors in biological chemistry should not be regarded solely as the culmination of previous accomplishments, but rather an expectation of future accomplishments in the discipline in the years ahead.

### **262 Introduction to Biological Chemistry (Spring)      4 credits**

An introduction to chemical properties and biological functions of proteins, nucleic acids, carbohydrates, and lipids. Topics in lecture and lab include purifying and characterizing proteins, enzyme kinetics, and basic energy metabolism. Three lectures and one scheduled lab each week. Prerequisite: Biology 251, Chemistry 221, and completion of or concurrent registration in Chemistry 222; or permission of instructor. LEVANDOSKI, TRIMMER.

\*Not offered every year.

## Chemistry

Member of the Division of Science

Elaine Marzluff, Chair, Jin Jin, Mark Levadoski, Jim Lindberg, Launa Lynch, Leslie Lyons, Martin Minelli, Andrew Mobley, Lee Sharpe, Stephen Sieck, James Swartz\*, Elizabeth Trimmer, Elliott L. Uhlenhopp\*

Chemistry, as pure science, seeks to describe and make comprehensible the nature and transformations of matter. As applied science, it provides society with knowledge and tools to achieve its material purposes. By coupling creative thought with experimentation, the study of chemistry contributes to a liberal education.

The Department of Chemistry recommends that students considering chemistry as a major begin coursework as first-year students. The starting point for those with no more than a year of secondary school chemistry is Chemistry 129. Placement in Chemistry 210 or, in rare cases, in 221 may be appropriate.

The department emphasizes laboratory work in its curriculum. Students have excellent facilities for independent projects and study, and majors will get hands-on experience with modern instrumentation in several areas of chemistry. A variety of microcomputers and graphics workstations are used for data acquisition, simulation, and analysis in all courses. An active summer program provides further opportunities for intensive research.

A major in chemistry may lead to a career in chemical research or education. It also serves those who seek to enter the medical or engineering professions and those wishing to pursue graduate work in fields such as biochemistry, molecular biology, physiology, pharmacology, geology, environmental science, nutrition, and materials science, or for others, as a focus for liberal education.

To complete the major, mathematics through 133 and physics through 132 are needed and should be taken as early as possible. Students contemplating graduate work in science should consider taking two additional semesters of mathematics (215 and 220) as well as related coursework in biology and physics, depending on personal interests and goals. The department recommends the study of a foreign language, with German providing the most extensive access to chemical literature.

### The Major

**A minimum of 32 credits.** With permission, up to four of the 32 credits may be taken in related studies outside the department. Required are Chemistry 129, 210, 221–222, 363, 499 (four credits), and eight credits from 325, 330, 332, 358, 364, or 423. Also required are Mathematics 131 and 133 and Physics 131–132. Participation in the Chemistry Colloquium is required for 499 projects. Note: Chemistry 100 does not count toward the major. ACS Certification: The department's program is approved by the American Chemical Society through its Committee on Professional Training. Graduates who complete the following program meet the ACS certification standards and are eligible for ACS membership: Chemistry 129, 210, 221–222, 358, 363–364, and 423; four credits of 499 projects; and four credits from 325, 330, or 332.

To be considered for honors in chemistry, graduating seniors, in addition to meeting the College's general requirements for honors, must be selected by the chemistry faculty. The criteria used to decide which students have achieved sufficient distinction and academic excellence to qualify for honors in chemistry are both objective

and subjective in nature. It signifies, in addition, an underlying commitment to the discipline as evidenced by participation in departmental affairs and activities (such as serving as a mentor), attendance at co-curricular activities such as departmental seminars and poster presentations both on and off campus, and other indications of strong interest above and beyond normal classroom participation and achievement. The faculty believes that honors signifies both academic excellence and an unusually high commitment and dedication to the discipline. Graduating with honors in chemistry should not be regarded solely as the culmination of previous accomplishments, but rather an expectation of future accomplishments in the discipline in the years ahead.

**129 General Chemistry (Fall and Spring) 4 credits**

An introductory course. Primary emphasis on stoichiometry, atomic and molecular structure, dynamic equilibrium, acid-base chemistry, thermodynamics, electronic structure, and intermolecular interactions. Three classes, one laboratory each week. Prerequisite: none. STAFF.

**210 Inorganic and Analytical Chemistry (Fall and Spring) 4 credits**

Leads to advanced work in the department. Principles of inorganic chemistry and elementary quantitative analysis, including ionic equilibrium, electrochemistry, and acid-base chemistry. Three classes, one laboratory each week. Not open to those who have taken Chemistry 130. Prerequisite: Chemistry 129 or permission of instructor. STAFF.

**221-222 Organic Chemistry (Fall, Spring) 4 credits**

A comprehensive study of structures, reactions, syntheses, and spectroscopy of aliphatic and aromatic compounds, which emphasizes modern mechanistic models. Three classes, one laboratory each week. Prerequisite: Chemistry 129 or permission of instructor. (Students with AP/IB credit or other off-campus credit to substitute for Chemistry 129 must take Chemistry 210). Prerequisite: for 222: Chemistry 221 or permission of instructor. STAFF.

**325 Advanced Organic Chemistry (Fall) 4 credits+**

Selected topics in organic chemistry, including spectral methods of identifying organic compounds, reaction mechanisms, and modern methods of organic synthesis. Laboratory emphasis on spectral, chromatographic, and synthetic methods. Three classes, one laboratory each week. Prerequisite: Chemistry 222 or permission of instructor. SIECK.

**330 Enzyme Mechanisms\* (Fall) 4 credits+**

Examination of the mechanisms of enzyme reactions. Topics include enzyme structure, catalytic strategies, and methodologies to study enzyme mechanisms. Emphasis on enzymes that require a coenzyme (pyridoxal phosphate, flavin, etc.) to carry out their chemistry. Labs stress spectroscopic and kinetic techniques. Three classes, one laboratory each week. Prerequisite: Biological Chemistry 262 or permission of instructor. TRIMMER.

**332 Biophysical Chemistry\* (Fall) 4 credits+**

Exploration of advanced topics in biochemistry with an emphasis on physical methodologies (thermodynamics and kinetics) and techniques. Topics include ligand binding theory, protein folding, and structure determination, etc. Secondary emphasis involves topics in molecular neuroscience, such as second messenger systems and ion channels. Laboratory employs some of the techniques discussed and includes an independent project. Three classes,

\*Not offered every year.

one laboratory each week. Completion of the introductory physics sequence and Chemistry 363 is recommended. Prerequisite: Biological Chemistry 262 and completion of or concurrent registration in Physics 131, or permission of instructor. LEVANDOSKI.

**358 Instrumental Analysis (Spring) 4 credits+**

Analytical chemistry, including both theory and applications of spectral, electrochemical, chromatographic, and other commonly employed methods of analysis and separation. Two classes, two laboratories each week. Prerequisite: Chemistry 221. LYONS, SHARPE.

**363 Physical Chemistry I (Fall and Spring) 4 credits+**

An introduction to physical chemistry that emphasizes experimental and theoretical aspects of chemical thermodynamics, chemical and physical equilibrium, and kinetics. Three classes, one laboratory each week. Prerequisite: Chemistry 222, and Mathematics 133 or equivalent, and Physics 131 or equivalent, and completion of or concurrent registration in Physics 132; or permission of instructor. MARZLUFF.

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**364 Physical Chemistry II (Spring) 4 credits+**

Selected topics in physical chemistry with emphasis on molecular structure and chemical bonding and the application of thermodynamic and quantum theory to a variety of physical chemical phenomena. Three classes, one laboratory each week. Prerequisite: Chemistry 363 or permission of instructor. MARZLUFF.

**390 Seminar: Current Topics in Chemistry\* (Fall or Spring) 2 credits**

An investigation of a selected topic in chemistry with readings from the recent literature discussed in a seminar format. Specific topic announced at least a semester in advance. May be repeated a second time for credit. Prerequisite: Chemistry 222 or permission of instructor. STAFF.

**399 Directed Research 4 credits**

See Directed Research. STAFF.

**423 Advanced Inorganic Chemistry (Spring) 4 credits+**

Selected topics, including atomic structure, bonding, acid-base theories, coordination chemistry, crystal structure, and inorganic reactions. Three classes, one laboratory each week. Prerequisite: Chemistry 363 or permission of instructor. MINELLI.

## Chinese and Japanese

Member of the Division of Humanities

Scott Cook, Chair, Jinhua Chang, Jin Feng, Carolyn Fitzgerald, Mariko Shigeta Schimmel, Ya-Li Tong, Newell Ann Van Auken

### Chinese

At Grinnell, Chinese is an interdisciplinary major that explores the complex interaction between literary, philosophical, aesthetic, religious, political, and other important spheres of human life in China. Emphasis is placed not only on the diversity and

uniqueness of Chinese civilization, but also on its contributions to humanity and its heuristic values to the understanding of Western cultural traditions.

A knowledge of Chinese is valuable for students contemplating graduate study or careers in government service or in businesses engaged in international trade. The Chinese department currently offers beginning through advanced levels of Modern Chinese, as well as courses in Classical Chinese, philosophy, and literature in translation. Independent study is encouraged for those who wish to pursue intensive study of individual authors or special topics. Qualified students may opt to do some reading in Chinese to supplement their designated Chinese courses in translation.

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## The Major

**A minimum of 32 credits** beyond the prerequisites of Chinese 101–102 Beginning Chinese I and II. At least 20 of the 32 credits must be Chinese courses in the department at Grinnell.

### Part 1: The Core (20 credits)

A minimum of 12 of these credits must be taken at Grinnell College.

- Chinese 221–222 Intermediate Chinese I and II (or equivalent)
- Chinese 331–332 Advanced Chinese I and II (or equivalent)
- Chinese 461 Classical Chinese
- Chinese 498 Readings in Chinese Literature

### Part 2: Individual Focus (12 credits)

Three courses from the list below, including at least one of the following to be taken in the Chinese department at Grinnell: Chinese 275, 277, or 498.

- Chinese 275 Chinese Literary Tradition (in Translation)
- Chinese 277 Modern China through Literature and Film (in Translation)
- Chinese 498 Readings in Chinese Literature
- History 275–276 Chinese History I and II
- Humanities/Social Studies 131 China's Ancient World
- Political Science 275 Politics of the People's Republic of China
- Religious Studies 222 Religious Traditions of China

To be considered for honors in Chinese, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate consistently superior performance in departmental classes and exemplify substantial commitment to departmental goals.

### **101–102 Beginning Chinese I and II (Fall and Spring) 5 credits**

An introductory course to modern (Mandarin) Chinese that teaches the skills of listening, speaking, reading, and writing. Instructional emphasis is laid on both linguistic aspects (pronunciation, vocabulary, and structures) and on sociocultural strategies in communication. Students learn approximately 550 frequently used core graphs and their use in context. No prerequisite for 101. Prerequisite for 102: Chinese 101 or permission of instructor. COOK.

\*Not offered every year.

**211 Practicum in Chinese/Japanese Calligraphy** 1 credit

Guided practice in the different styles of Chinese character writing. Recommended for students in Chinese and Japanese 102 and above. May be repeated for credit with the permission of instructor. (A maximum of eight practicum credits may count toward graduation.) Does not count toward Chinese major. Prerequisite: Chinese or Japanese 101 or equivalent. ASAOKA.

**221–222 Intermediate Chinese I and II (Fall and Spring)** 4 credits

Reinforcement and expansion of the grammatical basis and communicative competence gained in Chinese 101 and 102. Continued practice of oral and listening skills, but with increased emphasis on reading and writing skills. Stress is on the acquisition of core graphs (to approximately 1,500), vocabulary, and complex sentence patterns. Simplified characters are also introduced. Prerequisite: Chinese 102 for 221 and Chinese 221 for 222, or permission of instructor. FENG.

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**275 Chinese Literary Tradition (in Translation)\*** 4 credits+

Also listed as General Literary Studies 275. Close reading and interpretation of classic Chinese works of discursive prose, historical narrative, poetry, and vernacular fiction from the early Zhou dynasty through late imperial China (ca. 1000 BCE–1911 CE). Analysis of these texts in the context of their social, cultural, and historical backgrounds and appreciation of their artistry in terms of both traditional Chinese literary theories and modern-day reinterpretations. Readings and discussion in English. Prerequisite: None. COOK.

**277 Modern China through Literature and Film (in Translation)\*** 4 credits

Also listed as General Literary Studies 277. This course examines literature and society in China starting from the turn of the 20th century through the critical study of selected samples of the literary and cinematic products of this tumultuous historical period. Attention is particularly focused on the political, cultural, and aesthetic messages that the literary and cinematic forms convey and disseminate. All readings and discussion are in English. Prerequisite: None. FENG.

**331–332 Advanced Chinese I and II (Fall and Spring)** 4 credits

Further reinforcement, expansion, and refinement of grammatical proficiency and communicative skills through intensive reading of authentic Chinese materials, such as short stories, newspapers, journals, and viewing of films and television broadcasts. Particular emphasis also given to increasing level of literary appreciation and critical awareness of the sociocultural contexts that shape readings. Prerequisite: Chinese 222 for 331 and Chinese 331 for 332; or permission of instructor. COOK, FENG.

**387 Individual Reading (Fall or Spring)** 2 or 4 credits

Designed to satisfy needs and interests of majors who have otherwise exhausted departmental language offerings. Prerequisite: Permission of instructor and department chair. STAFF.

**412 Chinese Conversation\* (Fall or Spring)** 1 credit

This course is offered primarily to advanced Chinese students for their practice of conversational Chinese. May be repeated for credit with the permission of instructor. Prerequisite: Chinese 461 or concurrent registration in Chinese 461. STAFF.

**461 Classical Chinese (Fall) 4 credits**

Intensive treatment of the basic particles and grammatical structure of the literary Chinese language (*wenyan*). Development of skills in understanding and recognizing syntactic parallelism, contextual clues, and rhetorical structures through the reading of selected works of classical prose and poetry. Prerequisite: Chinese 332 or permission of instructor. COOK.

**498 Readings in Chinese Literature (Spring) 4 credits**

This course is designed to increase students' proficiency in reading, interpreting, and discussing Chinese literature in its original language, and thereby build upon the linguistic foundation acquired in both Classical Chinese (CHI 461) and the three-year language sequence. Literature for the course will consist of a thematically focused set of textual materials taken from both pre-modern and modern sources, including literary, philosophical, and religious texts. Conducted in Chinese. Prerequisite: Chinese 332 and 461, or permission of instructor. FENG.

**Japanese**

A knowledge of Japanese is valuable for students contemplating graduate study or careers in government service or in businesses engaged in international trade.

**101 Beginning Japanese I (Fall) 5 credits**

An introductory course that teaches the skills of listening, speaking, reading, and writing. Instructional emphasis is laid on both linguistic aspects (pronunciation, vocabulary, and structures) and on sociocultural strategies in communication. Students learn both Japanese syllabaries and are introduced to *kanji*. Prerequisite: none. STAFF.

**102 Beginning Japanese II (Spring) 5 credits**

A continuation of Beginning Japanese I, emphasizing the skills of listening, speaking, reading, and writing. Instructional emphasis is laid on both linguistic aspects (pronunciation, vocabulary, and structures) and on sociocultural strategies in communication. Students will have learned at least 100 *kanji* by the end of the course. Prerequisite: Japanese 101 or permission of instructor. STAFF.

**211 Practicum in Chinese/Japanese Calligraphy 1 credit**

Guided practice in the different styles of Chinese character writing. Recommended for students in Chinese and Japanese 102 and above. May be repeated for credit with the permission of instructor. (A maximum of eight practicum credits may count toward graduation.) Does not count toward Chinese major. Prerequisite: Chinese or Japanese 101 or equivalent. ASAOKA.

**221 Intermediate Japanese I (Fall) 4 credits+**

Reinforcement and expansion of Japanese grammar and communicative competence for students who have previously studied Japanese. Students will gain advancement in the four skills of speaking, listening, reading, and writing. Prerequisite: Japanese 102 or permission of instructor. STAFF.

**222 Intermediate Japanese II (Spring) 4 credits+**

Further reinforcement and expansion of Japanese grammar and communicative competence, and advancement in the four skills of speaking, listening, reading, and writing. Students will have learned at least 300 *Kanji* by the end of the course. Prerequisite: Japanese 221 or permission of instructor. STAFF.

\*Not offered every year.

**279 Modern Japanese Fiction and Film (Fall or Spring) 4 credits**

Also listed as General Literary Studies 279. This course considers Japanese fiction and film that depict Japan from the mid-19th century through the present day. The work of some major authors and film directors will be introduced to examine Japanese culture and society as well as the characteristics that are unique to Japanese fiction and film. Readings and discussions in English. Prerequisite: none. STAFF.

**331–332 Advanced Japanese I and II\* (Fall and Spring) 4 credits**

This course is for those students who have finished Intermediate Japanese II or an equivalent course. An integrated approach will be taken by the instructor so that the students will be able to develop both their speaking and writing skills in Japanese. Prerequisite: Japanese 222 for Japanese 331 and Japanese 331 for Japanese 332, or permission of instructor. STAFF.

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**387 Individual Reading (Fall or Spring) 2 or 4 credits**

Designed to satisfy needs and interests of majors who have otherwise exhausted departmental language offerings. Prerequisite: permission of instructor and department chair. STAFF.

**Classics**

Member of the Division of Humanities

Edward Phillips, Chair, Joseph Cummins (also Philosophy), Monessa Cummins, Dennis Hughes, Gerald Lalonde

Because of their continuity and comparability, the classical and modern worlds offer valuable perspectives on each other. Their continuity has long been recognized; modern languages, institutions, values, and the forms and symbols in which we frame ideas are derived from the beginnings of Western civilization in Greece and Rome. But since our modern world differs in important ways from its origins, the study of classics also supplies a perspective for comparison that enforces rational, conscious examination of the unconscious assumptions by which we speak, think, and act. Grinnell courses in classics deliberately and explicitly invite students to apply their classical experience to the facts and modes of understanding they have learned in history, social sciences, philosophy, literature, and the arts as taught from more modern points of view in other departments of the College.

All classics offerings are designed and taught with a view to the needs of students from various disciplines and with various preprofessional interests. Some of these needs are addressed directly in courses in classical thought or New Testament Greek, but, in general, preparation for such professions as law is best served by the rigorous and humane qualities that the study of classics gives to a liberal education.

The department offers beginning, intermediate, and advanced courses in both Greek and Latin and a special course, Latin 225, which quickly brings entering students with differing backgrounds to an appropriate reading ability by working on their individual needs. The 300-level courses in Latin and Greek introduce students to the pleasure derived from careful and intelligent reading of a relatively small selection of the best literature. Reading competence also is fostered in a voluntary activity that has become a tradition fondly remembered by graduates: the weekly evening of sight-reading in faculty homes.

Majors take a minimum of 20 credits in reading courses, since the department is convinced that all objectives of classical study—from linguistic competence to familiarity with classical culture—are best approached through intensive study of literary texts in their original languages. Majors who plan a career in classical scholarship satisfy the need for more extensive reading or more sharply focused professional preparation in independent study. Those who incline toward the archaeological specialty, and those with more literary or historical interests, are encouraged to take a semester in one of the approved programs in Athens or Rome. Since careers in these areas will require reading proficiency in French and German, interested students are advised to master at least one of these languages during the undergraduate years.

## The Major

**A minimum of 32 credits** beyond the 100 level. With permission, up to 8 of the 32 credits may be taken in related studies outside the department. Required are Classics 495 and at least 20 credits in 300-level courses or individual reading, or 16 credits in 300-level courses or individual reading in one language and course 222 in the other. A major program in classics normally involves reading in the original in both Greek and Latin, but a student may elect to build a major program including independent study and reading in either Greek or Latin alone, supplemented by other departmental courses or related work in other literature, linguistics, art, theatre, philosophy, or other disciplines.

To be considered for honors in classics, graduating seniors, in addition to meeting the College's general requirements for honors, must show superior performance in coursework in classics, combined with superior breadth or depth of curriculum.

### Ancient History, Philosophy, Archaeology, and Classics (in Translation)

#### **231 History of Ancient Philosophy (Fall) 4 credits+**

See Philosophy 231.

#### **242 Classical Mythology\* (Spring) 4 credits+**

Also listed as General Literary Studies 242. A systematic study of the most important stories and figures of classical mythology, with emphasis on the reading and interpretation of primary Greek and Roman literary sources and on the contribution of feminist criticism, anthropology, religion, and psychology to this study. Prerequisite: Humanities 101. PHILLIPS.

#### **248 Greek Archaeology and Art\* (Spring) 4 credits+**

Also listed as Art 248. A study of major archaeological excavations and artistic genres of ancient Greece, and their relationship to political and cultural history; the exchange of artistic and archaeological influences with contemporary cultures of Europe, Africa, and Asia. Prerequisite: none. M. CUMMINS.

#### **250 Roman Archaeology and Art\* (Spring) 4 credits+**

Also listed as Art 250. A study of the major monuments and artifacts of ancient Etruria and Rome; their relationship to the political and cultural history; the Roman borrowing and adoption of Greek forms as well as original expression

\*Not offered every year.

in art and architecture. Roman artistic exchange with other cultures of Europe, Africa, and Asia. Prerequisite: none. M. CUMMINS.

**255 History of Ancient Greece\* (Fall)** **4 credits+**  
See History 255.

**256 History of Rome\* (Fall)** **4 credits+**  
See History 256.

**495 Senior Seminar (Spring)** **4 credits**  
Devoted to major themes in Greek and Roman culture, the seminar allows seniors to integrate their study of classics and related fields. Participants will plan topics and present papers that serve as a basis for analysis and discussion. Prerequisite: senior standing and permission of department. STAFF.

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## Greek

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**101 Elementary Greek (Fall)** **5 credits**  
The fundamentals of ancient Greek inflection, grammar, syntax, and literary style, based on simplified readings from Attic prose and poetry. Prerequisite: none. HUGHES.

**222 Intermediate Greek (Spring)** **5 credits**  
Continuation of Greek 101. Review of forms and grammar. Introduction to a range of Greek poetic and prose literature, with selected short readings from Homer, lyric poetry, Herodotus, Sophocles, Euripides, Plato, and the Christian Scriptures. Prerequisite: Greek 101 or permission of instructor. HUGHES.

**301 Homer\* (Spring)** **4 credits+**  
Reading of selected passages from the *Iliad*, the *Odyssey*, or both epics; special readings in archaeological and critical background. Prerequisite: Greek 222 and Humanities 101, or permission of instructor. STAFF.

**302 Plato\* (Fall)** **4 credits+**  
Readings from one or more of Plato's dialogues with attention to language, literary features, and philosophy. Prerequisite: Greek 222 and Humanities 101, or permission of instructor. J. CUMMINS.

**303 Greek Drama\* (Spring)** **4 credits+**  
Reading of two plays with study of literary form, the myths, and relevant social, religious, and philosophical issues. Prerequisite: Greek 222 and Humanities 101, or permission of instructor. STAFF.

**304 Greek Prose Writers\* (Fall)** **4 credits+**  
Reading and study of related works of one or more Greek prose writers, excluding Plato. Possibly to include history (Herodotus, Thucydides, Xenophon), philosophy (Aristotle), oratory (Andocides, Lysias, Demosthenes), or epigraphy. Prerequisite: Greek 222 and Humanities 101, or permission of instructor. M. CUMMINS.

**305 Greek Poetry\* (Fall) 4 credits+**

Readings in Greek poetry, excluding Homer and drama. Possibly to include Archaic lyric and elegiac poets (e.g., Sappho, Archilochus, Solon), Pindar and Bacchylides, or the Hellenistic poets (Apollonius, Theocritus, Callimachus). Introduction to Greek metrics and literary dialects. Emphasis on close reading and critical analysis of the texts. Prerequisite: Greek 222 and Humanities 101, or permission of instructor. HUGHES.

**387 Individual Reading (Fall or Spring) 2 or 4 credits**

Supervised readings designed to fit special needs of students—for example, those who wish to develop facility in reading New Testament Greek. Prerequisite: at least one reading course in Greek and permission of instructor. STAFF.

**Latin****103 Elementary Latin (Fall) 5 credits**

The fundamentals of Latin forms and sentence structure, based on sentences and connected reading from classical Latin literature. Prerequisite: none. PHILLIPS.

**222 Intermediate Latin (Spring) 5 credits**

Continuation of Latin 103. Readings in classical Latin prose and poetry, with review and composition as needed in order to attain a reading knowledge of Latin. Prerequisite: Latin 103 or permission of instructor. PHILLIPS.

**225 Reading Latin (Fall) 4 credits**

An intermediate course that can function as a continuation of Latin 222 or as a review class for students with substantial prior work in Latin at the secondary or collegiate level. Review of fundamentals with an emphasis on reading and interpreting a variety of texts. Prerequisite: Latin 222, or at least two years of secondary-school Latin, or permission of instructor. STAFF.

**318 Roman Satire\* (Fall) 4 credits+**

Readings in Lucretius, Horace, and Juvenal: the poetry of criticism and wit. Roman originality, Epicurean and Stoic stances in this complex and chameleonic genre, the interplay of moral voice and sense of humor, relations between philosophy and satire, rhetoric and poetry. Prerequisite: Latin 222, or 225 and Humanities 101, or permission of instructor. PHILLIPS.

**323 Vergil\* (Spring) 4 credits+**

Readings in the *Eclogues*, the *Georgics*, and the *Aeneid*; the development of Vergilian poetic technique; the civilized and national epic as a new form and its influence on Roman and later cultures; the pastoral tradition, influence of Greek and Hellenistic literature. Prerequisite: Latin 222 or 225, and Humanities 101; or permission of instructor. PHILLIPS.

**333 Roman Historians\* (Fall) 4 credits+**

Selected readings from Sallust, *Bellum Catilinae*, *Bellum Iugurthinum*, and Livy, *Ab Urbe Condita*; the interpretation of Rome's past by historians of the era of transition from republic to empire. Prerequisite: Latin 222 or 225, and Humanities 101; or permission of instructor. M. CUMMINS.

\*Not offered every year.

**334 Roman Lyric Poetry\* (Spring)****4 credits+**

The poetry of Catullus and the *Odes* of Horace. Critical analysis, the Greek background and models, the art and philosophy of Horace as the culmination of classical humanism. Prerequisite: Latin 222 or 225, and Humanities 101; or permission of instructor. HUGHES.

**344 Roman Thought\* (Fall)****4 credits+**

The poetry of Lucretius and some of the essays of Cicero will be studied for the ways in which they present Greek ideas to a Roman audience, on the subjects of nature, religion, politics, and the goals of life. Prerequisite: Latin 222 or 225, and Humanities 101; or permission of instructor. J. CUMMINS.

**387 Individual Reading (Fall or Spring)****2 or 4 credits**

Supervised reading designed to fit special needs of students. Prerequisite: at least one reading course in Latin and permission of instructor. STAFF.

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## Computer Science

Member of the Division of Science

Henry Walker, Chair, Marge Coahran, Janet Davis, Samuel Rebelsky, John Stone

People use computers because they can provide services and help in the solving of problems. Thus, many courses and much research throughout the College utilize various aspects of computing.

The discipline of computer science includes all aspects of the effective use of computers. Core areas within the undergraduate curriculum include multiple views of problem-solving, hardware design, operating systems, data organization (structure) and processing (algorithms), software design, concepts of programming languages, and the theory of computation. Some topics, such as networks and compilers, explore elements of computer systems in more detail, while other areas, such as artificial intelligence, computational linguistics, and simulation, integrate computer science with interdisciplinary studies.

Formal coursework is concentrated within the Department of Computer Science. Introductory courses emphasize multiple views of problem-solving, each with a different supporting computer programming language. All courses combine strong emphasis on basic concepts and fundamental techniques with laboratory work and experimentation. Considerable use is made of the department's Local Area Network (LAN), which includes more than 70 workstations.

Most students begin with Computer Science 151, although students interested in a general overview of computer science take 105. After consultation with the department, students with advanced preparation might start in 153 or a higher level course.

The computer science major prepares students who plan careers in computer science in the use of computing in other disciplines, in teaching, or in other professions. The curriculum is strongly influenced by national recommendations of such professional bodies as the Association for Computer Machinery, the Computer Society of the Institute of Electrical and Electronics Engineers, and the Liberal Arts Computer Science Consortium. Students regularly supplement this formal coursework with independent projects, internships, and student-faculty research. In addition, students

often work with faculty throughout the College on a variety of special projects that involve computing.

## The Major

**A minimum of 32 credits** (at least 28 in Computer Science and at least four in Mathematics). Required are Mathematics 218, one of Computer Science 152 or 153, Computer Science 201, one of Computer Science 211 or 213, one of Computer Science 223 or 362, and Computer Science 301, 302, and 341. Computer Science courses numbered below 151 do not satisfy major requirements.

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All majors are encouraged to take statistics (Mathematics 209 or 335-336), Physics 220, and a course in technology and society (such as a foundation course in Technology Studies). Students considering graduate school in computer science should take both Computer Science 211 and 213. Students planning to work in industry should take Computer Science 223 together with coursework in another discipline that uses computing in a significant way. Students considering a career in computing are encouraged to participate in an independent project, internship, or research experience.

To be considered for honors in computer science, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate excellence in the major. The department applies the following criteria:

- A. Core Courses of study.
  1. Completion of Computer Science 211 or Physics 220, and
  2. Completion of Computer Science 213
- B. Additional coursework that is not used to fulfill another requirement.
  1. Completion of a 200- or 300-level course in computer science, or
2. Completion of a statistics course at the 200 level or higher (Math 209, 309, 335, or 336), or
  3. Completion of Math 220 Differential Equations, Math 306 Mathematical Modeling, Math 314 Topics in Applied Mathematics, or Math 321 Foundations of Abstract Algebra, or
  4. Completion of Physics 220 Electronics, or
  5. Completion of Psychology 222 Industrial Psychology or 260 Cognitive Psychology.
- C. Participation in local activities related to computer science, judged to be excellent by department faculty. Such activities might include:
  1. Giving talks at Extras sessions, or
  2. Doing independent projects (totaling four credits or more) in computer science, or
  3. Carrying out research under the direction of a member of the department, or
  4. Developing a successful software package with positive assessment by department faculty.

D. Participation in the study or use of computer science outside of the department, judged to be excellent by department faculty. Such activities might include:

1. Achieving a score at or above the 75th percentile on the Graduate Record Examination in Computer Science, or
2. Receiving an award in the Mathematical Competition in Modeling, or
3. Achieving a strong performance in the ACM Programming Competition, or
4. Having a paper accepted by a refereed computer science journal or conference, or
5. Developing a successful software package with positive assessment by outside referees or evaluators, or
6. Contributing to an open source software package or resource, or
7. Carrying out supervised research elsewhere.

**105 The Digital Age (Spring) 4 credits**

A study of core topics and great ideas in the field of computer science, focusing on underlying algorithmic principles and social implications. Topics may include multimedia and hypermedia, networks, architecture, programming languages, software design, artificial intelligence, databases, cryptography, and the theory of computing. Includes formal laboratory work. Prerequisite: none. COAHRAN, WALKER.

**151 Fundamentals of Computer Science I (Fall or Spring) 4 credits**

A lab-based introduction to basic ideas of computer science, including recursion, abstraction, state, information hiding, and the design and analysis of algorithms. Includes introductory programming in a high-level, functional language. Prerequisite: none. STAFF.

**152 Fundamentals of Computer Science II (Fall or Spring) 4 credits**

Builds upon Computer Science 151 to study object-oriented problem-solving, the design and analysis of common algorithms, fundamental abstract data types and data structures, and elements of testing and verification. Also provides an overview of the field of computer science. Includes team projects and formal laboratory work. Prerequisite: Computer Science 151 or permission of instructor. STAFF.

**153 Computer Science Fundamentals (Fall) 4 credits**

Study of basic concepts of computer science, with an emphasis on problem-solving techniques from functional and object-oriented perspectives. Functional elements include data types, procedures as first-class objects, recursion, and binding. Classes, objects, and methods are introduced as basic elements of object-oriented problem-solving. Examples of core data types and classes include stacks, queues, priority queues, trees, and lists. Additional topics include the representation of data and some elements of algorithm analysis. Includes formal laboratory work. A student who receives credit for Computer Science 153 cannot receive credit for Computer Science 151 or 152. Prerequisite: Three semesters of high school computer science, or departmental placement, or permission of instructor. WALKER.

**201 Memory Management, Data Representation, and Formal Methods (Spring)** **4 credits**

Study of machine-level representations of data and techniques for managing storage, using formal methods of program design and a low- or mid-level programming language, such as C. Topics include Boolean logic and proof, language semantics, assertions and invariants, numerical approximations and errors, pointers, memory allocation and deallocation, and the run-time stack. Prerequisite: Computer Science 152, or 153, or Computer Science 151 and additional programming experience in an imperative language; or permission of instructor. COAHRAN.

**205 Computational Linguistics\* (Fall)** **4 credits+**

An examination of computational techniques for producing and processing text in natural languages and an introduction to the theoretical basis for those techniques, both in linguistics and in computer science. Topics include generative grammars, parsing, algorithms for automatic indexing, information retrieval, and natural-language interfaces. Prerequisite: Introduction to General Linguistics 114, and Computer Science 151 or 153; or permission of instructor. J. STONE.

**211 Computer Organization and Architecture\* (Fall)** **4 credits+**

Study of both traditional and alternative computer architectures. Introduction to digital logic, microcode, Von Neumann architectures, data representations, fetch/execute model, RISC/CISC, instruction formats and addressing, machine and assembly language, memory architecture and algorithms, I/O architecture, and elements of distributed systems. Includes formal laboratory work. Prerequisite: Computer Science 201 or permission of the instructor. COAHRAN, WALKER.

**213 Operating Systems and Parallel Algorithms\* (Fall)** **4 credits+**

Study of the principal components of typical operating systems and an introduction to parallel algorithms. Topics from operating systems: storage management, scheduling, concurrent processing, synchronization, data protection, and security. Discussion of models of parallelism and algorithms for problems in such areas as lists, trees, searching, sorting, graphs, geometry, and strings. Includes formal laboratory work. Prerequisite: Computer Science 201 or permission of the instructor. DAVIS, WALKER.

**223 Software Design (Fall)** **4 credits+**

Study of software life cycle and its consequences. Consideration of various algorithms with an emphasis on strategies that can be applied. Emphasis on design, coding, testing, and documenting of large software packages through work on a large project. Prerequisite: Computer Science 152, or 153, or permission of instructor. STAFF.

**261 Artificial Intelligence\* (Fall)** **4 credits+**

An introduction to current principles, approaches, and applications of artificial intelligence, with an emphasis on problem-solving methods, knowledge representation, reasoning with uncertainty, and heuristic search. Study of a range of AI approaches, such as rule-based systems, neural networks, and systems for machine learning. Review of several applications areas such as game playing, natural language processing, robotics, theorem proving, and perception. Prerequisite: Computer Science 152, or 153, or permission of instructor. J. STONE, WALKER.

\*Offered in alternate years.

**301 Algorithms (Fall)****4 credits+**

Study of structures used to organize data and of the algorithms used to manipulate these structures. Assignments to implement data structures and to use them in computer science and other applications programs. Emphasis on mathematical principles behind the data structures. Prerequisite: Computer Science 152, or 153, and Mathematics 218; or permission of instructor. STAFF.

**302 Programming Language Concepts (Spring)****4 credits+**

Description and analysis of key issues in the design, syntax, semantics, and implementation of programming languages, with examples from several high-level languages, illustrating important paradigms (functional, object-oriented, imperative, declarative). Additional topics may include denotational semantics, type-inference algorithms, program verification, and the lambda calculus. Prerequisite: Computer Science 301 or permission of instructor. STAFF.

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**341 Automata, Formal Languages,****and Computational Complexity (Spring)****4 credits+**

Also listed as Mathematics 341. A formal study of computational devices, their related languages, and the possibility and difficulty of computations. Examples are pushdown automata and Turing machines, context-free languages and recursively enumerable sets, and the halting problem and NP-completeness. Prerequisite: Computer Science 152, or 153, and Mathematics 218; or permission of instructor. J. STONE, WALKER.

**362 Compilers\* (Spring)****4 credits+**

Study of traditional and modern techniques for implementation of high-level languages, through either interpretation or translation to low-level languages. Topics include formalisms for describing syntax and semantics of languages, theory of parsing, regular expressions, intermediate languages, and optimization. Students construct interpreters or compilers for high-level languages. Includes formal laboratory work. Prerequisite: Computer Science 201 or permission of instructor. REBELSKY, J. STONE.

**364 Computer Networks\* (Spring)****4 credits+**

This course focuses on the communications protocols used in computer networks: their functionality, specification, verification, implementation, and performance. The course also considers the use of network architectures and protocol hierarchies to provide more complex services. Existing protocols and architectures are used as the basis of discussion and study. Includes formal laboratory work. Prerequisite: Computer Science 201 or permission of instructor. STAFF.

## East Asian Studies Concentration

Scott Cook, Chair

Students concentrating in East Asian Studies work in the areas of language and literature, history, music, philosophy, political science, and religion. Participation in an off-campus study program in China, Japan, or Taiwan is encouraged (see Off-Campus Study). In the senior year, the student is expected to complete a 2- or 4-credit interdisciplinary research project involving at least two academic disciplines.

**Required, 22 or 24 credits** as follows (at least 8 of the 16 credits from parts 2 and 3 must focus on the same region [China or Japan] as that of the language credits of part 1; at least 4 of the 16 must focus on the *other* region):

1. 4 credits Chinese or Japanese beyond the 221 level (or equivalent)
2. 8 credits from:
  - Chinese 275 Chinese Literary Tradition (in Translation)
  - Chinese 277 Modern China through Literature and Film (in Translation)
  - Chinese 331 Advanced Chinese I
  - Chinese 332 Advanced Chinese II
  - Third-year Japanese (through an approved off-campus program)
  - Humanities 131 China's Ancient World
3. 8 credits from:
  - History 275 Chinese History I
  - History 276 Chinese History II
  - History 277 Japanese History I
  - History 278 Japanese History II
  - History 37x Advanced Studies in Asian History
  - Political Science 275 Politics of the People's Republic of China
  - Religious Studies 117 Major Asian Religions
  - Religious Studies 221 Religious Traditions of Japan
  - Religious Studies 222 Religious Traditions of China
4. Two or four credits of a senior interdisciplinary project involving research in at least two disciplines

**NOTE:** No course can be counted toward more than one concentration requirement.

## Economics

Member of the Division of Social Studies

Janet Seiz, Chair, Keith Brouhle, William Ferguson, Bradley Graham, William A. Kelly Jr., Mark Montgomery, Paul Munyon, Jack Mutti, Irene Powell

Economics is the study of how society uses its scarce resources. The goal of the department is to promote an understanding of the economic aspects of society and to develop each student's ability to reason about economic issues—that is, to provide a basis for intelligent, responsible participation in modern society.

The study of economics provides a background for careers in business and public service and a foundation for graduate study in economics, business, law, and public policy. The study of economics complements undergraduate or later graduate work in other social sciences or in history. Economics 111 introduces a student to the discipline. The courses numbered 205–250 consider important areas of applied economics at a level accessible to all students. The tools of economic analysis are systematically developed in intermediate theory courses (280, 282), which are recommended to all students who expect to make use of economics in their studies, careers, or avocations. Students should take one course numbered 205–250 before taking Economics 280 or 282; students who have already taken Economics 280 and 282 would not normally take courses numbered 205–250. Advanced analysis courses

\*Not offered every year.

(those numbered 300–350) develop additional analytical capabilities, and seminar courses provide advanced applications of the discipline’s theoretical, empirical, and institutional insights.

A student majoring in economics will find available complementary work in history, other social sciences, and mathematics (including statistics and computer science). Students will be expected to access data and to use spreadsheet and statistical software to analyze economics issues. Off-campus study provides an excellent opportunity to observe and analyze how economic choices are made in other societies.

## The Major

**A minimum of 8 four-credit economic courses.** Required are:

- 1) Economics 111;
- 2) One of the following courses in empirical analysis:  
Economics 262 Empirical Methods in Economics, Economics 312 Advanced Econometrics, or Mathematics 336 Probability and Statistics II (Mathematics 336 does not count toward the minimum eight courses required in Economics);
- 3) Economics 280 and 282;
- 4) One economic tools course (numbered 300–350);
- 5) Two economic seminars; and
- 6) One history course above the 100-level from a list approved by the economics department, which does not count toward the eight-course minimum.

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To be considered for honors in economics, graduating seniors, in addition to meeting the College’s general requirements for honors, must demonstrate to the department’s satisfaction that they have achieved depth and breadth in their course of study.

### **111 Introduction to Economics (Fall or Spring)**

**4 credits**

A survey of the basic concepts and methods of analysis used in economics. Application to such policy problems as economic recession, inflation, regulation of industry, poverty and income distribution, financial crises, pollution, and trade restrictions. Prerequisite: none. STAFF.

### **205 Current State of the U.S. Economy (Spring)**

**4 credits+**

A study of current business conditions and key public policy problems in the U.S. Analysis of the data reporting system and judgmental forecasting. Recent problems have included: inflation, the federal deficit, government regulation, energy, unemployment, and tax reform. Not intended for students who have taken Economics 282. Prerequisite: Economics 111 or permission of the instructor. SEIZ.

### **215 Labor Economics\* (Spring)**

**4 credits+**

An investigation into the political economy of labor markets. Consideration given to traditional supply and demand interactions, relations of authority between employers and employees and their influence on productivity, internal labor markets, labor market segmentation, the role of unions, racial differences, gender differences, and the effects of international competition on U.S. labor markets. Not intended for students who have taken both Economics 280 and 282. Prerequisite: Economics 111. FERGUSON.

**218 Gender and the Economy\*** **4 credits**

An examination and economic analysis of women's changing economic status, primarily in the United States. Topics include wage differentials, occupational segregation, labor force participation, and family and work issues. This course also examines the interaction of race, gender, and class in determining economic status and policies for improving women's economic options. Prerequisite: Economics 111 or permission of instructor. POWELL.

**225 Marxian Economics\* (Fall)** **4 credits+**

An introductory study of the Marxian analysis of capitalism. Readings include selections from the writings of Marx and Engels as well as 20th-century Marxists. Prerequisite: Economics 111 or permission of instructor. SEIZ.

**229 American Economic History\*** **4 credits+**

Also listed as History 229. Development of the U.S. economy since colonial times. Contributions and limitations of economic analysis and quantitative methods in understanding the economy's growth, industrialization, markets, railroads, the Revolution, slavery, greenback and silver controversies, the multi-national monopoly, the New Deal, the Depression, and the impact of reforms on future international economic relations. Prerequisite: Economics 111 or permission of instructor. MUNYON.

**230 Economic Development\* (Spring)** **4 credits+**

A survey of various analytic approaches to the problem of economic development in Asia, Africa, and Latin America, and an examination of their significant policy problems. Each student does an intensive case study of one selected country. Prerequisite: Economics 111 or permission of instructor. STAFF.

**233 International Economics** **4 credits+**

An introduction to international trade theory, balance of payments concepts, and exchange rate determination. Topics include events, international institutions, and policies that affect trade, foreign investment, economic stability, and growth. Not intended for students who have taken Economics 280 and 282. Prerequisite: Economics 111 or permission of instructor. MUTTI.

**240 Resource and Environmental Economics (Fall)** **4 credits+**

Investigation of the economics of renewable and nonrenewable natural resources. Particular emphasis on the relationship between the biological and physical characteristics of particular resources and our economic choices. Consideration of selected current problems. Not intended for students who have taken Economics 280. Prerequisite: Economics 111 or permission of instructor. MONTGOMERY.

**245 The U.S. Financial System\*** **4 credits+**

An analysis of how the U.S. financial system affects the level of economic activity. The course examines the impact of money and credit on the economy, the creation of money, and credit in the financial system, and the role of monetary policy. Not intended for students who have taken either Economics 280 or 282. Prerequisite: Economics 111 or permission of instructor. STAFF.

**250 Public Finance\*** **4 credits+**

The economic role of government in an economy. Topics include the determination of the size and economic function of government, expenditure decisions and budgeting, the incidence and distributional effects of various taxes, and issues in

\*Not offered every year.

state and local finance. Not intended for students who have taken Economics 280. Prerequisite: Economics 111 or permission of instructor. BROUHLE.

**262 Empirical Methods in Economics (Fall or Spring) 4 credits**

This course covers basic descriptive statistics, sources, and useful transformations of economic data, and the application of probability theory and statistical inference in bivariate and multiple regression frameworks. Students are expected to complete and present a term project based on their data analysis. Prerequisite: Economics 111 or permission of instructor. GRAHAM.

**280 Microeconomic Analysis (Fall or Spring) 4 credits**

An examination of the theoretical underpinnings of the economic system. The objective is to develop a theoretical framework with which to investigate the economic behavior of individual consumers, firms, and resource owners. Prerequisite: Mathematics 124 or 131, Economics 111, second-year standing, and one additional economics course numbered between 205–250; or permission of instructor. BROUHLE, MONTGOMERY.

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**282 Macroeconomic Analysis (Fall or Spring) 4 credits**

Analysis of economic aggregates, primarily national income and employment, through a theoretical framework. While current and historical real world examples will be used to illustrate concepts, the primary goal is the development of general tools that enable students to understand the behavior of a macroeconomy. Prerequisite: Mathematics 124 or 131, Economics 111, second-year standing, and one additional economics course numbered 205–250; or permission of instructor. FERGUSON.

**303 History of Economic Thought I: The Main Tradition\* 4 credits+**

The development of mainstream economic thought from 1776 to 1936. Substantial selections from major economists of the classical school (Smith, Malthus, Ricardo, J.S. Mill) and the neoclassical school (Jevons, Marshall, Chamberlin). Prerequisite: Economics 111 or permission of instructor. STAFF.

**304 History of Economic Thought II: Recovering the Keynesian Revolution\* 4 credits**

Also listed as History 304. An examination of the ways in which the state has become involved in economic management in Western Europe and North America. Following examination of Maynard Keynes's work, primary focus will be on the historical process by which these countries adapted Keynesian economic policies. Prerequisite: Economics 111, or History 239, or permission of instructor. STAFF.

**312 Advanced Econometrics (Fall) 4 credits**

The use of statistical techniques to estimate and test economic models. Topics include multiple regression, multicollinearity, serial correlation, heteroskedasticity, simultaneous equations, limited dependent variables, and time series/forecasting. Not open to those who have taken Economics 288. Prerequisite: Economics 262, or Mathematics 209, or Mathematics 335, or permission of instructor. MONTGOMERY.

**326 Financial and Managerial Accounting (Fall) 4 credits**

A case-based introduction to the principles of financial and managerial accounting. Although this is a first course in accounting, the level of coverage is advanced. Students work in teams and are responsible for their own learning and the

learning of their colleagues. Open only to third-year students and seniors. Pre-requisite: Economics 280 or permission of instructor. MUNYON.

**327 Corporate Finance (Spring) 4 credits**

An intense examination of the basics of theory and practice in corporate financial management. An understanding of intermediate microeconomics and financial accounting and comfort with applied mathematics are essential for success in this course. Prerequisite: Economics 280, and 286 or 326; or permission of instructor. MUNYON.

**338 Applied Game Theory (Spring) 4 credits**

Game theory facilitates modeling strategic interaction among interdependent agents who share awareness of their interdependence. As such, it can generate analytical foundations for many relationships found in social and natural sciences. This course develops game theoretic modeling using visual representation and equations, with an emphasis on intuitive technique and direct application to examples primarily from economics and politics. Not open to those who have taken Economics 291. Prerequisite: Economics 111 and 280, and Mathematics 124 or 131; or permission of instructor. FERGUSON.

**339 Introduction to Mathematical Economics\* (Spring) 4 credits**

An introduction to mathematical models of economic behavior. Basic techniques in differential and integral calculus and linear algebra will be applied to a wide range of micro- and macroeconomic issues. Topics include comparative statics, optimization, and linear programming. Not open to those who have taken Economics 289. Prerequisite: Mathematics 133, and Economics 280 and 282; or permission of instructor. Mathematics 215 is useful but not required. MONTGOMERY.

**366 Seminar in Health Economics\* 4 credits**

This seminar familiarizes students with economic analysis applied to the health-care sector of the economy. Topics covered include problems such as escalating medical care costs, health care for the uninsured, Medicare and Medicaid reform, and national health insurance. Course includes an international comparison of health-care systems. Prerequisite: Economics 280 or permission of instructor. POWELL.

**368 Seminar in Labor Economics\* 4 credits**

Analysis of labor markets in theory and practice. Topics include education, labor market structure, discrimination, labor unions, collective bargaining, income distribution, and unemployment. Prerequisite: Economics 280 and 282, or permission of instructor. MONTGOMERY.

**369 Seminar in Environmental Economics (Fall) 4 credits**

This course will familiarize students with the theory and application of economics to environmental problems and prepare them to analyze issues in environmental economics and policy. It will focus on the design of cost-effective environmental policies and on methods for determining the value of environmental amenities. Prerequisite: Economics 280, and concurrent registration in or completion of Economics 262, or Economics 312, or Mathematics 336; or permission of instructor. BROUHLE

\*Not offered every year.

**370 Seminar in Political Economy** **4 credits**

This course begins with the premise that many economic interactions are “political” in the sense that coalitions of participants, whose interest may differ, can influence important economic, or market, outcomes. In this regard, the course will explore tendencies toward competition, cooperation, and conflict, and their relationship to economic constraints imposed by the forces of supply and demand, as they operate in various market and institutional arenas, such as labor markets or the national economy. The course will examine relevant theories of incomplete contracting under conditions of imperfect information with some attention to game theory, and then apply these concepts to contemporary problems concerning employment, economic growth, and the distribution of income and wealth. Prerequisite: Economics 280 and 282, or permission of instructor. FERGUSON.

**372 Seminar in Economic Development\* (Fall)** **4 credits**

Processes of growth and change in developing societies. Both theoretical and empirical modes of analysis introduced in the literature covered. Topics chosen from among population growth, agricultural development, industrialization, investment in human capital vs. physical capital, the balanced-unbalanced growth controversy, noneconomic factors in development and underdevelopment. Prerequisite: Economics 282 or permission of instructor. STAFF.

**374 Seminar in International Trade\*** **4 credits**

International trade theory and policy. Explanations of the pattern of trade, possible gains from trade, effects on income distribution and trends over time. Import restrictions, export promotion, and strategic government intervention. Operations of multinational corporations, migration, trade blocs, WTO negotiations, and other current topics. Prerequisite: Economics 280 or permission of instructor. MUTTI.

**375 Seminar in International Finance\*** **4 credits**

International financial relationships and macroeconomic policy. Financial markets, exchange rate determination, and the balance of payments. Trade balance adjustments, international capital flows, and domestic macroeconomic goals. Exchange rate regimes, currency blocs, debt crises, and other current topics. Prerequisite: Economics 282 or permission of instructor. MUTTI.

**376 Seminar in Income Distribution (Fall)** **4 credits**

Examination of the distribution of income and wealth in the U.S., as well as the conflicting explanations of economic inequality and policy debates. Topics include economic trends affecting U.S. workers, racial and sexual inequality, and poverty. Prerequisite: Economics 280 and 282, or permission of instructor. SEIZ.

**380 Seminar in Monetary Policy\* (Spring)** **4 credits**

Analysis of how monetary and financial institutions affect the growth and stability of the American economy. Theoretical controversies and evidence about relations between money and the real sector of the economy, portfolio selection among financial assets and liabilities, and financial aspects of the inflation process. Current issues in effective use of monetary policies. Prerequisite: Economics 282 or permission of instructor. STAFF.

**382 Seminar in Industrial Organization (Spring) 4 credits**

An examination of the relationships between structure, conduct, and performance in the American economy. The seminar includes work with basic I/O theory, antitrust laws and litigation, industry studies, and alternative approaches to understanding corporate behavior in the American economy. Prerequisite: Economics 280 and 286, or permission of instructor. MUNYON.

**384 Seminar in the Economics of Education (Spring) 4 credits**

Education becomes increasingly important as the “information economy” replaces the old industrial economy. This course explores some questions that are global, others that are personal: Is better education the solution to poverty? Is investment in human capital the key to a nation’s development? Can vouchers improve public schools? Is a Grinnell education a better investment than putting those thousands of tuition dollars into the stock market? Should you go to law school? Prerequisite: Economics 280 and 282 and concurrent registration in or completion of Economics 262; or Economics 312, or Mathematics 336; or permission of instructor. MONTGOMERY.

**Education**

Member of the Division of Social Studies

Jean Ketter, Chair, Nancy Hayes, Paul Hutchinson, Kara Lycke, Martha Voyles

In education courses, leading ideas in education are considered in relation to their political, social, and economic setting and to psychological theories of effective learning and teaching. The department seeks to develop each student’s ability to analyze problems in education, to evaluate proposed solutions, and to act upon the results of that analysis in ethical ways. The introductory courses (Education 101, 210 or 211, and 221) are designed for all students as well as for those seeking a teaching credential. All education courses prepare students for licensure at either the elementary- or secondary-school level, and students who meet the requirements receive an Iowa license at graduation. There is no major in education; students major in an academic discipline. A grade of C or higher is required in all education courses counting toward licensure.

**Students seeking licensure at Grinnell College must apply to enter the Practitioner Preparation Program. This should be done no later than the deadline for declaring a major, usually in the second semester of the second year.**

Candidates must be approved by the Committee on Teacher Education. Applications and the *Student Handbook for Teacher Education*, which includes pertinent information about the program, are available from the Department of Education or the Steiner secretary.

Licensure can be attained in the following areas:

1. Secondary (American history, anthropology, art, biology, chemistry, economics, English, French, German, general science, Latin, mathematics, physics, psychology, Russian, Spanish, sociology, and world history). Requirements for the major are similar for teacher candidates as for other students; however, some departments have specific distribution requirements for secondary-teacher candidates. Students licensed in their major can sometimes

be licensed to teach other disciplines with less than a major. Students seeking secondary licensure should consult members of the department about these requirements as early as possible.

2. Elementary (in Iowa, Grades K–6). See a member of the department for specific distribution requirements.

For all areas of licensure the first courses are Education 101, 21x (there are four courses to choose from), 221, and 250. These courses relate philosophical, sociocultural psychological theories to education; Education 210 or 211, 221, and 250 require working in the Grinnell public schools, an experience that provides the opportunity to meet individuals outside the College community and aids in integrating theory and practice. In the upper-level courses students apply theory and methods of instruction to specific disciplines. Each licensure sequence includes a 12-week experience in student teaching, which may be done in Grinnell or other nearby public schools. Those interested in teaching in a larger urban area or in alternative schools may apply to spend a semester in the Urban Teaching Program in Chicago.

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Students seeking licensure must have taken courses in all divisions and a course in mathematics, in the humanities, in American history or government, and coursework in both a biological and physical science.

Students seeking licensure at Grinnell College should plan to take nine semesters to do so. All courses prerequisite to the Professional Semester (student teaching) must be completed within the five years immediately preceding the Professional Semester.

Section 4 of the catalog describes the special tuition and fee policies that apply to the Ninth Semester Teacher Certification Program.

Students may request permission from the department to complete the requirements for licensure in eight semesters rather than nine by indicating their ability to complete a major and obtain a strong liberal arts background in seven semesters. Students must also indicate that extracurricular commitments will not interfere with 12 weeks of full-time student teaching.

The Grinnell College Teacher Education Program for elementary and secondary licensure is approved by the Iowa State Department of Education.

## Grinnell Requirements for Licensure

### Secondary Licensure

1. Educational and Professional Requirements	<b>34 credits</b>
▪ Education 101 Educational Principles in a Pluralistic Society	4 credits
▪ Education 210 Perspectives on Educational Issues	4 credits
or	
Education 211 The Politics of Educational Assessment	4 credits
or	
Education 212 Critical Pedagogy and School Reform	4 credits+
or	
Education 213 Critical Issues in Second Language Acquisition	4 credits+
or	
▪ Education 214 Nature of Science and Science Teaching	4 credits

- Education 221 Educational Psychology 4 credits
- Education 250 The Exceptional Child 4 credits
- Education 469 Laboratory Practice and Practicum in Secondary Teaching 12 credits
- Education 34x Education Research and Methods in Teaching and Learning 4 credits
- 2. An approved major, including courses required for licensure
- 3. An approved course in each: American history, humanities, and mathematics; coursework in both a biological and a physical science; and demonstrated proficiency in writing

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## Elementary Licensure

- 1. Education and Professional Requirements 39 credits
  - Education 101 Educational Principles in a Pluralistic Society 4 credits
  - Education 210 Perspectives on Educational Issues 4 credits
  - or
  - Education 211 The Politics of Educational Assessment 4 credits
  - or
  - Education 212 Critical Pedagogy and School Reform 4 credits+
- Education 221 Educational Psychology: Principles of Development and Learning 4 credits
- Education 250 Exceptional Child 4 credits
- Education 310 Teaching and Learning Literacy in Elementary School 4 credits
- Education 314 Science and Health for Elementary Teachers 2 credits
- Education 315 Social Studies and Content Literacy for Elementary Teachers 2 credits
- Education 316 Mathematics for Elementary Teachers 4 credits
- Education 467 Laboratory Practice and Practicum in Elementary Teaching 12 credits
- Physical Education 215 Elementary Methods in Physical Education 1 credit

- 2. An approved course in each: mathematics; humanities; American history; coursework in both a biological and physical science; and demonstrated proficiency in writing
- 3. An exit portfolio

### 101 Educational Principles in a Pluralistic Society (Fall or Spring) 4 credits

Focus on the discussion of key concepts in multicultural/nonsexist elementary and secondary educational theory and practice, and the foundation of educational principles in the United States. Required for Iowa teacher certification. Prerequisite: none. STAFF.

\*Not offered every year.

**210 Perspectives on Educational Issues (Fall) 4 credits**

An examination of topical educational issues from historical, legal, and political perspectives with an emphasis on analysis and evaluation of historical and current approaches to defining and achieving education goals in the United States. Includes 10-hour field experience in the schools. Topics include aims of education, finance and governance of schools, alternative models of schooling, and justice concerns in schools. Prerequisite: Education 101 or permission of instructor. KETTER.

**211 The Politics of Educational Assessment\* (Spring) 4 credits**

The course will begin with an examination of the purposes and limits of assessment and discussions of the ethical use of standardized tests. We will examine the concept of meritocracy as a guiding principle of the American education system and will trace the historical development of standardized measurements of intelligence and aptitude as tools used to track students and determine eligibility for further schooling. We will include an analysis of the current debate on the Elementary and Secondary Education Act (No Child Left Behind) and its goal of addressing inequities in education through the use of standardized curriculum and assessments. Prerequisite: Education 101 or permission of instructor. KETTER.

**212 Critical Pedagogy and School Reform\* (Fall) 4 credits+**

This course is a study of critical pedagogy from its roots in Marxism and the Frankfurt School through current-day theoretical connections (postmodernism, critical theory, critical feminism, and critical race theory) and their relevance to American public education. We will examine the dual character of schools that helps to explain some difficulties of school reform; that is, the democratic promise of schooling on the one hand, and its institutional service to a society based on race, class, and gender privilege on the other. Prerequisite: Education 101 or permission of instructor. LYCKE.

**213 Critical Issues in Second Language Acquisition\* (Spring) 4 credits+**

This course will focus on issues critical to the acquisition of a second language. It will examine the historical, theoretical, and pedagogical foundations of language teaching in the United States. Of particular interest will be the relationships among language, literacy, and culture, and their influences on both teaching and learning across the curriculum. Special attention will be given to the instructional needs of ESL/bilingual students and to the creation of classroom environments that foster multilingualism. Prerequisite: Education 101 or permission of instructor. HAYES.

**214 Nature of Science and Science Teaching (Spring) 4 credits**

This course will begin by considering the nature of science from a variety of perspectives including official publications from professional science organizations, ethnographies of science laboratories and workplaces, and prominent critiques of science. Ideas about the nature of science will be used to analyze various science curricula and instructional strategies. Students will have the opportunity to focus on the discipline and level that is of most interest to them. Prerequisite: Education 101 or permission of instructor. STAFF.

**221 Educational Psychology (Spring) 4 credits**

The application of principles of development and theories of learning from birth to 18 years. The study of interaction in the teaching-learning process. Topics

include motivation, individual differences, evaluation of achievement, and learning styles. Two hours per week spent in Grinnell public schools. Prerequisite: Education 101 and second-year standing, or permission of instructor. LYCKE.

**250 The Exceptional Child (Fall) 4 credits**

Study of the categories of exceptionality, the social organization of exceptionality in the public schools, and the instructional methods used with students who are labeled exceptional. Course requires 24 hours observing/teaching exceptional children in a public school setting. Prerequisite: Education 101 and 221, or permission of instructor. KILIBARDA.

**310 Teaching and Learning Literacy in Elementary School (Spring) 4 credits**

Examines the theory and practice of teaching reading, literature, and language arts to children in elementary school. Emphasis on the cognitive, social, and cultural dimensions of literacy learning. Includes field experience and action research in the public schools with an emphasis on developing reflective and critical practice. Prerequisite: Education 101, and 210 or 211, and 221; or permission of instructor. HAYES.

**314 Science and Health For Elementary Teachers (Fall) 2 credits**

The study of goals, content, teaching strategies, and types of materials used in science and health in grades K-6. Prerequisite: Education 101, and 210 or 211, and 221, and 250; or permission of instructor. KILIBARDA.

**315 Social Studies and Content Literacy for Elementary Teachers (Fall) 2 credits**

Examines the theory and practice of teaching social studies to children in elementary school. Emphasis on strategies for reading and writing nonfiction and on critical approaches to the teaching of social studies. Prerequisite: Education 101, and 210 or 211, and 221, and 250; or permission of instructor. HAYES.

**316 Mathematics for Elementary Teachers (Spring) 4 credits**

Methods and content in teaching the number system, mathematical concepts, and arithmetical operations in grades K-6. Prerequisite: Education 101, and 210 or 211, and 221; or permission of instructor. STAFF.

**34x Education Research and Methods in Teaching and Learning (Fall or Spring) 4 credits**

Each discipline-specific course will examine the theory and research on student learning and effective instruction in the designated discipline. Students will have a short field experience and will be expected to complete a research project related to teaching and learning. Prerequisite: Education 101, 221, and senior standing; or permission of instructor.

- 341 Research and Methods in Teaching and Learning in Language Arts and Reading
- 342 Research and Methods in Teaching and Learning in Second Language Acquisition
- 343 Research and Methods in Teaching and Learning in the Social Sciences
- 344 Research and Methods in Teaching and Learning in Quantitative Literacy
- 345 Research and Methods in Teaching and Learning in the Sciences
- 346 Research and Methods in Teaching and Learning in the Arts

**467 Laboratory Practice and Practicum  
in Elementary Teaching (Fall)** **12 credits**

Students assume responsibility for classes in an elementary school under the close supervision of a faculty member and a cooperating teacher of the public school. A weekly seminar is held. Prerequisite: Education 101, and 210 or 211, and 221, 250, 310, 315, 316, and Physical Education 215; or permission of instructor. HAYES.

**469 Laboratory Practice and Practicum in  
Secondary Teaching (Fall)** **12 credits**

Students assume responsibility for classes in a junior or senior high school under close supervision. Each student is observed and tutored by a secondary education faculty member and a cooperating teacher from the public school. A weekly seminar is held. Prerequisite: Education 101, and 210 or 211, and 221, 250, 315, and 34x; or permission of instructor. STAFF.

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## English

Member of the Division of Humanities

Erik Simpson, Chair, David Ainsworth, Stephen Andrews, George Barlow, Michael Cavanagh, Elizabeth Dobbs, Khanh Ho, Shuchi Kapila, Heather Lobban-Viravong, Amy Nestor, M. Teresa Prendergast, Ralph Savarese, Saadi Simawe, Paula Smith

The study of English has diverse parts, including linguistics, creative writing, and rhetorical theory, and is itself part of European cultural history, general literary studies, and American studies. The study of the literary resources of the language cannot be isolated from the rest of the liberal arts. Students of English need to know how English can be used in other disciplines, and students in other disciplines can profit from study in the Department of English.

At Grinnell, the study of English is founded on critical reading and argumentative writing. To establish this foundation, the department offers several courses without prerequisite to accommodate a variety of needs and interests. Advanced courses reveal the department's particular emphasis on the imaginative literature of England, the United States, and other countries with traditions of literature in English, an emphasis that necessarily invites students to develop a critical understanding of the contexts of those literatures.

Advanced courses are categorized by type of literature (short story, novel, poem), by authors (Milton, Shakespeare, Chaucer), or by periods of literary history (medieval literature, Renaissance literature, modern literature). But the underlying purpose remains the same: to enhance the enjoyment of literature by developing ways of imaginatively understanding it.

The program for majors provides a general acquaintance with the traditions of English and American literature and encourages special interests in the various fields of English. Majors are required to study one foreign language and are advised to study the materials and methods of history, philosophy, and the arts. Nor should they neglect the physical and social sciences, whose methods provide valuable perspectives on literary study.

## The Major

**A minimum of 32 credits in English**, including at least 20 credits in the Department of English at Grinnell. Required are:

- Three 200-level literature courses, including: one course in early literature (223 or 227);

and, in addition to the course used to satisfy the early literature requirement,

- One course in British or Postcolonial literature (223, 224, 225, or 226);
- One course in American literature (227, 228, 229, 231, or 232);
- Three four-credit 300-level courses, excluding individual study, in the English department at Grinnell. At least two must be literature courses.

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Also required:

- One four-credit Humanities (HUM) course and
- Knowledge of a nonnative language at a level demonstrated by
  - 1) completion of fourth-semester college coursework in a modern language, or
  - 2) completion of third-semester college coursework in a modern language and Linguistics 114 or English 230, or
  - 3) completion of second-semester college coursework in Latin or Greek or
  - 4) examination showing equivalent competence.

To be considered for honors in English, graduating seniors, in addition to meeting the College's general requirements for honors, must have breadth in 200- and 300-level coursework in the English department, and make an outstanding contribution at the 300-level in English as certified by two members of the English faculty.

### **120 Literary Analysis (Fall and Spring) 4 credits**

An introduction to the methods and pleasures of literary analysis focusing on skills needed to practice close reading and explication of texts and emphasizing the rich complexities of literary language. Although individual sections vary in genres considered, all prepare students for further work in poetry and prose. Prerequisite: none. STAFF.

### **121 Introduction to Shakespeare (Fall or Spring) 4 credits**

A close study of representative plays from each period of Shakespeare's career, including comedies, histories, tragedies, and romances. Prerequisite: none. PRENDERGAST, SIMPSON.

### **204 The Craft of Argument\* (Spring) 4 credits**

Advanced course in argumentative or analytical writing with particular attention to style. Prerequisite: second-year standing and permission of instructor. DOBBS.

### **205 The Craft of Fiction (Fall and Spring) 4 credits**

Instruction in the techniques and process of fiction writing, with emphasis on the short story. Readings may include published short stories and essays on the art of fiction. Students may also be asked to write in forms related to fiction (journal, autobiography, prose poem). Prerequisite: English 120, or English 121, or permission of instructor. HO, SMITH

\*Not offered every year.

**206 The Craft of Poetry (Fall and Spring) 4 credits**

Instruction in the techniques and process of verse writing. Readings may include published poems and essays on the art of poetry. Prerequisite: English 120, or English 121, or permission of instructor. BARLOW, SAVARESE.

**223 The Tradition of English Literature I (Fall or Spring) 4 credits+**

Study of English literature from Old English to the early 17th century; may include such works as *Beowulf*, *Canterbury Tales*, *Sir Gawain and the Green Knight*, *The Faerie Queene*, and *Paradise Lost*. Prerequisite: English 120, or English 121, or permission of instructor. Humanities 101 strongly recommended. DOBBS, PRENDERGAST.

**224 The Tradition of English Literature II (Fall or Spring) 4 credits+**

Study of English literature from the Restoration through the Victorians; may include such authors as Behn, Defoe, Swift, Wordsworth, Shelley, Austen, George Eliot, and Dickens. Prerequisite: English 120, or English 121, or permission of instructor. LOBBAN-VIRAVONG, SIMPSON.

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**225 Introduction to Postcolonial Literatures (Fall) 4 credits+**

An introduction to postcolonial literatures and theory from the Caribbean, Africa, South Asia, and the Pacific. Prerequisite: English 120, or English 121, or permission of instructor. KAPILA, SIMPSON.

**226 The Tradition of English Literature III (Fall or Spring) 4 credits**

Study of English literature of the 20th century; may include such authors as Joyce, Woolf, Beckett, Orwell, Eliot, Winterson, Kureishi, and Walcott. Prerequisite: English 120, or English 121, or permission of instructor. KAPILA, SIMPSON.

**227 American Literary Traditions I (Fall or Spring) 4 credits+**

Study of American literature from Columbus to 1830; may include such authors as Columbus, Raleigh, Bradstreet, Rowlandson, Franklin, Rowson, Irving, Bryant, and Cooper. Features works from a variety of genres, including Native American myths, travel and promotional narratives, journals, poetry, fiction, nonfiction prose, and maps. Prerequisite: English 120, or English 121, or permission of instructor. ANDREWS.

**228 American Literary Traditions II (Fall or Spring) 4 credits+**

Study of American literature from 1830 to 1893; may include such authors as Emerson, Melville, Whitman, Dickinson, Twain, James, Chopin, Chesnutt, and Zitkala-Ša. Features works from a variety of genres including fiction, poetry, nonfiction prose, and drama. Prerequisite: English 120, or English 121, or permission of instructor. ANDREWS, SAVARESE.

**229 The Tradition of African American Literature (Fall) 4 credits+**

The emergence and growth of African American literature from slavery to the present. Prerequisite: English 120, or English 121, or permission of instructor. SIMAWE.

**230 English Historical Linguistics\* (Spring) 4 credits+**

Study of the history of the English language through examination of phonological, grammatical, and semantic changes in the language from Old English to Middle English to Modern English with attention to “external” history. Prerequisite: second-year standing or permission of instructor. DOBBS.

**231 American Literary Traditions III (Fall or Spring) 4 credits+**

Study of American literature from 1893 to today; may include such authors as Crane, Eliot, Faulkner, Hurston, Plath, DeLillo, and Morrison. Prerequisite: English 120, or English 121, or permission of instructor. SAVARESE.

**232 Ethnic American Literatures (Fall) 4 credits**

Study of the major traditions of American ethnic literatures. Features works from a variety of genres including fiction, poetry, nonfiction prose, and drama. Prerequisite: English 120, or English 121, or permission of instructor. HO.

**250 Literature in Place (Fall) 4 credits**

Study of British literature, as part of the Grinnell-in-London program, onsite in London and elsewhere in Britain and Ireland. For specific content, see Schedule of Courses. Prerequisite: English 120, or English 121, or permission of instructor. VINTER.

**273 Feminisms, Gender, and Literary Theory\* (Fall or Spring) 4 credits+**

Study of transnational critics and debates in the construction of gender and feminist theory; includes analysis of varying literary texts. For specific content, see Schedule of Courses. Prerequisite: English 120, or English 121, or permission of instructor. KAPILA.

**303 Chaucer\* (Spring) 4 credits+**

Study of Chaucer's poetry, in Middle English. Option of doing some reading in Latin, Italian, or French. For specific content, see Schedule of Courses. Prerequisite: English 223 or permission of instructor. DOBBS.

**310 Studies in Shakespeare\* (Fall) 4 credits+**

An intensive study of three or four plays from various approaches, such as sources, imagery, critical and theatrical traditions. For specific content, see Schedule of Courses. Prerequisite: English 121 or permission of instructor. English 223 and 224 strongly recommended. PRENDERGAST.

**314 Milton\* (Fall) 4 credits+**

Intensive study of Milton's poetry and selected prose with emphasis on *Paradise Lost*, on Milton's place in the epic tradition, and on Milton's reputation in English poetry. For specific content, see Schedule of Courses. Prerequisite: English 223 or permission of instructor. PRENDERGAST.

**316 Studies in English Renaissance Literature\* (Spring) 4 credits+**

An intensive study of a group of related authors, a mode, or a genre from the period 1500-1600. For specific content, see Schedule of Courses. Prerequisite: English 223 or permission of instructor. PRENDERGAST.

**323 Studies in English Literature: 1660-1798 (Spring) 4 credits**

Intensive study of Restoration and 18th-century literature with a focus on specific themes and genres. Prerequisite: English 223, or English 224, or permission of instructor. LOBBAN-VIRAVONG.

**325 Studies in Ethnic American Literatures (Spring) 4 credits+**

Intensive study of important authors, movements, or trends in American ethnic literatures. For specific content, see Schedule of Courses. Prerequisite: English 227, or 228, or 229, or 232, or permission of instructor. HO.

\*Not offered every year.

**326 Studies in American Poetry I\* (Fall) 4 credits**

Intensive study of important poets, movements, or trends in 19th-century American poetry. For specific content, see Schedule of Courses. Prerequisite: English 227, or 228, or 231, or permission of instructor. ANDREWS, SAVARESE.

**327 The Romantics\* (Fall) 4 credits+**

Study of major figures in English literature from 1798 to 1830 with attention to Romantic theories of poetry. For specific content, see Schedule of Courses. Prerequisite: English 224 or permission of instructor. SIMPSON.

**328 Studies in American Poetry II\* (Fall) 4 credits**

Intensive study of important poets, movements, or trends in 20th-century American poetry. For specific content, see Schedule of Courses. Prerequisite: English 227, or 228, or 231, or permission of instructor. ANDREWS, SAVARESE.

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**329 Studies in African American Literature (Spring) 4 credits+**

Intensive study of an African American literary genre, movement, author, or a group of related authors. For specific content, see Schedule of Courses. Prerequisite: English 225, or 227, or 228, or 229, or 231, or permission of instructor. SIMAWE.

**330 Studies in American Prose I\* (Fall) 4 credits**

Intensive study of important writers, movements, or trends in 19th-century American prose. For specific content, see Schedule of Courses. Prerequisite: English 227, or 228, or 231, or permission of instructor. ANDREWS, SAVARESE.

**331 Studies in American Prose II\* (Spring) 4 credits**

Intensive study of important writers, movements, or trends in 20th-century American prose. For specific content, see Schedule of Courses. Prerequisite: English 227, or 228, or 231, or permission of instructor. ANDREWS, SAVARESE.

**332 The Victorians\* (Fall) 4 credits+**

Study of major British writers from 1830 to 1900, with emphasis on distinctive approaches to common artistic, intellectual, and social problems. For specific content, see Schedule of Courses. Prerequisite: English 224, or 225, or permission of instructor. SIMPSON.

**337–338 The British Novel I and II\* (Spring) 4 credits+**

Historical development of the British novel, formal evolution, methods of publication, and the relation of novels to their cultures. First semester: through the early Dickens (e.g., Defoe, Richardson, Fielding, Sterne, Jane Austen, Thackeray). Second semester: from Dickens to the present (e.g., George Eliot, Hardy, Conrad, Lawrence, Forster, Virginia Woolf). For specific content, see Schedule of Courses. Prerequisite: English 223, or 224, or 225, or 226, or permission of instructor. May be taken separately. LOBBAN-VIRAVONG.

**345 Studies in Modern Poetry\* (Fall) 4 credits+**

Intensive study of important modern poets. For specific content, see Schedule of Courses. Prerequisite: English 224, or 225, or 226, or 227, or 228, or permission of instructor. SAVARESE.

**346 Studies in Modern Prose\* (Fall) 4 credits+**

Also listed as General Literary Studies 346. Intensive study of important modern fiction. For specific content, see Schedule of Courses. Prerequisite: English 224, or 225, or 226, or permission of instructor. SIMPSON, SMITH.

**349 Medieval Literature\* (Fall) 4 credits+**

Also listed as General Literary Studies 349. Study of medieval European literary forms (lyric, epic, romance, allegory, and dream vision) through analysis of major works such as *Beowulf*, Chretien de Troyes' poems, Marie de France's *lais*, *The Romance of the Rose*, *The Divine Comedy*, *The Decameron*, *Piers Plowman*, *Sir Gawain and The Green Knight*, *The Book of the City of Ladies*, and Malory's prose. Option of doing some reading in Latin, Italian, or French. For specific content, see Schedule of Courses. Prerequisite: English 223 or permission of instructor. DOBBS.

**360 Seminar in Postcolonial Literature (Spring) 4 credits+**

An intensive study of important writers, movements, or theoretical concepts in postcolonial literature written in English. For specific content, see Schedule of Courses. Prerequisite: English 224, or 225, or 226, or 229, or permission of instructor. KAPILA.

**385 Writing Seminar: Fiction (Fall or Spring) 4 credits**

Advanced workshop for students with a strong background in fiction writing. Prerequisite: English 205 and permission of instructor. SMITH.

**386 Writing Seminar: Poetry (Fall or Spring) 4 credits**

Advanced workshop for students with a strong background in verse writing. Prerequisite: English 206 and permission of instructor. BARLOW, SAVARESE.

**390 Literary Theory (Spring) 4 credits**

An intensive introduction to the major schools of critical and literary theory. Readings likely to include foundational texts in formalism, Marxism, feminism, psychoanalysis, historicism, poststructuralism, and postcolonialism. For specific content, see Schedule of Courses. Prerequisite: Third-year or senior standing and at least one 300-level literature seminar in the English department, or permission of instructor. KAPILA.

**Environmental Studies Concentration**

David Campbell, Chair

The interdisciplinary nature of this concentration illuminates the relationship between humans and their natural environment, and provides a basic background for rational and discriminating comprehension of environmental issues. Participation in the off-campus study programs, ACM Costa Rica: Tropical Field Research Semester, OTS, or Wilderness Field Station may, with the program chair's approval, satisfy some of the requirements below.

\*Not offered every year.

**Required, 24 credits as follows:**

1. Biology, 4 credits, chosen from:
  - Biology 150 Introduction to Biological Inquiry
  - Biology 252 Organisms, Evolution, and Ecology
2. Chemistry, 4 credits:
  - Biology 339 Biogeochemistry
  - Chemistry 210 Inorganic and Analytical Chemistry
3. Geology, 4 credits, chosen from:
  - Environmental Studies 111 Introductory Geology
  - Environmental Studies 125 Introduction to Earth Systems Science
  - Colorado College Summer Geology Institute, Geology of the Pikes Peak Region
4. Economics, 4 credits:
  - Economics 240 Resource and Environmental Economics
5. Additional social science, 4 credits, chosen from:
  - Anthropology 205 Human Evolution
  - Anthropology 238 Cultural and Political Ecology
  - Anthropology 252 Culture and Agriculture
  - Anthropology 325 Biological Basis of Human Society
  - Environmental Studies 145 Nations and the Global Environment
  - Environmental Studies 251 Water, Development, and the Environment  
(See Global Development Studies 251)
  - Global Development Studies 346 Sustainable Development in the Modern World System
  - Political Science 350 International Politics of Land and Sea Resources
  - Technology Studies 154 Evolution of Technology
6. Senior seminar, 4 credits:
  - Environmental Studies 495 Senior Seminar

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**111 Introductory Geology\* 4 credits**

An introduction to the composition and morphology of the earth, the geologic processes that alter its surface, and the implications of geology for the human population. Prerequisite: none. STAFF.

**125 Introduction to Earth Systems Science with Lab 4 credits  
(Fall or Spring)**

An introductory geology course that demonstrates that Earth systems (the atmosphere, hydrosphere, biosphere, and geosphere) are dynamically linked by internal and external physical, chemical, and biological processes. Using process-response models, we examine the structure and evolution of the Earth, how the rock record is used to decipher Earth's past and predict its future, and societal issues centered on the environment, land use, resources (water, mineral, and energy), and natural hazards. Three lectures and one laboratory each week. May not be taken by students who have completed Environmental Studies 111. Prerequisite: none. ASPLER

**145 Nations and the Global Environment (Fall) 4 credits**

Global environmental issues discussed from the perspective of how these problems relate to each student. Emphasis on the geological, biological, and human history of Earth: trends in global climate (including the greenhouse effect and ozone depletion), species diversity (including episodes of mass extinction), human demography, international energy policies, global distribution of resources (including famine, lifeboat "ethics," and politics of "north vs. south"). Discussion of sustainable development of tropical forest, savanna, and marine ecosystems. Readings from texts and current literature. Prerequisite: none. CAMPBELL.

**251 Water, Development and the Environment**

See Global Development Studies 251

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**495 Senior Seminar (Spring) 4 credits**

An interdisciplinary senior seminar for students completing the concentration in Environmental Studies. Prerequisite: permission of instructor. CAMPBELL.

**French**

Member of the Division of Humanities

Philippe Moisan, Chair, Daniel Gross, Janice Gross, David Harrison, Susan Ireland, Andrea Magermans

The Department of French develops students' use and understanding of French in its language, literature, and culture courses. The department's emphasis on proficiency in speaking, listening comprehension, reading, and writing enables students to explore the rich history and culture of the French-speaking world. French courses also contribute to several interdisciplinary concentrations (Western European studies, linguistics, gender and women's studies, and global development studies) and independent majors. Students who study French can apply their learning in areas such as international affairs, scholarly research, the creative arts, business, and education.

The Grinnell placement test, along with consultation with the department, ensures that students begin their study of French at an appropriate level. Entering students begin with the recommended course at either the beginning (101, 102, 103), intermediate (221, 222), or advanced level (301, 303, 304, 305, 312, or 313). The foundation courses at the advanced level are 301 (Advanced Oral and Written Expression), 303, 304 (French Civilization I and II), 305 (Contemporary Francophone Cultures), 312 (Literature from the Middle Ages to the Revolution), and 313 (Literature of the 19th and 20th Centuries). Advanced courses are regularly offered on major literary periods and genres, architecture, social movements, and other topics related to the French-speaking world. The opportunity to carry out a Mentored Advanced Project (MAP) is available as part of all seminars. All departmental courses are conducted in French. Advanced students are also eligible for French options available in courses offered throughout the curriculum.

Students of French are strongly recommended to undertake an approved semester-long or yearlong program of study abroad in a city such as Paris, Nantes, or Aix-en-Provence.

\*Not offered every year.

## The Major

**A minimum of 32 credits** (not including French 101, 102, and 103), with at least 20 credits in all and a minimum of three 300-level courses (12 credits) taken in the Department of French at Grinnell. Required: French 303, 304, or 305; 312 or 313; and a seminar chosen from among the following: 327, 328, 329, 330, 331, 341, 342, and 395 (special topics course offered each spring).

To be considered for honors in French, graduating seniors, in addition to meeting the College's general requirements for honors, must complete two 300-level seminars and must give a public oral presentation based on one of their seminar papers.

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**101 Introduction to French (Fall) 5 credits**

Study of the fundamentals of spoken and written French with emphasis on communication through oral-aural practice and awareness of cultural context. Acquisition of basic grammar, vocabulary, and pronunciation. Prerequisite: none. STAFF.

**102 Introduction to French II (Spring) 5 credits**

Offered only in the spring, this course is designed primarily as a continuation of French 101. Emphasizes the development of oral-aural skills and of reading comprehension by providing communicative practice and attention to cultural context. Prerequisite: French 101, or by placement, or permission of instructor. STAFF.

**103 Accelerated Introduction to French (Fall) 5 credits**

Offered only in the fall, this course is for students with some previous study of French. Covers the equivalent of French 101 and 102 in a single semester. Emphasizes the development of oral-aural skills and of reading comprehension by providing communicative practice and attention to cultural context. Not open to students who have taken French 102. Prerequisite: Grinnell Placement Test or consultation with department. D. GROSS.

**201 French Speaking (Fall or Spring) 1 credit**

Conversational unit designed for both free and structured oral exchange in French. Prerequisite: concurrent registration in any 200- or 300-level French language course or permission of instructor. May be taken only once for credit. STAFF.

**221 Intermediate French I (Fall or Spring) 4 credits**

Conducted in French. Review of grammar with emphasis on written and oral skills. Introduction to analysis of literary and cultural texts. Prerequisite: French 102, or 103, or permission of instructor. STAFF.

**222 Intermediate French II (Fall or Spring) 4 credits**

Conducted in French. Review of grammar with a focus on the development of written and oral skills. Emphasis on analysis, discussion, and composition through the exploration of literature, documents, and films related to the Occupation of France during World War II. Prerequisite: French 221 or permission of instructor. STAFF.

**301 Advanced Oral and Written Expression (Spring) 4 credits**

Conducted in French. An integrated approach to the development of aural-oral and written skills in French. Designed to prepare students for discussion and analysis at the 300 level. Prerequisite: French 222 or permission of instructor. MOISAN.

**303 French Civilization I: Sites of Myth and Memory\* (Fall) 4 credits**

Conducted in French. An introduction to French civilization from its origins to the French Revolution through the study of historical and literary texts, paintings, and films. Prerequisite: French 222 or permission of instructor. HARRISON.

**304 French Civilization II: Revolutions and Identities\* (Fall) 4 credits**

Conducted in French. An introduction to French civilization from the French Revolution to the present through the study of historical and literary texts, paintings, and films. Prerequisite: French 222 or permission of instructor. MOISAN.

**305 Contemporary Francophone Cultures (Spring) 4 credits+**

Conducted in French. Overview of contemporary France and the French-speaking world. Examines the relationship between national identity and the forces of geography, history, language, race, religion, and ethnicity. Topics include: colonization, decolonization, immigration, French-American relations, and societal values related to the family, gender, education, political organization, the state, and secularism. Uses historical, cultural, and literary texts and films. Prerequisite: French 222 or permission of instructor. J. GROSS.

**312 Introduction to French Literature from the Middle Ages to the Revolution: From Knights to Libertines (Spring) 4 credits**

Conducted in French. Readings in poetry, prose, and theatre. Topics may include: the medieval *chanson de geste*, Renaissance love poetry, tragedy and comedy in the age of Louis XIV, and the Enlightenment. Presents the critical terminology and analytical techniques necessary for in-depth study of the respective genres. Prerequisite: French 222 or permission of instructor. HARRISON.

**313 Introduction to French Literature of the 19th and 20th Centuries: Literary Revolutions (Fall) 4 credits**

Conducted in French. Readings in poetry, theatre, and prose from romanticism to the theatre of the absurd and the *nouveau roman*. Presents critical terminology and analytical techniques necessary for in-depth study of the respective genres. Prerequisite: French 222 or permission of instructor. IRELAND.

**316 Architecture and Urbanism in Paris\* (Fall) 4 credits**

Also listed as Art 316. Conducted in French. Major monuments and the development of the city in historical context from the Middle Ages through the transformations of Haussmann in the 19th century. Attention to the vocabulary of architectural design and structure, and to analysis of period treatises and literary texts in relation to aesthetic issues and the politics of architecture. Prerequisite: a 300-level French course or permission of instructor. CHASSON.

**327 Power and Resistance in 17th- and 18th-Century French Literature\* (Fall) 4 credits+**

Conducted in French. Explores the relationship between writers and questions of authority from 1600–1789. Examines the representation of royal power, challenges to state authority and social conventions (such as the role of the church and the position of women in society), and the role of humor as a subversive technique. Authors studied may include La Fontaine, Pascal, Corneille, Molière, Madame de Lafayette, Mme de Sévigné, Saint-Simon, Diderot, Voltaire, Laclos, and Sade. Prerequisite: French 312, or 313, or permission of instructor. HARRISON.

\*Not offered every year.

**328 Comedy in French Literature** 4 credits**Prior to the Revolution\* (Fall)**

Conducted in French. Analyzes the notion of the comic in French literary texts written before 1789. Examines the relationship between comedy and society, using the theories of Bakhtin, Bergson, Boileau, and Freud. Focuses on the particular techniques used in different literary genres, such as the novel, theatre, and satiric verse. Works studied may include the *farces* of the Middle Ages, Rabelais, Marguerite de Navarre, Molière, Boileau, Voltaire, and Diderot. Prerequisite: French 312, or 313, or permission of instructor. HARRISON.

**329 Literature and Society in 19th-Century and** 4 credits**Belle Epoque France\* (Fall)**

Conducted in French. Examines texts representative of Romanticism, Realism, Naturalism, and post-Romantic poetry. Topics may include: realism and nature; the role of description; the expression of desire, and the relationship between the individual and society. Prerequisite: French 312, or 313, or permission of instructor. MOISAN.

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**330 Innovation and Transgression in French from** 4 credits**1870 to 1945\* (Fall)**

Conducted in French. Explores the evolution of literature and the rise of cinema between 1870 and 1945; examines notions such as moral and aesthetic transgression and innovation. Topics to be studied may include: collage, montage, memory, war, autobiography, and sexuality in authors and filmmakers such as Rimbaud, Rachilde, Colette, Méliès, Jarry, Proust, Gide, Céline, and Cocteau. Prerequisite: French 312, or 313, or permission of instructor. MOISAN.

**331 Modern Francophone Theatre\* (Spring)** 4 credits

Conducted in French. Study of dramatic texts and their contexts since the Second World War, with reference to existentialism, the Theatre of the Absurd, and recent scenic depictions of female, postcolonial, and immigrant experiences. Examines how theatre of the French-speaking world reflects, challenges, and redefines societal, philosophical, and aesthetic values, with a focus on the relationship between text and performance. Prerequisite: French 312, or 313, or permission of instructor. J. GROSS.

**341 Contemporary French Writing\* (Spring)** 4 credits

Conducted in French. Traces the evolution of prose fiction from the 1950s to the present and examines its relationship to biography, autobiography, feminist writing, film, and the popular novel. Prerequisite: French 312, or 313, or permission of instructor. IRELAND.

**342 Orientalism Revisited\* (Spring)** 4 credits

Conducted in French. Examines the relations between France and the Orient as portrayed in paintings, photos, films, and prose fiction from the mid-19th century to the present. Focuses in particular on images of Oriental women, beginning with France's representation of its colonies as female. The main topics to be considered are: the depiction of interracial relationships; the effect of gender on the experience of immigration; women and war (Algeria and Lebanon); women's voices in contemporary North Africa; and the notions of tradition and modernity in relation to issues such as arranged marriages, polygamy, and excision. The Orient studied includes Algeria, Tunisia, Morocco, Egypt, and Lebanon. Prerequisite: French 312, or 313, or permission of instructor. IRELAND.

## Gender and Women's Studies Concentration

Kathleen Skerrett, Chair; Rita Alfonso, Heather Lobban-Viravong, Daniel Reynolds

This concentration emphasizes the new scholarship on women, men, gender, and sexuality by looking at various cultures and historical periods and by employing diverse methods of inquiry. Core and elective courses encourage disciplined thinking in both the theories and methods employed by scholars of gender.

### **Required, 24 credits as follows:**

1. Gender and Women's Studies 111 Introduction to Gender and Women's Studies (4 credits)
2. Gender and Women's Studies 249 Theory in Gender and Women's Studies (4 credits)
3. One four-credit elective course in which gender is a significant category of analysis to be chosen from a list published during each semester's preregistration period. Students may also petition the GWS Concentration Committee to have a course taken off campus serve as a GWS elective. This petition should be filed after completion of the course, and the petition should be accompanied by documentation from the course to indicate its attention to gender issues. Students may also petition to have an independent study serve as a GWS elective or may ask that a course not on the elective list be considered an elective. In such cases, the student must have undertaken a major paper or project that deals with gender or women and must provide the committee with documentation.
4. Senior seminar (4 credits): Gender and Women's Studies 495
5. Two four-credit core courses required, in which gender is the central category of analysis, chosen from the following list:
  - Art 210 Women, Art, and History
  - Economics 218 Gender and the Economy
  - English 273 Feminisms, Gender and Literary Theory
  - \*English 330 Studies in American Prose I
  - \*English 332 The Victorians
  - \*English 345 Studies in Modern Poetry
  - \*English 346 Studies in Modern Prose
  - History 222 The History of Women in the United States
  - \*Philosophy 106 Contemporary Ethical Issues
  - Philosophy 265 Psychoanalysis and the Intersubjective Constitution of the Self
  - Sociology 260 Human Sexuality in the United States
  - Sociology 270 Gender and Society
  - Sociology 320 The Family
  - Theatre 310 Studies in Dance

\*Varying content requires the approval of the concentration committee.

See also the list published during each semester's preregistration period for the most current offering of core courses.

Special-topic courses (195, 295, and 395) and other variable content courses may be counted toward core course or elective course requirements with approval from the Gender and Women's Studies Committee.

\*Not offered every year.

**Additional requirements:**

1. All students must have the concentration approved by the committee or designated personnel.
2. Of the two core courses and one elective course the student selects, only one can be in the student's major.

**111 Introduction to Gender and Women's Studies (Fall or Spring) 4 credits****Women's Studies (Fall or Spring)**

The way in which gender affects ideas, institutions, and patterns of behavior that determine the place of women in society is considered. Basic assumptions and theories of traditional disciplines are questioned through an interdisciplinary approach. Guest lecturers share research on the effect of feminist scholarship in their disciplines. Prerequisite: none. ALFONSO, MILLER.

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**249 Theory in Gender and Women's Studies (Fall or Spring) 4 credits**

This course examines a variety of contemporary theoretical perspectives on gender as these emerge in many disciplines. This course explores the implications for gender theory of recent work in biology, psychology, literary criticism, history, and other fields of inquiry. Prerequisite: Gender and Women's Studies 111 or permission of instructor. ALFONSO, SKERRETT.

**495 Senior Seminar (Spring) 4 credits**

An interdisciplinary senior seminar for students completing the concentration in Gender and Women's Studies. Topics vary, with broad application of methodological skills. Prerequisite: Gender and Women's Studies 111, one core course from category 2, and four additional credits from core or elective courses (categories 2 or 3); or permission of instructor. ALFONSO.

**General Literary Studies**

Program in the Division of Humanities

The program in General Literary Studies reflects the assumption that educated persons will wish to extend their experience of literature beyond what has been written in their native tongue and beyond what they can read in the foreign languages they have mastered. The education of any student can be enriched by exploring in translation the study of literature in the original language. Courses in General Literary Studies make possible the discovery of a variety of illuminating relationships among works in different languages.

While the program does not offer a major, its courses serve the literary interests of all students and provide greater breadth for majors in the foreign languages.

**135 Philosophy and Literature\* 4 credits**

See Philosophy 135.

**227 Topics in German Literature in Translation (Spring) 4 credits**

See German 227.

<b>233 Frames of Reference: Topics in German Cinema from 1920 to the Present (Fall)</b> See German 233.	<b>4 credits+</b>
<b>242 Classical Mythology (Spring)</b> See Classics 242.	<b>4 credits+</b>
<b>247 The Russian Short Story* (Fall or Spring)</b> See Russian 247.	<b>4 credits+</b>
<b>248 The Russian Novel* (Fall or Spring)</b> See Russian 248.	<b>4 credits+</b>
<b>275 Chinese Literary Tradition (in Translation)*</b> See Chinese 275.	<b>4 credits+</b>
<b>277 Modern China through Literature and Film (in Translation)*</b> See Chinese 277.	<b>4 credits</b>
<b>279 Modern Japanese Fiction and Film (Fall or Spring)</b> See Japanese 279.	<b>4 credits</b>
<b>291 Perspectives in 20th Century Central and European Literature* (Spring)</b> See Russian, Central, and Eastern European Studies 291.	<b>4 credits+</b>
<b>346 Studies in Modern Prose (Fall)</b> See English 346.	<b>4 credits+</b>
<b>349 Medieval Literature* (Fall)</b> See English 349.	<b>4 credits+</b>
<b>353 Major Russian Writers (Fall or Spring)</b> See Russian 353.	<b>4 credits+</b>

## General Science

An Interdepartmental Major Program

Mark Schneider, Chair (Physics), Vince Eckhart (Biology), Nancy Rempel-Clower (Psychology), Elaine Marzluff (Chemistry), David Romano (Mathematics and Statistics), Henry Walker (Computer Science)

The major in General Science has been designed to accommodate students who wish to pursue a combination of courses in several sciences. Students take six courses including work in at least three of five sciences (biology, chemistry, computer science, physics, and psychology) and a year's work in mathematics. Additional study beyond the introductory level in one of these fields is also required.

General Science may serve those who plan to teach science in secondary school, but students are strongly encouraged to contact the College's education department to verify current licensure requirements. It may also lead to graduate work in such interdisciplinary fields as biophysics and psychobiology, or a career in environmental science, medicine, law, or engineering. The chair of the department in which the

\*Not offered every year.

student expects to take at least four courses will designate a departmental faculty member to serve as the student's adviser.

The General Science major may not be combined with a second major in a Division of Science department, and credits for independent study (297, 387, and 397) may not be used to fulfill major requirements.

## The Major

### A minimum of 48 credits, including:

- A. 24 credits from courses in the departments of biology, chemistry, computer science, physics, or psychology, creditable toward those majors, with no more than eight credits in any one of these five disciplines. Environmental Studies 111 (Geology) may be used to count for four of the 24 credits.
- B. Eight credits from courses in mathematics creditable toward the mathematics major, including calculus through Mathematics 133.
- C. Sixteen additional credits from courses numbered 200 or above in the departments of the Division of Science. Biological Chemistry 262 or a four-credit mentored scientific research project (299, 399, or 499) may be used to count for four of the 16 credits. However, research credits cannot be used to satisfy the additional specialized requirements listed below:
  1. For a concentration in biology: 251, 252, and one additional course from courses numbered 300 or above.
  2. For a concentration in chemistry: Three courses numbered 200 and above, at least one of which must be numbered 300 or above.
  3. For a concentration in computer science: Three courses in computer science numbered 200 or above, at least one of which must be numbered 300 or above.
  4. For a concentration in mathematics: Three courses in mathematics numbered 200 or above, at least one of which must be numbered 300 or above.
  5. For a concentration in physics: 234, 335, and four additional credits from courses numbered 200 and above.
  6. For a concentration in psychology: One course from 243, 246, or 260; and one course from 214, 233, or 248; and one course numbered 300 or above.

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To be considered for honors in general science, graduating seniors, in addition to meeting the College's general requirements for honors, must take at least two four-credit courses at the 300 level or above in their departments of concentration and must complete a scientific research project and publicly present the results on campus.

**NOTE:** For the General Science Teaching Certificate, it is required that one full year of coursework (eight credits) be completed in biology, in chemistry, and in physics (requirement A) and that the 12 additional credits (requirement C) be selected from courses in biology, chemistry, or physics.

## German

Member of the Division of Humanities

Daniel Patrick Reynolds, Chair, Sigmund Barber, Vance Byrd, Jennifer Michaels

Knowledge of German opens another window on the human scene, making possible an expanded perspective not available to those whose powers of comprehension and expression are confined to a single language. Students taking German develop an awareness of other modes of thinking about and interpreting human experience. Whether through the acquisition of a second language or the immersion in a new culture, students of German increase their sensitivity to their own linguistic and cultural practices, habits, and assumptions. Encounters with the cultures of Germany, Austria, and Switzerland help students develop a critical understanding of Western civilization. In a liberal arts setting, the study of German can be its own reward, while also leading students to a greater appreciation of the arts, the sciences, politics, and the past. German is valuable for students contemplating graduate study in numerous fields, planning careers in government service, joining businesses engaged in international trade, communicating with activists committed to global change, or embarking on a lifelong journey of continued intellectual, cultural, and personal enrichment.

Technology is integral to work in all courses in the Department of German. Films, recordings, and digital media supplement class instruction at all levels. A weekly dinner meeting at the German Table provides opportunity for students and faculty to speak German in an informal setting. A departmental assistant who is native to a German-speaking country acts as an informal resource person and tutor. A German writer is in residence for half of spring semester.

The 100-level courses introduce students to the language and contemporary culture, the 200-level courses further develop reading and speaking skills through analysis and discussion of modern German texts, and the 300-level courses cover the development of German culture from its beginnings to recent times.

Independent study is encouraged for those who wish to pursue intensive study of individual authors or special topics. Qualified students have the option of doing some reading in German to supplement designated German courses.

Students majoring in German should broaden their understanding of literature, film, theatre, and other modes of cultural expression by taking courses in other languages and literatures, as well as in fine arts and social studies. German courses completed in approved off-campus programs are counted toward the major in German at Grinnell.

## The Major

Two tracks are offered. Proficiency in the German language is fundamental to both. For both tracks, we strongly encourage students to study for at least a semester in a German-speaking culture.

1. The German Literature and Culture track has as its focus the study and analysis of German literary and other cultural texts. A minimum of 32 credits. At least 20 credits from 300-level (or higher) German courses, 14 credits of which must be taken within the Department of German at Grinnell. Required are German

302, 303, 372 (for 2 credits), and 495. Related courses in humanities and social studies and a reading knowledge of a second foreign language are strongly recommended. Courses numbered 101, 102, 121, and 212 do not count toward the major. With permission, up to 8 of the 32 credits may be taken in related studies outside the department.

2. The German Studies track allows students to pursue interdisciplinary interests in German by doing coursework outside the Department of German. A minimum of 32 credits. Required are German 302, 303, and 495. At least 12 credits from approved courses at the 200 level or above in departments outside the Department of German are required. Courses numbered 101, 102, 121, and 212 do not count toward the major.

The following is a *partial* list of approved courses:

Art 231 Modern Art in Europe, 1900–1940  
 Economics 225 Marxian Economics  
 History 238 Germany from Unification to Reunification  
 Music 262 Western Music from 1750 to the Present  
 Philosophy 234 19th-Century Continental Philosophy  
 Philosophy 268 Cultural Critique: Marx, Nietzsche, Freud, and Beyond  
 Philosophy 391 Advanced Studies in Continental Philosophy  
 Philosophy 394 Advanced Studies in Theories of Value

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Some courses not listed may also be counted toward the German Studies track. Please consult the Department of German about courses not listed.

To be considered for honors in German, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate superior performance in their coursework in the major and make contributions to the department outside the classroom.

### 101 Introductory German (Fall)

**5 credits**

Acquisition of German language skills through listening, speaking, reading, and study of grammar. Students will develop communication skills such as the ability to talk about themselves and their interests. Practice of oral skills with a native German-speaking assistant. Prerequisite: none. STAFF.

### 102 Continuing German (Spring)

**5 credits**

Continuation and completion of oral-aural study of grammatical structures. Increased emphasis on developing oral fluency. Introduction to the literature and culture of Germany through reading and analysis of modern short stories and expository prose. Practice of oral skills with a native German-speaking assistant. Prerequisite: German 101 or permission of instructor. STAFF.

### 121 Accelerated German (Fall)

**5 credits**

Intensive oral/aural study of German and focus on developing proficiency. This course is the equivalent of 101 and 102. Designed for students who want to progress quickly in their German. Not open to students who have taken German 102. Prerequisite: placement by department, based on previous exposure to German or prior study of another foreign language. STAFF.

**212 German Conversation (Fall or Spring) 1 credit**

Focus on development of conversation skills. Discussion based on a variety of cultural topics. May be repeated once for credit. Prerequisite: German 102 or permission of instructor. S/D/F only. Does not count toward major. STAFF.

**221 Intermediate German I (Fall) 4 credits**

Review of selected topics in German grammar, accompanied and followed by continued practice in speaking, reading, and writing. Prerequisite: German 102 or permission of instructor. STAFF.

**222 Intermediate German II (Fall or Spring) 4 credits**

Reading and discussion of literary works of intermediate difficulty. Reading content designed to acquaint students with important aspects of recent German culture and to develop skill in the analysis and comprehension of modern German prose. Prerequisite: German 221 or permission of instructor. STAFF.

**227 Topics in German Literature in Translation (Spring) 4 credits**

Also listed as General Literary Studies 227. Texts selected from a wide variety of literary (and some nonliterary) texts by German-speaking authors. Topics are announced each time the course is offered. Readings and discussion in English. Prerequisite: none. May be repeated once for credit when content changes. MICHAELS.

**233 Frames of Reference: Topics in German Cinema from 1920 to the Present\* (Fall) 4 credits+**

Also listed as General Literary Studies 233. Readings and discussions in English. Seminal readings from film theory combined with a survey of German cinema from its inception to the present. Variable thematic concerns include the aesthetics of power, the real and the imaginary, representations of subjectivity, and the construction of national identity. German majors write in German. Prerequisite: none. REYNOLDS.

**302 Core Seminar I: From Culture to Nation (Fall) 4 credits**

Conducted in German. Study of German literature, history, and culture from 1750 to 1871 through literary and historical texts, documentaries, and films. Prerequisite: German 222 or permission of instructor. STAFF.

**303 Core Seminar II: German Identity Through Wars and Reconciliations (Spring) 4 credits**

Conducted in German. Study of German literature, history, and culture from 1871 to the present through literary and historical texts, documentaries, and films. Prerequisite: German 222 or permission of instructor. STAFF.

**310 Topics in German Language and Culture (Fall or Spring) 4 credits**

Advanced language course with special emphasis on oral and written proficiency in German. Pertinent cultural and sociopolitical issues of German-speaking countries are used as a basis for short essays and discussions. Predominantly non-literary texts are chosen. Not open to those who have taken German 326. Prerequisite: German 222 or permission of instructor. STAFF.

**331 The German Cultural Heritage: From Tacitus to Goethe\* 4 credits+**

Conducted in German. An introduction to German culture from the Germanic tribes to the Enlightenment. Topics to be examined include political organizations, gender issues, and religion, with readings from the pre-middle ages, the

\*Not offered every year.

medieval period, the Reformation, the Enlightenment, and the Storm and Stress movement. All readings in modern German. Prerequisite: German 302 and 303, or permission of instructor. BARBER.

**343 Cultural and Intellectual Revolution from  
Classicism Through Realism\*** 4 credits+

Conducted in German. A study of literature and thought from the late 18th century through 1880. Literary texts will be placed within the philosophical, historical, and socio-linguistic context. Variable topics. Prerequisite: German 302 and 303, or permission of instructor. BYRD.

**350 Contested Subjects: German Culture from the  
Avant-Garde to Postmodernism\*** 4 credits+

Conducted in German. An exploration of German-speaking identities through their formulations and contestations in literature, architecture, cinema, music, cabaret, and political culture. Tracing the artistic epochs from Naturalism to Postmodernism, the course will examine ideologies of self and Other as they relate to ethnicity, race, class, gender, and geography. Prerequisite: German 302 and 303, or permission of instructor. REYNOLDS.

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**354 The Turbulent Century: Literature and Culture  
in 20th-Century Germany\*** 4 credits+

Conducted in German. A study of responses in literary and other texts to historical, political, and social events such as World War I, the Weimar Republic, World War II, postwar reconstruction, the German Democratic Republic, and unification. Variable topics. Prerequisite: German 302 and 303, or permission of instructor. MICHAELS.

**372 Recent Trends in German Literature (Spring)** 1 or 2 credits

Close reading and analysis of recent German works from a contemporary cultural perspective. Conducted by the German writer in residence. All readings and discussion in German. Prerequisite: German 302 or permission of instructor. May be repeated once for credit. STAFF.

**495 Advanced Seminar in German Studies (Spring)** 4 credits

Critical reading and close analysis of selected texts in German literature and culture for students with a solid background in the study of German. Topics vary, and texts include both primary and secondary sources. Course may be repeated once for credit when content changes. Prerequisite: senior standing or special permission for third-year students. STAFF.

## Global Development Studies Concentration

J. Montgomery Roper, Chair

The interdisciplinary character of this concentration introduces students to diverse perspectives on processes of change in the so-called “Third World.” Courses in the social sciences and humanities permit concentrators to learn about Western and non-Western conceptions of change and the meaning of development. The requirement in environment and development ensures that concentrators will become conversant in the environmental and technological implications of economic change and the alternative offered by strategies of sustainable development.

In addition to completing the required coursework, concentrators must participate in either an internship or independent research project. Students planning to study or complete internships abroad are expected to undertake appropriate language study. A statistics course is also recommended.

**Required, 22 or 24 credits as follows:**

1. Global Development Studies 111 Introduction to Global Development Studies
2. Micro Setting, one four-credit course required, chosen from the following:
  - Anthropology 242 African Cultures
  - Anthropology 246 Peoples of the Middle East
  - Anthropology 257 Latin American Cultures
  - Chinese 277 Modern China through Literature and Film (in Translation)
  - English 225 Introduction to Postcolonial Literatures
  - English 360 Seminar in Postcolonial Literature
  - French 342 Orientalism Revisited
  - History 202 Modern Latin America
  - History 204 Radical Movements in 20th-Century Latin America
  - History 276 Chinese History II
  - Latin American Studies 111 Introduction to Latin American Studies
  - Political Science 261 State and Society in Latin America
  - Political Science 262 African Politics
  - Political Science 275 Politics of the People's Republic of China
  - Religious Studies 117 Major Asian Religions
  - Religious Studies 220 The Traditions of Islam
  - Religious Studies 222 Religious Traditions of China
  - Spanish 315 Creativity and Dissidence in Modern Spanish America
  - Spanish 377 Modernization and Innovation in Contemporary Spanish America
  - Spanish 383 The Spanish American Colonial World
3. Macro Context, one four-credit course required, chosen from the following:
  - Anthropology 238 Cultural and Political Ecology
  - Economics 230 Economic Development
  - Economics 233 International Economics
  - Economics 240 Resource and Environmental Economics
  - Political Science 251 International Political Economy
  - Sociology 220 Sociology of Global Development
4. Environment and Development, one four-credit course required, chosen from the following:
  - Anthropology 238 Cultural and Political Ecology
  - \*Biology 150 Introduction to Biological Inquiry
  - Biology 220 Biotechnology and Its Social Impact
  - Biology 340 Aquatic Biology
  - Biology 368 Ecology
  - Economics 240 Resource and Environmental Economics
  - Environmental Studies 145 Nations and the Global Environment
  - \*Environmental Studies 395 Advanced Special Topics
  - \*Environmental Studies 495 Senior Seminar
  - Global Development Studies 251 Water, Development, and the Environment
  - Technology 154 Evolution of Technology

\* Varying content requires the approval of the concentration committee.

5. Senior Seminar, one four-credit course required, chosen from the following:
  - Economics 372 Seminar in Economic Development
  - Economics 374 Seminar in International Trade
  - Economics 375 Seminar in International Finance
  - Global Development Studies 346 Sustainable Development in the Modern World System
  - Global Development Studies 347 Globalization and Development
  - Political Science 350 International Politics of Land and Sea Resources
  - Political Science 354 Political Economy of Developing Countries
  - Political Science 357 Diffusion of Democracy
  - \*Sociology 390 Advanced Studies in Sociology

\* Varying content requires the approval of the concentration committee.

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**NOTE:** Courses not taken as senior seminar may be taken to meet the distribution requirements of Nos. 3 or 4, depending on appropriateness.

6. Additional Course Requirements (two or four credits)
  - Two credits in an approved 300-level internship in development, strongly recommended

or

- Four credits in an approved 397 independent project or 499 Mentored Advanced Project (MAP)

### Other Requirements

1. Students must complete GDS 111 before taking the senior seminar or undertaking the internship or independent study.
2. No course can be counted toward more than one concentration requirement.
3. Student selections must include at least one course in anthropology or sociology, economics, and political science.
4. Concentrators planning to participate in internships and study-abroad programs are expected to undertake foreign language study if the target language is offered at Grinnell through either formal departments or the Alternative Language Study Option Program. Concentrators are required to review their plans for foreign language study with their GDS adviser.

### 111 Introduction to Global Development Studies (Fall and Spring)

**4 credits**

This course adopts an interdisciplinary approach to the analysis of contemporary issues in the economic development of less-developed countries. Course reviews the leading theories of economic, political, and social change that have been adopted by anthropologists, economists, and political scientists, and considers how these theories have shaped past and current debate on the definition and goals of the development process. Course compares and contrasts the approaches adopted by international institutions and alternative development organizations to the “practice” of development. Prerequisite: one course in Anthropology, or Economics, or Political Science, or Sociology; or permission of instructor. Economics 111 is strongly recommended. CARTER, ROPER.

**251 Water, Development, and the Environment\* (Spring) 4 credits**

This course explores international water issues, focusing on the environmental, social, economic, and political implications of water scarcity. Emphasis will be on three interrelated topics: water scarcity as a constraint on development; water scarcity as a source of domestic and international conflict; and, in particular, the environmental implications of water supply projects and their social and economic consequences. Water management policy and the implications of changing climate on regional water availability will also be considered. Prerequisite: second-year standing or permission of instructor.

P. JACOBSON

**346 Sustainable Development in the Modern World System\* (Spring) 4 credits+**

Interdisciplinary social science examination of theories and issues concerning “sustainable development.” Historical consideration of the goals of development along with how and why the concept of sustainability became prevalent in the dominant discourse, and the contested meanings applied to this concept. Focus then given to several key issues (varying by year) at the boundary of economic/social development, natural resource management, and environmental degradation (such as population growth, agrarian reform, international environmental treaties, climate change, deforestation, agribusiness, tourism, etc.). Can count as anthropology seminar when taught by Roper. Prerequisite: Global Development Studies 111, or Anthropology 280, or permission of instructor. ROPER.

**347 Globalization and Development\* 4 credits+**

Interdisciplinary social science examination of the nature of social change—particularly in terms of varied conceptions of “development”—associated with processes of modernization and globalization in developing countries. Focus is placed on western development aid and the expansion of the world capitalist system; including the major actors and institutions involved, their linkages with one another and peoples in the developing world, and impacts on the developing world. Also examines local-level responses, focusing on social movements and/or grassroots development initiatives. Can count as anthropology seminar when taught by Roper. Prerequisite: Global Development Studies 111, or Anthropology 280, or permission of instructor. ROPER.

**Greek (see Classics)**

Member of the Division of Humanities

\*Not offered every year.

## History

Member of the Division of Social Studies

Victoria Brown, Chair, Edward D. Cohn, Andrew Hsieh, Daniel Kaiser, P. Albert Lacson, Rob Lewis, Russell K. Osgood, Elizabeth Prevost, Sarah Purcell, Diana Shull, Jose Pablo Silva, Marci Sortor\*

The study of history leads to a knowledge of the past, to ways of knowing that past, and to an understanding of how such knowledge has been applied. Historical study has traditionally been associated with such academic disciplines and vocations as law, public service, and teaching, as well as advanced work in history itself, but majors have successfully entered at least 75 different occupations over the past decade.

Introductory courses are designed to teach the methods and materials of historical study and to create an appreciation for the elements of continuity and change in human experience. 100-level courses require no special preparation. (Advanced Placement students should know that the College will not permit credit for both History 101 and AP European History, nor for History 111-112 and AP American History.) Some 200-level courses require no prerequisites and are open as well, but anyone who is in doubt about the level of preparation expected for an advanced course should consult the instructor before registering.

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Because history has traditionally drawn many of its methods and theories from other disciplines, one quickly learns that abilities developed in studying other disciplines can be applied to history as well. Indeed, breadth of learning is a great asset. The nature of modern historical methods requires the ability to read languages other than English and to use mathematics for statistical analysis. Humanities 140 also is recommended for history majors. The course dovetails nicely with History 101 to provide an interdisciplinary introduction to Western culture and may be applied as related credit (see below) for the major.

### The Major

**A minimum of 32 credits**, 20 of which must be taken in the history department at Grinnell College, including the required eight credits at the 300 level. Of the required eight credits at the 300 level, no more than four credits may be taken in any single area of study. Note: History 304 or 305 may be used toward the 32 credits required for the major, but does not satisfy the 300-level requirements for the major. No more than 12 credits of the 32 required for the major may be taken at the 100 level, AP credit, or equivalent. With permission, four of the 32 credits may be taken in related studies. The department strongly recommends that students complete a history curriculum that embraces geographic and chronological diversity. The department also recommends that students take the equivalent of at least three semesters of a foreign language and at least one course in quantitative analysis; knowledge of foreign languages and mathematics is essential for serious study of history.

To be considered for honors in history, graduating seniors, in addition to meeting the College's general requirements for honors, must have completed both recommended and required work listed above, and must also submit a substantial piece of historical writing by the first Monday after spring break for evaluation by a faculty panel appointed by the department chair. These papers should be the result of work that began in a 300-level history seminar, MAP, or some other form of advanced independent research. The faculty panel will decide by majority vote which papers qualify for honors.

**101 Basic Issues in European History: 4 credits****1650 to the Present (Fall and Spring)**

Examines the institutions of the Old Regime, the economic and political revolutions of the late 18th and 19th centuries, and the social and ideological conflicts of the 20th. Introduces students to a variety of historical problems. Humanities-Social Studies 140 provides a useful preparation but is not a prerequisite.

Prerequisite: none. STAFF.

**105 Cultural Encounters in History (Fall and Spring) 4 credits**

Investigates the problems and opportunities that arise when people from very different cultures come into contact as a result of conquest, migration, or the emergence of pluralist societies. Cases will be drawn from the Americas, Africa, Asia, and Europe since the Middle Ages and will examine the impact of the conquest on the conquered, the spread of voluntary and involuntary migration, various forms of religious and racial prejudice and campaigns against prejudice, the extent to which the emergence of a global economy has transformed cultural encounters, and the evolution of concepts of "human rights."

Prerequisite: none. STAFF.

**111–112 American History I and II (Fall and Spring) 4 credits**

A thematic survey of American history from colonial beginnings to the present, emphasizing the use of primary source materials and introducing students to the methods of historical inquiry. First semester: from the colonial period to 1877; second semester: from 1877 to the present. May be taken separately, but students planning further work in American history should take both semesters.

Prerequisite: none. STAFF.

**201 Colonial Latin America\* (Spring) 4 credits+**

A general survey of Latin American history from the Columbian encounter through Independence. The course will focus on the patterns of European conquest and colonization, the complexity of race relations in the region, and the problems of colonial administration. Prerequisite: none. SILVA.

**202 Modern Latin America (Fall) 4 credits+**

A general survey of Latin American history from independence to the present day. The course will focus on problems of political instability, economic development and the role of the United States in the region. Prerequisite: none. SILVA.

**204 Radical Movements in 20th-Century Latin America\* 4 credits+**

During the 20th century, Latin America has witnessed both peaceful leftist mobilizations and violent revolutions. All of these movements aimed at redressing inequalities and creating more just societies. This course will consider several of these movements in comparative perspective. Prerequisite: none. SILVA.

**211 Colonial and Revolutionary America, 1450–1788\* (Spring) 4 credits+**

Examines selected topics in the colonization of the New World with emphasis on the interactions between Native Americans, Africans, and Europeans in the French, Spanish, and English colonies. The course then focuses on the American Revolution with special attention to transformations in ideology and politics. Students investigate how social, gender, and racial hierarchies were defined and rearranged in colonial and post-colonial America. Prerequisite: History 105, or 111, or permission of instructor. PURCELL.

**212 Democracy in America, 1789–1848 (Fall) 4 credits+**

Examines the tensions caused by the simultaneous development of political democracy in the United States and the demands for rights by those who continued to be excluded from various forms of power. Topics include: the creation of party politics, reform movements, economic growth, class conflict, expansionism, race, slavery, gender, and material culture. Prerequisite: History 111 or permission of instructor. PURCELL.

**214 The American Civil War and Reconstruction (Spring) 4 credits+**

Surveys the causes, progress, and consequences of the Civil War and Reconstruction. Examines American history from the mid-1840s through the late 1870s with a focus on race, politics, economics, gender, and military conflict to uncover how and why the United States tore itself apart, whether the fundamental conflicts of the war were solved by Reconstruction, and why the Civil War has occupied such an important place in American history and imagination. Prerequisite: none. PURCELL.

121

**221 The American West, 1803–1912 (Fall) 4 credits+**

Examines two basic themes of the trans-Mississippi-West frontier: the actual experiences of men and women pioneers (explorers, cowboys, miners, farmers, soldiers, entrepreneurs, lawmen, and outlaws) and popular myths and misconceptions about the “wild West.” Sources for the course include historical accounts, novels, primary sources (diaries and oral histories), films, and slides. Prerequisite: none. STAFF.

**222 The History of Women in the United States (Spring) 4 credits**

Examines basic themes and issues that have dominated the lives of women in the United States since the colonial period. Focuses on the interaction of economics and ideology, relationships between production, reproduction, and sexuality in defining women’s status, development of female culture and feminism, and the role of race, class, and ethnicity in shaping women’s experience. Prerequisite: second-year standing; and History 111, or 112, or Gender and Women’s Studies 111; or permission of instructor. BROWN.

**227 African American History (Spring) 4 credits+**

A survey of the African-American experience in slavery and freedom, with a primary emphasis on the struggle for racial justice and equality since the Civil War. Assignments stress primary sources as well as scholarly studies, films, and recordings. Prerequisite: second-year standing or permission of instructor. STAFF.

**228 The Promised Land: U.S. Immigration History\* (Fall) 4 credits+**

This course examines variations and commonalities in the experiences of those who have voluntarily emigrated to the United States since the mid-19th century. The focus of the course is on the lives of immigrants themselves, but it also examines U.S. immigration from the standpoint of those already settled in the United States and from the standpoint of popular culture and public policy. Prerequisite: History 105, or 112, or permission of instructor. BROWN.

**229 American Economic History\* 4 credits+**

See Economics 229.

**231 History of London (Fall) 2 credits**

(Grinnell-in-London ONLY) This course explores the history of London from its Roman origins to the present day and examines how royalty, trade, religion, and transport have shaped the city's pattern of growth over 2,000 years. Coursework consists of weekly lectures, guided walks, and discussions of readings from contemporary sources. Students are given an opportunity to investigate an aspect of London history of particular interest to them. Prerequisite: none. BOWERS ISAACSON.

**233 Medieval Europe, 800–1350 (Fall) 4 credits+**

Explores the interplay between institutions (such as the church, monarchy, and lordship), economic trends, and society in Western Europe between 800 AD and 1450 AD. While providing a general survey of the Middle Ages, this course will focus particular attention on village life and rural society, migration and military expansion, how members of ethnically and religiously mixed communities lived with each other, and whether women experienced a “golden age.” Prerequisite: none. Option of doing some reading in French, Latin, and Spanish. STAFF.

**234 Europe in Renaissance and Reformation, 1350–1650 (Spring) 4 credits+**

Examines the powerful and often unpredictable influence of ideas and the role of economic developments in shaping institutions and people's experiences in early modern Europe. Special attention is given to the interplay of popular and high culture; the effect of commercial capitalism on women and on society as a whole; the emergence of powerful monarchies; and the tensions between reason and folly, and between dreams of a godly society and fears of demonic forces. Prerequisite: none. Option of doing some reading in French, Latin, or German. STAFF.

**235–236 British History I and II (Spring) 4 credits+**

While surveying the main outlines of British history, these courses emphasize the development of political institutions within the context of economic, religious, and intellectual movements, and with regard to Britain's relations with the rest of the world. History 235: Anglo-Saxon settlements to 1660. History 236: 1660 to the present century. May be taken separately. Prerequisite: none. DRAKE, PREVOST.

**238 Germany from Unification to Reunification (Fall) 4 credits+**

Employs theories of Marx, Max Weber, and Freud to analyze the tension between nationalist ideology and the realities of social conflict in Bismarck's Empire, the Weimar Republic, and the Third Reich; the success of democratic institutions in the Federal Republic; and the failure of the German Democratic Republic. Students who took History 238, Modern European Cultural History, may enroll in this course. Prerequisite: History 101 or permission of instructor. PEGELOW.

**239 The Collapse of the Eurocentric World Order\* (Spring) 4 credits+**

Studies the “New Imperialism” of the 1880s; causes of the First World War; the impact on international relations of communism, fascism, and the Great Depression; appeasement and the outbreak of the Second World War; the emergence of the United States and the U.S.S.R. as “superpowers;” and the dissolution of the colonial empires. Prerequisite: History 101, or 105, or permission of instructor. PEGELOW.

\*Not offered every year.

**241 Origins of Modern Russia (Fall) 4 credits+**

Focusing upon the medieval origins of early East Slavic societies and the formation of the Muscovite state and Russian Empire, this course examines the political, economic, and social components of pre-revolutionary Russia from the 10th through the 19th centuries. The dynamics of ethnicity, the multiple forms of state-building, and the role of gender, class, and ideology receive special attention. Prerequisite: none. Option of doing some work in Russian. KAISER.

**242 Revolutionary Russia (Spring) 4 credits+**

Examines 20th-century Russia, focusing upon the causes, course, and consequences of the 1917 Revolution, and the development and dissolution of the Soviet Union. Allots special attention to urbanization, industrialization, Marxist-Leninist ideology, new definitions of gender, national, and class identity. Prerequisite: none. Option of doing some work in Russian. KAISER.

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**255 History of Ancient Greece\* (Fall) 4 credits+**

Also listed as Classics 255. The political, military, social, economic, and intellectual history of the Greeks in the Archaic and Classical periods and their relationship with other peoples of Europe, Africa, and Asia. Focus on the evolution of the Athenian and Spartan constitutions, the Persian War, Athenian imperialism and the Peloponnesian War, the rise of Macedon, and Alexander's conquest of Egypt and the Near East. Prerequisite: none. M. CUMMINS (Classics).

**256 History of Rome\* (Fall) 4 credits+**

Also listed as Classics 256. Rome's rise, maturity, and decline; emphasis on the republican constitution, organization of Italy, Rome's relationship with other peoples of Europe, Africa, and Asia during the republic and the empire. Focus on the Roman Revolution, the Augustan Age, the "Pax Romana," the spread of Christianity, and the transition to the Middle Ages. Prerequisite: none. M. CUMMINS (Classics).

**261 Southern Africa (Fall) 4 credits+**

An introduction to the 10-country region, with an emphasis on the Republic of South Africa. Regional geography along with culture and politics are principal themes, including the rise and fall of the South African apartheid state. Prerequisite: none. DRAKE.

**275–276 Chinese History I and II (Fall and Spring) 4 credits+**

An introduction to the political, cultural, and economic life of China. First semester: from the Shang dynasty (1766 B.C.?–1122 B.C.?) to the end of the Ming dynasty (1368–1644). Second semester: from the establishment of the Ch'ing dynasty to modern times. May be taken separately. Prerequisite: none. HSIEH.

**277–278 Japanese History I and II (Spring) 4 credits+**

An introduction to the political, cultural, and economic life of Japan. History 277: from prehistory to the end of the Tokugawa period (1867). History 278: from the end of the Tokugawa period to the present. Prerequisite: none. HSIEH.

**304 History of Economic Thought II\* 4 credits**

See Economics 304.

**305 Transnational Legal Institutions (Spring) 4 credits**

See Political Science 305.

**3xx Advanced Studies in History (Fall and Spring) 4 credits**

In any academic year, students may choose from among six to eight 300-level seminar courses in the following categories. For course descriptions, prerequisites, and instructors, see the current Schedule of Courses. All courses are 4-credit, without the “Plus-2” option.

- 31x Advanced Studies in American History
- 32x Advanced Studies in Latin America and the United States
- 33x Advanced Studies in Western European and British History
- 34x Advanced Studies in Russian History
- 35x Advanced Studies in Historiography and Ancient History
- 36x Advanced Studies in African History
- 37x Advanced Studies in Asian History

**397 Advanced Independent Study (Fall or Spring) 2 or 4 credits**

With approval from a member of the history department (by the end of the semester preceding study), students may engage in advanced research on a topic of significant debate among historians. May be taken to satisfy the 300-level requirement for the major, if results are presented satisfactorily to a colloquium of students and faculty. Prerequisite: a relevant 200-level history course or permission of instructor. STAFF.

**411 Senior Essay (Fall or Spring) 4 credits**

The preparation and writing of an original piece of historical work, not to exceed 7,500 words in length, based upon primary sources or secondary sources that afford an opportunity for bibliographical or historiographical treatment. Seniors must obtain approval of a department member as adviser for the essay and the department chair before the end of the semester preceding that during which the essay will be written. Prerequisite: senior standing or permission of instructor. STAFF.

**499 Mentored Advanced Project (Fall or Spring) 2–4 credits**

A history MAP normally follows work begun in a 300-level history seminar, so that the student can undertake exhaustive research on a precisely defined topic to produce a paper as close as possible in quality to the articles published in history journals. MAP proposals unrelated to a seminar will be considered, but in that case students must demonstrate that they are already familiar with the most important scholarly works published in their proposed field of inquiry. MAP proposals, which must be submitted to the history department chair at least one week before they are due at the Office of the Registrar, should include an essay of 1,200–1,500 words to explain the historical problem to be investigated and the questions left open by existing research in the field, and a bibliography detailed enough to demonstrate that the project is feasible. A faculty committee appointed by the department chair will review all proposals, which will only be accepted if they reflect careful preparation and close consultation with the chosen mentor. STAFF.

\*Not offered every year.

## Humanities and Social Studies

### Divisional and Interdivisional Courses

The Divisions of Humanities and Social Studies, separately and in cooperation, offer courses that are of fundamental importance to inquiry in the disciplines represented in the two divisions as well as to education in the liberal arts generally. These courses acquaint students with what people have thought and done individually and socially in the past, and with the means by which they have expressed their ideas and emotions. Such study enriches one's understanding of human nature by exploring the channels through which individuals have interpreted human experience—literature, art, music, religious and philosophical systems, political and social orders, and historical works.

While these courses in humanities and social studies do not in themselves constitute a major program of study, students planning to major in a department in either of these divisions should consult the department about acceptance of these courses as cognate credits for their proposed major or for inclusion in an independent major.

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### Courses in the Division of Humanities

#### **101 Humanities I: The Ancient Greek World (Fall or Spring) 4 credits**

A foundation for further study in the liberal arts, developing skills of critical reading, writing, and imaginative thinking through the study of selected works from ancient Greece. Readings include Homeric epic, tragic drama, Platonic dialogues, Thucydides' *History* and Aristotle's *Poetics*. Prerequisite: none. STAFF.

#### **102 Humanities II: Roman and Early Christian Culture (Spring) 4 credits**

Major works of Roman and early Christian culture, exploring private and public paths to happiness from Cicero's ideal commonwealth to the City of God. Readings include Virgil's *Aeneid*, Stoic and Epicurean philosophy, satire and drama, Christian scripture, St. Augustine, and Boethius. Emphasis on close reading, discussion, and short essay assignments. Prerequisite: none. STAFF.

### Courses in the Divisions of Humanities and Social Studies

#### Studies in East Asian Culture

#### **131 China's Ancient World\* 4 credits**

An introduction to China's classic texts of philosophy, religion, history, and literature, from the Yin-Zhou period (ca. 18th c. B.C. to ca. 5th c. B.C.) through the Tang Dynasty (618–907 A.D.). Traditional Chinese cosmology, morals, ethics, and institutions examined; also the various means (philosophical, historical, literary, and musical) of expressing these aspects of traditional Chinese culture. Prerequisite: none. COOK.

## Studies in Western Culture

### 140 Medieval and Renaissance Culture: 1100–1650 (Spring) 4 credits

This interdisciplinary course explores European culture and the social and political forces that shaped it between 1100 and 1650, paying special attention to feudalism and the Crusades, the intellectual efflorescence of the 12th and 13th centuries, the Renaissance, the Reformation, and the advent of the Scientific Revolution. In our exploration of medieval and Renaissance culture we will draw on art, science, literature, political theory, philosophy and theology, music, the writings of mystics, and advice manuals for heads of households and would-be courtiers. Prerequisite: none. STAFF.

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## Courses in the Division of Social Studies

### 115 Introduction to Statistics (Fall or Spring) 4 credits

See Mathematics 115.

### 201 From Herron to Hopkins: The Social Gospel at Grinnell College\* 4 credits

Grinnell College was a struggling frontier college until President George Gates brought the Social Gospel to the school in 1887. This course traces the College's history from its founding through the early 20th century with a careful consideration of how the College's ethos of social justice and public service was formed through the influence of the Social Gospel. Prerequisite: none. STAFF.

## Course in the Division of Humanities, Science, and Social Studies

### 350 Freedom and Authority: The Control of Reproduction (Fall) 1 credit

How do social, biological, and cultural constraints affect decisions about reproduction? How do social institutions set and enforce the boundaries of what is possible and permissible? How do practices of reproduction generate meaning for human existence? This seminar examines conflicts between the freedom of the individual to make decisions about reproduction and the internal and external authorities of biology, evolution, the family, the state, health care systems, criminal justice systems, and religious hierarchies. Prerequisite: third-year or senior standing and completion of a four-credit course at the 200 level or above creditable to a major in the division of registration; or permission of instructors. STAFF.

## Japanese (see Chinese and Japanese)

Member of the Division of Humanities

## Latin (see Classics)

Member of the Division of Humanities

\*Not offered every year.

## Latin American Studies Concentration

Maria Tapias (Anthropology), Chair

In this concentration, students examine Latin American cultures and societies, with work in at least two disciplines: humanities and social sciences. Participation in a study program in Latin America is encouraged (see Off-Campus Study). A student choosing the senior research project will be expected to integrate the various components of his or her program in the analysis of a topic of special interest.

### Required, 24 credits as follows:

1. Gateway course, 4 credits:
  - Latin American Studies 111 Introduction to Latin American Studies
2. Latin American core courses, 8 credits chosen from:
  - Anthropology 257 Latin American Cultures
  - Anthropology 267 Aztecs, Incas, and Mayas
  - History 201 Colonial Latin America
  - History 202 Modern Latin America
  - History 204 Radical Movements in 20th-Century Latin America
  - History 32x Advanced Studies in Latin America and the United States (only on an LA topic)
  - Political Science 261 State and Society in Latin America
  - Spanish 311 Traditions of Independent Spanish America
  - Spanish 315 Creativity and Dissidence in Modern Spanish America
  - Spanish 377 Modernization and Innovation in Contemporary Spanish America
  - Spanish 383 The Spanish American Colonial World
3. Elective courses, 8 credits chosen from:
  - a. Courses listed under number 2 above
  - b. Courses with Latin American content:
    - Anthropology 238 Cultural and Political Ecology
    - Economics 230 Economic Development
    - Economics 233 International Economics
    - Economics 372 Seminar in Economic Development
    - Economics 374 Seminar in International Trade
    - Economics 375 Seminar in International Finance
    - Environmental Studies 495 Senior Seminar on Environmental Studies (only on an Latin American topic)
    - Global Development Studies 34x Senior Seminar in Global Development Studies (only on an Latin American topic)
    - Political Science 354 Political Economy of Developing Countries
    - Sociology 220 Sociology of Global Development
  - c. Off-campus study, up to 8 approved credits taken in LAS-designated off-campus programs: Argentina (FLACSO-Buenos Aires), Chile (CIEE-Santiago de Chile and Valparaiso; IES Santiago de Chile), Costa Rica (ACM-Studies in LA Culture and Society, and ACM Tropical Field Research; Duke University-Organization for Tropical Studies; ICADS), Ecuador (IES-Quito Minnesota Studies in International Development), or Mexico (Rutgers U-Mérida); and

- d. With the approval of the concentration, courses not included above that deal significantly with Latin America.
4. Research project, 4 credits. Students may choose one of the following two options for the fulfillment of this requirement:

- a. Senior Research

Declaration of the intention to complete a senior research project will occur no later than the second semester of the junior year. The project should integrate previous coursework in the concentration and should rely significantly on sources in Spanish if the topic pertains to a Spanish-speaking country. A proposal stating the research questions and describing a methodology must be submitted to and approved by the concentration in the fall semester of the senior year. Fall semester enrollment is allowed if the proposal is approved in the second semester of the third year.

- b. Senior Paper

Students may choose to complete a research paper while enrolled as a senior in an approved 300- or 400-level course from the following:

- Economics 372 Seminar in Economic Development
- Economics 374 Seminar in International Trade
- Economics 375 Seminar in International Finance
- Environmental Studies 495 Senior Seminar in Environmental Studies (only on an Latin American topic)
- Global Development Studies 34x Senior Seminar in Global Development Studies (only on an Latin American topic)
- History 32x Advanced Studies in Latin America and the United States (only on an Latin American topic)
- Political Science 354 Political Economy of Developing Countries
- Spanish 377 Modernization and Innovation in Contemporary Spanish America
- Spanish 383 The Spanish American Colonial World

With the approval of the concentration and the course instructor, any other 300- or 400-level courses not included above that deal significantly with Latin America.

Declaration of the intention to choose this option should occur no later than the second semester of the junior year.

5. Other requirements:

- a. Language requirement: demonstrated proficiency in Spanish through the completion of at least one course at the 200 level or above OR the equivalent.
  - b. No more than 12 credits in the same department may count toward the concentration.
  - c. A course cannot fulfill more than one requirement within the concentration.

**111 Introduction to Latin American Studies (Spring) 4 credits+**

This discussion-based, interdisciplinary Latin American studies course approaches “culture” broadly to include a wide spectrum of everyday experiences, and provides students with a solid foundation for subsequent academic work in the region. The course begins with an overview of definitions of “Latin America” and of its current state as an object of interdisciplinary study and then explores contemporary issues (i.e. state repression, human rights, immigration) via various disciplines (humanities and social sciences) and genres (i.e. academic essays, narrative journalism, testimonio). Not open to those who have taken Spanish 221. APARICIO, BENOIST.

**499 Senior Research (Fall or Spring) 4 credits**

An interdisciplinary senior research project for students completing the concentration in Latin American Studies. May be repeated in consecutive semesters by a student pursuing a single research project. Credits earned each semester must fulfill program requirements as specified in program description. Permission of the concentration committee required. STAFF.

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**Linguistics Concentration**

Brigitte French, Chair, Elizabeth Dobbs, John Fennell, Janet Gibson, John Stone, Carmen Valentín

The linguistics concentration focuses on the systematic and scientific study of language. Core courses in the Departments of Psychology, Philosophy, English, and Anthropology offer various perspectives on different aspects of language and its uses. Some knowledge of a nonnative language is required. Each student will complete a 4-credit interdisciplinary research project, which is expected to build on some past work in the student’s program.

**Required: competence in a nonnative language, as certified by the relevant department** (equivalent to, for example, Latin 222, French 222, German 222, Spanish 217, Russian 222) **and 24 credits to be taken as follows:**

- 1 4 credits:
  - Linguistics 114 Introduction to General Linguistics
2. Three 4-credit core courses chosen from the following:
  - Anthropology 260 Language, Culture, and Society\*
  - Computer Science 205 Computational Linguistics\*
  - English 230 English Historical Linguistics\*
  - Philosophy 256 Philosophy of Language and Cognition
  - Psychology 355 Psychology of Language\*
3. Elective courses (4 credits): a fourth core course; any 4-credit 300-level language course, not in translation; any second semester, or higher, 4- or 5-credit language course in a second nonnative language; or the following, provided permission is obtained from the instructor and the concentration chair:
  - Anthropology 205 Human Evolution
  - Computer Science/Mathematics 341 Automata, Formal Languages, and Computational Complexity
  - Philosophy 102 Symbolic Logic

- Philosophy 235 20th-Century Continental Philosophy
- Philosophy 257 Philosophy of Science
- Psychology 260 Cognitive Psychology
- Sociology 248 Self and Society
- Special topics and independent studies

4. Senior Research Project (4 credits): see Linguistics 499 below.

**114 Introduction to General Linguistics (Fall or Spring) 4 credits**

Scientific description of the language: phonetics, phonology, morphology, syntax, and semantics. Contributions of various schools: traditional, descriptive, and generative-transformational grammars. Survey of the subdisciplines psycho- and sociolinguistics. For those who have a general interest in language and those who need some acquaintance with linguistics for their studies in other fields. Prerequisite: none. STAFF.

**499 Senior Research Project: Mentored Advanced Project (Fall or Spring) 4 credits**

An interdisciplinary senior research project for students completing the concentration in linguistics. Besides the principal mentor, there will be one or, upon recommendation of the concentration committee, two additional readers. Prerequisite: Introduction to General Linguistics 114 and at least two courses from Category 2 above, or permission of instructor. STAFF.

## Mathematics and Statistics

Member of the Division of Science

Marc Chamberland, Chair, Arnold Adelberg, Christopher French, Eugene Herman, Charles Jepsen, Keri Kornelson, Shonda Kuiper, Emily Moore, Thomas Moore, Holly Mosley, David Romano, Karen Shuman, A. Royce Wolf

Study of the mathematical sciences develops logical thinking and quantitative ability; mathematical skills in rigorous deductive analysis and in the use of data are germane to many disciplines. The curriculum of the department is divided into two basic parts: mathematics and statistics. Each provides a combination of fundamental theory and widely applicable material of interest to all students of liberal arts. The curriculum further prepares majors who plan careers in pure or applied mathematics, probability or statistics, or in the natural or social sciences, in teaching, or in other professions.

Depending on their background and interests, students may enter the study of mathematics at different points. Those with good preparation normally start in 131, while those with less preparation may start in 123, and those with advanced standing in 133 or 215. Thereafter, the student's intellectual curiosity, interests, and abilities and the needs of various disciplines determine the particular mathematics courses selected. Several courses make use of the department's network of workstations for graphics, computation, data analysis, and numeric experimentation.

Mathematics majors pursue many interests. All are encouraged to study in depth at least one field, such as physics or economics, in which mathematics is applied extensively. Some enjoy working on challenging problems, such as those presented in the Putnam Examination or the Mathematical Contest in Modeling, both of which are national mathematics competitions; many present talks to the Mathematics and

\*Not offered every year.

Statistics Student Seminar. Visiting lecturers extend the curriculum beyond the classroom, as do opportunities for students to do summer research in mathematics.

## The Major

**A minimum of 32 credits in the department.** Required are at least four courses in mathematics at the 300–400 level, including Math 316 and 321 (the “Foundations” courses) and at least one of the year sequences: Math 321-324, 321-326, 316-331, 316-338, 335-336. Courses numbered below 123 do not satisfy major requirements. With departmental approval, 4 credits of computer science may count toward the mathematics major.

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Strongly recommended: A working knowledge of a modern computer programming language; coursework in another department in which mathematics or statistics is used in a substantial way; and (for students considering graduate work in mathematics) a reading knowledge of French, German, or Russian.

To be considered for honors in mathematics, graduating seniors, in addition to meeting the College’s general requirements for honors, must demonstrate excellence in the major. The department applies the following criteria:

- Completion of two disjoint full-year upper-division sequences in mathematics;
- Participation in local activities related to mathematics, judged to be excellent by members of the department. Such activities might include completing the senior seminar, giving Math/CS Journal Club talks, actively participating in the Problem-Solving Seminar, doing independent projects in mathematics, or carrying out summer research under the direction of members of the department;
- Performance in the study or use of mathematics, judged to be excellent by mathematicians outside the department. Evidence of such performance might include an outstanding score in the Putnam Competition or the Iowa Mathematics Competition, a score at or above the 75th percentile on the Graduate Record Examination in Mathematics, an award in the Mathematical Competition in Modeling, a prize-winning or refereed talk at a mathematical conference or colloquium, a paper accepted by a refereed mathematical journal, or summer research conducted elsewhere.

Up to 8 credits can be earned for any combination of Mathematics 123, 124, 131, subject to the following constraints:

1. Upon successful completion (grade C or better) of either Mathematics 124 or Mathematics 131, no further credits may be earned in any of these three courses.
2. If a student completes all three of Mathematics 123, 124, and 131, the student’s credit is canceled in the first of these courses in which the student earned a grade of F or D. Also, the grade for that course will no longer be counted in computing the student’s GPA.

**115 Introduction to Statistics (Fall or Spring) 4 credits**

Also listed as Social Studies 115. Introduces the notions of variability and uncertainty and such common statistical concepts as point and interval estimation and hypothesis testing. Data-oriented, with real-world examples chosen from the social and biological sciences. The computer is used for data analysis and to illustrate probabilistic and statistical concepts. Prerequisite: two years of high school algebra and second semester of first-year standing, or permission of instructor. STAFF.

**123 Functions and Differential Calculus (Fall) 4 credits**

An introductory course in mathematics and the first in a two-course sequence. This first semester is an introduction to the differential calculus of functions of one variable with an extensive review of precalculus topics such as algebra and functions. This review, together with an emphasis on developing problem-solving skills, is designed to help students learn to do mathematics at the college level. Mathematics 123–124 has the same calculus content as Mathematics 131. Prerequisite: two years of high school algebra. STAFF.

**124 Functions and Integral Calculus (Spring) 4 credits**

A continuation of Mathematics 123. An introduction to the integral calculus of functions of one variable. Topics include the definite integral, techniques of integration, and applications of the integral. Successful completion of this course prepares students for Mathematics 133. Prerequisite: Mathematics 123 or permission of instructor. MOSLEY.

**131 Calculus I (Fall or Spring) 4 credits**

The normal first course in mathematics and the first in a two-course sequence. An introduction to the differential and integral calculus of functions of one variable. Also introduces a few concepts and methods of differential equations. Prerequisite: good preparation, including trigonometry, or departmental placement. STAFF.

**133 Calculus II (Fall or Spring) 4 credits**

A continuation of Mathematics 131. Topics include functions of more than one variable: partial and total derivatives, multiple integrals, vector-valued functions, parametrized curves, and applications to differential equations. Prerequisite: Mathematics 124, or 131, or permission of instructor. STAFF.

**209 Applied Statistics (Spring) 4 credits+**

The course covers the application of basic statistical methods such as univariate graphics and summary statistics, basic statistical inference for one and two samples, linear regression (simple and multiple), one- and two-way ANOVA, and categorical data analysis. Students use statistical software to analyze data and conduct simulations. A student who takes Mathematics 209 cannot receive credit for Mathematics 115. Prerequisite: Mathematics 133 or permission of instructor. STAFF.

**215 Linear Algebra (Fall or Spring) 4 credits+**

A unified study of the concepts underlying linear systems and linear transformations and of the techniques for using them. Topics: matrix algebra, rank, orthogonality, vector spaces and dimension, eigenvectors and eigenvalues. Typical applications: fitting lines and curves to data, Markov processes, linear

differential equations. Prerequisite: Mathematics 133 or permission of instructor. STAFF

**218 Combinatorics (Fall or Spring)** 4 credits+

An introduction to the basic objects, numbers, and techniques of combinatorics. Includes combinations, permutations, partitions, and graphs; binomial and other coefficients; inclusion-exclusion, recurrence relations, and generating functions and series. Prerequisite: Mathematics 215 or permission of instructor. E. MOORE, T. MOORE.

**220 Differential Equations (Fall or Spring)** 4 credits+

First and second order differential equations; series solutions and Fourier series; linear and nonlinear systems of differential equations; applications. Prerequisite: Mathematics 215 or permission of instructor. CHAMBERLAND, SHUMAN.

133

**271 Problem-Solving Seminar (Fall)** 1 credit

Students solve challenging mathematics problems and present solutions. Prepares students to take the Putnam Examination, if they wish. Prerequisite: Mathematics 133, or concurrent registration in Mathematics 133, or permission of instructor. May be repeated for credit. S/D/F only. STAFF.

**306 Mathematical Modeling\* (Spring)** 4 credits+

An introduction to the process and techniques of modeling “real-world” situations, using topics from linear algebra and differential equations. Appropriate mathematics, including numerical methods, developed when needed. Models drawn from both the social and natural sciences. Prerequisite: Mathematics 220 or permission of instructor. CHAMBERLAND.

**309 Design and Analysis of Experiments (Spring)** 4 credits+

In addition to a short review of hypothesis testing, confidence intervals, and 1-way ANOVA, this course incorporates experiments from several disciplines to explore design and analysis techniques. Topics include factorial designs, block designs (including latin square and split plot designs), random, fixed, and mixed effects models, crossed and nested factors, contrasts, checking assumptions, and proper analysis when assumptions are not met. Prerequisite: Mathematics 209, or 336, or permission of instructor. KUIPER, MOORE.

**310 Statistical Modeling\* (Spring)** 4 credits

This course will focus on investigative statistics labs emphasizing the process of data collection and data analysis relevant for science, social science, and mathematics students. These labs will incorporate current events and interdisciplinary research, taking a problem-based approach to learn how to determine which statistical techniques are appropriate. Topics will typically include nonparametric tests, designing an experiment, and generalized linear models. Prerequisite: Mathematics 209, or 306, or permission of instructor. KUIPER.

**314 Topics in Applied Mathematics\* (Spring)** 4 credits+

Topics include, but are not limited to, one of the following: Chaos and Fractals (one- and two-dimensional discrete dynamics, iterated function systems, fractal dimension), Fourier Analysis (fast Fourier transform, Fourier series, wavelets), or Partial Differential Equations (heat and wave equation, eigenfunction expansions). May be repeated for credit. Prerequisite: Mathematics 220 or permission of instructor. STAFF.

**316 Foundations of Analysis (Spring) 4 credits+**

A thorough study of the topology of the real line and of limits of functions of one real variable. This theory is then used to develop the theory of the derivative and integral of functions of one real variable and also sequences and series of real numbers and functions. Prerequisite: Mathematics 218, or 220, or permission of instructor. FRENCH, SHUMAN.

**321 Foundations of Abstract Algebra (Fall) 4 credits+**

The study of algebraic structures, with emphasis on formal systems such as groups, rings, and fields. Prerequisite: Mathematics 218, or 220, or permission of instructor. E. MOORE, ROMANO.

**324 Number Theory\* (Spring) 4 credits+**

The primary subject matter of this course is elementary number theory from an algebraic viewpoint. Topics include congruencies, quadratic reciprocity, sums of powers and Diophantine analysis. An introduction to algebraic number theory, emphasizing algebraic integers and unique factorization, is included. Prerequisite: Mathematics 321 or permission of instructor. WOLF.

**326 Field Theory\* (Spring) 4 credits+**

The study of fields, including such topics as vector spaces and canonical forms, algebraic extensions, finite and cyclotomic fields, geometric constructions and Galois Theory. Prerequisite: Mathematics 321 or permission of instructor. ROMANO.

**331 Topology\* (Fall) 4 credits+**

General and/or metric topology. Fundamental theorems on continuous mappings and on compact and connected sets. Particular emphasis on the real line and Euclidean n-space. Prerequisite: Mathematics 316 or permission of instructor. KORNELSON.

**335 Probability and Statistics I (Fall) 4 credits+**

An introduction to the mathematical theory of probability and statistical inference. Discrete and continuous distributions will be considered. The limit theorems of probability, including the Law of Large Numbers and the Central Limit Theorem, will be introduced. Prerequisite: Mathematics 215; and 209, or 218, or 220; or permission of instructor. STAFF.

**336 Probability and Statistics II (Spring) 4 credits+**

A systematic treatment of mathematical statistics based on probability theory. Topics will include: principles of estimation and hypothesis testing, regression, sampling distributions, decision theory and nonparametric inference. Applications will be given. Prerequisite: Mathematics 335 or permission of instructor. STAFF.

**338 Complex Analysis\* (Fall) 4 credits+**

Theory of analytic functions of a complex variable, based on a preliminary study of the complex number system. Prerequisite: Mathematics 316 or permission of instructor. FRENCH.

**444 Senior Seminar (Spring) 4 credits+**

Advanced course with varying content, typically with a geometric emphasis. Strongly recommended for students considering further work in mathematics. Requires independent work. Prerequisite: Mathematics 316 and 321, or permission of instructor. May be repeated for credit when content changes. STAFF.

## Music

Member of the Division of Humanities

Eugene Gaub, Chair, Jonathan Chenette\*, Patrice Ewoldt, Eric McIntyre, John Rommereim, Alan Tormey, Roger Vetter, Jennifer Williams Brown

Highly integrative by nature, music studies offer students experience in bringing sociocultural, historical, religious, aesthetic, literary, scientific, and theoretical perspectives to bear on the development of skills in listening, analysis, criticism, composition, and performance. Department coursework falls into three general areas: historical and cultural studies; theoretical, compositional, and technological studies; and individual and group performance studies. Two introductory courses explore the relationships between various musics and their shaping contexts: Music 110 focuses on western classical traditions; Music 116 compares diverse traditions. These courses lead to in-depth studies in music history and culture. Introductory theory courses (Music 109 and 112) develop basic notational, analytical, aural, and creative skills in western musical styles. Music 109 is particularly valuable as an adjunct to private instruction for students who wish to improve music-reading and aural skills. Music 112 leads to further studies in music theory, analysis, composition, and electronic music. Prospective majors and other students with musical backgrounds should begin their music theory courses with Music 112. Students are encouraged to pursue their musical interests beyond the introductory level, and all upper-level courses welcome appropriately qualified nonmajors.

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The 200-level courses in historical and cultural studies (Music 201, 202, 203, and 204) focus more narrowly on a specific topic, such as gender and music; on a specific musical tradition, such as jazz music; or on a particular area of the world, such as Africa. The topics of Music 201–3 vary each year, and they therefore can be repeated for credit. Many of these topics have an interdisciplinary character, and they are likely to be of value both to majors and nonmajors. The history sequence (261–262) also deals substantially with music’s historical and cultural context, but the overarching goal of these courses is to offer students a survey of European music. Music 322 offers students a more focused study of a genre, composer, or period.

Performance studies apply listening and critical thinking skills to the physical process of playing an instrument or singing. So that Grinnell students may develop new vocal and instrumental skills and sharpen skills learned previously, the department offers an exceptional range of ensemble and studio instruction options listed as Music 101, 120, 122, 220, 221, and 420. Most of these performance courses are open to all students, regardless of musical backgrounds, although several ensembles require auditions. Because music lessons are a required part of the major, music majors in their junior and senior years are eligible for one free half-hour of music instruction per semester. This may be taken either as a free half-hour lesson (Music 120 or 220) or as a reduced-rate hour-long lesson (Music 221 or 420).

Music majors should participate in a department ensemble for at least two semesters. Students anticipating graduate studies in music should take Music 213. It is also recommended that music majors take foreign language courses and participate in a semester of off-campus study.

### The Major

**A minimum of 36 credits.** Required are Music 112, 261, 262, one 200-level course in theory or composition (Music 213, 215, 217, or 219), one 200-level course in

historical and cultural studies (Music 201, 202, 203, or 204), four credits of private instruction (Music 120, 220, 221, or 420), and at least four credits at the 300 level or above (Music 321, 322, or 495).

To be considered for honors in music, graduating seniors, in addition to meeting the College's general requirements for honors, must complete Music 420, 495, or another official Mentored Advanced Project, with results presented in a public forum.

**101 Practicum: Performance Ensembles <sup>†</sup> (Fall or Spring) 1 credit**

The study of musical literature through regular ensemble rehearsals and public performances. One credit awarded for each participation in a musical organization directed by the department, e.g., Orchestra, Community Chorus, Singers, Symphonic Concert Band, Collegium Musicum (early music consort), Young, Gifted, and Black Gospel Choir, Percussion and Marimba Ensemble, Latin American Performance Ensemble, Chamber Ensemble, Jazz Band, and Javanese Gamelan and Dance. (A maximum of eight practicum credits may count toward graduation.) Does not count toward music major. S/D/F only. Prerequisite: permission of instructor. Practicum may be repeated for credit. STAFF.

**109 Musicianship (Fall) 2 credits**

Establishes an understanding of musical concepts and develops complementary practical skills. Includes aural and written exercises and creative projects in performance and composition. Prerequisite: none. CHENETTE.

**110 Introduction to Western Music\* 4 credits**

A survey of Western art music from Gregorian chant to postmodernism, intended to enrich and inform listening experience. Examination of musical elements including rhythm, melody, and texture; and consideration of stylistic eras, representative composers, major genres, and forms. Emphasis on developing critical listening skills. Prerequisite: none. BROWN, E. GAUB.

**111 Aural Skills I (Fall or Spring) 1 credit**

Development of aural understanding through singing, dictation, conducting, and improvisation. Topics include identification and singing of diatonic intervals and triads, singing of diatonic melodies using "moveable do" solfège, notation of diatonic melodies and chord progressions by dictation, improvisation of short melodic patterns, and basic conducting patterns. Prerequisite: none. Normally taken in conjunction with Music 112, this course may also be taken separately. STAFF.

**112 Harmony (Fall or Spring) 4 credits**

The study of how individual chords are combined to create a piece of tonal music. Focuses on developing the ear and analytical/creative skills to enhance

\* Not offered every year.

† For fees, see Financial Regulations

\* A maximum of 16 credits in Music 120, 122, 220, 221, and 420 will count toward graduation. Credits in Music 101, 120, 122, 220, 221, and 420 may not exceed a total of six in any one semester. Students should note that Music 101, 120, 122, 220, 221, and 420 are included in the 48-credit

appreciation, performance, and compositional imitation of Western music of the 18th and 19th centuries. Required keyboard lab meets outside regular class time. Prerequisite: concurrent registration in Music 111 or placement by Aural Skills Test II. STAFF.

**116 Music, Culture, Context (Spring) 4 credits**

This course explores our globalized musical present and the major forces (social, political, economic, technological) that have shaped it over the last few centuries. Attention is focused on music-making as a form of human activity within and between cultures. Course content ranges over musics of diverse times and places. No prior experience in music is needed. Prerequisite: none. STAFF.

**120 Performance: Private Instruction‡† (Fall or Spring) 1 credit**

Private lessons in instrumental or vocal music, intended for beginning to intermediate students. Weekly 30-minute private lessons totaling 7 hours of instruction per semester. Practice expectation: minimum of 30 minutes per day. One credit for each area studied, e.g., voice, piano, flute, etc. May be repeated for credit. Prerequisite: none. STAFF.

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**122 Performance: Group Instruction‡† (Fall or Spring) 1 credit**

Group lessons in instrumental, vocal music, world hand drumming, flute, etc. intended for beginning to intermediate students. Weekly 60-minute small-group lessons totaling 14 hours of instruction per semester. Practice expectation: minimum of 30 minutes per day. One credit for each area studied, e.g., world hand drumming, flute, etc. May be repeated for credit. Does not count toward the music major. Offered S/D/F only. Prerequisite: none. STAFF.

**201 Topics in Music and Culture (Spring) 4 credits+**

Detailed study of the relationship between music and a particular aspect of culture. Possible areas to be covered include music and technology, music and politics, gender and music, and mythology and music. May be repeated for credit if content changes. Consult registration materials for prerequisites. STAFF.

**202 Topics in American Music (Fall) 4 credits+**

Detailed study of a particular musical tradition in the United States. Possible areas to be covered include Latino music, music of black Americans, and American popular music. May be repeated for credit if content changes. Consult registration materials for prerequisites. STAFF.

**203 Regional Studies in World Music (Fall or Spring) 4 credits**

An exploration of music and its linkages to other facets of life in a particular geographic/cultural region of the world. Possible regional foci include Sub-Saharan Africa, East Asia, South Asia and the Middle East, and Southeast Asia. May be repeated for credit if content changes. Prerequisite: Music 116 or permission of instructor. VETTER.

**204 The Jazz Tradition in America (Spring) 4 credits+**

The history of jazz traces the development of jazz from its African and European roots to contemporary style. Through reading and listening assignments, major styles and prominent musicians will be discussed. Primarily examines jazz from a sociocultural perspective. Prerequisite: none. STAFF.

**212 Aural Skills II (Spring) 1 credit**

Development of aural understanding through singing, dictation, conducting, and improvisation. Topics include identification and singing of chromatic intervals and harmonies, singing of chromatic melodies using “moveable do” solfège, notation of chromatic and modulating melodies and chord progressions by dictation, improvisation of phrase and period structures, conducting patterns, and aural analysis of binary and ternary forms. Normally taken in conjunction with Music 213, this course may also be taken separately. Prerequisite: Music 111 or placement test. STAFF.

**213 Form and Analysis (Spring) 4 credits+**

Examines the structure of 18th- and 19th-century music and completes the study of harmony begun in Music 112. Includes critical analysis of entire movements and composition based on tonal models. Prerequisite: Music 112 and concurrent registration in Music 212, or placement by Aural Skills Test III. E. GAUB.

**214 Advanced Aural Skills (Spring) 1 credit**

Development of aural understanding through singing, dictation, conducting, and improvisation, according to the needs of students as established through a diagnostic exam. Topics may include chromaticism, modes, atonality, and score reading as well as topics from Music 111 and 212 on which students need additional work. Prerequisite: Music 111, or 212, or placement test. May be repeated once for credit. ROMMEREIM.

**215 Introduction to Composition (Fall) 4 credits+**

Students learn and apply recent techniques of composition. Expands on the compositional experiences of harmony class by opening students to the exploration of contemporary tonal, serial, and experimental musical styles and dealing with matters of orchestration and music form. Prerequisite: Music 112 or permission of instructor. COLEMAN, MCINTYRE.

**219 Electronic Music (Spring) 4 credits+**

History and techniques of electronic and computer music. Topics include compositional aesthetics, recording technology, digital and analog synthesis, sampling, MIDI (Musical Instrument Digital Interface), and computer-assisted composition. Focuses on the creation of finished works to be presented in public concert. Prerequisite: Music 112 or permission of instructor. COLEMAN.

**220 Performance: Advanced 2 credits****Private Instruction‡\* (Fall or Spring)**

Private lessons in instrumental or vocal music, intended for intermediate to advanced students. The study of performance combined with considerations of history, analysis, and style. Weekly 30-minute lessons totaling 7 hours of instruction per semester. Practice expectation: minimum of one hour per day. Performance requirement: at least one performance in a department-sponsored

\* Not offered every year.

‡ For fees, see Financial Regulations

\* A maximum of 16 credits in Music 120, 122, 220, 221, and 420 will count toward graduation. Credits in Music 101, 120, 122, 220, 221, and 420 may not exceed a total of six in any one semester. Students should note that Music 101, 120, 122, 220, 221, and 420 are included in the 48-credit

recital or repertoire class per semester. Two credits for each area studied. May be repeated for credit. Prerequisite: permission of instructor. STAFF.

**221 Performance: Advanced** **2 credits**

**Private Instruction‡\* (Fall or Spring)**

Private lessons in instrumental or vocal music, intended for intermediate to advanced students. The study of performance combined with considerations of history, analysis, and style. Weekly 60-minute lessons totaling 14 hours of instruction per semester. Practice expectation: minimum of one hour per day. Performance requirement: at least one performance in a department-sponsored recital or repertoire class per semester. Two credits for each area studied. May be repeated for credit. Prerequisite: permission of instructor. STAFF.

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**261 Western Music to 1750 (Fall)** **4 credits+**

General survey of Western European music from ancient times through the Baroque era. Stylistic developments considered in their social and cultural contexts and as influenced by artistic and intellectual movements. Prerequisite: Music 112 and 213, or permission of instructor. STAFF.

**262 Western Music From 1750 to the Present (Spring)** **4 credits+**

Music in the Western world from the time of Mozart to the present. Stylistic developments considered in their social and cultural contexts and as influenced by artistic and intellectual movements. Prerequisite: Music 112 and 213, or permission of instructor. BROWN, MCINTYRE.

**321 Advanced Musical Studies\*** **4 credits**

Detailed study of a particular area of music theory and practice. Possible topics include orchestration, conducting, counterpoint, computer music, transmedia arts, and interpretive analysis. May be repeated for credit if content changes. Prerequisite: will vary depending on topic. STAFF.

**322 Advanced Studies in Music History and Literature (Fall)** **4 credits+**

In-depth study of a particular area of music history and literature. Possible topics include the Renaissance Mass, Mozart's operas, Shostakovich, and the music of Fin-de-Siecle Paris. May be repeated for credit if content changes. Prerequisite: Music 112, and Music 261 or Music 262; or permission of instructor. STAFF.

**420 Performance: Recital‡\* (Fall or Spring)** **2 credits**

An advanced and intensive study of music literature through private tutorial instruction in a single area of instrumental or vocal music. The study of performance related to advanced studies in criticism, history, analysis, and style. Weekly 60-minute lessons totaling 14 hours of instruction per semester. Practice expectation: minimum of 60 minutes per day. Performance requirement: a full recital. May be repeated once for credit. Prerequisite: third-year or senior standing, instructor's consent, and signature of department chair. STAFF.

**495 Senior Project (Fall or Spring)** **4 credits**

The senior project will consist of a recital, original composition(s), or presentation of original musical research. All projects will incorporate significant research and writing, integrating studies in theory, culture, and performance. Seniors must obtain approval from the department prior to preregistration for the final semester. Students are expected to participate as responders at other senior project presentations. Prerequisite: music major and senior standing, or permission of instructor. STAFF.

## Neuroscience Concentration

Nancy Rempel-Clower, Chair, Rafael Cabeza, John Fennell, Mark Levandoski, Clark Lindgren, Tammy Nyden-Bullock, David Romano

The neuroscience concentration exposes students to the major problems in the field and gives them some experience in the various modes of inquiry used to solve these problems. The concentration provides students a unique opportunity to integrate diverse approaches and principles from across the natural sciences and beyond the natural sciences to address complex questions about the function of the nervous system.

### Required 24 credits as follows:

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1. Two 4-credit introductory science courses with a laboratory, from two departments. Only one of these courses may count toward both major and concentration.
  - Biology 150 Introduction to Biological Inquiry
  - Chemistry 129 General Chemistry
  - Chemistry 210 Inorganic and Analytical Chemistry
  - Computer Science 151 Fundamentals of Computer Science I
  - Computer Science 153 Computer Science Fundamentals
  - Physics 109 Physics in the Arts
  - Physics 131 or 132 General Physics I or II
  - Psychology 113 Introduction to Psychology
2. Neuroscience 250 Neuroscience: Foundations, Future, and Fallacies, 4 credits
3. Science elective, 4 credits, chosen from:
  - Biology 350 Animal Development
  - Biology 355 Developmental Genetics
  - Biology 363 Neurobiology
  - Biology 364 Animal Physiology
  - Chemistry 332 Biophysical Chemistry
  - Computer Science 261 Artificial Intelligence
  - Mathematics 306 Mathematical Modeling
  - Mathematics 309 Design and Analysis of Experiments
  - Mathematics 310 Statistical Modeling
  - Psychology 336 Advanced Behavioral Neuroscience
  - Psychology 348 Behavioral Medicine
  - Psychology 360 Advanced Cognitive Psychology
4. Cross-divisional elective, 4 credits, chosen from one of the following content areas:
  - a) Perceptual-Motor Integration
    - Art 234 Drawing
    - Music 215 Introduction to Composition
    - Theatre 325 Choreography: Theory and Composition
  - b) Humanities Perspective on Science and Mental Processes
    - Philosophy 253 Philosophy of Mind
    - Philosophy 256 Philosophy of Language and Cognition
    - Philosophy 257 Philosophy of Science

c) Health and Illness

- Anthropology 210 Illness, Healing, and Culture
- Education 250 The Exceptional Child
- Sociology 242 Deviance and Social Control
- Sociology 265 Sociology of Health and Illness

The student will be expected to integrate the material of this elective in a project in the Neuroscience Seminar and to demonstrate knowledge gained in this course during discussions.

5. Senior Seminar, 4 credits:

- Neuroscience 495 Neuroscience Seminar

**250 Neuroscience: Foundations, Future, and Fallacies (Spring)** **4 credits**

This course introduces the historical and theoretical foundations of neuroscience. Topics will range broadly from questions at the molecular and cellular level to those of organismal behavior; and consideration will be given to how traditional disciplines such as biology, chemistry, and psychology have helped inform the field. The course will trace the development of neuroscience, considering both its successes and failures, as a means for appreciating its future directions. Prerequisite: Two 100-level science courses (with laboratories). Must be from two different departments. STAFF.

**495 Neuroscience Seminar (Fall)** **4 credits**

The seminar provides the culmination of the neuroscience concentration. As a recapitulation of the interdisciplinary nature of the field, a significant problem in the field will be chosen for study and students will be exposed to multiple approaches to address this problem. The course will focus on analysis of relevant primary literature with an emphasis on student-led discussion. A major writing project in the course will integrate the student's coursework in the concentration. Prerequisite: Neuroscience 250, completion of or concurrent enrollment in the cross-divisional elective, and senior standing. Limited to neuroscience concentrators or permission of the instructor. STAFF.

## **Philosophy**

Member of the Division of Humanities

Joseph Cummins, Chair (also Classics), Jennifer Dobe, John Fennell, Richard Glatz, Johanna Meehan, Tammy Nyden-Bullock, Alan Schrift

The study of philosophy enables students to confront in a disciplined and constructive way fundamental questions and problems, both theoretical and practical, about themselves and their relation to the world. Philosophy enriches thought, imagination, understanding, and experience as a whole. Even beginning students of philosophy find themselves reflecting upon things they formerly took for granted, and they can often apply their philosophical perspectives to issues treated in their other courses.

Most courses in the philosophy curriculum require only the introductory course as a prerequisite; the department invites all students to construct programs in philosophy related to their studies in other disciplines. Qualified students are encouraged

to study a foreign language to supplement their study of philosophy. The study of philosophy contributes valuably to academic pursuits and to the pursuit of almost any career.

The department requires that students who major in philosophy take the survey courses in ancient and modern philosophy and two advanced seminars. The department expects that each major will pursue as broad a liberal education as possible and build a suitable background for special interest in philosophy.

## **The Major**

**A minimum of 32 credits**, 20 of which must be taken at Grinnell College. Required are 231, 233, and eight credits from the following: 336, 391, 392, 393, and 394.

The required 300-level seminars are normally taken in the student's senior year. Of 100-level courses, only either 101 or 102, and 111 may be counted toward the 32-credit minimum. With permission, up to four of the 32 credits may be taken in related studies outside the department. For students who plan to attend graduate school, four semesters of a foreign language are strongly recommended.

To be considered for honors in philosophy, in addition to meeting the College's general requirements for honors, graduating seniors must also satisfy the following departmental requirements: successful completion of either three semesters of a foreign language or a fourth semester course in a foreign language, Philosophy 102, Philosophy 491, or an approved MAP (PHI 499) that meets the description of the Senior Essay (491); and must have successfully presented a paper to a colloquium of students and faculty during one of their final two semesters.

### **101 Logic (Fall or Spring) 4 credits**

An introduction to the formal rules of reasoning, with extensive practice in identification and analysis of types of argument and in evaluation of the validity of arguments. Topics include: the construction of arguments, the relation of ordinary language to standard logical form, inductive reasoning (including hypotheses, generalization, analogy, and probability), deductive reasoning, the syllogism, validity, truth, formal fallacies, nonformal fallacies, and practical applications of the rules of logic. An introduction to complex syllogisms and to symbolic notation may be included, but extensive treatment of these topics is reserved for Philosophy 102. Prerequisite: none. J. CUMMINS.

### **102 Symbolic Logic (Fall or Spring) 4 credits**

A study of the formalization of complex arguments, in particular those involving quantification and relations, using principles of deduction in sentential and predicate logic. Course may also explore the semantics of the formal system. Prerequisite: none. FENNELL.

### **106 Contemporary Ethical Issues (Fall or Spring) 4 credits**

Designed to develop the ability to think philosophically about moral issues by examining ethical problems. Topics may include gender, abortion, class, race, affirmative action, and the environment. The course also examines some leading ethical and/or social theories in conjunction with these topics. Prerequisite: none. FENNELL, NYDEN-BULLOCK.

**111 Introduction to Philosophy (Fall and Spring) 4 credits**

Designed to develop the habit of philosophical thinking by pursuing perennial problems as raised and developed throughout the history of philosophy. Readings include selections from Plato, Descartes, Hume, Kant, and other thinkers, including an introductory section on some basic principles of logical thinking. Prerequisite: none. STAFF.

**135 Philosophy and Literature\* 4 credits**

Also listed as General Literary Studies 135. A general introduction to philosophical issues and topics through works of fiction. Readings include novels, short stories, and drama by Aeschylus, Sophocles, Voltaire, Goethe, Dostoevsky, Ibsen, Sartre, Camus, Borges, Kafka, Duras, Piercy, and others. Prerequisite: none. STAFF.

**215 Existentialism\* (Fall or Spring) 4 credits+**

A study of the major existentialist thinkers of the 19th and 20th centuries, including Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, and others. Readings will include philosophical and literary texts that explore issues including the nature of the self and its relations with others, freedom and responsibility, anxiety, transcendence, ambiguity, and the absurd. Prerequisite: Philosophy 111 or permission of instructor. STAFF.

**231 History of Ancient Philosophy (Fall) 4 credits+**

Also listed as Classics 231. A study of the philosophy of ancient Greece and Rome. Traces the growth of Western philosophy from its origins in the sixth century B.C.E. through the third century C.E. Includes examination of the Presocratics, Sophists, Socrates, Plato, Aristotle, Epicureans, Stoics, Sceptics, and Plotinus. Prerequisite: Philosophy 111, or Humanities 101, or permission of instructor. J. CUMMINS.

**233 History of Early Modern Philosophy (Spring) 4 credits+**

A study of the intellectual world of the early modern period. Readings may include works by Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, and Kant. Particular attention will be given to the complex relations between philosophy, science, religion, and politics during this period. Prerequisite: Philosophy 111 or permission of instructor. NYDEN-BULLOCK.

**234 19th-Century Continental Philosophy\* (Fall) 4 credits+**

Survey of the major figures in 19th-century philosophy, emphasizing themes that lead to developments in 20th-century phenomenology, existentialism, and poststructuralism. Readings include selections from Hegel's *Phenomenology*, Kierkegaard's writings, Marx's philosophical and political works, several texts of Nietzsche, and short works from the hermeneutic tradition. Prerequisite: Philosophy 111 or permission of instructor. SCHRIFT.

**235 20th-Century Continental Philosophy\* (Spring) 4 credits+**

Examination of the major themes in phenomenology, existentialism, hermeneutics, poststructuralism, and feminism. Readings may include works by Husserl, Heidegger, Habermas, Merleau-Ponty, Sartre, Beauvoir, Derrida, Foucault, and Cixous. Special attention will be focused on connections between philosophy and recent developments in humanities and social sciences. Prerequisite: One 200-level course in philosophy or permission of instructor. SCHRIFT.

**242 Ethical Theory\* (Fall or Spring) 4 credits+**

Examination of several problems that arise in ethical theory. Questions included for consideration are the identity of the moral self, the issues of moral relativism and how to ground norms, the question of the nature of the virtues and their relationship to one another, and the question of whether gender might be morally significant. Prerequisite: Philosophy 111 or permission of instructor. MEEHAN.

**245 Philosophy of Art\* (Fall or Spring) 4 credits+**

Designed as a survey of theories of art and beauty, this course acquaints students with influential aesthetic theories in the history of Western philosophy and relates them to more recent theoretical developments in the arts. Prerequisite: Philosophy 111 or permission of instructor; courses in the arts emphasizing theoretical issues may substitute for 111. STAFF.

**253 Philosophy of Mind\* (Fall) 4 credits+**

Examination of several issues in philosophy of mind. Topics include the metaphysics of mind (the mind-body problem, dualism, functionalism, eliminativism, and the computer paradigm), intentionality (internalism and externalism), and consciousness (subjectivity, the nature of qualitative experience). Readings from Descartes, Ryle, Smart, D. Lewis, Putnam, Dennett, Quine, Davidson, Searle, Churchland, Fodor, and Nagel. Prerequisite: Philosophy 111 or permission of instructor. FENNELL.

**256 Philosophy of Language and Cognition (Spring) 4 credits+**

A survey of the major issues in contemporary philosophy of language as well as an examination of the major assumptions of empirical theories of language and cognition. Readings include works by Frege, Russell, Carnap, Ayer, Wittgenstein, Kripke, Putnam, Quine, Davidson, and Chomsky. Topics include theories of meaning, the nature of reference, and the cognitivist approach to mind and language. Prerequisite: Philosophy 102 or 111, or Linguistics 114, or permission of instructor. FENNELL.

**257 Philosophy of Science\* (Fall or Spring) 4 credits+**

An examination of the foundations of scientific inference (induction and confirmation), the nature of scientific explanation, the structure of theories, and scientific methodology. Discussion includes the possibility of objective knowledge and the nature of scientific revolutions. Prerequisite: Philosophy 102 or 111, or background in a science, or permission of instructor. FENNELL, NYDEN-BULLOCK.

**258 Classical and Contemporary American Pragmatism\* (Fall or Spring) 4 credits+**

A study of the major figures in classical and contemporary American pragmatism. Topics included for consideration are: what is the pragmatic method?; how does it engage traditional philosophical questions?; and what is its relation to other key philosophical approaches, such as logical positivism and realism? Readings may include selections from Peirce, James, Dewey, Mead, C.I. Lewis, Carnap, Ayer, Quine, Davidson, Rorty, Putnam, and Nagel. Prerequisite: Philosophy 111 or permission of instructor. FENNELL.

**261 Philosophy of Race and Gender\* (Fall or Spring) 4 credits+**

This course examines the relationship between modern conceptions of race and gender from philosophical perspectives that may include historical materialism,

phenomenology, critical theory, postcolonial theory, and whiteness studies. We will study the social construction of race and gender, as well as the way these concepts inform theories of the subject. Finally, we will consider how race and gender identities have become sites for pleasure, creativity, and productivity. Prerequisite: Philosophy 111 or permission of instructor. STAFF.

**263 Political Theory I\* (Fall or Spring) 4 credits+**

A selective introduction to the major concepts and themes of Western political philosophy from classical Greece to the Renaissance. Topics may include: human nature, the basis of society, the purpose and justification of government, types of government and their relative merits, the function of law, political virtues, and the civic role of religion. Prerequisite: one course from the following: Philosophy 111, Political Science 101, History 255 or 256, Humanities 101 or 102 or 140; or permission of instructor. J. CUMMINS.

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**264 Political Theory II\* (Fall or Spring) 4 credits+**

A study of the central themes and concepts articulated by political theorists since Machiavelli. Focus will be on theories of human nature, social relationships, conceptions of justice, and the operations of power. May be repeated once for credit when content changes. Prerequisite: Philosophy 111, or Political Science 101, or permission of instructor. MEEHAN, NYDEN-BULLOCK.

**265 Psychoanalysis and the Intersubjective Constitution of the Self (Fall or Spring) 4 credits+**

This class will consider the psychic/social processes of the constitution of the self. We will read highly theoretical texts from the psychoanalytic tradition, including works by Freud, Jessica Benjamin, Judith Butler, Hortense Spillers, Steven Mitchell, and Cornelius Castoriadis. We will study the way gender, race, and class become aspects of our individual and collective psychic identities, consider the role of power in the constitution of identity, and search for possibilities of individual and social psychic resistance. Prerequisite: Philosophy 111 or permission of instructor. MEEHAN.

**268 Cultural Critique: Marx, Nietzsche, Freud, and Beyond\* (Fall) 4 credits+**

Students begin by examining several key texts of the 19th century by Marx, Nietzsche, and Freud that lay the groundwork for the “Critique of Ideology” that has evolved in the 20th century into the interdisciplinary field of “Cultural Critique.” Focusing on thinkers who have fused the critical perspectives of Marx, Nietzsche, and Freud, students explore the works of the Frankfurt School (Adorno, Marcuse, Benjamin, Arendt), structuralism (Althusser, Bataille), and poststructuralism (Foucault, Deleuze, Cixous, Mouffe, Butler). Prerequisite: Philosophy 111; and one 200-level course in Philosophy, Political Science, or History; or permission of instructor. SCHRIFT.

**336 Contemporary French Philosophy\* (Spring) 4 credits**

A detailed study of French philosophy since 1960. Possible topics include structuralism, deconstruction, poststructuralism, and postmodernism. Focus on issues of interdisciplinary concern, addressing questions of textuality, psychoanalysis, and politics. Readings may include works by Foucault, Derrida, Deleuze, Lyotard, Cixous, and Irigaray, among others. With permission of instructor, may be repeated for credit. Prerequisite: Philosophy 234, or 235, or 268, or permission of instructor. SCHRIFT.

<b>352 Philosophy of Religion* (Spring)</b> See Religious Studies 352.	<b>4 credits+</b>
<b>391 Advanced Studies in Continental Philosophy* (Fall or Spring)</b> An advanced investigation of a single author, text, issue, or problem in continental philosophy. Content of the course announced each year. With permission of instructor, may be repeated for credit when content changes. Prerequisites will vary depending on topic; at least one 200-level course. MEEHAN, SCHRIFFT.	<b>4 credits</b>
<b>392 Advanced Studies in Anglo-American Philosophy* (Fall or Spring)</b> An advanced investigation of a topic, text, or author in the analytic or Anglo-American tradition. Content of the course announced each year. With permission of instructor, may be repeated for credit when content changes. Prerequisites will vary depending on topic; at least one 200-level course. FENNELL.	<b>4 credits</b>
<b>393 Advanced Studies in History of Philosophy* (Fall or Spring)</b> An advanced investigation of a single author, text, issue, or problem in the history of philosophy. Content of the course announced each year. With permission of instructor, may be repeated for credit when content changes. Prerequisites will vary depending on topic; at least one 200-level philosophy course. CUMMINS, NYDEN-BULLOCK.	<b>4 credits</b>
<b>394 Advanced Studies in Theories of Value* (Fall or Spring)</b> An advanced investigation of a single author, text, issue, or problem that addresses theories of value (ethics, politics, aesthetics, interdisciplinary studies). Content of the course announced each year. With permission of instructor, may be repeated for credit when content changes. Prerequisites will vary depending on topic; at least one 200-level philosophy course. MEEHAN.	<b>4 credits</b>
<b>491 Senior Essay (Fall or Spring)</b> The preparation and writing of an original piece of philosophical work, not to exceed 7,500 words in length, based upon primary or secondary sources. Seniors must obtain approval of a department member as adviser for the essay and the department chair before the end of the semester preceding that during which the essay will be written. Prerequisite: senior standing. STAFF.	<b>4 credits</b>

## Physical Education

Member of the Division of Social Studies

Greg Wallace, Chair, David Arseneault, Heather Benning, Evelyn Freeman, William Freeman, Andrew Hamilton, Timothy Hollibaugh, Erin Hurley, Brian Jaworski, Priscilla Lowther, Tom Sonnichsen, David Zeiss

Activity, recreation, and theory offerings in the Department of Physical Education instruct students in areas that provide lifelong enrichment. Intramural, indoor and outdoor recreation, and other noncredit opportunities are available but are not listed in the catalog. Practicum credit, which counts toward graduation, is offered for the activity program, which includes instructional courses (Physical Education 100), intercollegiate sports, and performance groups (Physical Education 101).

\*Not offered every year.

Academic credit is given for physical education theory courses, which are open to all students. These courses are specifically useful to those students planning careers in teaching, youth activities, or coaching.

Students are provided an opportunity to obtain a coaching authorization. The authorization is designed to develop the skills necessary to coach specific sports from grades K–12 and will include certification through the American Sport Education Program (ASEP) and the Program for Athletic Coaches Education (PACE), as well as American Red Cross CPR certification.

For students who plan to pursue coaching at any level, it is recommended that they take the following courses:

- EDU 221 Educational Psychology
- PHE 101 Sport Performance: Intercollegiate Competitive
- PHE 200 Organization and Administration of Athletics
- PHE 201 Sport Theory Course
- PHE 202 Coaching Methods, (includes ASEP and PACE certification)
- PHE 235 Psychological Foundations of Sport

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## Theory Courses

### **110 Wellness Dynamics\* (Fall)**

**2 credits**

An examination of factors influencing one's health and capacity for mental and physical work. The effects of nutrition, stress, physical exercise, alcohol, and drugs are discussed. One lecture and two aerobic activities per week. Prerequisite: none. E. FREEMAN, W. FREEMAN.

### **112 Outdoor Leadership (Fall and Spring)**

**4 credits**

This course focuses on the more theoretical skills necessary to be an outdoor leader. The first half of class will focus on preparing for a five-day expedition over fall break. Topics include: navigation, weather, liability, outdoor history, group dynamics, teaching styles, and first aid. Labs include: water rescue, canoeing, rope work, and equipment. Participation in the fall break trip is expected. Prerequisite: none. Speaking with the professor prior to registration is suggested. ZEISS.

### **200 Organization and Administration of Athletics (Fall)**

**4 credits**

Lecture and discussion concerning the function, organization, and administration of an athletic program. Includes philosophy and psychology of coaching. Prerequisite: none. STAFF.

### **201 Sport Theory Courses (Fall and Spring)**

**1 credit per unit**

Fundamental principles and problems of coaching the designated sport and specific administrative considerations. Methods and techniques relevant to the sport as well as management of equipment, facilities, practice sessions, and the game. Each unit is 14 class hours in length. Some sports have a double unit. Coaching certification requires at least one of these courses. Prerequisite: none. STAFF.

#### **Unit 1. Football\* (Spring)**

**1 credit**

WALLACE.

#### **Unit 2. Soccer\* (Fall)**

**1 credit**

BENNING.

<b>Unit 3. Volleyball*</b> SONNICHSEN.	1 credit
<b>Unit 4. Swimming*</b> (Fall) HURLEY.	1 credit
<b>Unit 5. Basketball*</b> (Fall) ARSENEAULT.	1 credit
<b>Unit 6. Baseball*</b> (Spring) HOLLIBAUGH.	1 credit
<b>Unit 7. Softball*</b> (Spring) SONNICHSEN.	1 credit
<b>Unit 8. Golf*</b> (Spring) WALLACE.	1 credit
<b>Unit 9. Cross Country and Track and Field*</b> (Spring) W. FREEMAN.	1 credit
<b>Unit 10. Tennis*</b> (Spring) HAMILTON.	1 credit

**202 Coaching Methods (Fall and Spring) 4 credits+**

A comprehensive study of the components of coaching. Areas of emphasis include: philosophy of coaching; sport psychology; sport first aid; exercise physiology; athletic management; and sport specific training of tactics and techniques. Geared toward coaching the high school athlete. Students who successfully complete the course will receive a diploma from the American Sport Education Program. Prerequisite: none. BENNING, HOLLIBAUGH.

**211 Foundations of Athletic Training (Spring) 4 credits**

Specific to rehabilitation and the care and prevention of athletic injuries. Lectures plus laboratory sections. Prerequisite: CPR/First Aid or permission of instructor. LOWTHER.

**212 Wellness II\* (Fall) 2 credits**

Designed to provide an understanding of stress and the individual responses to it, causes and consequences, and stress management methods. Effective use of time management techniques covered in-depth; also, nutritional aspects of healthy lifestyle. Prerequisite: none. E. FREEMAN, W. FREEMAN.

**215 Elementary Methods in Physical Education (Fall) 1 credit**

Provides insights into the concepts and methods of teaching physical education at the elementary level. Students observe and assist elementary physical education teachers in actual classes. Readings focus on topics ranging from motor development to teaching theory. Prerequisite: Education 221 or permission of instructor. JAWORSKI.

**235 Psychological Foundations of Sport (Spring) 4 credits**

An overview of various psychological concepts underlying sports performance. Pertinent social and philosophical issues also addressed. Topics include personality, anxiety and arousal, motivation, self-efficacy and confidence, individual and group dynamics, cohesion, and various cognitive intervention strategies. Prerequisite: none. W. FREEMAN.

## Activity Program

**NOTE:** A maximum of four credits may be earned in either Physical Education 100 or 101. Physical Education 100 and 101 both count as practica; A maximum of eight credits earned in practica may count toward graduation. Credit in Physical Education 101 is not counted as overload.

<b>100 Physical Education Activity</b>	<b><math>\frac{1}{2}</math> or 1* credit per hour per week per semester</b>
<b>Instruction (Practica) (Fall or Spring)</b>	
<b>of class meetings</b>	
Aerobics Conditioning/Cardio Strength Training	
Adult CPR	Football Skills
Advanced Baseball Skills	Golf
Advanced Racquetball	Indoor Soccer
Advanced Swimming	Introductory Kayaking
Advanced Tennis	Lifeguard Training
Badminton	Rock Climbing
Basketball Skills	Sailing
Beginning Racquetball	Standard First Aid
Beginning Swimming	Swimming Technique
Beginning Tennis	Triathlon Training
Bowling	Volleyball
Canoeing	Water Aerobics
Conditioning	Water Polo

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Offered S/D/F only. May be taken without credit.

\*See registrar's Schedule of Courses for credit options.

<b>101 Sport Performance: Intercollegiate</b>	<b><math>\frac{1}{2}</math> credit per season</b>		
<b>Competitive (Practica) (Fall and Spring)</b>			
<b>For men:</b>	<b>For women:</b>		
Baseball	Indoor Track	Basketball	Soccer
Basketball	Outdoor Track	Cross Country	Softball
Cross Country	Soccer	Golf	Swimming
Football	Swimming	Indoor Track	Tennis
Golf	Tennis	Outdoor Track	Volleyball

Offered S/D/F only. May be taken without credit.

<b>Clubs (some clubs change with student interest)</b>	<b>No credit</b>	
Archery	Kickball	Volleyball
Dodgeball	Lacrosse	Water Polo
Fencing	Rugby	Folk Dance
Ultimate Frisbee		

<b>Grinnell Outdoor Recreation Program (GORP)</b>	<b>No credit</b>
Sponsors trips and instruction in cycling, caving, climbing, kayaking, backpacking, canoeing, winter sports, and other outdoor activities, and provides most equipment required to participate safely in these outings.	

<b>Intramural Sports (Fall or Spring)</b>	<b>No credit</b>
Organizes competitive activities at the campus level in season.	

## Physics

Member of the Division of Science

Robert Cadmus, Chair, Lawrence Aspler, William Case, Charles Cunningham, Charles Duke, Mark Schneider, Paul Tjossem, Sujeew Wickramasekara, Jacob Willig-Onwuachi

Physics develops an understanding of physical phenomena through study of classical and modern theory in conjunction with laboratory experience. The intellectual curiosity and disciplined study promoted by work in physics are important to such diverse fields as the natural sciences, the social sciences, engineering, medicine, and law.

Grinnell students may begin their study of physics at several different points. Those currently registered in calculus (Mathematics 131) normally start with Physics 131, while those with advanced standing may start in 132 or even in 232. The department also offers courses (109, 116, 117, and 180) specifically designed for students who do not plan to major in one of the sciences.

Students who plan to major in physics are immediately encouraged to take part in departmental activities such as the weekly physics seminar. As they develop expertise with laboratory equipment, computers, and mathematical techniques, students are urged to pursue their own interests within the discipline. Most physics majors do some sort of independent project or research, either on or off campus.

The physics facilities include the Grant O. Gale Observatory, which features a 24-inch research-quality telescope that is fully computer controlled and has CCD-based imaging and spectroscopic capabilities. The solid-state physics lab offers a powder X-ray diffractometer and instruments to measure the magnetic, electrical, and thermodynamic properties of superconductors and spin glasses in magnetic fields up to 9 Tesla and at temperatures from near absolute zero to above room temperature. The gamma ray astronomy lab uses networked workstations for analyzing TeV gamma rays from supernova remnants and active galactic nuclei. The nuclear physics lab features computerized multiparameter data acquisition systems and high-purity germanium detectors for use in studying low energy positron spectra. The laser lab has two high-power tunable lasers for molecular spectroscopy: a Nd:YAG pulsed dye system and a continuous-wave Argon ion/Ti Sapphire system.

Grinnell participates with four universities in joint 3-2 engineering programs that enable students to earn two bachelors' degrees in physics and engineering. Students preparing for professional engineering should consult the departmental engineering adviser.

### The Major

**A minimum of 32 credits.** Required are Physics 131, 132, 232, 234, 335, 337, and 462. (Physics 109, 116, 117, 180 do not satisfy major requirements.) Mathematics courses through Mathematics 220 are required for all physics majors. Additional courses in mathematics, such as Mathematics 331 or 338, are advised for students planning graduate work in physics; other courses in the division are appropriate for those who plan to continue in a science or engineering field. Prospective majors should consult early with the department about suitable additional courses. Physics 314 and 456 are recommended for all majors.

To be considered for honors in physics, graduating seniors, in addition to meeting the College's general requirements for honors, must complete Physics 456.

\*Not offered every year.

**109 Physics in the Arts\*****4 credits**

An investigation of a variety of physical principles that have interesting applications to musical acoustics and the visual arts. Topics include simple vibrating systems, musical instruments, Fourier analysis, light and color, optics, and photography. Intended primarily for nonscience majors. Laboratory work allows students to investigate phenomena firsthand. Three lectures, one laboratory each week. Prerequisite: none. CADMUS, CUNNINGHAM.

**116 The Universe and Its Structure (Fall)****4 credits**

Descriptive astronomy, covering the tools and methods of astronomy, the solar system, the stars, and the structure of the galaxy and the universe. Prerequisite: none. CADMUS.

**131 General Physics I (Fall and Spring)****4 credits**

This course is the first part of a yearlong, calculus-based introductory physics sequence, focusing on the application of physical principles, logical reasoning, and mathematical analysis to understand a broad range of natural phenomena related to force and motion. Topics include Newtonian mechanics, conservation principles, gravity, and oscillation. This course meets for six hours each week and involves both classroom and laboratory work. Prerequisite or co-requisite: Mathematics 124, or 131, or permission of instructor. STAFF.

**132 General Physics II (Fall and Spring)****4 credits**

This course is the second part of a yearlong, calculus-based introductory physics sequence, focusing on the application of physical principles, logical reasoning, and mathematical analysis to understand a broad range of electromagnetic phenomena. Topics include electricity, magnetism, light, and early atomic theory. This course meets for six hours each week and involves both classroom and laboratory work. Concurrent or prior enrollment in Mathematics 133 is recommended. Prerequisite: Physics 131, and Mathematics 124 or 131; or permission of instructor. STAFF.

**180 Bridges, Towers, and Skyscrapers\* (Spring)****4 credits**

An investigation of large man-made structures (e.g., Brooklyn Bridge, Eiffel Tower, and Hancock Tower/Chicago), considering structural, social, and aesthetic aspects. The relationship between a structure's form and its function is examined. Concepts from physics necessary for the quantitative analysis are presented. Prerequisite: Mathematics 124, or 131, or permission of instructor. CASE.

**220 Electronics (Fall or Spring)****4 credits**

A course in modern electronics, emphasizing the use of integrated circuits. Topics include analog electronics, primarily the design of circuits based on operational amplifiers; digital electronics, including logic circuits, counters, and timers; and microcomputer interfacing using software written in low-level languages and Pascal. Two lectures, two laboratories each week. Prerequisite: Physics 132, and some computer programming experience, and either second-year standing or permission of instructor. TJSSEM.

**232 Modern Physics (Fall)****4 credits**

For students with an introductory physics background who wish to extend their knowledge of atomic, nuclear, and solid state physics. Emphasis on the basic phenomena and fundamental physics principles involved in special relativity

and quantum mechanics and their subsequent application to atomic, nuclear, and solid state models. Three classes, one laboratory each week. Prerequisite: Physics 131–132 and concurrent registration in Mathematics 215, or permission of instructor. STAFF.

**234 Mechanics (Spring) 4 credits**

A study of analytical mechanics, including Lagrangian and Hamiltonian formalisms of particle dynamics, rigid body motion, and harmonic oscillations. Prerequisite: Physics 131–132 and concurrent registration in Mathematics 220, or permission of instructor. STAFF.

**310 Computational Physics (Fall) 2 credits**

An active-learning introduction to computing in physics. Class is taught in the laboratory, with each class session dedicated to a particular topic. These topics include investigations of numerical algorithms for integration, matrix manipulations, Fourier transforms, data fitting, and Monte Carlo methods. Prerequisite: Physics 234 or permission of instructor. STAFF.

**314 Thermodynamics and Statistical Physics (Fall or Spring) 4 credits**

A study of thermodynamics from classical and statistical points of view. Applications of Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein distributions are used to provide an introduction to solid-state physics and quantum optics. Prerequisite: Physics 232 and Mathematics 220, or permission of instructor. STAFF.

**335 Electromagnetic Theory (Fall) 4 credits**

An advanced treatment of electric and magnetic fields and potentials, including the laws of Coulomb, Ampere, and Faraday, Maxwell's equations, and electromagnetic waves. Prerequisite: Physics 234 or permission of instructor. STAFF.

**337 Optics and Other Wave Phenomena (Spring) 4 credits**

A wide variety of physical problems—including one- and two-dimensional mechanical oscillating systems, sound, and optical phenomena—are examined using the theory of waves. The primary emphasis is on physical optics (interference and diffraction phenomena). Three lectures, one laboratory each week. Prerequisite: Physics 335 or permission of instructor. CADMUS, CUNNINGHAM.

**340 Astrophysics (Spring) 2 credits**

An introduction to topics in theoretical and observational astrophysics, including stellar structure and evolution, the physics of interstellar material, galactic structure and dynamics, cosmology and observational technology and techniques. The course also includes a very brief survey of other topics, including the solar system and areas of current research interest. Prerequisite: Physics 232 or permission of instructor. CADMUS.

**360 Solid State Physics (Fall) 2 credits**

An introduction to the physics of crystalline solids, such as metals, semiconductors, and insulators. This course presents models of the crystal lattice, lattice vibrations, and electronic band structures, as well as a brief survey of selected topics of current research interest. Prerequisite: Physics 232 or permission of instructor. CUNNINGHAM, SCHNEIDER.

**399 Directed Research 2 or 4 credits**

\*Not offered every year.

**456 Introduction to Quantum Theory (Fall) 4 credits**

Introduction to the physical and mathematical foundations of quantum mechanics with application to simple physical systems. Prerequisite: Physics 232, Mathematics 220, and Physics 335; or permission of instructor. CASE, WICK-RAMASEKARA.

**457 Advanced Quantum Theory (Spring) 2 credits**

Application and implications of the quantum theory. Perturbation theory and other approximation techniques are used to examine various quantum systems. Fundamental questions of interpretation of the quantum theory will also be considered. Prerequisite: Physics 456 or permission of instructor. STAFF.

**462 Advanced Laboratory (Fall and Spring) 2 credits**

Experiments bear a closer resemblance to research than do the experiments in more elementary courses. There is a wide range of activities to meet individual needs and interests. Two afternoons of laboratory or reading each week. Prerequisite: senior standing and at least three 200- or 300-level physics courses. Special permission for well-qualified third-year students. SCHNEIDER, WILLIG-ONWUACHI.

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**Political Science**

Member of the Division of Social Studies

Barb Trish, Chair, Dionne Bensonsmith, Robert Grey, Wayne Moyer, Russell Osgood, Ira Strauber, Eliza Willis, Jeremy Youde

Political science courses focus on the processes by which societies make decisions affecting the lives of their citizens. Questions raised by political science include: Who has the power, how is it acquired, and how is it used? What produces stability and what produces change in societies? What is political leadership, and what forces shape the relations between leaders and the led? How do societies through their governments attempt to deal with basic problems? Political science offers students both a grasp of the various answers provided for these questions and a sophisticated sense of how to choose among these answers.

Since a core of central questions is common to virtually all the department's courses, students of political science are expected to begin with the introductory course, Political Science 101, in which these questions are pointedly raised. This course provides the necessary background for further work in the various fields of the discipline: American politics, comparative politics, international politics, and political philosophy.

Political science majors should take statistics and courses in related social studies—anthropology, economics, history, philosophy, and sociology. They are encouraged to undertake interdisciplinary study combining social studies with the humanities. Students have the option of doing work in a foreign language to supplement their study of political science. Appropriate internships and experience off campus enhance the major. Students will find courses in mathematics valuable to their major program in political science.

Recent graduates in political science have undertaken careers in a number of different fields. Law, government service, teaching, journalism, and social work have proven especially attractive.

## The Major

**A minimum of 32 credits.** With permission, up to eight of the 32 credits may be taken in related studies, at the 200-level or above, outside the department.

Required are: Introduction to Political Science 101 and courses in each of the following areas:

- American politics (Political Science 216, 219, 222, 237, 238, or 239)
- Comparative politics (Political Science 255, 261, 262, 273, or 275)
- International politics (Political Science 250 or 251)

In addition, eight credits of coursework are to be taken at the 300 level after having completed the prerequisite at the 200 level. It is preferred that students complete all of their 200-level work before undertaking 300-level courses, so students should try to reserve 300-level work for the third and fourth years.

The following is the schedule of Prerequisite: A 200-level course can be used as a prerequisite for only one of two 300-level courses required to fulfill distribution requirements.

- Political Science 305 (Political Science 219, 250, or 255).
- Political Science 310 (Political Science 216, 237, 238, or 239).
- Political Science 319 (Political Science 219).
- Political Science 350 (Political Science 250 or 251).
- Political Science 352 (Political Science 250 or 251).
- Political Science 354 (Political Science 250, 251, 261, 262, 273 or 275).
- Political Science 357 (any comparative politics course).

In addition to the required 32 credits, students are required to take statistics (Mathematics 115 or 209), or four semesters (or its equivalent) of a modern foreign language, or two semesters of ancient Greek or Latin.

To be considered for honors in political science, graduating seniors, in addition to meeting the College's general requirements for honors, must achieve a GPA of 3.75 in the major and a GPA of 3.6 overall.

### **101 Introduction to Political Science (Fall or Spring)                            4 credits**

Designed to provide a general introduction to the major concepts and themes of the discipline of political science, using examples from contemporary American, comparative and international politics. Prerequisite: none. STAFF.

### **216 Politics of Congress\*    4 credits**

A study of the politics of Congress, including such topics as congressional elections, party leadership, floor voting, congressional committees, congressional policymaking, and reform proposals. Emphasis placed on understanding theories of legislative behavior. Prerequisite: Political Science 101 or permission of instructor. TRISH.

**219 Constitutional Law and Politics (Fall) 4 credits+**

An introduction to the role of the United States Supreme Court as a policymaking institution in American politics and how law gives shape to, and is shaped by, struggles over the development of the institutional structure of the polity, governmental powers, and citizens' rights. Prerequisite: Political Science 101 or permission of instructor. I. STRAUBER.

**222 Welfare State, Politics and Society (Spring) 4 credits**

An examination of the role of American political institutions in shaping welfare policy. This course focuses on the relationship between ideology, political structures, and the policymaking process. Attention will be given to the effects of race, class, and gender on the development of welfare policy over time, and their influence on key developments in the American welfare state, such as the passage of the 1935 Social Security Act. Prerequisite: Political Science 101 or permission of instructor. BENSONSMITH.

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**237 Political Parties (Fall) 4 credits+**

An examination of the political party in U.S. politics. Considers the party at three levels: the individual, the organization, and the system. Topics include the development and evolution of parties, candidates and elections, third parties, and the role of parties in the U.S. political system. Prerequisite: Political Science 101 or permission of instructor. TRISH.

**238 Campaigns and Elections\* (Fall) 4 credits+**

Study of U.S. campaigns and elections from both scholarly and pragmatic perspectives. Emphasis on the implications of modern campaigns and election for democracy in the United States. Students analyze contemporary politics in light of the material covered. Offered during national election seasons. Prerequisite: Political Science 101 or permission of instructor. STAFF.

**239 The Presidency (Spring) 4 credits+**

Consideration of the modern presidency as an institution and the president as a critical political actor in politics. Topics include leadership, institutional change, executive-legislative relations, decision-making, and presidential selection. Prerequisite: Political Science 101 or permission of instructor. TRISH.

**250 Politics of International Relations (Spring) 4 credits+**

A study of the evolving relations between nations in the period since 1939, focusing on U.S. foreign policy. The crucial decisions of the Cold War and post-Cold War evaluated against the standard of the rational national actor, taking into account distortions caused by the bureaucratic, bargaining, personality, psychological, societal, momentum, and communications factors. Prerequisite: Political Science 101 or permission of instructor. MOYER.

**251 International Political Economy\* (Spring) 4 credits**

Introduction to the study of political economy through the examination of the pursuit of wealth and power in the international system. Evaluates the strengths and weaknesses of different theoretical approaches as applied to the issues of trade, international finance, and foreign investment. Prerequisite: Political Science 101 or permission of instructor. Economics 111 is highly recommended. WILLIS.

**255 Pluralist Systems: Comparative Politics of European Government: East and West\* (Fall)** 4 credits+

Europe possesses a broad and very diverse range of political systems and polities. In order to help students understand and appreciate this diversity, students will be asked to explore the political systems and societies of a broad range of European countries. Particular attention will be devoted to Italy, Germany, Sweden, the Czech Republic, Hungary, and Poland. This range of both West and East European countries should provide students with an understanding not only of how more advanced political systems function, but also of what types of political and institutional structures the newly emerging democracies of Central Europe have chosen. Particular attention will be paid to the way in which political outcomes differ depending on the institutional and socioeconomic make up of individual states. Prerequisite: Political Science 101 or permission of instructor. STAFF.

**261 State and Society in Latin America\*** 4 credits+

Examination of the diverse and common dilemmas facing Latin America, using social scientific approaches. Topics include economic development and political uncertainty. Prerequisite: Political Science 101 or permission of instructor. WILLIS.

**262 African Politics\* (Fall)** 4 credits+

A study of typical Third World politics in an African context. A study of behavior of political elites constrained both by the international context and by limited resources. Topics include personalistic leadership, corruption, military coups, civil wars, mass-elite interactions, and peasant autonomy. Prerequisite: Political Science 101 or permission of instructor. GREY.

**265 Issues in Democratic Political Theory (Spring)** 4 credits

The purpose of this course is to explore some facets of the relationships between citizenship, democracy, freedom, and liberalism. In particular, the course is concerned with what "critical" citizens might consider to be relevant when thinking about public affairs, their own interests, and the interests of others. Prerequisite: Political Science 101 or permission of instructor. STRAUBER.

**273 Politics of Russia\* (Spring)** 4 credits+

Analysis of the dynamics of Russian politics, beginning with the historical background of communist rule in the Soviet Union. Primary focus on the Putin era. Topics include: democracy, corruption, economic reform, and mass-elite interactions. Prerequisite: Political Science 101 or permission of instructor. GREY.

**275 Politics of the People's Republic of China\* (Fall)** 4 credits+

A study of the dynamics of politics in the People's Republic of China. After a study of the history of communism in the PRC, the course examines the role of political leadership, the communist party, the state bureaucracy, the People's Liberation Army, and elite-mass relations. Recent reforms in the political and economic systems are analyzed. Some comparison with the experience of the political system of the former USSR. Prerequisite: Political Science 101 or permission of instructor. GREY.

**305 Transnational Legal Institutions (Spring)** 4 credits

Also listed as History 305. This course, in seminar form, will consider the workings of the European Court of Justice, the International Court of Justice,

International Arbitration, and the proposed International Criminal Court. Prerequisite: Political Science 219, or 250, or 255, or permission of instructor. OSGOOD.

**310 Advanced Seminar in American Politics (Spring) 4 credits**

A research-oriented course in American politics. Students examine research methods and their application to political questions/phenomena. Students then devise and conduct an intensive research project. Throughout the course there is an emphasis on quantitative political science. Prerequisite: Mathematics 115 or 209; and Political Science 216, or 237, or 238, or 239; or permission of instructor. TRISH.

**319 Advanced Seminar in Constitutional Law and Politics (Spring) 4 credits**

The goal of the seminar is to study the role of the U.S. Supreme Court as a means of change and conservation, both legal and social, in the 20th and 21st centuries. The course addresses selected 14th Amendment due process and equal protection cases and doctrines, using both primary and secondary materials, in order to evaluate the legal and political strengths and weaknesses of the court as a means of change and conservation. Prerequisite: Political Science 219 or permission of instructor. I. STRAUBER.

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**350 International Politics of Land and Sea Resources\* (Fall) 4 credits+**

Analysis of the international politics of the conflict between the developed nations of the North and the developing nations of the South for control of the world's resources and over trade and environmental issues. The impact of national decision-making processes, international organizations, cartels, and multinational corporations. Case studies. Prerequisite: Political Science 250, or 251, or permission of instructor. MOYER.

**352 Advanced Seminar on the U.S. Foreign Policymaking Process\* (Fall) 4 credits+**

An in-depth study of the U.S. foreign and defense policymaking process, emphasizing international relations theory; case studies of recent important decisions; discussion of the role, structure, function, and power of the National Security Council, State Department, Defense Department, and CIA; conflict between president and Congress; impact of press, public opinion, lobbies, and elections. Prerequisite: Political Science 250, or 251, or permission of instructor. MOYER.

**354 Political Economy of Developing Countries (Fall) 4 credits**

Following a brief examination of the main theoretical approaches taken in the study of development, students apply these approaches to a comparison of several less-developed countries. Emphasis on the interplay between domestic and international factors in the path to industrialization. Prerequisite: Political Science 250, or 251, or 261, or 262, or 273, or 275, or permission of instructor. Economics 111 is highly recommended. WILLIS.

**357 Diffusion of Democracy (Spring) 4 credits+**

An analysis of the conditions under which and the processes by which nations become and/or remain democracies. Prerequisite: Political Science 255, or any comparative politics course, or permission of instructor. GREY.

## Psychology

Member of the Division of Science

Laura Sinnett, Chair, Jason Drwal, Ann Ellis, Janet Gibson, David Lopatto, Mark Pitzer, Nancy Rempel-Clower, Asami Seawell

Psychology is invigorated by the intellectual imperative to understand behavior, the ethical imperative to alleviate human suffering, and the aesthetic imperative to find form and pattern in our lives. The psychology curriculum illuminates the behavior of biological organisms living in social habitats. Students of psychology learn to use empirical methods to investigate behavior and to use critical thinking to interrogate empirical methods. Situated in a liberal arts environment, the psychology curriculum empowers the student with tools for mindful inquiry. Students of psychology construct their learning into a variety of professional careers, including teaching, scientific research, clinical work, medicine, and law.

Students interested in psychology should take Introduction to Psychology and either Introduction to Statistics or Applied Statistics early in their college careers. Students interested in the psychology major should follow these courses to the required Research Methods and the 200-level core program. Research Methods equips the student with tools for inquiry; core courses explore the essential content areas of psychological science. Engagement with the core program aims the student toward advanced courses that permit the study of topics in depth and may provide the impetus for individual research projects. In addition, the department encourages students to pursue experiential learning through internships.

All majors are encouraged to explore the varied elective courses offered by the department and to take advantage of opportunities to do independent work. Liberally educated psychology majors value the breadth of their education. The requirements for the major leave time in the student's career for courses in mathematics, science, social studies, and humanities. The student is encouraged to discover the natural affinity of psychology with many disciplines and the creative thinking that follows from multidisciplinary competence.

The facilities that support learning in the psychology curriculum afford genuine laboratory experience and creative research. Interactions in these facilities give the student experience with the protocols that inspire awareness of the opportunities for research and teach the ethical responsibilities of researchers. The facilities include a group process laboratory, a behavioral neuroscience suite with a contiguous animal colony, and a freestanding preschool that offers an ongoing curriculum in parallel with its laboratory function.

### The Major

#### **A minimum of 32 credits in psychology including:**

- Psychology 113 Introduction to Psychology
- Psychology 225 Research Methods
- Psychology 495 Senior Seminar
- Twelve additional credits from core courses at the 200 level with at least one course from Group A and one course from Group B

## Group A

- Psychology 243 Behavior Analysis
- Psychology 246 Physiological Psychology
- Psychology 260 Cognitive Psychology

## Group B

- Psychology 214 Social Psychology
- Psychology 233 Developmental Psychology
- Psychology 248 Abnormal Psychology
- Eight additional credits at the 300 level

## Also required:

- Mathematics/Social Studies 115 Introduction to Statistics or Mathematics 209 Applied Statistics

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## Recommended:

- At least two courses above the 100 level should be laboratory courses
- Independent research and departmental service

To be considered for honors in psychology, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate voluntary engagement with and commitment to the values of the discipline, which include, but are not limited to, departmental service and independent research.

**113 Introduction to Psychology (Fall or Spring)****4 credits**

An introduction to principles of psychological science and inquiry. Major topics of psychology are covered with consideration of different approaches psychologists take to describe, predict, and explain behavior. Emphasis is placed on theory, research, and application. Laboratory work is required. Prerequisite: none. STAFF.

**214 Social Psychology (Fall)****4 credits+**

Survey of contemporary experimental social psychology. Topics include: attribution theory, social cognition, stereotypes, attitudes, prosocial behavior, aggression, group processes, and applied social psychology. Attention given to interaction between theoretical development and empirical measurement. Laboratory work is required. Co-requisite: Mathematics/Social Studies 115 or Mathematics 209. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. SINNETT.

**220 Decision-Making\* (Spring)****4 credits+**

An examination of human decision making under uncertainty. Topics include biases resulting from cognitive strategies, probability, utility theory, reasoning, prediction, and issues specific to group decisions. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. GIBSON.

**222 Industrial Psychology\* (Fall)****4 credits+**

An investigation of individual differences, learning, and motivation in the context of the work setting. Topics include testing theory, training techniques, and motivational theories. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. LOPATTO.

**225 Research Methods (Spring) 4 credits**

This course describes experimental designs and attendant statistical techniques. Students learn to use quantitative methods to pose meaningful questions to data. Topics include between-group and within-group designs, Analysis of variance for main effects and interactions, the adaptation of statistical inquiry to less than optimal situations, and critical thinking about research methods. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. STAFF.

**233 Developmental Psychology (Spring) 4 credits+**

A survey of psychological development from the prenatal period through adolescence. Major theoretical perspectives on the nature of developmental change are considered with a focus on empirical validation and application of each perspective. Topics include physical, cognitive, and social development. Laboratory work is required. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. ELLIS.

**243 Behavior Analysis (Spring) 4 credits+**

The course studies behavior as it occurs in its environmental context. Topics in learning and motivation are analyzed through the experimental approach of behavior analytic psychology. Topics include classical and operant learning, choice, self-control, and extrinsic and intrinsic motivation. Laboratory work is required. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. LOPATTO.

**246 Physiological Psychology (Fall) 4 credits**

An introduction to the physiological control of behavior. Course content: (a) general introduction to neuroanatomy and neurophysiology; (b) neuroregulatory systems, motivation, and emotion; (c) perceptual and motor systems; (d) processes of learning, memory, and cognition. Laboratory work may be required. Prerequisite: Psychology 113 or permission of instructor. One semester of biology is recommended. REMPEL-CLOWER.

**248 Abnormal Psychology (Fall) 4 credits+**

The study of psychopathology. Emphasis is given to experimental models and the underlying psychological processes of abnormal behavior. Some attention is given to treatments. The course is structured around the categories of the DSM IV. Prerequisite: Psychology 113 or permission of instructor. DRWAL.

**260 Cognitive Psychology (Spring) 4 credits+**

A survey of the experimental research on human thinking, knowing, and remembering. Topics include attention, memory, reasoning, problem-solving, and language. Laboratory work is required. Prerequisite: Psychology 113, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. GIBSON.

**311 History of Psychological Theories\* (Fall) 4 credits+**

Historical and philosophical origins of contemporary schools of psychology are considered. The student analyzes the nature of psychological theory and the methods used to disconfirm theories, as well as the reasons for the emergence and decline of schools of psychological thought. Prerequisite: two psychology courses numbered 200 or above, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. LOPATTO.

\*Not offered every year.

**315 Advanced Social Psychology\* (Spring) 4 credits**

An advanced study of a particular social psychological topic. Emphasis will be placed on a critical analysis of theoretical approaches, experimental findings, and future directions. Topics will vary and may include: stereotypes, inter-personal relationships, cross-cultural psychology, or the social psychology of emotion. Laboratory work may be required. Prerequisite: Psychology 214 or permission of instructor. SINNETT.

**317 Personality Psychology\* (Spring) 4 credits**

A survey of classical and contemporary approaches to understanding healthy adult personalities. Emphasis will be placed on the trait approach, the coherence of personality across time and situations, beliefs about the self, social aspects of personality, and empirical research methods used to study personality. Prerequisite: Two psychology courses numbered 200 or above, not including 225, or permission of instructor. SINNETT.

**332 Advanced Developmental Psychology\* (Fall) 4 credits**

An advanced investigation of substantive topics in developmental psychology. Emphasis is placed on theory and research. Laboratory work may be required. Prerequisite: Psychology 233 and one additional 200-level psychology course, or permission of instructor. ELLIS.

**334 Adult Development\* (Fall) 4 credits**

A consideration of human development during adulthood with emphasis on models and empirical work that illustrate factors that constrain and optimize development. Topics are treated in-depth and include changes in social roles, wisdom, autobiographical memory, dementia, and death. Laboratory work may be required. Prerequisite: Two psychology courses numbered 200 or above or permission of instructor. ELLIS.

**336 Advanced Behavioral Neuroscience\* (Spring) 4 credits**

A laboratory-centered introduction to advanced topics in behavioral neuroscience and basic research techniques used to investigate brain-behavior relationships. Participants will gain experience, stereotaxic neurosurgery, psychopharmacology, and various behavioral measures. A research-team approach is used for both the literature discussion and the laboratory activities each week. Prerequisite: Psychology 246 or permission of instructor. REMPEL-CLOWER.

**337 Psychological Measurement\* (Spring) 4 credits**

Students will learn about methods of test development, the statistical analysis of test data, and social implications of testing. In lab, students will develop testing instruments and learn multivariate data analysis. Topics covered include intelligence and personality testing, systems of behavioral observation, regression, factor analysis, and theories of test construction. Prerequisite: two Psychology courses numbered 200 or above, and Mathematics/Social Studies 115 or Mathematics 209; or permission of instructor. DRWAL.

**348 Behavioral Medicine\* (Fall) 4 credits+**

This course describes psychophysiological and behavioral principles and methods in the context of the biopsychosocial model of health and illness. Topics include behavioral pathogens, stress, pain, psychoneuroimmunology and behavior management. Laboratory work may be required. Prerequisite: Psychology 243 or permission of instructor. LOPATTO.

**355 Psychology of Language\* (Fall) 4 credits+**

An examination of experimental psycholinguistics. Topics include how humans perceive, comprehend, and produce language, research with brain-damaged individuals, language acquisition, and the role of memory and cognition on processing language. Laboratory work may be required. Prerequisite: Psychology 260 or permission of instructor. GIBSON.

**360 Advanced Cognitive Psychology\* (Fall) 4 credits+**

An in-depth examination of research on a specific area within cognitive psychology. Possible topics focus on implicit memory, memory in older adults, language in primates, conditional reasoning, and insight in problem solving. Laboratory work may be required. Prerequisite: Psychology 260 or permission of instructor. GIBSON.

**495 Senior Seminar (Spring) 4 credits**

A critical exploration of controversial topics of both historical and contemporary significance in psychology with intense interrogation of the field's diverse perspectives and methods. Prerequisite: Senior Psychology Majors. STAFF.

**Religious Studies**

Member of the Division of Humanities

Tyler Roberts, Chair, Timothy Dobe, Ed Gilday, Harold Kasimow\*, Jonathan Moore, Henry Rietz, Kathleen Roberts Skerrett

When you study the world's religious traditions, you learn about the histories, literatures, practices, and beliefs that have shaped not only the world's religious traditions, but also human societies and cultures. You study rituals and festivals that give meaning to time and place; disciplines that develop modes of perception and attention; and ideas of holiness, justice, and love through which human beings have expressed their highest ideals; and discourses and institutions that have wielded great political and social power.

Majors in religious studies will be required, above all, to develop the capacities fundamental to the liberal arts: clear communication, critical thinking, and the careful and open-minded exploration of ways of life different from one's own. Some majors pursue religious studies as preparation for graduate study in religion and a teaching career at a college or university. Some go on to theological school and a career in ministry. Most majors, however, apply the skills and sensibilities developed through the study of religion to a variety of other professions, such as law, medicine, education, or international relations.

Majors generally focus on either Asian or Western religions, but all majors are required to take at least one course in each area. All majors are also required to take the Third-Year Seminar on Theory and Method in the Study of Religion and one other advanced (300-level) seminar. Majors who expect to undertake graduate study should gain a reading knowledge of at least one classical or modern foreign language.

\*Not offered every year.

## The Major

**A minimum of 32 credits.** With permission (see below), up to eight of the 32 credits may be taken in related studies outside the department. Required are:

- One course in Asian religions and one course in Western religions;
- One 100-level course (Religion 111, 115, or 117), with a maximum of two of these courses (Religion 111 plus either Religion 115 or 117) eligible for credit toward the major;
- Religion 311; and
- One other advanced seminar (numbered 350 or above).

Application to the department for approval of credit toward the major for Grinnell courses not listed under the religious studies rubric, and for courses taken at other institutions or through off-campus study programs, needs to be made in writing in advance of taking the course. More information is available from the chair.

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To be considered for honors in religious studies, graduating seniors, in addition to meeting the College's general requirements for honors and the department's general requirements for the major, must have achieved a minimum GPA within the department of 3.7 and a cumulative GPA of 3.50; produced original scholarship judged excellent by members of the department; and demonstrated exemplary academic citizenship.

### **111 Mapping the Realm of Religion (Fall and Spring) 4 credits**

This course introduces religious studies through a series of case studies, from a study of Nepalese sacred geography, to Japanese memorial rites, to the interior geographies attested to by Christian mystics. We will also consider cases of contested religious spaces and identities in the Middle East and the United States. Together the examples illustrate how diverse religious ideas and practices can be interpreted as ways that people "map" or bring order, meaning, and purpose to their personal and social lives. In considering these religious mappings, we will also be attentive to the ways that students of religion themselves map the religious worlds of other cultures as well as of their own. Prerequisite: first- or second-year standing or permission of the instructor. STAFF.

### **115 Major Western Religions (Spring) 4 credits**

A comparative study of the beliefs, practices, and formative events of the Jewish, Christian, and Islamic traditions. Some attention given to the interaction among these religions and their influence on Western culture. Prerequisite: none. ROBERTS.

### **117 Major Asian Religions (Fall and Spring) 4 credits**

A study of the development of Hinduism, Buddhism, Confucianism, Taoism, and Shintoism in their views of reality, human spirituality, and paths to ultimate fulfillment. Prerequisite: none. DOBE, GILDAY.

### **211 The Hebrew Bible\* (Fall) 4 credits**

The history, religion, and thought of the Hebrew-Jewish people as recorded in Scripture. Special attention given to the formation of this literature and to the rise and development of major biblical motifs. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. RIETZ.

**213 Christian Traditions\* (Fall) 4 credits+**

This course explores what Christians have believed about God, humanity, time, and creation, by focusing on how they have believed their central doctrines. We look at the political and cultural contexts in which specific beliefs have become meaningful and indispensable for Christian communities through particular struggles, practices, authorities, and rituals. The purpose of the course is to consider how Christians have discovered meanings that have guided their many vocations in the world, as individuals and as communities. To do this, we consider historical and contemporary cases. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. SKERRETT.

**214 The Christian Scriptures\* (Spring) 4 credits**

The history, religion, and thought of early Christianity as recorded in the New Testament. Special attention to the formation of this biblical literature, the theology of the various writers, and the development of major New Testament motifs in relation to the Hebrew Bible. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. RIETZ.

**216 Modern Religious Thought (Fall) 4 credits+**

A study of the way 19th- and 20th-century philosophers and theologians have criticized and reconceptualized religion in light of the intellectual currents, social changes, and historical events that continue to shape Western culture. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. ROBERTS.

**217 The Jewish Tradition\* (Fall) 4 credits**

An examination of the basic ideas of biblical, rabbinic, and medieval Judaism as presented in the sacred Jewish texts: the Bible, the Talmud, the Zohar, and other Jewish writings. Attention given to modern Jewish thinkers, Holocaust literature, and women in the Jewish tradition. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. RIETZ.

**220 The Traditions of Islam\* (Fall) 4 credits**

An examination of the spirit of Islam as presented in the Qur'an, the Sunna of the Prophet, Islamic law, theology, and mysticism. Special attention given to the status of women in Islam. Contemporary movements within the Islamic world discussed. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. DOBE.

**221 Religious Traditions of Japan\* 4 credits**

A historical introduction to Japanese religious ideas and practices, including Shinto, Buddhist, Confucianist, and popular developments as well as the place of so-called new religions in modern Japan. Prerequisite: Religious Studies 111, or 117, or second-year standing, or permission of instructor. GILDAY.

**222 Religious Traditions of China\* 4 credits**

An examination of fundamental Confucian, Taoist, and Buddhist ideas and their historical development in China. Emphasis given to views of human nature, morality, ritual, and spiritual discipline as expressed in classical literature. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. GILDAY.

**225 The Buddhist Tradition\* (Fall) 4 credits**

An examination of the classical doctrines and practices of Nikaya and Mahayana Buddhism and their historical developments in various social and cultural contexts in Asia and the West. Prerequisite: Religious Studies 111, or 117, or second-year standing, or permission of instructor. GILDAY.

**226 Religious Traditions of India (Spring) 4 credits+**

Indian religion is marked by ongoing dialogues among the South Asian traditions we call Hinduism, Jainism, Sikhism, and Islam. The interaction between these traditions shows the ways that each has defined itself independently and in response to challenges presented by the others. This course will introduce the historical and philosophical foundations for these traditions as well as familiarize students with these intersecting traditions as living religions. The course will include special attention to the role of women and the links between religion and politics. Prerequisite: Religious Studies 111, or 117, or second-year standing, or permission of instructor. DOBE.

**240 The Bible and Liberation\* (Spring) 4 credits**

An introduction to the conversations occurring in biblical studies concerning the interplay between the identity of readers and the biblical texts. Students read interpretations of the Bible by authors from a variety of social contexts and locations. Attention is paid to how these authors construct their identities and how those identities affect their interpretations. Addressed are issues related to the social and political dimensions of scholarship and interpretation. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. RIETZ.

**241 Religion in U.S. Public Life\* (Spring) 4 credits**

This course explores debates in the United States over the place of religious discourse in public and political life. Topics include the nature of public discourse, the role of the citizen as a religious and moral actor, ideas of fairness and justice, and interpretations of the First Amendment of the U.S. Constitution. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. ROBERTS, SKERRETT.

**266 Apocalyptic “Sectuality”\* 4 credits**

What is the meaning of this age? Are we standing at the dawn of a golden age in history? Or are we at the brink of global destruction and the end of history? In this class, we will take an interdisciplinary approach to examine selected apocalyptic movements and texts in an attempt to understand how meaning is constructed. We will discuss several early Jewish and Christian apocalyptic texts and communities as well as modern apocalyptic communities. Prerequisite: Religious Studies 111, or second-year standing, or permission of instructor. RIETZ.

**311 Theory and Method in the Study of Religion (Fall) 4 credits+**

This seminar focuses on the history and assumptions of the comparative method in the study of religion and culture. This genealogical narrative involves a critical examination of a variety of sources and perspectives on religion leading up to and emerging from the European Enlightenment, including the development of various methodological and critical positions in the modern study of religion during the 19th and 20th centuries. Readings from a wide range of contemporary scholarship will illustrate the state of the field today. Not open to those who have taken Religious Studies 390. Prerequisite: third-year or senior standing and declared major, or permission of the instructor. GILDAY, ROBERTS.

**326 Anthropology of Religion\***

See Anthropology 326.

**4 credits+****352 Philosophy of Religion\* (Spring)****4 credits+**

Also listed as Philosophy 352. How do we understand “religion” in the 21st century? Is the world becoming more secular? More religious? Does this distinction even work anymore? How might ideas like “saint” and “sacrifice” and “spiritual discipline” help us think and act ethically and politically in the contemporary world? This course explores the ways recent philosophers and theologians have answered such questions by turning to the resources of the Continental philosophical tradition (Kierkegaard, Nietzsche, Heidegger, Derrida, Irigaray, etc.) in order to reconceptualize religion, philosophy, and ethics after the “death of God.” Not open to those who have taken Religion 313. Prerequisite: Religious Studies 216 and 311, or two 200-level philosophy courses, or permission of instructor. ROBERTS.

**394 Advanced Topics in Religious Studies (Fall and Spring) 4 credits**

An advanced, intensive seminar devoted to selected topics in religious studies. Topics have included mysticism, South Asian saints, and religion and democracy. This seminar may be repeated for credit if content is different. Prerequisite: Religious Studies 311 or permission of instructor; additional prerequisites may vary depending on topic. STAFF.

**Russian**

Member of the Division of Humanities

Kelly Herold, Chair, Todd Armstrong, Raquel Greene, Helen Scott, Sara Stefani, Anatoly Vishevsky

The student of Russian first develops a basic competence in the language as a means of communication—reading, speaking, aural comprehension, and writing. This competence is then applied to Russian literature, Russia’s human past and present. The study of the language and its embodiment in literature and culture can, therefore, serve students whose specializations are in any academic discipline, enhancing their capabilities for research and their appreciation of aesthetic and cultural diversity.

The recommended sequence of study for all students with an interest in Russian language covers four semesters (Russian 101, 102, 221, 222). Those entering with a previous background in Russian are placed in this sequence on the basis of a comprehensive test and an interview with the departmental staff. Opportunities for further study include courses in syntactical and literary analysis of the language and seminars on a broad variety of topics chosen by students. (See Independent Study.)

The department also offers courses on modern Russian literature in translation (Russian 247, 248, 251, 353). These provide access to Russian literature and culture for students who do not have a command of the language. Russian majors are encouraged to broaden and deepen their understanding of the Russian experience by exploring other disciplines—history, philosophy, the social sciences, and the languages and literatures of other national heritages. With this background, they may seek careers in teaching and scholarship, government, library science and informational services, and international trade. In addition, study in mathematics and the natural sciences in conjunction with a Russian major can open doors to many other careers.

\*Not offered every year.

Language is, of course, a social phenomenon. For this reason, many students of Russian become involved in the lively extracurricular program: Russian House; Russian-language dinners, parties, films, visits; and lectures by Russian and American specialists. A native Russian language assistant is in residence in Russian House to make spoken Russian a daily reality. To encourage further mastery of the language, the College is affiliated with programs of study in Russia: in Moscow, St. Petersburg, Vladimir, and Krasnodar.

## The Major

**A minimum of 32 credits beyond Russian 102.** With permission, up to eight of the 32 credits may be taken in related studies outside the department. The recommended sequence includes Russian 101, 102, 221, 222, 247, or 248, 251, 331, 332, or 353, and 495 or 498. Beyond the language sequence (101–332) and the literary component of any off-campus program, four credits of work using original texts are required. (This requirement may be satisfied through “Plus-2” components of literature courses, independent reading projects, group independents, 495 or 498.) Recommended programs may include Linguistics 114 Introduction to General Linguistics, History 241-242 Russian History I and II, or a second foreign language.

To be considered for honors in Russian, graduating seniors, in addition to meeting the College’s general requirements for honors, must demonstrate superior performance in the coursework in the major (3.5 GPA or higher) and make contributions outside the classroom to the department.

<b>101 Beginning Russian I (Fall)</b>	<b>5 credits</b>
Intensive treatment of elementary Russian grammar, with special emphasis on pronunciation, basic conversational ability, and thorough coverage of contrastive English-Russian grammar. Conducted primarily in Russian. Meets five times a week. Prerequisite: none. STAFF.	
<b>102 Beginning Russian II (Spring)</b>	<b>5 credits</b>
A follow-up course to Russian 101, stressing the further study of grammatical usage and the development of reading and speaking ability. Conducted in Russian. Meets five times a week. Prerequisite: Russian 101 or permission of instructor. STAFF.	
<b>200 Conversational Russian (Fall or Spring)</b>	<b>1 credit</b>
Conversation on free and structured themes, with topics drawn from different aspects of Russian and American life. Prerequisite: Russian 102 or permission of instructor. May be repeated once for credit when content changes. STAFF.	
<b>221 Intermediate Russian I (Fall)</b>	<b>4 credits</b>
A reading and discussion course whose materials focus on contemporary culture with emphasis on the continuing study of grammatical concepts introduced in Russian 101 and 102. Prerequisite: Russian 102 or permission of instructor. STAFF.	
<b>222 Intermediate Russian II (Spring)</b>	<b>4 credits</b>
A continuation of Russian 221. Materials focus on major aspects of Russian culture, with added emphasis on the study of more complex grammatical concepts. Prerequisite: Russian 221 or permission of instructor. STAFF.	

**247 The Russian Short Story\* (Fall or Spring) 4 credits+**

Also listed as General Literary Studies 247. The development of the genre from its beginning in 18th-century Sentimentalism to the present. Authors could include Karamzin, Pushkin, Lermontov, Gogol, Tolstoy, Chekhov, Bulgakov, Babel, Olesha, Makanin, Tolstaya, and Sorokin. Conducted in English. Prerequisite: none. VISHEVSKY.

**248 The Russian Novel\* (Fall or Spring) 4 credits+**

Also listed as General Literary Studies 248. A critical development of the Russian novel from its beginnings in Pushkin to its modernist and postmodernist incarnations. Conducted in English. Prerequisite: none. ARMSTRONG, HEROLD.

**251 The Theme of the African in Russian Literature and Culture\* (Fall or Spring) 4 credits+**

A survey of the varying cultural and racial perceptions of Africa and people of African descent as reflected in 19th- and 20th-century literature. Examines tsarist and Soviet history of Russian intellectual contact with the African diaspora and the impact of this contact on the development of the “African” as a literary theme in Russian and Soviet literature. Conducted in English. Prerequisite: none. GREENE.

**331 Readings in Russian Literature of the 19th Century (Fall) 4 credits**

Advanced grammar combined with intensive reading of selected literary texts by major writers of the 19th century, including Pushkin, Lermontov, Gogol, Dostoevsky, Turgenev, Tolstoy, and Chekhov. Conducted in Russian. Prerequisite: Russian 222 or permission of the instructor. STAFF.

**332 Readings in Russian Literature of the 20th Century (Spring) 4 credits**

Further study of advanced grammar combined with intensive reading of selected literary texts by major writers of the 20th century, including modernist poets, and such prose writers as Bulgakov, Zamiatin, Olesha, Ilf and Petrov, Solzhenitsyn, Trifonov, Aksyonov, and other selected recent authors. Conducted in Russian. Prerequisite: Russian 331 or permission of the instructor. STAFF.

**353 Major Russian Writers (Fall or Spring) 4 credits+**

Also listed as General Literary Studies 353. This course examines the artistic oeuvre of a single major Russian writer within the context of his cultural and literary milieu. The following writers could be offered in alternating years: Dostoevsky, Tolstoy, Gogol, Chekhov, and Nabokov. Conducted in English. Prerequisite: none. May be repeated once for credit when content changes. STAFF.

**495 Seminar in Russian Culture and Linguistics (Fall) 4 credits**

A cultural and linguistic study of a selected Russian cultural phenomenon from the 19th or 20th century. Discussion may be centered around intellectual history, popular culture, a cultural period (e.g., The Silver Age) or analysis of an aspect of culture (theatre, rock, etc.). Conducted in Russian. Prerequisite: Russian 332 or permission of instructor. STAFF.

**498 Seminar in Russian Literature and Linguistics (Spring) 4 credits**

A literary and linguistic study of a major novel of the 19th or 20th century (e.g., Lermontov's *Hero of Our Time*, Dostoevsky's *Crime and Punishment*, Tolstoy's *Anna Karenina*, Bulgakov's *The Master and Margarita*, Ilf and Petrov's *The Twelve Chairs*, Pasternak's *Doctor Zhivago*, a single author, a genre, a literary period, or clear expression of student choice). Conducted in Russian. Prerequisite: Russian 332 or permission of instructor. STAFF.

**Russian, Central, and Eastern European Studies Concentration**

Raquel Greene, Chair

This concentration requires work in literature, history, political science, and economics, with a major emphasis on Russia or other Central/Eastern European countries, particularly the Czech Republic and Poland. Study opportunities are available in Moscow, St. Petersburg, and Krasnodar, and also at sites in the Czech Republic, Hungary, and Poland.

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**Required, 24 or 26 credits as follows:**

**Russian Literature and Culture Track**

1. Literature, 12 credits chosen from the following courses:
  - Russian 247 The Russian Short Story
  - Russian 248 The Russian Novel
  - Russian 331 Readings in Russian Literature of the 19th Century
  - Russian 332 Readings in Russian Literature of the 20th Century
  - Russian 353 Major Russian Writers
  - Russian 495 Seminar in Russian Culture and Linguistics
  - Russian 498 Seminar in Russian Literature and Linguistics
2. History, 8 credits:
  - History 241 Origins of Modern Russia
  - History 242 Revolutionary Russia

and

3. Four or six credits in an interdisciplinary seminar or independent work related to or deriving from a course already taken in the concentration

**Russian History and Culture Track**

1. Social Sciences, 12 credits chosen from the following courses (eight of these must be from one social science discipline):
  - Economics 225 Marxian Economics
  - History 241 Origins of Modern Russia
  - History 242 Revolutionary Russia
  - History 34X Advanced Studies in Russian History
  - Political Science 250 Politics of International Relations

- Political Science 251 International Political Economy
- Political Science 273 Politics of Russia
- Political Science 357 Diffusion of Democracy
- The area studies components of the Russian and Central European programs with which Grinnell College is affiliated (4 credits)

2. Eight credits from the literature list

and

3. Four or six credits in an interdisciplinary seminar or independent work related to or deriving from a course already taken in the concentration

### **Central and Eastern European Track**

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- 1. Twelve credits chosen from the following courses:
  - Economics 225 Marxian Economics
  - History 238 Germany from Unification to Reunification
  - History 239 The Collapse of the Eurocentric World Order
  - History 241 Origins of Modern Russia
  - History 242 Revolutionary Russia
  - Political Science 250 Politics of International Relations
  - Political Science 255 Pluralist Systems: Comparative Politics of European Government: East and West
  - Political Science 273 Politics of Russia
  - Political Science 357 Diffusion of Democracy

and

2. RES 291 Perspectives in Modern Central and Eastern European Literature

and

3. Four credits from the following courses:

- Russian 247 The Russian Short Story
- Russian 248 The Russian Novel
- German 227 Topics in German Literature in Translation
- Philosophy 234 19th-Century Continental Philosophy
- The area studies components of Russian and Central European programs with which Grinnell College is affiliated (4 credits)
- One 300-level (or higher) Russian or German literature course

and

4. Four or six credits in an interdisciplinary seminar or independent work related to or deriving from a course already taken in the concentration

**291 Perspectives in 20th-Century Central and Eastern European Literature\* (Spring)** **4 credits+**

Also listed as General Literary Studies 291. This course examines and analyzes a number of 20th-century works in translation from several countries of Central

and Eastern Europe (primarily, but not limited to the former-Yugoslavia, Poland, and the former-Czechoslovakia). Attention is devoted to how writers, artists, poets, and others attempt to understand and respond to major events and issues in specific countries, and in the region in general: war, genocide, revolution, totalitarianism, political repression, clashes of religion and culture, and quests for (self-)identity. Prerequisite: none. **ARMSTRONG**.

An interdisciplinary senior seminar or senior research project for students completing the concentration in Russian and Eastern European Studies. May be repeated in consecutive semesters by a student pursuing a single research project. Credits earned each semester must fulfill program requirements as specified in program description. STAFF.

## **Social Studies (see Humanities and Social Studies)**

## Sociology

### Member of the Division of Social Studies

Kent McClelland, Chair, David Cook-Martín, Elizabeth Erbaugh, Karla Erickson, Susan Ferguson, Christopher Hunter, Kesha Scott

Sociology, the scientific study of human behavior in social groups, seeks to understand how people interact, how they organize themselves in social groups, and how this organization changes. Courses in sociology focus on the basic forms of social organization and social processes, in our own and other cultures, and on the theoretical approaches sociologists use to understand those basic forms. These courses contribute to critical, intelligent understanding of how the social world operates—an essential understanding for any liberally educated person in a complex and rapidly changing world. Students of sociology will find that related work in psychology, anthropology, economics, political science, and history enhances their sociological insights. Majors are required to study statistics and are encouraged to participate in interdisciplinary courses, internships, and off-campus programs. The study of foreign languages is highly recommended, especially for those who are interested in comparative sociology.

Sociological training is useful for any career, since all careers require working with people in groups or organizations. The discipline is particularly helpful for careers in business, education, law, urban and social planning, journalism, medicine, social work, and governmental service.

## The Major

**A minimum of 32 credits.** With permission, up to eight of the required 32 credits may be taken in related studies outside the department. Required are Sociology 111, 285, and 291. In addition, eight credits are to be taken at the 300 level or above. In addition to the 32 credits, students are required to take Mathematics 336 or 209 (preferred), or Mathematics 115. The major normally consists of Sociology 111 by the second year and Sociology 285 and 291 by the end of the third year.

To be considered for honors in sociology, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate, by departmental consensus, excellent performance in classes, especially seminars, and an underlying commitment to the discipline as evidenced by strong interest above and beyond completion of the major.

**111 Introduction to Sociology (Fall or Spring) 4 credits**

Introduction to basic concepts, theory, and methods concerning human behavior and social structure. Special attention is paid to the scope and limitations of sociological analysis and the major empirical areas of investigation in sociology. Prerequisite: none. STAFF.

**220 Sociology of Global Development\* (Fall) 4 credits+**

Provides an overview of global development with a focus on the social consequences of development practices for people living in developing countries. Also examines the ways in which consumption patterns in industrialized countries affect global development. Case study approach used to consider the effects of general practices on specific locales, such as the role of powerful forces (economic, political, ideological, religious) in shaping living conditions at the local level. Prerequisite: Sociology 111 or permission of instructor. STAFF.

**230 Conflict and Conflict Management (Spring) 4 credits+**

This course examines sociological theories and perspectives on issues of conflict, violence, and conflict management in contemporary societies, with attention to the role of third parties in conflict resolution and peacemaking. Topics include person-to-person negotiation, alternative dispute resolution (ADR) techniques, restorative justice, peace processes in wars and ethnic conflicts, and principles of conflict management at the micro and macro levels. Prerequisite: Sociology 111 or permission of instructor. MCCLELLAND.

**240 Social Movements (Fall or Spring) 4 credits+**

This survey of contemporary social movements focuses on the processes of social and cultural change, collective group behavior, and the process and critiques of reform revolution and social movement change. We will examine definitions and theories of reform, revolution, and social movements and make comparative analyses of goals and ideologies, and their development, inside and beyond the boundaries of the United States. Our central paradigms will focus on race, class, ethnicity, gender, sexuality, and nationality. Prerequisite: Sociology 111 or permission of instructor. SCOTT.

**242 Deviance and Social Control\* (Fall) 4 credits+**

Analysis of the causes and control of deviant behavior, e.g., alcohol and drug abuse, suicide, assault, and sexual deviance. Topics include how definitions of deviance change, how people become deviant, how deviant groups are organized, and how transactions among deviants occur. Prerequisite: Sociology 111 or permission of instructor. HUNTER.

**248 Self and Society\* (Spring) 4 credits+**

The study of human social interaction. Focuses on how people interact in small groups, change their beliefs, interpret behavior, develop a sense of identity, and construct their social worlds. Attention to the social psychology of collective

behavior and of everyday life. Prerequisite: Sociology 111, or Psychology 113, or permission of instructor. HUNTER.

**250 Social Inequality\* (Fall) 4 credits+**

Analysis of social inequality in groups and society. Topics include why inequality occurs, its consequences for individuals and societies, how social stratification systems operate, and how social status is attained by individuals. Theories of stratification are evaluated. Prerequisite: Sociology 111 or permission of instructor. McCLELLAND.

**260 Human Sexuality in the United States\* (Spring) 4 credits+**

How do individuals develop attractions, make sexual choices, define and enact their own sexuality? How do institutions and organizations influence, shape, and constrain sexual attitudes and behaviors? This course will examine the social construction of human sexuality in the United States with particular attention to gender, sexual orientation, commercial sex, and sexual education. Prerequisite: Sociology 111 or permission of instructor. ERICKSON.

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**265 Sociology of Health and Illness\* (Fall) 4 credits+**

An examination of the social contexts of health, illness, and medical care, focusing on the debates and contrasting perspectives of medical sociology. Topics include the social, environmental, and occupational factors in health and disease; the politics surrounding breast cancer and the AIDS epidemic; the patient's perspective on illness; the development of the health professions and the health work force; ethical issues in medicine as they relate to medical technology; and alternatives to current health care organizations. Emphasis is given to how the social categories of gender, race, social class, and sexual orientation affect both illness and health care. Prerequisite: Sociology 111 or permission of instructor. FERGUSON.

**270 Gender and Society (Fall) 4 credits+**

A sociological analysis of how gender is constructed and transformed in American society. This course will explore how both men and women come to know themselves as gendered beings, how gender is produced through interactions, in the media, in the workplace, and in families. Prerequisite: Sociology 111 or permission of instructor. ERICKSON.

**275 Race and Ethnicity in America (Fall) 4 credits+**

Introduces students to sociological perspectives on race, ethnicity, and racial inequality in American society. Examines the historical development of race-based barriers to achievement, the emergence and persistence of racial inequality, the character of racial beliefs, resistance to racial oppression, and current problems in American race relations. Emphasis on understanding individual attitudes and behaviors in relation to the structure of social institutions. Prerequisite: Sociology 111 or permission of the instructor. SCOTT.

**285 Contemporary Sociological Theory (Fall) 4 credits+**

Contemporary sociological theory considered in light of some historical precursors. Emphasis on the conceptual adequacy and the logical consistency of major contemporary theoretical perspectives. Prerequisite: Sociology 111 or permission of instructor. STAFF.

**291 Methods of Empirical Investigation (Spring) 4 credits+**

Also listed as Anthropology 291. An overview of the research process in social science, focusing on problems of research design, techniques of sampling, methods of data collection, principles of measurement, problems of inference and proof, basic methods of data analysis, and ethical considerations. Prerequisite: Sociology 111; and Mathematics 115, or 209 (preferred), or 336; or permission of the instructor. STAFF.

**292 Ethnographic Research in Complex Societies (Fall) 4 credits+**

See Anthropology 292.

**300 Practicum in Applied Sociology (Spring) 4 credits**

Students work 14 hours each week at internship sites in Des Moines, Grinnell, and surrounding areas. Class discussions and assignments focus on internship experiences in sociological perspective. Applications for internships are made to the internship coordinator of the Career Development Office prior to spring or fall break for the following semester. Learning contracts must be approved by the instructor, the work site supervisor, the student's academic adviser, and the dean of the College. Prerequisite: any two 200-level or above sociology courses and third-year student or senior in good academic standing, or permission of instructor. SCOTT.

**320 The Family (Fall or Spring) 4 credits+**

A survey of the family from a sociological perspective, focusing on recent transformations of the family. Topics include historical origins of the family, traditional marriage and alternative processes of mate selection and family formation, parenting, divorce, family violence, racial-ethnic variations in family experience, and gay and lesbian families. Prerequisite: any 200-level or above sociology course or permission of instructor. FERGUSON.

**350 NGOs: Organizing To Do Good (Spring) 4 credits+**

People often join together in nonprofit and nongovernmental organizations to accomplish good for themselves or others. This seminar focuses on how such organizations are structured and how they operate. We will explore how NPOs and NGOs resemble, and differ from, other organizational forms in mission, leadership, organizational change, environmental constraints, and effects on members. Attention to practical managerial challenges. Cases may include human service organizations, community action agencies, foundations and funding organizations, fraternal organizations, nonprofit colleges, and international humanitarian NGOs. Not open to those who have taken Sociology 390. Prerequisite: at least two 200-level sociology courses and third-year or senior standing, or permission of instructor. HUNTER.

**390 Advanced Studies in Sociology (Fall or Spring) 4 credits+**

Seminar in current issues of sociological theory and research. Content of the course announced each year. May be repeated for credit with permission of instructor. Prerequisite: varies; at least one 200-level sociology course and third-year standing. STAFF.

**399 Directed Research 2 or 4 credits**

See Directed Research. STAFF.

## Spanish

Member of the Division of Humanities

Valérie Benoist, Chair, Yvette Aparicio, Esther Fernández, Dennis Perri\*, David Richter, Megan Saltzman, Carmen Valentín

Courses in Spanish examine the diverse cultural achievements of Spain and Latin America and enable students to respond with intelligence and sensitivity to a foreign culture. The department seeks to develop in students from all disciplines the critical ability to identify problems and view them from multiple perspectives: historical, literary, and linguistic. The growing importance of bilingual areas in urban America underscores the advisability of Spanish-language study for careers in health care, bilingual education, community development, and social services.

Students with training in Spanish receive a recommendation as to the appropriate course level (100, 200, 300) for continued language study. Those beginning the language take Spanish 105. The first two years of study in the department follows the sequence 105, 106, 217, and 285. All courses are conducted in Spanish.

The program for majors provides for the acquisition of essential skills for communication in the language, a sound and comprehensive introduction to Hispanic literature, and an exploration of various aspects of Spanish and Latin American culture. Students should balance their Spanish program with a broad selection of interdepartmental courses and study in all three major divisions in order to ensure breadth of learning. The department encourages participation in one of the approved off-campus programs in Argentina, Chile, Costa Rica, Mexico, or Spain.

### The Major

**A minimum of 32 credits.** Courses numbered 105, 106, and 204 do not count toward the major. Required are Spanish 343; and either Spanish 385, 386, or 395 (on a Spanish topic); and either Spanish 377, 383, or 395 (on a Spanish American topic). After completing any of the required courses mentioned above, students cannot enroll in Spanish 311, 312, 314, 315, or 316. With permission of the department, Latin American Studies 111 and/or up to 4 credits of coursework with content solely on Latin America or Spain (taken at Grinnell or at a Grinnell-approved off-campus study program) may count toward the major.

At least 20 credits must be taken within the Department of Spanish at Grinnell. Upon declaration of a Spanish major, students will consult with the department concerning their objectives in order to plan an approved program of courses.

To be considered for honors in Spanish, graduating seniors must meet the College's general requirements for honors.

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#### **105 Introduction to the Spanish Language I\* (Fall or Spring) 4 credits**

Treatment of basic language elements with special emphasis on oral communication. Short readings of a historical, cultural, and literary nature. Not regularly offered in the Spring. Prerequisite: none. STAFF.

**106 Introduction to the Spanish Language II (Fall or Spring) 4 credits**

Completion of the presentation of basic language elements with a special emphasis on oral communication. Short readings of a historical, cultural, and literary nature. Prerequisite: Spanish 105 or permission of instructor. STAFF.

**204 Communication in Spanish\* (Fall or Spring) 1 credit**

Work on improvement of speaking skills. Discussion and conversation based on various cultural materials including current periodicals and satellite television. Prerequisite: concurrent enrollment in Spanish 285 or any 300-level course except 316, or permission of instructor. Conducted in Spanish. May be repeated once for credit when content changes. S/D/F only. STAFF.

**217 Intermediate Spanish (Fall or Spring) 4 credits+**

Development of language skills through reading, oral practice, vocabulary building, grammar review, and short compositions. Materials include short literary, nonliterary, and visual texts. Prerequisite: Spanish 106 or placement by department. STAFF.

**285 Reading and Discussion of Hispanic Texts (Fall or Spring) 4 credits+**

Development of students' critical and interpretive commentary on literary and cultural texts from Spain and Spanish America. Continued emphasis on language skills. Materials include fiction, nonfiction, poetry, and film. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 217 or placement by department. STAFF.

**311 Traditions of Independent Spanish America\* (Spring) 4 credits+**

A study of 19th-century poetry and prose and 20th-century film in their treatment of the challenges faced by the newly independent republics. Focus on the relationship between historical context and changing aesthetics, particularly Romanticism and Modernism. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 285 or permission of the instructor. BENOIST.

**312 Modern Spanish Poetry and Drama\* (Fall) 4 credits+**

Study of dramatic and poetic texts from 18th- to 21st-century Spain, with emphasis on 20th-century drama. A Plus-2 component may be taken on the staging or edition of a short play at the end of the semester. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 285 or permission of the instructor. FERNANDEZ.

**314 Contemporary Spanish Narrative\* (Fall) 4 credits+**

A study of representative Spanish fiction and film since 1940. Close readings and discussion focus on works that respond to, oppose, or subvert the political and ideological pressures exerted by Franco's regime or, after the dictator's death, reevaluate the past and dissect the new historical circumstances of a society in change. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 285 or permission of the instructor. RICHTER.

**315 Creativity and Dissidence in Modern Spanish America\* (Spring) 4 credits+**

A study of selected, representative works from the 1920s through the 1960s. Emphasis on texts manifesting social conscience and artistic experimentation; treatment of the culture of protest and imaginative cultural expression.

\*Not offered every year.

Consideration of poetry, narrative, and visual arts (painting, film). Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 285 or permission of the instructor. APARICIO.

**316 Advanced Spanish Language\* (Spring) 4 credits+**

A Spanish communication course designed to strengthen Spanish oral proficiency and to improve listening and comprehension skills. Emphasis on natural language use of the target language in social encounters, and grammar concepts related to communicate strategies. A variety of authentic materials will be used. Prerequisite: Spanish 285 or permission of the instructor. VALENTÍN.

**343 The Art of Language (Fall) 4 credits+**

The study of Spanish idiomatic and literary language with a view to developing ability to express oneself with ease, orally and in writing, on a variety of subjects of current interest. Selected texts in Spanish used as a basis for student-written short essays before free range is given to choose and develop the student's own materials. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 311, or 312, or 314, or 315, or 316, or permission of instructor. VALENTÍN.

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**377 Modernization and Innovation in Contemporary Spanish America\* (Fall) 4 credits+**

A study of selected, representative works since 1960, including internationally-respected literature of the "Boom," subsequent postmodern fictions, and/or recent poetic revolutions. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 311, or 312, or 314, or 315, or permission of instructor. APARICIO.

**383 The Spanish American Colonial World\* (Fall) 4 credits+**

A study of the texts and debates surrounding initial encounters between Spaniards, indigenous and African peoples in the "New World," and the establishment of colonial culture and society. Spanish, indigenous, mestizo, and African perspectives are considered through the study of myth, narratives, poetry, autobiography, and film. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 311, or 312, or 314, or 315, or permission of instructor. BENOIST.

**385 Cervantes and His World\* (Spring) 4 credits+**

Intensive study of Cervantes' *Don Quijote*, with emphasis on the novel's reflection of Golden Age Spain, its contribution to the genre, and its metafictional dimension. A Plus-2 component may be taken on the *Novelas ejemplares* or the plays. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 311, or 312, or 314, or 315, or permission of instructor. RICHTER.

**386 Studies in Medieval and Golden Age Literature\* (Spring) 4 credits+**

Examination of texts against the background of the literary and cultural history of medieval and Golden Age Spain. Readings may include the *Poema del mio Cid*; *Lazarillo de Tormes*; plays by Lope de Vega, Tirso de Molina, Calderón de la Barca, and Alarcón; and selected poems. Conducted in Spanish. Prerequisite: Spanish 311, or 312, or 314, or 315, or permission of instructor. FERNANDEZ.

**395 Advanced Special Topics in Literature and Civilization\* (Fall or Spring)****4 credits**

Intensive study of related authors, a particular group or generation, a movement, a genre, and/or a particular work. Topic is announced each time the course is offered. Conducted in Spanish. Spanish 204 may be taken concurrently. Prerequisite: Spanish 311, or 312, or 314, or 315, or permission of instructor. STAFF.

**Technology Studies Concentration**

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Sam Rebelsky, Chair, Douglas Caulkins, Janet Davis, Diane Robertson, Susan Strauber, John Whittaker, Sujeew Wickramasekara

This concentration examines technology and the role it plays in society. Courses help to provide a bridge between pure and applied science, and between science and nonscience, by integrating material from all three divisions of the curriculum. Students are required to obtain a grounding in laboratory science and statistics, take at least one foundation course, at least two specific technology courses, participate in an internship in a technological setting, and complete an independent study project or technology seminar, normally during the senior year.

**Required, 24 credits as follows:**

1. Eight credits from courses in the departments of biology, chemistry, computer science, physics, or psychology, creditable toward those majors. Mathematics/Social Studies 115 Introduction to Statistics, or Mathematics 209 Applied Statistics, may be used for 4 of the 8 credits. Environmental Studies 111 (Geology) or Environmental Studies 125 (Introduction to Earth Systems) may be used for 4 of the 8 credits.
2. Technology 154 Evolution of Technology (4 credits).
3. At least two specific technology courses (8 credits)  
Specific technology courses are often selected from the following. Upon approval by the concentration chair, other specific technology courses, such as special topics courses, can be used to meet this requirement.
  - Art 148 Introduction to Studio: Digital Art
  - Biology 220 Biotechnology and Its Social Impact
  - Computer Science 105 The Digital Age
  - Music 219 Electronic Music
  - Physics 180 Bridges, Towers, and Skyscrapers
  - Physics 220 Electronics
  - Sociology 265 Sociology of Health and Illness
4. A technology-related seminar or independent study project (4 credits).

The concentration also includes two noncredit-bearing requirements.

5. An internship in technology. The internship may be completed during the summer or academic year, either locally or at an approved off-campus program with internship and seminar components. The internship must be approved in advance by the concentration chair.

\*Not offered every year.

6. A public presentation. Students are expected to give a public presentation in a class or colloquium, drawing upon the internship experience and the seminar or independent study project.

### 154 Evolution of Technology (Spring)

**4 credits**

A chronological survey of technology from stone tools to the electronic and chemical technologies of the present through case studies, readings, and integrative lectures by several faculty. Prerequisite: none. STAFF.

## Theatre and Dance

Member of the Division of Humanities

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Lesley Delmenico, Chair, Elizabeth Bonjean, Christopher Connelly\*, Erin Howell-Gritsch, Ellen Mease, Justin Thomas, Shawn Womack

In the practice and study of theatre and dance, the Department of Theatre and Dance at Grinnell is committed to high standards of artistic expression and creative scholarship within the context of a liberal arts education. Performance is a cultural necessity that can transform the lives of those involved; as an academic practice it is interdisciplinary in its very nature. Here, theory and practice of performance are integrated, and students engage in acting and directing, dance and choreography, design, and the history and literature of drama and performance as a broad foundation prior to advance study in any of these areas. Combining historical knowledge and critical thinking with current practices in performance, directing, design, choreography, and studies in drama, students interact creatively with diverse ideas, cultures, and historical moments often far different from their own. The art forms of theatre and dance, inherently collaborative, provide the model for learning to work well and creatively with others. The department also provides students with opportunities for interdisciplinary performance-making. These studies are broadly beneficial to all students in the liberal arts. Grinnell students participating in these studies develop analytic, organizational, technical, and artistic skills, an understanding of socio-political contexts, and an active commitment to social engagement that inevitably contribute to interdisciplinary study and innovative approaches to learning within the liberal arts.

This theatre experience expands our ways of knowing others and ourselves. It can also enable critical examination of the past, since our own social and political concerns inform the making and understanding of the dramatic event, even as we attempt to appreciate and understand staged performances in their social, historical, and artistic contexts. In every community, drama and dance have been among the most important ways of articulating our experience of ourselves and others. Developed aesthetic sensibilities, cooperative skills, historical imaginations, and critical habits — the fruits of a liberal education — are important in personal and professional lives.

The knowledge of the various aesthetic and intellectual means through which a theatrical concept is realized is developed through coursework in dramatic literature, critical theory, and theatre history; in the methodology of stagecraft and the plastic arts of scene, lighting, and costume design; and in the performing arts, including directing, choreography, acting, and dance.

All courses at the introductory level and all departmental productions (for which limited academic credit is offered through Performance Laboratory) are open to students without previous experience in the theatre. Courses in dramatic literature, theory, and theatre history are of particular interest to students majoring in English, foreign languages and literatures, philosophy, history, or religious studies, or to any student who wants to become an informed audience member.

The theatre curriculum serves the College's mission to provide a broad liberal arts training to all its students and prepares students with a compelling interest in theatre to undertake appropriate postgraduate training in the field. To this end, all theatre majors take selected core courses in six principle areas: acting, technical theatre/design, dance, directing, dramaturgy (including textual, critical, theoretical, and historical study), and performance studies. Each area focuses on some aspect of making the dramatic work of art; many skills are at work in each area. The coordination of all of these aspects and skills is manifest in the production.

Early in their course of study, theatre majors are encouraged to take the full array of introductory courses in the College core areas, as well as important foundation courses that cultivate habits of close reading and develop skills of written and oral expression (for example, Humanities 101, 102, and 140; English 120 and 121). Additionally, majors are expected to study in the English, foreign language, philosophy, and religious studies departments; in the sciences and social sciences; and in the other arts. Many majors elect one of the five main areas (acting, directing, design, dance choreography, and dramaturgy) for emphasis and take the designated sequence of courses in that emphasis area, in addition to core courses and the required curriculum. Students with serious interests in any of these areas will want to consult with the department well in advance to insure that prerequisites have been met as the training sequence unfolds and to anticipate complementary coursework in other disciplines, independent study, or off-campus study. Both majors and nonmajors may also undertake individual or group independent work in playwriting, translating, and independent projects in acting, directing, design, choreography, and dramaturgy. An off-campus semester of intensive theatre training with the National Theatre Institute of Waterford, Conn., (the Eugene O'Neill Memorial Theatre Center) is available to a maximum of four selected students each year.

Students interested in dance, whether majoring in theatre and dance or not, may take technique, dance history, and theory courses at the appropriate level, and choreography and other special topics courses as offered. They are also encouraged to participate in Dance Troupe (105), a performing company with membership by audition.

## The Major

**A minimum of 32 credits.** Required are two of three Theatre 111, 113, 117; and Theatre 115; and 201, and 202, or 203, or 211, or 260; and 325 or 335; and two 300-level electives, in addition to either 325 or 335.

To be considered for honors in theatre, graduating seniors, in addition to meeting the College's general requirements for honors, must demonstrate an underlying commitment to the discipline above and beyond simple completion of the core classes for the major. This commitment is evidenced by excellent performance in class, sustained activity in department productions, and an Independent Project (such as a MAP 499). No more than 12 credits in 100-level courses may be applied to the

\*Not offered every year.

32-credit major. A maximum of 4 credits in Independent Projects (Theatre 397, Theatre 499) may be applied to the 32-credit major. A maximum of 16 credits in Theatre 104 and 204 may count toward graduation.

**100 Performance Laboratory (Fall or Spring) 1 or 2 credits**

Guided participation, for major theatre and dance productions, in performance, assistant directing, stage managing, dramaturgy, or design and crew work on sets, lights, props, costumes, or make-up. Qualified students examine problems of production in the theatre while solving these problems in rehearsal and performance. Prerequisite: permission of instructor. S/D/F only. May be repeated for credit. (A maximum of 8 practica credits may count toward graduation.) STAFF.

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**104 Dance Technique I (Fall or Spring) 2 credits**

Beginning dance technique; the principles, terminology, basic history; developing a physical and kinesthetic understanding of concert dance techniques. Possible areas of emphasis include but are not limited to ballet or modern dance. Consult the Schedule of Courses for the specific area of emphasis each semester. S/D/F only. Does not count toward the theatre major. For fees, see Financial Regulations. May be repeated for credit. Prerequisite: none. HURLEY.

**105 Dance Troupe (Fall and Spring) 1 or 2 credits**

Faculty-directed participation for dancing (1 credit) or dancing and choreographing (2 credits) in Dance Troupe, the theatre department's dance company. Qualified students participate in an ensemble environment for four sessions per week. Students learn dance technique, choreography, performance technique, and dance company management. S/D/F only. A yearlong commitment is required. May be repeated for credit each semester. Prerequisite: permission of instructor and audition. (A maximum of 8 practica credits may count toward graduation.) STAFF.

**111 Introduction to Performance Studies\* (Spring) 4 credits**

An examination of dramatic performance in its broadest cultural contexts. This foundational course is designed to encourage critical thinking about the inclusive field of performance and how it is created, including orality, festivals, living history museums, trials, political conventions, and sporting events. Students explore both texts and performance events to analyze "What makes an event performance?" and "How is performance made and understood?" Because knowledge is embodied as well as textualized, students will both write and perform components of their final class projects. Prerequisite: none. DELMENICO.

**113 Movement for the Performer (Fall) 4 credits**

Practical exploration of movement and bodily-based trainings such as pilates, yoga, body-mind centering, and Bartenieff Fundamentals and/or Laban Movement Analysis as preparation for performance. Studio-based exercises will investigate somatic and movement improvisation practices as an alternative means to theorize the relationship of mind to body and to develop greater physical awareness. Not open to those who have had Theatre 106. Prerequisite: none. WOMACK.

**115 Introduction to Technical Theatre (Fall and Spring) 4 credits**

An introduction to the technical aspects of theatre production. Brief exposure to theatre architecture and stage forms, stage painting, properties, lighting, sound, drafting, make-up, and costuming. Emphasis placed on the basic theories and methods of scenic construction. No previous drafting experience necessary. Requirements include one three-hour laboratory each week, plus crew work for one of the major productions during the semester. Prerequisite: none. GORDON.

**117 Fundamentals of Acting (Fall and Spring) 4 credits**

Practical exploration of the process of acting and characterization. Designed to provide an initial exposure to the effects and influence of the voice, body, observation, and imagination in combined and independent usage. One or more scenes may be prepared for public viewing. Prerequisite: none. STAFF.

**201 Dramatic Literature I (Fall) 4 credits+**

Study of major works in Western dramatic literature to 1850, with reference to cultural contexts, interpretive problems, and dramatic theory beginning with Aristotle's *Poetics*. Readings include Greek tragedy and Aristophanic comedy, medieval cycle plays, Marlowe, Shakespeare, Webster's revenge tragedy, French Neoclassicism, a Restoration comedy, and Göethe's *Faust*. Prerequisite: English 120, or Humanities 101, or permission of instructor. STAFF.

**202 Dramatic Literature II (Spring) 4 credits+**

Study of major works in Western dramatic literature from 1850 to the present, with reference to cultural contexts, interpretive problems, and dramatic theory. From realism to the Theatre of the Absurd, dramatists include Ibsen, Chekhov, Pirandello, Artaud, Brecht, Genet, Beckett, Pinter, and others. Prerequisite: English 120, or Humanities 101, or permission of instructor. MEASE.

**203 American Theatre\* (Fall) 4 credits+**

A study of American theatre from the late 19th century to the present. Attention to major cultural and philosophical influences and to phenomena such as the little theatre movement, off and off-off Broadway, and the performance groups. Dramatists include O'Neill, Williams, Miller, Wilson, Shepard. Prerequisite: English 120, or Humanities 101, or permission of instructor. CONNELLY.

**204 Dance Technique II (Fall or Spring) 2 credits**

Intermediate and advanced dance technique; physical and kinesthetic study involving more complex movement patterns and sequences, phrasing, musicality, and stylistic considerations. Possible areas of emphasis include but are not limited to ballet or modern dance. Consult the Schedule of Courses for the specific area of emphasis each semester. S/D/F only. For fees see Financial Regulations. A studio instruction fee applies. May be repeated for credit. Does not count toward the theatre major. Prerequisite: Theatre 104, or equivalent experience, or permission of instructor. HURLEY.

**211 Performance Studies: Traditions and Innovations (Fall) 4 credits**

This course examines non-naturalistic forms of theatre and performance-making. It explores the work of foundational avant-garde director/theorists and performance practices that have developed since the 1960s, including performance art and community-based theatre. It also focuses on non-Western performances, including textual and non-textual practices, and the ways in which Western and non-Western theatre have intersected interculturally.

\*Not offered every year.

during the last century. Prerequisite: Theatre 111, or 113, or 117, or permission of instructor. DELMENICO.

**217 Intermediate Acting\* (Fall) 4 credits**

An exploration of acting in various periods and styles with an emphasis on psychological realism. The course emphasizes scene work, monologue preparation, textual and character analysis with exercise work in voice and movement. Prerequisite: Theatre 117 or permission of instructor. CONNELLY.

**240 Theatrical Design I (Spring) 4 credits+**

An exploration of the design fundamentals common to each facet of theatrical design: scenery, lighting, costumes, and make-up. Such elements as design procedure from conception to realization, research techniques and materials, period style, and design history are emphasized. Not open to those who have had Theatre 113. Prerequisite: Theatre 115 or permission of instructor. GORDON.

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**245 Lighting for the Stage\* (Fall) 4 credits+**

Introduces the student to the art of lighting design, process, and the practice of lighting the stage for the theatre, opera, dance, industrials, television, and video. Students develop the knowledge, vocabulary, and skills necessary to become a master electrician, assistant lighting designer, and beginning lighting designer. Prerequisite: Theatre 115 or permission of instructor. GORDON.

**260 Contemporary Dance\* (Fall and Spring) 4 credits**

A study of Western concert dance from the 19th century to the present. Studio-based exercises in modern dance technique and composition are combined with readings, video viewings, and lecture/discussion to provide a physical, conceptual, and historical understanding of dance as a performing art form. Not open to those who have had Theatre 160. Prerequisite: none. WOMACK.

**303-304 Studies in Drama I and II (Fall and Spring) 4 credits+**

A seminar-style course in dramaturgy, the history and theory of theatre and performance. Studies in Drama I covers topics prior to 1850; Studies in Drama II covers topics after 1850. (Topics are announced in the Schedule of Courses.) The course will emphasize the development of methodologies and research strategies useful for the theatre practitioner and the researcher. Topics have included: Theories of Comedy (Aristophanes to Stoppard); English Medieval and Renaissance Drama; Revenge Tragedy and Hamlet; Ibsen, Strindberg, and Chekhov; Beckett and the Absurd; British Drama since World War II; and Postcolonial Theatre. Topics could include: Early English Theatre Production Practice; the Development of Theatre Spaces and Scenic Investiture; Asian Theatre—Literature and Practice; and the Development of Theatre Architecture in the 20th Century. Prerequisite: a 200-level literature/criticism/theatre/history course or permission of the instructor. Each course may be repeated once for credit when content changes. STAFF.

**310 Studies in Dance\* (Spring) 4 credits**

A combined seminar and practice course for advanced study of a selected topic in dance or contemporary performance that will be detailed each time the course is offered (topics are announced in the Schedule of Courses). The course will employ a variety of materials and methods for advanced research in dance as a cultural, social, historical, and artistic phenomenon. Topics could include: Radical Moves: A Social History of 20th-Century American Modern Dance; Choreographing Community; Dancing Gender and Sexuality; and Dance and

Political Protest On and Off the Stage. Not open to those who have had Theatre 260. Prerequisite: Theatre 202, or 203, or 211, or 260, or permission of instructor. May be repeated once for credit. WOMACK.

**320 Theatrical Design II\* (Spring) 4 credits+**

An in-depth exploration of designing for the stage, with the specific area of design (scenery, lighting, costumes) announced each time the course is offered. Emphasis is on script or dance “text” analysis and the evolution of design from first reading to first performance. Not open to those who have had Theatre 340. Prerequisite: Theatre 201 and 204, and 202 or 203, or permission of instructor. GORDON.

**325 Choreography: Theory and Composition\* (Spring) 4 credits**

Dance composition and performance technique. Not open to those who have had Theatre 225. Prerequisite: Theatre 113, or 260, or permission of instructor. WOMACK.

**330 Period Acting Styles\* (Spring) 4 credits**

This course focuses on Classical, Elizabethan, French Neoclassic, and contemporary docu-drama theatre. Students will retrace the development of the Western European theatrical tradition in aesthetic and practical terms. Emphasis is placed upon developing the performance skills, especially in regards to movement, voice, diction, and characterization, essential to the acting style of the period, while examining its value in contemporary performance. Course emphasis is on historical research, scene study, and performance. Prerequisite: Theatre 201 and 217, or permission of instructor. CONNELLY.

**335 Directing (Fall) 4 credits+**

A theoretical and practical investigation of the responsibilities and techniques of the director in the theatre. Classroom exercises are supplemented by selected readings in the history and theory of directing. The final project is the directing of a one-act play. Not open to those who have had Theatre 280. Prerequisite: Theatre 115, 117, and 201; and 202, or 203, or 211; or permission of instructor. CONNELLY.

## Tutorials

In the tutorial, every entering student explores in some depth a topic of interest to the student and the instructor, in a small group and an informal setting. The objectives of tutorial work are to illuminate methods of inquiry rather than to master disciplinary material, to give special attention to writing and to critical analysis of texts, to provide the student with the opportunity to practice oral presentations, and to provide initial preparation in techniques of research.

By promoting a close working relationship between the instructor and the student and by combining the roles of instructor and academic adviser, the College provides every student with an academic adviser who knows the student's needs and abilities. A tutorial (4 credits) is required of all students who enter Grinnell as first-year students and of all transfer students below third-year student standing whose previous work does not qualify them for an exemption. A student must complete the tutorial with a grade of C or higher to meet the tutorial graduation requirement and to be eligible to enroll in a “Plus-2” or independent project.

\*Not offered every year.

Tutorials are offered only in the first semester.

The following tutorials are offered in 2007–08:

- Our Town: The World at our Doorstep, Andelson—Anthropology
- The Aesthetics of Home, Anger—Art
- African American Autobiography, Barlow—English
- Environmental Conflict, Brouhle—Economics
- The Grace of Sleep or the Ineptitude of All-Nighters, Cabeza—Biology
- Humanities I: The Ancient Greek World, M. Cummins—Classics
- More than Ourselves: An Exploration of Self-Improvement, Drwal—Psychology
- Environmental Messages and Messengers: *Silent Spring* and *An Inconvenient Truth*, Eckhart—Biology
- Climate Change Policy: A Social Science Perspective, B. Ferguson—Economics
- *Don Quixote* and the Modern World, Fernández—Spanish
- Speaking Truth and Telling Lies, B. French—Anthropology
- African American Literary Ties to Russian Intellectual Thought in the 19th and 20th Century, Greene—Russian
- Religion and Politics Across the World, Grey—Political Science
- Literature, Intertextuality, and Philip Pullman’s *His Dark Materials*, Herold—Russian
- Word and Image, K. Ho—English
- The Teller and the Tale, Ireland—French
- Storied Landscapes: American Indian Identities through Place and Displacement, Ketter—Education
- Letters: Narratives of the Self, Lobban-Viravong—English
- Climate Change Policy: A Scientific Perspective, Marzluff—Chemistry
- The Social Politics of Having Children, Kent McClelland—Sociology
- Weird Music, E. McIntyre—Music
- Narrative and Identity, Meehan—Philosophy
- Science for the General Public, E. Moore—Mathematics and Statistics
- Freedom and Authority on the Internet: Conflict, Community, and Control, Rebelsky—Computer Science
- Coexistence, Rommereim—Music
- The Aesthetics of Home, Running—Art
- Dis Lit: Illness, Disability, and Contemporary American Life Writing, Savarese—English
- Black Men in Higher Education, K. Scott—Sociology
- Will the Lights Go Out Forever? Is There a Solution to Our Energy Needs? Sharpe—Chemistry
- Equality and Inequality, Silva—History
- Health Care Reform, C. Sullivan—Biology
- Music in the Balance of Power, R. Vetter—Music
- The Growth and Convergence of Scientific Knowledge, Wickramasekara—Physics
- Development as Freedom, E. Willis—Political Science
- Icelandic Sagas, R. Wolf—Mathematics and Statistics
- Artist as Citizen, Artist as Activist, Womack—Theatre

## Western European Studies Concentration

Sigmund Barber, Chair

In this concentration, understanding a culture so rich and complex as that of Western Europe requires interdisciplinary study of its histories, languages, and cultures. Carefully selected courses in the Humanities and Social Studies can provide access to methods and fields basic to such knowledge. In order to assure that courses in the concentration are indeed carefully selected, students consult with their academic adviser and the program chair (the concentration adviser should not be from the major department). Together, student, adviser, and chair work out a course of study for the final four semesters that also must have the approval of the committee.

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Because of the great variety of courses taught about Western European society and culture, students may opt for any of three possibilities for this concentration: the Classical Heritage, Medieval and Renaissance Studies, or Modern Europe.

Independent work in the third and senior years provides an opportunity to complete and unify the concentration; it may not be used to fulfill any departmental major requirements. Participation in approved off-campus study programs is strongly encouraged; up to 8 credits in such a program may, with approval of the committee, count toward satisfying the requirements as listed below. All relevant coursework completed in Grinnell-in-London can be used to satisfy concentration requirements.

### Track I: The Classical Heritage

Required: Language competence in Greek or Latin, as certified by the Department of Classics (equivalent to completion of Greek 222 or Latin 222), and 22 credits distributed as follows:

1. Literary Study, 8 credits, such as:
  - Classics 242 Classical Mythology
  - Humanities 101 The Ancient Greek World
  - Humanities 102 Roman and Early Christian Culture
  - Or any 300-level course in Greek or Latin literature
2. Special Field, 8 credits, such as:
  - Classics/Philosophy 231 History of Ancient Philosophy
  - Classics/Art 248 Greek Archaeology and Art
  - Classics/Art 250 Roman Archaeology and Art
  - Classics/History 255 History of Ancient Greece
  - Classics/History 256 History of Rome
  - Philosophy 263 Political Theory I
3. 6 credits in 297 and 397, independent work.

### Track II: Medieval and Renaissance Studies, c. 1100–1700

Required: Language competence, as certified by the relevant department (equivalent, for example, to Latin 222, French 222, German 222, or Spanish 285), and 22 credits distributed as follows:

1. Social Studies, 8 credits, such as:
  - History 233 Medieval Europe
  - History 234 Europe in Renaissance and Reformation
  - History 235 British History I
  - Humanities/Social Studies 140 Medieval and Renaissance Culture
  - Philosophy 264 Political Theory II
2. Humanities, 8 credits that deal with the art, literature, philosophy, or music of Western Europe in the period from c. 1100 to 1700
3. 6 credits in 297 and 397, independent work.

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### Track III: Modern Europe, c. 1750–Present

Required: Language competence, as certified by the relevant department (equivalent, for example, to French 222, German 222, or Spanish 285), and 22 credits distributed as follows:

1. Social Studies, 8 credits, such as:
  - Anthropology 247 Contemporary Europe
  - Economics 303 History of Economic Thought I: The Main Tradition
  - Economics/History 304 History of Economic Thought II: Recovering the Keynesian Revolution
  - History 101 Basic Issues in European History, 1650–Present
  - History 236 British History II
  - History 238 Germany from Unification to Reunification
  - History 239 The Collapse of the Eurocentric World Order
  - Political Science 255 Pluralist Systems: Comparative Politics of European Government
2. Humanities, 8 credits that deal with the art, literature, philosophy, or music of Western Europe since 1750
3. 6 credits in 297 and 397, independent work.

### 297 Guided Reading Project (Fall or Spring)

**2 credits**

To be taken in the semester preceding that in which the student will take the 397 course, this project is designed as preparation for Senior Independent Study. The student may request to work with any instructor currently teaching in the program who will also be teaching on the Grinnell campus during the following semester. STAFF.

### 397 Senior Independent Study (Fall or Spring)

**4 credits**

The subject must be arranged with a faculty adviser (preferably the instructor of the Guided Reading Project 297, above) before the end of the semester preceding the independent study. The study should result in either a substantial essay (about 25–30 pages) or a creative accomplishment such as a photographic essay, film, dramatic production, paintings, etc. of similar magnitude. The latter will require some written explication as well. Occasional colloquia consisting of all students and faculty engaged in these projects will be held to exchange ideas and methods. STAFF.

## Choosing an Off-Campus Study Program

Off-Campus Study programs exist in most regions of the world. You will find information on a very wide range of programs at <[www.grinnell.edu/offices/ocs](http://www.grinnell.edu/offices/ocs)>.

### Featured Programs

The programs featured on the Off-Campus Study website have been carefully selected and are believed to represent some of the best opportunities available today in off-campus study. From among the broad academic and geographical diversity of options, most students should be able to identify a program well suited to their academic goals.

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### Types of Programs

Most programs offer you the opportunity to enhance your major, concentration, or other area of academic interest while broadening your liberal arts education by learning about another area of the world. In some programs, the courses offered are linked by a common theme, such as women's studies, environmental studies, or global development studies. In others, coursework may be closely connected to a particular major such as biology or economics. Programs may be organized and operated by American educational institutions, universities abroad, or a combination of both in a cooperative arrangement. Formats vary from traditional classroom-based instruction to fieldwork, independent study, and internship.

### Program Competitiveness

It is important to note that off-campus study programs vary considerably in competitiveness. While some programs are highly competitive, accepting only students with higher GPAs and specific course preparation, others may have more relaxed criteria for admission. Specific prerequisites and GPA requirements are normally set out in the program information materials. Campus Program Advisers are also able to advise you regarding your eligibility for a particular program. Normally, Grinnell students apply to only one off-campus study program. Denial of admission to Grinnell students is rare because of the screening that takes place during the on-campus approval process.

### Yearlong Programs

Approval to attend yearlong programs is limited and is granted by the Off-Campus Study Board on a competitive basis to students demonstrating exceptional academic achievement, strong written rationale, and support for their plans from their major department. The Off-Campus Study Board gives preference to well-focused proposals designed to deepen the student's knowledge of a single culture within the context of a single integrated program. Successful applications for yearlong approval normally involve a request to study in one program in one country.

## Assessing the Importance of Off-Campus Study

You may already have a good idea about where and what you would like to study off campus. However, if you are just beginning to explore the possibilities, you should reflect seriously on what you are planning to do. Personally, at this point in your life and education, you are likely to be at the optimal point in your capacity to learn by living and studying in a new and challenging environment. Since an optimal point occurs by definition only once in a lifetime, and off-campus study may hold valuable personal, academic, and professional benefits, the careful choice of an appropriate program may well be one of the most important decisions you make during your college career.

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### Core Rationale for Off-Campus Study

Grinnell requires that you select a program compatible with your academic goals, which you will clearly set out in a four-year course-plan and written rationale for off-campus study. It is up to you to define your goals in consultation with your academic adviser. Since your choice of program must be linked to your academic objectives, you should begin by thinking about why you want to study off campus, i.e., your core rationale. Most students choose to link their off-campus study to their major or concentration while others may wish to use the experience to enhance their understanding of other subjects studied on campus.

### Additional Objectives for Off-Campus Study

In addition to the core rationale described above, your choice of program may be partly determined by additional academic objectives you want to achieve. For example, you may wish to broaden your liberal arts education by studying a language or taking courses not offered at Grinnell. You may also have broader educational goals connected to the experience of living in another culture. The possibility of community service, fieldwork, or an internship might be an important consideration. Additional objectives such as these are important to consider along with your core rationale and will help in selecting a program that is right for you.

### Campus Program Advisers

A Program Adviser is assigned to every off-campus study program featured by Grinnell College. These advisers are very familiar with the programs they represent and can provide you with detailed program information as well as answering any questions you may have.

### Peer Advisers

Every semester, large numbers of Grinnell students return from studying off campus. Talking with other students who have already studied on a program of interest to you is essential to making an intelligent decision about off-campus study.

## International Students

Grinnell College is fortunate to have a diverse student body from many parts of the world. International students may be able to provide you with valuable insights and information to help you in making a decision about where to study off campus. The International Students Office will provide names of students from specified countries or regions.

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## Grinnell-in-London

Donna Vinter, English, Resident Director; Lisa Bowers Isaacson, History, Assistant Director; Charles Cunningham, Physics; Julianna Fuzesi, Economics; Chris Hunter, Sociology; George W. Jones, Political Science; Sheila Fox, Theatre; Paula Nuttall, Art History

Grinnell-in-London takes place each fall semester. The program's course offerings include topics that change from year to year, reflecting the interests and expertise of Grinnell faculty members who teach on the program. Other courses—in art, English, history, political science, and theatre —are offered regularly by our London-based faculty members.

Students may choose between traditional classes or classes plus an internship. Internship placements take into account the interests of each student. Several parliamentary internships are available.

The program has two phases. In the nine-week Phase I, students earn 8 to 12 credits in three or more courses. In the six-week Phase II, students take one 4 credit course or participate in an internship and required internship seminar. Students live in flats, homes, or residence halls in London, attend classes at the Grinnell-in-London site, and take multiple field trips in London, the English countryside, other parts of Great Britain, and other European destinations.

### Phase I Courses

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#### **Art 295: The Early Renaissance in Florence and Flanders 2 credits**

The Florentine renaissance is widely regarded as an artistic watershed, when artists formulated new ways of representing reality based on direct observation, scientific principles, and classical precedent, with profound implications for the course of European art. Equally important were contemporary developments in Flanders, where artists were likewise engaged in new ways of seeing, and where the oil technique offered unprecedented potential for depicting light and texture. This course will provide the opportunity to study the art of both Flanders and Florence, introducing students to the major artists (Masaccio, Donatello, Botticelli, Leonardo da Vinci, Jan van Eyck, and Rogier van der Weyden), and to broader art historical themes such as patronage, iconography, and technique. Students will acquire an understanding of what constitutes the Florentine renaissance, but by also studying Flanders, will be encouraged to question the standard view of Florence's central position in the art of the 15th century. Approximately 50 percent of classes will take place in London's galleries, taking advantage of the unparalleled collections of the National Gallery and the Victoria and Albert Museum. An additional three-day visit to Bruges and Ghent, located in Belgium, will offer the opportunity to study Flemish painting in situ. Prerequisite: none. NUTTALL.

**English 121: Introduction to Shakespeare** **4 credits**

This course will study representative plays from each period of Shakespeare's career, including histories, tragedies, and comedies. Through close analysis of these plays, both on the page and on the stage, the course will aim to develop an appreciation of the richness of Shakespeare's theatrical art in its powerful marriage of words and images. Attendance at productions of Shakespeare both in Stratford and in London, including at the newly built replica of the Globe in Southwark, will be central to our study. Prerequisite: none. VINTER.

**History 231: History of London** **2 credits**

This course explores the history of London from its Roman origins to the present day and examines how royalty, trade, religion, and transport have shaped the city's pattern of growth over 2,000 years. Coursework consists of weekly lectures, guided walks, and discussions of readings from contemporary sources. Students are given an opportunity to investigate an aspect of London history of particular interest to them. Prerequisite: none. BOWERS ISAACSON.

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**Physics 109: Physics in the Arts** **4 credits**

This course introduces students to physical principles with interesting applications to musical acoustics and the visual arts. Topics include simple vibrating systems, sound and hearing, musical instruments, Fourier analysis, light and color, optics, and art. Field trips will include visits to concert halls (e.g. Glyndebourne Opera House, Birmingham Symphony Hall) to study the relationship between architecture and acoustical design, as well as visits to museum exhibits related to the interplay between physics and the arts.

Prerequisite: Mathematics 124 or 131 recommended. CUNNINGHAM.

**Political Science 295: Principles of Ethno-National Conflicts and Their Management** **2 credits**

This course aims to familiarize students with the devices used for the regulation of national and ethnic conflicts. It seeks to provide students with an understanding of the tools available to states and policymakers to manage conflict. The course will include a close examination of cases of divided societies such as India, South Africa, Lebanon, and Yugoslavia. Once students have a grasp on the concept of ethnicity, the course will divide conflict management into four main themes: 1) territorial devices; 2) repressive and accommodation incorporation; 3) violence; and 4) solutions within democracies. Instruction and discussion will occur in the classroom as well as out in London at various museums, communities, and sites. Prerequisite: none. FUSEZI.

**Sociology 295: Doing Good: NGOs as Organizations, as Workplaces, and as Actors** **4 credits**

Non governmental organizations are increasingly significant organizational actors. NGOs frequently tackle tasks that for-profit organizations and governments can't or won't perform; NGOs attract workers who want more than just a paycheck and volunteers who want to serve others or enact their faith; and NGOs are organized in distinctive ways. We will examine such issues as why NGOs exist in the first place, how NGOs organize to do their work (especially social services, international development, disaster relief, and humanitarian aid), how volunteers change through their involvement in that work, and what kinds of practical and moral dilemmas NGOs encounter in, for instance, humanitarian interventions in militarily unstable contexts. We will visit the local

offices of a number of British NGOs, will have staff from NGOs visit class, and may volunteer in local agencies. Prerequisite: none. Sociology 111 recommended. HUNTER.

**Social Studies 297: The British Parliament** **2 credits**

Class discussions and assignments focus on understanding and interpreting internship experiences with an academic perspective. Prerequisite: acceptance as a Parliamentary intern. JONES.

**Theatre 275: British Theatre in Performance** **2 credits**

This course explores the inner workings of the elements that comprise the professional theatre in Britain through a careful examination of contemporary and classic plays in actual performance. Prerequisite: none. FOX.

**Phase II Courses (6 weeks)**

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**English 250: Modern Literature in Place:** **4 credits**

**Modern Irish Literature**

This course will study modern Irish literature written between about 1890 and the present, including fiction, poetry, and drama by such authors as W.B. Yeats, J.M. Synge, James Joyce, Sean O'Casey, Elizabeth Bowen, Samuel Beckett, and Seamus Heaney. It will introduce the student to the turbulent history of modern Ireland, while considering how these writers foster, invent, reinvent, and critique ideas of Irish national, cultural, and religious identity. It will also look at how the authors engage with themes that speak to the wider modern human experience. We will take advantage of opportunities to see Irish plays and hear Irish music in London, and there will be a field trip to the Republic of Ireland. Prerequisite: English 107, or 115, or 118, or 120. VINTER.

**Physics 180: Bridges, Towers, and Skyscrapers** **4 credits**

This course introduces students to a variety of large, man-made structures, with a particular emphasis on British and continental examples (e.g. Tower Bridge, Iron Bridge, Eiffel Tower, and Gherkin), through a consideration of their structural, social, and aesthetic aspects. We will focus on the relationship between the form and function of each structure. Physics concepts that are necessary for quantitative analysis will be presented. Field trips will include many sites within London and historic structures in Wales and Scotland. Prerequisite: Mathematics 124 or 131 recommended. CUNNINGHAM.

**Social Studies 295: Understanding Work in the U.K.** **2 credits**

Class discussions and assignments focus on understanding and interpreting students' internship experiences and those of their co-workers within the U.K. work environment. Topics include the meaning of work and changing definitions of work, the emergence of the culture of overwork and pressures that interfere with a viable work-life balance, the growth of the service economy and consequent increased importance of "emotional labor" (work requiring one's emotional skills), the social costs of low pay, and the impact of European Union legislation on the world of work in the United Kingdom. Prerequisite: acceptance into regular internship. HUNTER, VINTER.

**Social Studies 300: Internship****4 credits**

Students work 32 hours a week for six weeks at internship sites in London. Applications for internships are made as part of the application for the Grinnell-in-London semester program prior to coming to London. Learning contracts must be approved by the instructor, the internship coordinator, and the work-site supervisor. Prerequisite: none. STAFF.

**Grinnell-in-Washington, D.C.**

Victoria Brown, History, Program Director

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The Grinnell-in-Washington, D.C., program is offered in the first semester of each academic year. Part of the curriculum changes from year to year, reflecting the interests and expertise of the Grinnell faculty member leading the program that fall. Other courses—policymaking, internships, and the internship seminar—are offered every year. The classes are taught throughout the semester, more intensely before and after the internship.

Students are placed in internships that match their individual interests and experience. The internship is 10 weeks in length, Monday–Thursday, approximately 32 hours each week. During the internship, classes are held only on Fridays.

Students are housed in apartments in D.C., attend class just off Dupont Circle, and take multiple field trips in Washington, D.C.

Prerequisite: second-year status and good academic standing.

**Political Science 295: Contextual Policymaking****4 credits**

This course will introduce the political and organizational nature of policymaking using an applied interdisciplinary approach, taking advantage of the resources available in Washington, D.C. Various approaches to public policymaking will be discussed and analyzed using current policy issues of interest to the students on the program. The course will provide students with analytic tools to use in their internship and to use as a foundation for understanding the politics of policymaking. Prerequisite: none. FERRARA.

**Social Studies 295A: Immigration Policy in Post 9-11 America** **4 credits**

This course is an exploration of current immigration policy and policy debates related to labor economics, homeland security, and asylum/refugee status.

Students will combine reading and writing assignments with regular interaction with government officials and nongovernmental activists who are engaged with preserving or changing current immigration policies. Prerequisite: none. History 228 recommended. BROWN.

**Social Studies 295B: Organizational Life and Decision-Making in D.C.****4 credits**

This course includes readings and discussions on how organizations operate and how decisions are made in Washington, D.C., as well as reflections on students' experiences as interns in Washington-based organizations. Students will analyze readings, share questions and insights from internship journals, develop

portfolios of internship projects, and write a reflective paper (at the end of the semester) on their internship host organizations using informal ethnographic case study techniques. Prerequisite: none. BROWN.

### Social Studies 300: Internship

**4 credits**

Each student will intern four days a week (approximately 32 hours per week) for 10 weeks. Grinnell College has contracted with a local nonprofit that specializes in internship placement. The organization discusses the student's interests and based on that information secures an internship. These placements can be chosen from governmental agencies, nonprofit organizations, or private, for-profit corporations. Prerequisite: none. BROWN.

## The ACM

Grinnell cooperates with 13 other independent liberal arts institutions in the Associated Colleges of the Midwest (ACM). The other members of the ACM are Coe and Cornell in Iowa; Carleton, Macalester, and St. Olaf in Minnesota; University of Chicago, Knox, Lake Forest, and Monmouth in Illinois; Beloit, Lawrence, and Ripon in Wisconsin; and Colorado College. The ACM provides off-campus study programs for students of member institutions and promotes opportunities for faculty research and development.

### Featured Programs

#### Africa

##### **Botswana: Culture and Society in Africa (ACM) (Spring)**

Offered by the Associated Colleges of the Midwest, Botswana: Culture and Society in Africa is an interdisciplinary program in the humanities and social sciences providing the opportunity to study one of the most dynamic economies of Africa. In Gabarone, the capital, students study at the University of Botswana, choosing from a variety of Africa studies courses offered in English. Included are required courses in Setswana, the national language, and a seminar taught by the program director. An independent study project enables students to explore a topic of interest, such as HIV/AIDS, population displacement, and conflicts between local and national identities. Guest speakers from government, business, and international organizations contribute their expertise to classroom study. Field trips enable students to observe the problems and successes of economic development, contrasts between urban and rural life, and ecological zones from the wetlands to the Kalahari Desert. Housing is provided with host families or in graduate student dormitories at the university. Eligibility: Coursework in African studies and global development studies are strongly recommended. GREY, Program Adviser.

##### **Ghana: Minnesota Studies in International Development (MSID)**

The Minnesota Studies in International Development (MSID) program in Ghana focuses on problems of development and social change through grassroots internships in poor communities. The program is divided into three phases: seven weeks of classroom work in Accra, the capital of Ghana; six weeks in a field-study placement with an agency or development project in Accra or in a rural

community; and a weeklong final seminar. Course topics include theories and topics of development, national and regional history, economics, and culture. Field-study placement categories include public health, education, environmental protection, social services, women in development, agriculture, and small business, involving a minimum commitment of 30 hours a week. Students study intensive Twi, the predominant ethnic language of Ghana, during the initial seven weeks of the program. Courses are taught in English. Housing is in homestays with local families. Eligibility: Global Development Studies and Africa-related courses are highly recommended. BRIGHT, Program Adviser.

### **Madagascar: Conservation and Ecology—School for International Training**

The SIT program in Madagascar concentrates on the conflict between human needs and nature conservation. A course on Malagasy life and culture covers political and economic issues, human and physical geography, and rural development. The Ecology and Conservation Seminar studies the impact of economic development and tourism on the natural environment, featuring a large number of field trips. All students conduct a major independent study project. Courses are taught in French and English. Housing is provided in homestays and hostels. Eligibility: Three semesters of college-level French and at least one course in environmental studies or biology. BRIGHT, Program Adviser.

### **Senegal: Council on International Educational Exchange (CIEE)**

The CIEE program in Senegal offers courses and internship opportunities through two partner institutions in the capital, Dakar: the Baobab Center, a cultural resource and training center; and Cheikh Anta Diop University, one of the premier French-speaking universities in West Africa. Courses at the Baobab Center are offered in English and may include cultural studies, development, literature, art, history, and political science. Students also study both French, the national language, and Wolof, the predominant ethnic language of the country. University courses, in which program participants are in class together with Senegalese students, are offered in a wide range of subject areas, including history and geography, French-language literature, philosophy, and sociology. Community service or internship options are available, involving both a required seminar and 50–60 hours of practical experience. Housing is provided in homestays with Senegalese families. Field trips and cultural activities include travel to Saint Louis, the former capital of Senegal, Goree Island, and the rural areas of Nioro in the center of the country. Eligibility: Minimum 2.75 GPA. Completion of at least one 300-level course in French. IRELAND, Program Adviser.

### **Senegal: Minnesota Studies in International Development (MSID)**

The Minnesota Studies in International Development (MSID) program in Senegal focuses on problems of development and social change through grassroots internships in poor communities. The program is divided into three phases: seven weeks of classroom work in Dakar, the capital of Senegal; six weeks in a field-study placement with an agency or development project in Dakar or in a rural community; and a weeklong final seminar. Course topics include theories and topics of development, national and regional history, economics, and culture. Field-study placement categories include public health, education, environmental protection, social services, women in development, agriculture, and small business, involving a minimum commitment of 30 hours a week. Students study intensive Wolof, the predominant ethnic language of Senegal,

during the initial seven weeks of the program. Courses are taught in French, the national language of Senegal, which is essential to communicating with local people. Housing is in homestays with local families. Eligibility: French through the 200 level (4 semesters) or the equivalent. Global Development Studies and Africa-related courses highly recommended. BRIGHT, Program Adviser.

### **South Africa: Lexia in Cape Town**

Based at the University of the Western Cape, the Lexia in Cape Town program introduces students to the language, history, politics, socioeconomics, and culture of South Africa through coursework, language training, excursions, research projects, and the experience of living in a homestay. Social and academic encounters within the local community, as well as extensive field trips, enable students to develop an understanding of the ongoing social and political transformation of the nation in the broader Southern African context. The program strongly supports interaction and dialogue between program participants, South African faculty, and local university students. The courses, which are taught in English, include the South African Civilization Seminar, Research Methods Seminar, and a Field Research Project. Independent research may include an internship and is possible on a wide range of topics in such areas as education and child development, the aftermath of Apartheid and contemporary politics, race relations, linguistic and ethnic diversity, religion, literature, and history. The study of either Xhosa or Afrikaans language is required, and students are encouraged to take both. Eligibility: History of Sub-Saharan Africa, African Politics, and Global Development Studies highly recommended. DRAKE, Program Adviser.

### **South Africa: Organization for Tropical Studies (OTS)**

The OTS in South Africa program, offered in partnership with Duke University, provides students the opportunity to gain in-depth knowledge of field ecology and biology while developing skills in field research. The program is based in Kruger National Park, home to hundreds of animal species and more than 2,000 species of plants. Courses are taught by three resident faculty, who hold doctorates in biology, and visiting professors from South African institutions, and include: Ecosystems and Diversity, Field Research in Savanna Ecology, Conservation and Management of Protected Areas in South Africa, and History and Culture of South Africa. All courses include independent research projects. The program includes cultural exchanges with the Zulu, Ndebele, Venda, and Sotho/Tsonga communities. Field trips are provided to Cape Town for both cultural study and botany, the Nylsvley Reserve north of Johannesburg for ornithology, and the Wits Rural Facility for study of rural life, community health, and water access. Group housing is provided in a variety of locations during the program. Eligibility: At least two semesters of biology, ecology, or related sciences. Course(s) in African studies highly recommended. K. JACOBSON, Program Adviser.

### **Tanzania: Human Evolution and Ecology (ACM) (Fall)**

The ACM program in Tanzania is an interdisciplinary program in the natural and social sciences offering undergraduates the rare opportunity to conduct field work in some of the world's greatest paleoanthropological and ecological sites. Students divide their time between the University of Dar es Salaam and the Northern Region of Tanzania. Courses include Swahili, human evolution, ecology of the Serengeti Plain, and research topics. Six weeks are spent in tent

camps while pursuing individual field research in the Serengeti/Ngorongoro area. During the first two months, students live in dormitories at the University of Dar es Salaam; housing in the field is in tents, and during the final four weeks in homestays near the university. Eligibility: Background in both anthropology and biology. BENTLEY-CONDIT, Program Adviser.

## Asia—East

### **China: Beijing (Council on International Educational Exchange) (CIEE)**

The CIEE program in Beijing features study at Peking University for intermediate and advanced level students. Mandarin is taught in small classes and includes intensive training in speaking, reading, and writing. Other courses are available in modern literature, classical poetry, and Chinese culture and customs. Field trips are organized to historical and cultural sites in and around Beijing. Classes in calligraphy, painting, taijiquan, quigong, seal cutting and traditional Chinese musical instruments are also offered. Housing is provided in shared rooms in the foreign students' dormitory. Prerequisite: two years of college-level Chinese and one Chinese area studies course. CHINESE DEPARTMENT FACULTY, Program Advisers.

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### **China: Beijing Program (Associated Colleges in China: Hamilton College) (ACC)**

ACC is a very rigorous and intensive language program for intermediate and advanced students of Chinese. Students in their second year of Chinese must begin the program in the summer term, but those beginning their third or fourth year may enroll in the summer, fall or spring. In addition to language instruction, courses are offered in modern Chinese society, literature, history, philosophy, and cinema. Students participate in a language practicum in which they are required to use their Chinese outside the classroom with local citizens through information-gathering and interviews. Extracurricular activities, such as calligraphy, cooking, and tai chi are also provided. Participants pledge that only Chinese will be spoken on the program. The program features weekly local excursions within Beijing and several longer field trips. Housing is in dormitories, and activities with host families take place on weekends. Eligibility: intermediate level Mandarin Chinese. CHINESE DEPARTMENT FACULTY, Program Advisers.

### **China: Beijing Program (Institute for the International Education of Students) (IES)**

The IES Beijing program shares facilities with the Hydro-Ecology Institute, Shui-Dian Guanli Xueyuan. Students combine language study at the intermediate level with academic work in Chinese area studies taught in English. Internships are available in business and education. Volunteer opportunities are available in such areas as secondary English teaching. Field trips are an integral part of the program. Housing is provided in dormitories with Chinese students or in homestays with a Chinese family. Eligibility: One year of college-level Mandarin Chinese or the equivalent. CHINESE DEPARTMENT FACULTY, Program Advisers.

## China: Nanjing (Council on International Educational Exchange) (CIEE)

The CIEE program at Nanjing University aims to provide a solid foundation for intermediate-level students in the four skills of reading, writing, listening, and speaking. Students are required to use the language creatively outside the classroom and then to discuss their efforts with teachers and fellow students. All students take two language classes in Mandarin Chinese, taught by Nanjing University faculty, and an area studies course taught in English by the resident director. Housing is provided in triple rooms in foreign student dormitories, but Chinese roommates may be available. Eligibility: one year of college-level Mandarin Chinese and at least one pre-1949 Chinese history or civilization course. CHINESE DEPARTMENT FACULTY, Program Advisers.

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## China: Pitzer College in Beijing

Exclusively for neuroscience students, the Pitzer in China program offers an opportunity to study Chinese language, culture, and society while participating in research projects with Chinese neuroscientists. Offered in cooperation with Beijing University, classes are taught by university faculty, scholars, and specialists. The “Core Course” is a cross-disciplinary study of Chinese society and culture, including history, religion, philosophy, art, and economy, providing the context for learning from a wide variety of cultural immersion experiences, including a number of field trips. The intensive study of Chinese language—offered at the beginning, intermediate, and advanced levels—is required. In addition, neuroscience students will take a course in traditional Chinese medicine. An independent study project is conducted in the neuroscience laboratories of the University of Beijing under the supervision of Chinese researchers. Students are housed in dormitories with Chinese roommates and also in homestays. Eligibility: Highly selective program requiring advanced study in neuroscience and recommendation of the program adviser. Prior study of Chinese strongly recommended. LINDGREN, Program Adviser.

## Japan: Nagoya—Nanzan University-Institute for the International Education of Students (IES) (Fall recommended)

The IES Nagoya program at Nanzan University offers an excellent Japanese Studies program, specializing in the highly intensive courses in Japanese language and area studies. A private university, Nanzan is one of Japan’s leading educational institutions; coursework is rigorous, and admission is competitive. All students are required to take 8 credits of language study alongside Japanese area studies coursework taught in English in the humanities, social sciences, and studio arts. Students with very advanced language skills may take seminars taught entirely in Japanese. The university itself offers excellent facilities, including a large and well-equipped physical education center. IES organizes a special orientation program, field trips, and cultural events, including destinations such as Hiroshima and Kyoto, Zen Buddhist monasteries, and Toyota Motors. Volunteer opportunities are available. Housing is provided in homestays or student residence halls. Eligibility: At least one year of Japanese language study. Minimum GPA of 3.0 (both comprehensive and in Japanese).

SCHIMMEL, Program Adviser.

## **Japan: Japanese Studies—Waseda University (Associated Colleges of the Midwest) (ACM) (Full Year)**

The Japanese Studies program is located on the campus of Waseda University, one of Japan's premier universities, and emphasizes the study of Japanese language and culture. Morning classes are devoted exclusively to language acquisition. Classes in English are offered in social studies, arts, and humanities, covering various topics in Japanese and Asian Studies. Independent study and internships are available. Students live with host families in Tokyo and in a month-long rural homestay. A range of field trips is offered. Eligibility: At least one semester of Japanese. Minimum 3.0 GPA. SCHIMMEL, Program Adviser.

## **Japan: Tokyo (Council on International Educational Exchange) (CIEE) (Spring)**

The CIEE program in Japan is based at Sophia University in Tokyo, a private Jesuit institution offering an extensive curriculum in English and Japanese. Students may take Japanese language at many levels and courses taught in English, including Japanese and Asian Studies, economics and international business, international relations, political science, art history, literature, religion, philosophy, anthropology, and sociology. Field trips encompass visits to companies, factories, government agencies, museums, shrines, theatre, and local festivals. Social activities are organized with Japanese students. Housing is provided in homestays. Eligibility: Coursework in Asian Studies highly recommended. SCHIMMEL, Program Adviser.

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## **Taiwan: Taipei (Council on International Educational Exchange) (CIEE)**

The CIEE program in Taipei at National Chengchi University provides intermediate-level students with Mandarin Chinese language training along with a perspective on Taiwan's contemporary culture and history. In addition to language courses, electives are offered in English in such areas as economics, sociology, history, and art. Field trips in and around Taipei are provided. Housing is provided in dormitories. Eligibility: One year of college-level Mandarin Chinese and one Chinese area studies course. CHINESE DEPARTMENT FACULTY, Program Advisers.

## **Asia—South**

### **India: India Studies (Associated Colleges of the Midwest) (ACM) (Fall)**

The ACM India Studies program is located in Pune, a city of over a million people in Maharashtra State. Students are introduced to the civilization of India through area-studies courses in English on such topics as the colonial legacy, religion, caste, village life, urbanization, and politics. Intensive instruction is provided in Marathi, the major local language. Students also enroll at the Tilak Maharashtra Vidyapeeth, a local university offering courses in English in literature, history, philosophy, economics, political science, art, and music. All students complete a major independent study project. Many extracurricular activities and field trips are available. Housing is provided in homestays. Eligibility: Relevant coursework such as Major Asian Religions strongly recommended. T. DOBE, Program Adviser.

### **India: South India Term Abroad (SITA)**

The SITA program operates in the temple city of Madurai in the Indian state of Tamil Nadu, one of India's most important centers of religious pilgrimage.

Classes are taught by local Indian faculty. Coursework includes required courses in Tamil language and culture, socio-political issues, and a month-long independent study project. Optional courses include the Myth and Art of Hinduism and Modern Indian Literature. Cultural activities emphasize music, dance, and drama, as well as numerous field trips. Intensive, in-depth contact with South India's peoples is a hallmark of the program. All students are housed with host families. Eligibility: GPA above 3.0. Coursework in Asian Studies and Global Development Studies highly recommended. GILDAY, Program Adviser.

### **Sri Lanka: Intercollegiate Sri Lanka Education (ISLE) (Fall)**

The ISLE program is located in the city of Kandy, the center of traditional Sri Lankan culture, is affiliated with the University of Peradeniya, which organizes courses tailored to participants. Required courses include intensive Sinhala, the local language, a Sri Lankan Studies Seminar, and the Independent Study, an in-depth field project. Optional courses include Buddhist Thought, Ritual and Folk Culture, Modern Lankan Literature, Art, and Theatre, as well as other offerings in women's studies, political science, history, anthropology, and development studies. Classroom study is supplemented by field trips and two tours of the island. Housing is provided in homestays. Eligibility: GPA above 3.0. Coursework in Asian Studies and Global Development Studies highly recommended. GILDAY, Program Adviser.

## **Australia**

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### **Adelaide: University of Adelaide (Institute for the International Education of Students) (IES)**

Primarily recommended for science division students, the University of Adelaide is one of Australia's oldest and finest universities. Adelaide has been developed as a leading science university, offering a particularly strong environmental science program. With 15,000 students, including approximately 1,500 international students from 70 countries, the university offers a comprehensive range of courses while being small enough for personal interaction with faculty. Internships are available in a variety of organizations. The Australian academic year begins in late February and ends in late November. Grinnell students normally attend for a single semester and are integrated into university life. IES offers several field trips during the semester, including a week in the outback. Accommodation is in dormitories. Eligibility: major or substantial coursework in the sciences. Nonscience students will be considered but must submit a plan for an academic project supported by their academic adviser. BRIGHT, SHARPE, Program Advisers.

### **North Queensland: Tropical Rainforest Management (School for Field Studies) (SFS)**

The SFS program in Australia focuses on the restoration and management of degraded forest, pasturelands, and watersheds. Students are registered in four

courses: Rainforest Ecology; Principles of Forest Management; Environmental Policy and Socioeconomic Values; and Directed Research. Days are spent in a combination of lectures, field exercises, and research in the surrounding natural rainforest. Every student completes a directed research project. Interviews are conducted with farmers, resource managers, and aboriginal clan members to gain a variety of perspectives on the issues being studied. Housing is provided on a fully equipped research compound. Eligibility: At least one course in environmental studies or biology required. ECKHART, Program Adviser.

## Europe and Russia

### Austria: Vienna—(Institute for the International Education of Students) (IES)

IES Vienna is primarily recommended for music performance majors who have taken at least two semesters of college-level German. Students may audition for master classes and individual instruction at the Konservatorium der Stadt Wien—which offers concentrations in keyboard, strings, woodwind, percussion, and voice—as well as for the conservatory orchestra, choral, and recital groups. For students not accepted at the conservatory, individual instruction is available at the IES Performance Workshop. IES also offers classes in intensive German, anthropology, art history, literature, economics, political science, psychology, and international relations. Most courses are taught in English. Internships arranged by request. Major weeklong field trips are provided. Housing is in shared student accommodation. Eligibility: Minimum of two semesters of German. Advanced performance classes. BARBER, MCINTYRE, Program Advisers.

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### Belgium: Program in European Culture and Society and Institute of Philosophy, Katholieke Universiteit, Leuven

Primarily for philosophy students or those who wish to work on advanced projects in the social sciences, this program is intended for qualified philosophy students and those who may wish to study European integration. Courses are taught in English and participants are fully integrated with Belgian and international students. The study of Dutch language is required. Noncredit internships are available in both Leuven and Brussels. Field trips are provided to locations throughout Belgium and to institutions of the European Community in Brussels. Housing is arranged in private student accommodation. Eligibility: Major or substantial course work in philosophy. Social science students must submit a plan for a specific project supported by their academic adviser. BRIGHT, Program Adviser.

### Denmark: Denmark International Study (DIS)

Denmark International Study (DIS) at the University of Copenhagen offers a variety of study abroad programs in English primarily for American students. Founded in 1959, DIS is a challenging educational environment, known for its rigorous and demanding courses. The curriculum is subdivided into a number of distinct programs, each with a specific academic focus: European Culture and History, European Politics and Society, International Business and Economics, Marine and Environmental Biology, Medical Practice and Policy,

Migration and Multiculturalism, Molecular Biology and Biotechnology, and Psychology and Child Development. In addition to studying within an individual program, students may also choose from other courses, such as anthropology, archaeology, art history, economics, education, environmental studies, film studies, gender studies, history, international relations, and studio art. The study of Danish language is required. Field trips are offered by the different programs to locations in Europe, and optional study tours are organized during the breaks, including trips to Russia, Italy, and Scotland. Housing is provided with host families, in student residence halls, or with Danish roommates in apartments. Eligibility: Cumulative GPA of 3.0. European Studies highly recommended. BRIGHT, Program Adviser.

### **England: Bristol—University of Bristol (Spring)**

The University of Bristol has an international reputation for academic research and is particularly recommended for science division students or those who wish to work on advanced projects in the social sciences or humanities. Many of the departments are rated among the top five U.K. universities, and Bristol itself is reputed to be the most selective institution of higher education in the country. Teaching consists of lectures and small group tutorials with a heavy emphasis on independent study. The City of Bristol is famous for its long history of maritime trade and accomplishments in engineering; its economic strength today is founded on financial services, aerospace industries, high technology, and media. Housing is provided in dormitories or apartments. Eligibility: Minimum GPA of 3.4. Detailed plan of study. Recommendation of academic adviser. BRIGHT, Program Adviser.

### **England and Italy: London and Florence—Arts in Context (ACM) (Spring)**

This ACM program divides the semester between London and Florence, spending eight weeks in each city and focusing on how a variety of artistic media—architecture, painting, sculpture, literature, and theatre—both reflect and influence cultural and political values. In Florence, students visit galleries, museums, churches, and public buildings. Field trips are taken to both Rome and Siena. Intensive Italian language study is available for students starting the program in Florence. Housing is in homestays. In London, in addition to the focus on art and architecture, the program features a course in theatre involving attendance at several productions. Group housing is provided. Eligibility: Coursework in art history, theatre, history, and literature recommended. CHASSON (Fall), BRIGHT (Spring), Program Advisers.

### **England: London School of Economics and Political Science (LSE) (Full Year)**

The LSE has an outstanding international reputation in economics and social sciences as well as history, law, and philosophy. Located in the heart of London at the nexus of the government, commercial, financial, and legal districts, over half of its students are international, from more than 30 countries. “The General Course” is a fully integrated, one-year program for study-abroad students. Students may take any four yearlong courses from a total of more than 420 offerings. Teaching consists of lectures, seminars, and small group tutorials with a heavy emphasis on independent study. Housing is in dormitories or apartments. Eligibility: Minimum GPA of 3.3. Recommendation of department and approval for a full year off campus. MUNYON, Program Adviser.

## England: University of Manchester (Spring)

Internationally recognized for teaching and research, the University of Manchester is particularly recommended for science division students or those who wish to work on advanced projects in the social sciences or humanities. The science, social studies, and humanities divisions are consistently rated among those of the top five U.K. universities. Manchester houses the most powerful university computing center in the country and one of the top academic libraries. Teaching consists of lectures and small group tutorials with a heavy emphasis on independent study. The City of Manchester, famous as the birthplace of the industrial revolution, is now an international center for business, education, and media. Housing is provided dormitories or apartments. Eligibility: Minimum GPA of 3.4. Detailed plan of study. Recommendation of academic adviser. BRIGHT, Program Adviser.

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## France: Aix-en-Provence—American University Center of Provence (AUCP)

Located in Aix-en-Provence, the AUCP program is both academically rigorous and highly experiential. Students are rapidly integrated into the local French community while undertaking the intensive study of French language and culture. In addition to coursework taught by French university professors in modern French civilization, literature, political science, art history, and studio art, students take a core course, called the Practicum, involving experiential activities and community service. Students also attend one course with French students at the University of Provence. Cultural activities include regional field trips. Housing is in homestays with French families carefully selected for their desire to make the student a part of the family. Eligibility: Minimum GPA of 3.0. Completion of at least one 300-level course in French. FRENCH DEPARTMENT FACULTY, Program Advisers.

## France: Nantes (Institute for the International Education of Students ) (IES)

The IES program in Nantes has two important goals: to improve students' written and oral proficiency in French through language and area studies and to provide an introduction to the European Union. In addition to French language courses, students select from IES offerings in such areas as Art History, Economics, History, Literature, Political Science, Psychology, Sociology, and Theatre. Students are encouraged to take at least one course with French students at the University of Nantes, where they have access to libraries, computer labs, restaurants, and sports facilities. The program also features numerous internships and volunteer opportunities together with field trips, Model European Union, and International Drama Festival. Housing is provided in homestays. Eligibility: Completion of at least one 300-level course in French. FRENCH DEPARTMENT FACULTY, Program Advisers.

## France: Paris—Hamilton College Junior Year in France (Full Year)

Hamilton College in Paris is a rigorous yearlong program for students of exceptional ability. The program combines courses specifically designed and taught in French for American college students with a wide selection of courses from French institutions of higher education throughout Paris. Particular emphasis is placed on French language, literature, performing arts, political science, history, and economics. Majors in political science, history, or economics may qualify to enroll in the prestigious Institut d'Etudes Politiques. Special opportunities

include a theatre course involving regular attendance at theatrical productions, teaching internships in Parisian secondary schools, and an independent study option. Field trips are organized throughout the year. Students are housed in homestays. Eligibility: Minimum 3.0 GPA. Completion of at least one 300-level course in French. Approval for a full year off campus. FRENCH DEPARTMENT FACULTY, Program Advisers.

### **France: Sarah Lawrence College in Paris**

Primarily recommended for students of fine arts with advanced fluency in French, Sarah Lawrence College in Paris provides the opportunity to devote up to half of the program to the visual and performing arts, including theatre, dance, visual arts, and music at selected studios and conservatories. This academically intensive program also features the opportunity to study at French institutions of higher learning in the city as well as to participate in a variety of specially designed seminars, including “Maghrebi Literature” and “France and Africa.” The wide range of courses available, offered by both Sarah Lawrence and the University of Paris, includes French language and literature, history, art history, philosophy, anthropology, political science, and sociology. Academic programs are individually designed, and weekly or bi-weekly personal meetings with professors are structured into every course. A large number of field trips, excursions, and cultural activities allow students to explore Paris in depth and to travel to other areas of France, including Provence. Housing is provided in homestays or international student residences. Eligibility: Minimum 3.0 GPA. Completion of at least one 300-level course in French. Recommendation of the French department. FRENCH DEPARTMENT FACULTY, Program Advisers.

### **Germany: Berlin—(Institute for the International Education of Students) (IES) (Spring recommended)**

IES Berlin, a program designed for advanced-level students, is taught entirely in German. The semester begins with a three-week orientation session and intensive instruction in German. Classes at the Berlin Center are specifically designed for the students on the program; there is also the option of enrolling directly in classes at the Humboldt University. Berlin Center courses are available in art history, business, cinema, economics, history, literature, and politics. The university offers a very wide range of classes in the humanities, social sciences, and natural sciences. A wide range of internships is available. Several field trips are provided. Accommodation is provided in homes and apartments with Germans. Eligibility: Minimum of fifth-semester German for spring, fourth-semester for fall. At least 4 credits in European, preferably German, culture and history. BARBER, Program Adviser.

### **Germany: Freiburg—European Union Program—(Institute for the International Education of Students) (IES)**

The IES European Union (E.U.) Program is recommended for students who are interested in the intensive study of European political and economic integration. Based in Freiburg, the program benefits from its location in the center of Europe, affording ease of access to major E.U. organizations and national capitals. Program courses are taught in English by German faculty. German language study is required at the intermediate or advanced level. An “E.U. Studies Integrative Seminar” provides an overview of the major issues in Europe today and includes extensive field trips to key European organizations, such as the

Parliament in Strasbourg, the Court of Justice in Luxembourg, the Central Bank in Frankfurt, and the European Commission in Brussels. Students also visit the World Bank in Paris, the United Nations and World Trade Organization in Geneva, the OECD in Paris, and NATO in Brussels. Additional field trips are offered to the new E.U. member states, such as Hungary, the Czech Republic, Slovakia, Lithuania, and Latvia. Housing is provided together with German students in coed residence halls. Eligibility: Minimum of two semesters of German or the equivalent; coursework in modern European history, politics, and economics recommended. BARBER, Program Adviser.

### **Germany: Freiburg—(Institute for the International Education of Students) (IES) (Spring recommended)**

IES Freiburg, a program designed for advanced-level students, is taught entirely in German. The program begins with a three-week orientation session and intensive instruction in German. Classes at the Freiburg Center, specifically designed for program students, are offered in German language and literature, art history, modern German history, political science, economics, and theatre. Students also may enroll directly in classes at the Albert-Ludwigs University, where courses are available in nearly all subject areas. A wide range of internships is available. Several field trips are provided. Accommodation options include single rooms in German residence halls, suite arrangements with German students or shared rooms with an IES roommate. Eligibility: Minimum of fifth-semester German for spring, fourth-semester for fall. At least 4 credits of coursework in European, preferably German, culture and history. BARBER, Program Adviser.

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### **Germany: Munich—(Wayne State University) (Spring recommended)**

The Munich program is affiliated with the Ludwig-Maximilians University. Program participants have access to courses in the arts and sciences, including language and literature studies, history and history of art, cultural studies, psychology, education, philosophy of science, and social sciences. In addition, the program provides courses specially designed for American students, including German language and literature, theatre, film, intellectual history, and European history. All students are required to take an intensive course in German during the orientation session. Internships are available. Housing is in dormitory accommodation. Eligibility: Fifth-semester German. At least 4 credits of coursework in European, preferably German, culture and history. BARBER, Program Adviser.

### **Greece: College Year in Athens**

College Year in Athens, which also admits students for a single semester, offers courses taught in English and covering periods from the ancient world to the present. Students choose from two academic tracks: Ancient Greek Civilization, offering both Ancient Greek and Advanced Latin as well as ancient literature, art, architecture, history, philosophy, and religion; and Mediterranean Studies, offering Byzantine history, art, and architecture; Greek language, literature, history, politics, and society. Ancient Greek Art and Archaeology as well as Modern Greek are open to all students. Independent research projects are available. Extensive study trips are offered within Greece. Housing is provided in shared student apartments. Eligibility: Coursework in art, history, humanities, or classics. HUGHES, Program Adviser.

## **Hungary: Budapest Semester in Mathematics**

The Budapest program provides students of mathematics with a unique opportunity to study under the tutelage of eminent Hungarian scholar-teachers from Eotvos University and the Mathematical Institute of the Hungarian Academy of Sciences. All courses are taught in English and comprise a wide selection in mathematics along with other options, including European History, Film, and Drama. Students take three or four math courses and two intercultural courses, including intensive Hungarian. Housing is provided in homestays or shared apartments. Eligibility: One semester of either advanced calculus (or first theory course in analysis) or abstract algebra. E. MOORE, Program Adviser.

## **Italy: Florence—Florence Program: Associated Colleges of the Midwest (ACM)**

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The ACM Florence Program focuses on the Italian Renaissance, studying first-hand many influential masterpieces of Western civilization. Rigorous coursework involves visits to museums and monuments, as well as lectures by local scholars and art conservation specialists. The program begins with a study of contemporary Italy and four weeks of intensive Italian language, reinforced through living with an Italian family for the semester. Students select three courses, taught in English, from six options, such as Central Italian Art of the 15th and 16th Centuries, Devotional Art in Renaissance Florence, and Architectural History of Florence. A studio art class is also offered, Drawing and the Human Figure. The program features field trips to Rome, Venice, Pisa, and Siena. Eligibility: Background in art and art history, European history, modern languages, or the humanities. CHASSON (Fall), BRIGHT (Spring), Program Advisers.

## **Italy: Milan Program—Institute for the International Education of Students (IES)**

The IES Milan Program is especially recommended for music performance students interested in Italian studies. Instruction in vocal and instrumental performance, composition, and orchestra is available at a number of outstanding institutions, including the Civica Scuola di Musica, the Scuola Musicale G. Marziani, the Conservatorio G. Verdi. All beginning and low-intermediate students of Italian take a required nine-credit course in Italian language and culture. Students may also select from area studies courses, taught in English, including history, literature, art history, cinema, and political science. Internships are available. Field trips are offered throughout the semester. Housing is provided in shared apartments with Italian roommates. Prerequisite: Advanced performance classes. Course background in European history and humanities recommended. MCINTYRE, Program Adviser.

## **Italy: Intercollegiate Center for Classical Studies in Rome (ICCS)**

The ICCS program in Rome focuses on the study of ancient history, archeology, Greek and Latin literature, and ancient art. Students normally take four courses, including a required double-course titled “The Ancient City,” covering Roman archaeology and topography, aspects of social and urban history, and Roman civilization. Students may take Intermediate or Advanced Latin, Intermediate or Advanced Greek, Renaissance and Baroque Art History, or Elementary Italian. Site visits, museum tours, lectures, and field trips outside of Rome are included. Housing is provided at the ICCS center. Eligibility: Minimum GPA of 3.0. Major in classics or art history with strong classical interests. Roman History through coursework or independent reading. M. CUMMINS, Program Adviser.

## Italy: Rome Program: Institute for the International Education of Students (IES)

The IES Rome Program is designed primarily for students of social sciences, humanities, or fine arts. English-taught courses are offered for students with little or no background in Italian, and coursework taught entirely in Italian, including the possibility of study at an Italian university, is offered for high-intermediate and advanced-level students. All students must take at least one course in Italian language. Courses taught in English include options in anthropology, art history, cinema, classics, economics, history, literature, philosophy, political science, psychology, religion, and sociology. Students with advanced Italian may enroll in regular university courses, and fine arts students with at least two semesters of the language are eligible for study at the Rome University of the Fine Arts. Internships and volunteer opportunities are available. Field trips include Pompeii, Sicily, Tuscany, and Ravenna. Homestays are limited, and housing is primarily in shared apartments. Prerequisite: Course background in European history, humanities, art history, religious studies, and/or classics strongly recommended. BRIGHT, Program Adviser.

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## Poland: Lexia in Krakow

The Lexia in Krakow program operates in cooperation with the Jagiellonian University in Krakow, founded in 1364. The city and the university are both known for their contributions to intellectual and political independence and have played key roles in the Polish reform movement. The program offers specialized courses in Polish Studies, taught in English. Instruction in Polish is available at the beginning, intermediate, and advanced levels. The “Civilization Seminar,” which introduces students to Polish history, politics, economics, geography, and culture, is taught by local university faculty and specialists from government and industry. A required Field Research Project involves the study of a particular aspect of Polish culture and may entail subjects appropriate to the social science, humanities, fine arts, or physical sciences. The program offers several field trips within Poland and to other Lexia program sites, such as Budapest, Berlin, and Prague. Housing is in dormitories with Polish students. Eligibility: Russian, Central, and Eastern European Concentration coursework recommended, especially RES 291. ARMSTRONG, Program Adviser.

## Russia: Russian Language and Area Studies Programs: Moscow or St. Petersburg (ACTR)

ACTR offers the choice of either Moscow or St. Petersburg for its linguistic and cultural immersion programs, which are located at the Moscow Linguistics University, Moscow International University, or the Russian State Pedagogical University in St. Petersburg. The programs offer the intensive study of Russian language as well as Russian history, politics, economics, culture, and society. Participants may audit regular university courses with Russian students. Internship or volunteer opportunities are available in businesses, voluntary, or nongovernmental organizations. The program features regular weekly excursions and field trips to regions outside of Moscow or St. Petersburg. Housing is provided in host families or university dormitories. Eligibility: Advanced (3 years) or Intermediate (2 years) of Russian. ARMSTRONG, Program Adviser.

## Spain: Granada—Institute for the International Education of Students (IES)

IES in Granada offers two options for students at different levels of Spanish-language proficiency. Those placed into the intermediate level take courses in both English and Spanish, and advanced courses are entirely in Spanish, including the option of taking courses alongside Spanish students at the Universidad de Granada. The curriculum includes the study of Spain's Moorish heritage and Jewish past as well as its links with the Arab world. Area studies courses taught in English or Spanish include art history, economics, environmental studies, film studies, history, international relations, literature, history, political science, religion, sociology, theatre, and women's studies. Internships and volunteer work are available. Field trips are organized to Seville, Cadiz, and Jerez de la Frontera, and there is optional travel to Morocco during spring semester. Housing is provided in Spanish homes or residence halls. Eligibility: Spanish 217 for the intermediate-level program in either fall or spring semester; Spanish 285 for admission to the advanced program in the fall and 300-level in the spring. Coursework in European history or culture strongly recommended. FERNANDEZ (Fall), VALENTÍN (Spring), Program Advisers.

## Spain: Madrid—Hamilton College in Spain

Hamilton College in Spain is a rigorous program offering courses designed specifically for program students and taught in small classes by Spanish faculty. Students select four courses per semester from a wide range of offerings in Spanish language, literature, history, art history, political science, economics, anthropology, and sociology. Independent study is also available. All courses are taught in Spanish, and the language must be spoken at all times. Internships are available in such areas as education, health care, and social work. The program offers a large number of field trips throughout the semester, including travel to Granada, Segovia, Salamanca, Toledo, Seville, Cordoba, Avila, and Santiago de Compostela. Housing is provided in homestays. Eligibility: Minimum GPA of 3.0 and 300-level Spanish. FERNANDEZ, Program Adviser.

## Spain: Madrid—Institute for the International Education of Students (IES)

IES in Madrid is located on the campus of the Universidad Compultense de Madrid, allowing for immersion of program participants in Spanish student life. The IES Center offers courses taught in Spanish for American students and taught by Spanish faculty as well as the opportunity to take regular university courses with Spanish students. The program begins with two weeks of intensive language study. Area studies courses offered by the IES Center include art history, archaeology, cinema, economics, history, literature, political science, sociology, and theatre. University courses include classes in international relations, women's studies, philosophy, history, linguistics, and sociology. Internship and volunteer opportunities are available. Field trips are offered to such locations as Cordoba, Seville, Cadiz, and Morocco. Housing is provided in homestays or university dormitories. Eligibility: Spanish 285; 300-level Spanish for spring semester students; course in European history or culture is strongly recommended. FERNANDEZ, Program Adviser.

## Spain: Salamanca—Institute for the International Education of Students (IES)

IES in Salamanca offers high-intermediate or advanced study in Spanish in courses at the IES Center and the Universidad de Salamanca. IES Center courses include art history, economics, history, Spanish language and literature, political science, religion, and sociology, focusing on Iberian culture, comparative Mediterranean studies, and comparative studies of Spain and Latin America. Universidad de Salamanca courses provide an opportunity to take classes alongside Spanish students in anthropology, art, history, linguistics, literature, philosophy, political science, psychology, sociology, biology, and biochemistry. Internships are available in education and social services. Field trips include travel to Segovia, Toledo, Madrid, and Portugal, with optional visits to Granada, Seville, and Barcelona. Housing is provided in homestays or student residence halls. Eligibility: Spanish 285. 300-level Spanish required for spring semester students. Priority is given to students who have studied Spanish during the semester preceding the program. Courses in European history or culture highly recommended. FERNANDEZ (Fall), VALENTÍN (Spring), Program Advisers.

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## Sweden: Stockholm—The Swedish Program (Hamilton College)

The Swedish Program at the University of Stockholm, primarily recommended for students intending to work on advanced projects in the social sciences, focuses on the country's innovative responses to public policy challenges such as environmental protection, gender equality, women's issues, immigration, workplace democracy, day care, health care, and education. Comparative study compares and contrasts Swedish social and economic policies with those of its European neighbors and the United States. Other courses include Swedish language, as well as options in Swedish literature, film, art, and architecture, which are taught in English. Field trips are offered throughout Sweden. Housing is provided in homestays or shared apartments. Eligibility: Background in sociology, anthropology, and/or political science; detailed plan of study. CAULKINS, Program Adviser.

## Latin America and the Caribbean

### Argentina: Buenos Aires: Council on International Educational Exchange (CIEE)

The CIEE program in Argentina is located at the Facultad Latinoamericana de Ciencias Sociales (FLACSO), which sponsors one of the most prestigious social science programs in the region. The program is designed to provide students with a critical appreciation of Argentina and its importance in Latin America from the perspective of the social sciences. Students normally take two special courses offered at FLACSO combined with one or two University of Buenos Aires courses, in addition to a required intensive course in Spanish. Available areas of study include Argentine studies, sociology, economics, history, psychology, and political science. All courses are taught in Spanish. Excursions and field trips are offered by the program. Housing is provided in homestays or in student residences. Eligibility: Third-year Spanish, coursework in Latin American studies or social sciences. BENOIST, Program Adviser.

## **British West Indies: Marine Resource Studies (School for Field Studies) (SFS)**

The focus of the SFS British West Indies program is on the development and management of fishery resources and the attractions offered by the spectacular natural marine environment. Interdisciplinary case studies focus on local environmental problems and resource conflicts. Students take four courses: Tropical Marine Ecology; Principles of Resource Management; Environmental Policy and Socioeconomic Values; and Directed Research. Fieldwork sites include coral reefs and shallow banks, seagrass beds, mangroves, and beach areas. Every student completes a directed research project. Accommodation is provided in shared rooms at the SFS Center. Eligibility: At least one course in environmental studies or biology required; willingness to live and work in groups. ECKHART, Program Adviser.

## **Chile: Santiago—Institute for the International Education of Students (IES)**

IES in Santiago, Chile, operates in cooperation with the Pontificia Universidad Católica de Chile and the Universidad de Chile, where students study alongside Chilean students. Students may also take IES Center courses that concentrate on tradition and development in Chile and Latin America in the fields of anthropology, art history, economics, environmental studies, history, literature, political science, Spanish language and literature, and sociology. The Universidad de Chile sponsors interdisciplinary coursework in Andean studies, Easter Island studies, bioethics, environmental studies, and public policy. Courses are also offered in anthropology, economics, sciences, history, mathematics, music, psychology, and sociology. At the Pontificia Universidad Católica de Chile, courses are available in art, sciences, geography, history, mathematics, philosophy, political science, and the social sciences. A special health sciences program may be of interest to pre-med students. Internships are available. Field trips include places of interest in Santiago and elsewhere in Chile. An optional field trip is offered to Easter Island in the fall and Patagonia in the spring. Housing is provided in homestays. Eligibility: Spanish 285. Latin American studies courses are recommended. APARICIO (Fall), BENOIST (Spring), Program Advisers.

## **Chile: Santiago or Valparaíso: Council on International Educational Exchange (CIEE)**

The CIEE program in Santiago or Valparaíso, Chile, operates at three host institutions: two in Santiago, the Universidad de Chile, the country's preeminent public university, and the Pontificia Universidad Católica de Chile, the leading private university; and at the Universidad Católica de Valparaíso. During a two-week orientation session, students take an intensive Spanish language and culture course. University courses in Santiago are offered in such areas as history, philosophy, political science, international relations, anthropology, women's studies, urban studies, fine art, psychology, and literature. In Valparaíso, the most appropriate departments for study-abroad students are literature, history, oceanography, and psychology; political science, anthropology, and sociology are not available. Excursions and field trips are provided to sites of historical and cultural interest. Housing is in homestays. Eligibility: Third-year Spanish. BENOIST, Program Adviser.

## Costa Rica: Organization for Tropical Studies (OTS)

OTS offers an intellectually and physically demanding field studies program utilizing three biological field stations in ecologically distinct regions. The stations include La Selva, internationally recognized for tropical rain forest research; La Cruces, located in the largest protected area in Central America; and Palo Verde, containing some of the oldest remaining dry rain forest and important wetland areas. An intensive schedule includes fieldwork, data analysis, and lectures. Additional classes are offered in the environmental policy, Spanish language, and Latin American culture. The first three weeks, devoted to intensive training in Spanish, are spent in a homestay with a Costa Rican family. Students are housed in group living arrangements in the field. Eligibility: GPA above 3.0. Minimum of one year of biology and one year of Spanish. J. BROWN, Program Adviser.

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## Costa Rica: Institute for Central American Development Studies (ICADS)

The ICADS Semester Internship and Research Program focuses on women's issues, economic development, public health, education, human rights, and environmental issues in Central America. The program offers an initial four weeks of intensive Spanish language training and seminars in history and culture, environmental problems, and women's studies. During an eight-week internship in Costa Rica or Nicaragua, students work at the grass-roots level with environmental organizations, public health professionals, teachers, and community organizers. Housing is in homestays. A field trip is provided to either Nicaragua or Panama. Eligibility: Minimum of three semesters of college-level Spanish; two years strongly recommended. ROPER, Program Adviser.

## Costa Rica: Studies in Latin American Culture and Society (ACM) (Fall)

The ACM program, located in San Jose, offers in-depth cultural studies and immersion in the daily life of the country through a combination of coursework and field study. The program provides intensive Spanish; an overview of the country through classwork, field studies, and a two-week rural stay; and a choice of core courses dealing with issues in economics, politics, and development. Students conduct a major independent study on a topic of personal interest, which may be written in English. During the second half of the semester, participants select a language elective in Latin American Literature, advanced composition, or conversation. The program is complemented by a number of field trips. Housing is provided in homestays. Eligibility: At least three semesters of college-level Spanish or the equivalent; four semesters preferred. ROPER, Program Adviser.

## Costa Rica: Tropical Field Research Semester (ACM) (Spring)

The ACM Tropical Field Research Semester provides for advanced independent work in the natural and social sciences and the humanities. Students take an orientation course involving the intensive study of Spanish and Costa Rican culture, while designing a detailed research proposal. Independent projects may be conducted in a wide variety of areas, including tropical biology and ecology; the social sciences, such as economics and anthropology; and literature and the arts. Housing is in homestays with Costa Rican families. Field trips are offered throughout the program. Eligibility: Coursework in the proposed research discipline. Minimum of three semesters of Spanish or the equivalent; four

semesters preferred. Familiarity with statistics and fieldwork methodology strongly recommended. ECKHART, ROPER, Program Advisers.

### **Ecuador: Minnesota Studies in International Development (MSID)**

The Minnesota Studies in International Development (MSID) program in Ecuador focuses on problems of development and social change through grassroots internships in poor communities. The program is divided into three phases: seven weeks of classroom work in Quito, the capital of Ecuador; six weeks in a field-study placement with an agency or development project in Quito or in a rural community; and a weeklong final seminar. Course topics include theories and topics of development, national and regional history, economics, and culture. Field-study placement categories include public health, education, environmental protection, social services, women in development, agriculture, and small business, involving a minimum commitment of 30 hours a week. Courses are taught in Spanish, which is essential to communicating with local people. Housing is in homestays with local families. Eligibility: Spanish through the 200 level (four semesters) or the equivalent. At least one course each in Global Development Studies and Latin American Studies highly recommended. ROPER, Program Adviser.

### **Ecuador: Quito—Institute for the International Education of Students (IES)**

IES in Quito, Ecuador, offers two options: the Area Studies and Language Program and the Universidad San Francisco de Quito (USFQ) Direct Enrollment Program. The first focuses on the ecological and ethnic diversity of Ecuador, featuring an IES core course, a Spanish course at the Pontificia Universidad Católica del Ecuador (PUCE), and a selection of courses in a wide range of disciplines from IES, PUCE, or the Facultad Latinoamericana de Ciencias Sociales (FLACSO). PUCE courses include sciences, humanities, social sciences, and health sciences, while FLACSO provides coursework in anthropology, economics, gender issues, public policy, political science, indigenous studies, and environmental studies. The second option, the USFQ program, entails full-time direct enrollment in classes alongside Ecuadorians in the humanities, social studies, and natural sciences. USFQ has a well developed environmental studies program and operates biological field stations in the Galápagos and Amazon basin. Internships are also available. Trips are offered to the Galápagos, the Amazon, and the Andes. Housing is provided in homestays. Eligibility: Spanish 285 for Area Studies and Language Program: 300-level Spanish for USFQ Direct Enrollment Program. Priority is given to students who have studied Spanish during the semester preceding the program. Latin American studies courses are recommended. APARICIO (Fall), BENOIST (Spring), Program Advisers.

### **Mexico: Center for Wetland Studies, Baja, Mexico: (School for Field Studies) (SFS)**

The SFS program in Mexico is concerned with collecting the data necessary for the creation of a sustainable development management plan for the region. The program features intensive Spanish instruction and lectures on the history, socio-economics, culture, and resource use patterns and concentrates on three interdisciplinary case studies focusing on local environmental problems and resource conflicts. Students take four courses: Coastal Ecology; Principles of Resource Management; Economic and Ethical Issues in Sustainable Development; and Directed Research, involving a combination of lectures, field exercises, and

research on sites including beach areas, mangroves, waters, and local communities. Every student completes a directed research project. Eligibility: Minimum of one semester of college-level Spanish; at least one course in environmental studies or biology. ECKHART, Program Adviser.

### **Mexico: Rutgers University in Mérida, Mexico**

The Rutgers University program in Mexico operates in cooperation with the Universidad autónoma de Yucatán, located in the city of Mérida. The area offers a unique mixture of colonial Mexican heritage, indigenous Mayan cultures, and dynamic modern life. The university offers courses for students in all disciplines, including the natural and applied sciences, fine art, history, literature, sociology, archaeology, anthropology, economics, and education. To prepare for entrance into the regular university, students attend a five-week intensive Spanish language program and take an introduction to Mexican history, literature, culture, and politics. Internships in local businesses are available. Frequent field excursions are provided to the numerous archaeological sites of the region, such as Chichen Itza and Uxmal, as well as a longer field trip to Mexico City. Housing is provided in homestays with local families. Eligibility: Third-Year Spanish. BENOIST, Program Adviser.

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## **Middle East**

### **Israel: The Hebrew University of Jerusalem: Rothberg School for Overseas Students**

The Hebrew University program offers a full range of Judaic, Israel, and Middle East Studies in English in such fields as political science, international relations, history, religion, gender studies, literature, philosophy, psychology, sociology, and archaeology, as well as fully accredited pre-medical school courses. Independent study and research internships are also available. Participants are required to take an eight-week intensive Hebrew course before the beginning of the semester. There is a full program of social and cultural activities, field trips, and volunteer opportunities. Housing is provided in dormitory accommodation. Eligibility: Minimum GPA of 3.0. Middle Eastern Studies highly recommended. RIETZ, Program Adviser.

### **Turkey: Global Partners Study-Abroad in Turkey (Fall)**

The program in Turkey begins in Istanbul, with its rich ancient Byzantine, and Ottoman heritage, where students begin the study of Turkish language and take a core course on history, politics, economics, and religions of the region. A field trip is provided to major sites such as Gallipoli, Troy, Sardis, Izmir, Ephesus, and Gordion. The second phase of the program is based in Ankara, the Turkish capital, where students choose three additional courses in English from the offerings at Bilkent University and Middle East Technical University, including art, economics, education, social sciences, humanities, music, performing arts, and science. Housing is provided in dormitories. Eligibility: Relevant coursework in anthropology, classics, and/or religious studies highly recommended. BRIGHT, Program Adviser.

## North America

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### Atlanta: Morehouse College

Morehouse College is the nation's only historically black, all-male, four-year, liberal arts college, founded in 1867. The college provides an environment that encourages students to develop an appreciation for the ideals of brotherhood, equality, spirituality, humane values, and democracy. The Atlanta campus has an enrollment of 3,000 men from 40 states and 12 foreign countries. More than half of the students are housed on campus. The college has 180 full-time faculty and offers degrees in 35 majors. Morehouse has a very lively student culture and charters more than 40 educational, cultural, religious, social, and recreational student organizations. Eligibility: Recommendation of adviser. CAVANAGH, Program Adviser.

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### Atlanta: Spelman College

Spelman College is a private four-year liberal arts college for women, founded in 1881. An historically black women's college, Spelman is one of the most prominent institutions of higher education in the country. Spelman attempts to instill in students an appreciation for the multicultural environment in which they live and a sense of responsibility for bringing about positive change in those communities. Located in Atlanta, the college has an enrollment of 1,800 women. The academic program includes 23 major areas of study and encourages students to pursue a broad program of study. A low student-faculty ratio of 15:1 insures small classes and personal attention. Spelman offers an extensive array of campus activities involving interaction with politicians, artists, and business executives, as well as a full range of extracurricular opportunities. Housing is in dormitories. Eligibility: Recommendation of adviser. CA-VANAGH, Program Adviser.

### Chicago: Arts Program (Associated Colleges of the Midwest) (ACM)

The ACM Chicago Arts Program offers a semester immersed in the art scene of Chicago for students interested in the performing, media, literary, and visual arts. The program has four components: the internship offers opportunities in stage design, photography, dance, literary magazines, drama, music, and the Art Institute of Chicago; the Core Course combines study of art history, theory, and criticism with field experiences such as plays, concerts, poetry readings, and video screenings; the independent study focuses on a creative project, scholarly inquiry, or combination of both; and the Special Topics Course offers a choice of two or three topics in various areas of the arts. Students live shared accommodation. Eligibility: Coursework related to prospective internship recommended. CONNELLY, Program Adviser.

### Chicago: Newberry Seminar in the Humanities (Associated Colleges of the Midwest) (ACM) (Fall)

On the ACM Newberry Library program, students have access to the collections of one of America's foremost research libraries. Areas of specialization include Western Europe and the Americas from the late Middle Ages to the early 20th century, including European exploration and settlement of the New World, the American West, and Native American history. Materials are also available on the Renaissance, the French Revolution, Portuguese and Brazilian history, and British history and literature. Students explore together a common theme for the semester and complete individual research projects related to it.

Housing is provided in shared apartments. Eligibility: Interest in pursuing serious research in the humanities. CAVANAGH, Program Adviser.

### **Chicago: Urban Studies Program (Associated Colleges of the Midwest) (ACM)**

The ACM Urban Studies program aims to provide students with an intimate look at the way Chicago functions as a city and assists them in building a career while contributing to public life. The program features four academic components: the Core Course, the Seminar, the Internship, and the Independent Study Project. The Core Course provides an introduction to urban public policy organized around themes such as health care, mass transit, neighborhood development, or public education. The Seminar covers topics such as the media, employment, community building, and political campaigns. The Internship allows students to spend 16–20 hours a week working in a city agency or organization. During the Independent Study Project, students explore a topic of personal interest. Numerous field trips are scheduled. Accommodation is in shared apartments. Eligibility: Recommendation of adviser. K. ERICKSON, Program Adviser.

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### **Oak Ridge, Tennessee: Oak Ridge National Laboratory Science Semester (Associated Colleges of the Midwest) (ACM) (Fall)**

The Oak Ridge National Laboratory (ORNL) is a U.S. Department of Energy research facility focusing on energy and environmental issues. The program enables students in the sciences and social sciences to join ongoing investigations. During the Interdisciplinary Seminar, biology, chemistry, mathematics, physics, computing, and social science students learn about a wide range of research projects. In the Advanced Course, students choose to study a particular research option. During the Research Component, students devote at least 35 hours per week to a research project supervised by a staff scientist. Research is conducted in biology, concentrating on the effects of radiation; all branches of chemistry; nearly all phases of physics, particularly nuclear, solid state, and plasma physics; and interdisciplinary studies. Social science research options exist in urban development, environmental impact, attitudinal surveys, and energy supply-and-demand analysis. Eligibility: Minimum 3.0 GPA. ROBERTSON, Program Adviser.

### **Waterford, Connecticut: National Theatre Institute (NTI)**

At NTI, students are offered a very intensive, wide-ranging, and practical experience of professional theatre. The program is based at the Eugene O'Neill Theatre Center, a 90-acre estate including residential buildings, acting studios, open-air theatres, and a cabaret space. The core curriculum consists of voice, playwriting, costume and scene design, movement, directing, and acting. A final project culminates in a public performance. During two weeks in England at Stratford-upon-Avon, workshops are offered based on English classical texts, folk dancing, and choral singing. Internship opportunities are available for NTI alumni as well as auditions for summer theatre. Housing is provided in shared student accommodation. Eligibility: Recommendation of adviser. THEATRE DEPARTMENT FACULTY, Program Adviser.

## **Woods Hole, Massachusetts: Marine Biological Laboratory— Semester in Environmental Science (SES)**

The SES program is offered by the Ecosystems Center, the ecological research arm of the Marine Biological Laboratory. The program goal is to investigate the processes linking organisms with their environment in the interest of resource management. Two core lab and lecture courses are offered, one in Aquatic and one in Terrestrial Ecosystems; one elective two-seminar series; and an independent project. Core courses study the linkages between terrestrial and aquatic ecosystems, featuring both field and laboratory work. Specialized electives provide an opportunity to study in depth a specific area of ecology, such as aquatic chemistry, microbial methods, or mathematical modeling. Two seminar series feature nationally distinguished scientists and science writers. Student teams conduct and present research projects. Housing is provided in the MBL dormitory. Eligibility: Competitive GPA, preparation in biology and environmental studies, faculty recommendation. CAMPBELL, Program Adviser.

# Campus Life

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# Campus Life

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## The Student Affairs Program

The primary purpose of the student affairs program is to complement and enhance the College's central educational mission. A concurrent goal is to develop an effective support community within each residence hall that reflects and addresses the broad range of student experiences, life within a highly rigorous academic environment, and concerns for the future.

The student affairs philosophy is based on self-governance in residence life—students assume responsibility for themselves and their actions. Professional staff fulfill an important role in helping students make transitions and empowering them to make decisions.

The structure for self-governance includes the student affairs staff, student government, the committee on student life, the housing committee, the judicial system, and the hall council. Residence Life Coordinators (RLCs) are student affairs staff members who live in the residence halls and work closely with students, student advisers, and hall councils as educators, mediators, advisers, and advocates. Each RLC advises about 150 students and is available in emergency situations. The hall council, which includes student staff members, student government representatives, and hall residents, promotes community through organized programs and social activities.

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## Activities

Grinnell is a residential college, and campus life is an essential part of the student's individual development. Just as the residential living system encourages self-reliance and social responsibility, extracurricular activities and events provide opportunities for students to expand their intellectual, cultural, social, and recreational interests.

To ensure participation and experimentation, no admission fee is charged for any campus event. The College sponsors a variety of programs and activities, but many others depend upon student imagination and initiative. A single year's calendar lists as many as 100 visiting lecturers; 60 concerts and recitals by guest artists, students, and faculty; more than a dozen folk, jazz, and rock concerts; 15 major and minor theatre productions; 150 movies, documentaries, and special film series; nearly two dozen conferences, symposia, and special-topic weeks and weekends; and a full schedule of parties, dances, and other all-campus recreational events arranged by student groups.

## Community Service

Grinnell is a residential college, and campus life is an essential part of the student's The Community Service Center functions as a clearinghouse for student service projects, supporting established campus service organizations and encouraging new projects that address the community's needs. The office also helps to facilitate the Federal Work Study/Community Service program, placing students in local non-profit organizations to earn their work study awards.

Grinnell students volunteer with agencies that serve people affected by poverty, the elderly, or people who may have developmental disabilities. They provide outreach through mentoring and tutoring programs with local school children, teach foreign languages after school to third graders, and teach English as a Second Language. Many students work as advocates for sexual assault and domestic violence survivors.

Each semester a volunteer fair is held to inform the campus of local volunteer activities and opportunities. In addition, volunteer opportunities are updated regularly on the CSC website and sent out electronically to interested students. The CSC welcomes new student-initiated service projects and encourages students to link service activities with academic interests and career exploration.

## Counseling and Advising

The director of academic advising and the vice-president for student services coordinate Grinnell's academic and nonacademic advising system. That system is based on an awareness of the needs of students as young adults involved in the examination and development of all aspects of their lives.

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Each student has a faculty adviser for guidance in planning academic work and for related counseling. For all first-year students, the advisers are their tutorial professors; later, students choose advisers in their major fields.

Personal advising is available from the deans in student affairs, the director of academic advising, the College chaplains, the director of international student services, and the residence life coordinators; student advisers work closely with students on an informal, day-to-day basis in the residence halls. In addition, psychological services are provided through the Poweshiek County Mental Health Center and its clinical, psychological, psychiatric, and social worker staff. Under the terms of an arrangement with the mental health center, there is no charge for the first eight sessions any student has each academic year. Students may call the center directly for an appointment, or referrals for counseling may be arranged through the Grinnell College Health Center, the Office of Student Affairs, the College chaplains, or residence life coordinators.

The Career Development Office helps students make informed matches between their interests, skills, and career options. Programming is based on student needs. A comprehensive plan for self-assessment, occupational assessment, decision-making, and job or graduate school placement is offered. Individual counseling, career-related workshops, and career assessment inventories are available for all students. An online database of all alumni living throughout the United States and the world is available to assist students with career advice and leads for internships and jobs. Preprofessional advisers also assist students who anticipate graduate or professional study or careers in particular vocational fields (see Liberal Education and Careers).

## Fine Arts

The fine arts at Grinnell are anchored by the Bucksbaum Center for the Arts, dedicated in 1999 and designed by Cesar Pelli. The building houses the departments of music, theatre, and art, as well as the Faulconer Gallery.

Participation in the art, music, theatre, and dance programs at Grinnell is widespread. Students, faculty, and staff appear regularly in performances or present their works in exhibitions in the Faulconer Gallery. In addition, the fine arts departments, the Faulconer Gallery, and the College's Public Events Committee bring a variety of visiting artists, performers, companies, and musicians to campus throughout the year. Many of the visitors are of international stature and greatly enrich the cultural life on campus. All events are free and open to the entire community. Recent visitors have included South African artist William Kentridge, Ailey II (dance), Orpheus Ensemble (chamber music), and Chinese artist Xu Bing.

Students participate in the visual arts in a number of ways. In the exhibition seminar, students work intensively with art department faculty and the Faulconer Gallery staff to curate an exhibition from start to finish. Using a body of work from the College's permanent art collection, the students research the art, select works for the exhibition, design the installation, develop programming, and write a catalog published by the gallery. Students also serve as desk attendants and docents for all exhibitions.

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The annual Student Art Salon is open to all students who have created artwork during the past year. The exhibition is a juried show organized by students and presented in the Faulconer Gallery, with cash prizes awarded by the juror. Students may utilize studio art courses to make their work, or one of several recreational craft workshops on campus. Several other spaces on campus also show student art and work from the Grinnell College Art Collection.

Music touches almost every member of the college community. Hundreds of students participate in performances of solo, chamber, jazz, folk, choral, and orchestral music. The Department of Music sponsors the orchestra, chorus, Medieval/Renaissance/Baroque ensembles, chamber singers, jazz band, opera workshop, a Javanese gamelan ensemble, and chamber ensembles involving woodwinds, brass, and strings. The department offers lessons on nearly every standard orchestral instrument, plus banjo, guitar, harpsichord, organ, and voice. Instructional programs are supplemented by an outstanding listening facility, strong collections of nonwestern and early musical instruments, and a MIDI-based electronic and computer music studio.

The theatre and dance program includes four major faculty-directed productions each year. Recent productions include Shakespeare's *Macbeth*, Stoppard's *Arcadia*, Brecht's *Private Life of the Master Race*, Farquhar's *The Recruiting Officer*, Lorca's *Blood Wedding*, O'Neill's *Desire Under the Elms*, Fugard's *The Island*, Wertenbaker's *Our Country's Good*, and Churchill's *Top Girls*. Gogol's *The Inspector General* was recently directed by visiting Cowles guest artist-in-residence Venia Smekhov of Moscow's Taganka Theatre. All students are invited to try out for parts and to participate in stage work. Students also develop skills as directors, actors, and designers in student-directed Open Space one-act productions, in 317 and 380 advanced acting and directing projects, and in more informal improv and playwriting groups. The large student staff has wide responsibility in the department's production season,

handling front-of-house, box office, stage management, and crew in costumes, set, light, sound, props, etc.

Facilities include Roberts Theatre (a modern caliper stage), Flanagan Studio Theatre (a smaller, state-of-the-art black box theatre with flexible seating), and the informal “Wall” studio space. Occasional visiting theatre and dance companies—such as The Acting Company and Pilobolus—add further variety to the program.

Modern dance is taught as part of the theatre curriculum, with performances each year both as independent events and as part of dramatic and musical presentations. Folk dancing is popular and is practiced in both a student-sponsored club and in courses taught by the Department of Physical Education. Both modern and folk dance give students a chance to choreograph as well as perform.

## Health Service

The mission of the Health Center is to promote academic success by providing and maintaining psychological and physiological wellness. Student health care needs are met by a staff of three professional nurses, an administrative assistant, and student clerks. The Grinnell community provides many health care resources. A local physician serves as medical adviser to the Health Center team.

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The Health Center is an on-campus facility open Monday through Friday, 8 a.m. to 5 p.m. The professional nurses provide assessment and treatment or referral as needed or requested. Transportation to and from in-town appointments are facilitated by the Health Center. Wellness is emphasized during office hours and by informational evening study breaks given in the residence hall setting. Pamphlets about many health issues are available at the Health Center. Non-emergent health-related questions may be asked by using e-nurse. This can be accessed through the Grinnell website.

Overnight care for students who are ill, but not hospitalized, is provided as part of the health fee by the College Sub-acute Care Program at Grinnell Regional Medical Center. After physician assessment, the Health Center nurses or residence life coordinators admit students to the program.

*Each student is required to submit a Grinnell College Health Form before registration at the College.* The information on this form is important because it aids in the medical care given to the student. An updated immunization record is required, and students are asked to list any chronic illnesses, daily medications, learning disabilities, or physical disabilities that could impede education at Grinnell.

The College's health fee covers the cost of unlimited visits to the Health Center during the academic year, the College Sub-acute Care Program with Grinnell Regional Medical Center, eight visits to the Poweshiek County Mental Health Center, walk-in mental health counseling at the Health Center, influenza immunizations, tetanus boosters, pregnancy, mononucleosis, Streptococcus A, urine, hemoglobin, and blood sugar testing. HIV testing and Plan B are available for a \$20 and \$15 fee respectively.

All students are required to carry health insurance. Students may enroll in a college group insurance plan or maintain coverage through a parental or personal policy. All Grinnell physicians, the Grinnell Regional Medical Center, and the University of

Iowa Hospital and Clinics have agreed to be a PPO for the college group insurance plan. Students are asked to return an insurance card indicating enrollment or waiver of the group insurance. Premiums are payable at the Office of the Cashier.

## Religious Life

The Office of the Chaplain coordinates multireligious programs open to all members of the college community. The religious and spiritual needs of students, faculty, and staff are met through worship services, Bible study, discussion groups, films, and social activities. There are additional social justice opportunities, including the Grinnell Community Meal/Soup Kitchen, which is coordinated out of the Office of the Chaplain, Center for Religion, Spirituality, and Social Justice. A spring break work trip is also offered annually.

One Sunday morning each month, the College has “Black Church at Grinnell” services that focus on the African American worship experience. There are also holy day services and special events throughout the year when school is in session.

On Friday afternoon, people gather in the Religious Activities Room to celebrate the Jewish Sabbath. This is followed by a shabbat dinner in the Chalutzim Lounge in Cowles Dining Hall. Students assist the rabbi in planning services and programs for the High Holy Days and all of the holidays that occur when school is in session.

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The Religious Life Council and the Pre-Seminarian Group also provide opportunities for student leadership and involvement. An annual retreat is held for these groups.

There are many religious groups and worship opportunities on campus. There are many varieties of Christian worship opportunities in the town of Grinnell. The following groups meet regularly on campus: Chalutzim, Buddhist Meditation, Catholic Students Association, Christian Science, Grinnell College Christian Fellowship (GCCF), Grinnellians Investigating Religion, Hindu Community (for Diwali and Holi), Muslim Prayer, Muslim Student Association, Pagan Discussion Circle (PDC), Orthodox Christian, Quaker Silent Meeting, and Unitarian/Universalist. More detailed information about these groups can be seen at the chaplain’s website: <[www.grinnell.edu/offices/studentaffairs/chaplain](http://www.grinnell.edu/offices/studentaffairs/chaplain)>.

Grinnell has two chaplains to serve the community. Both the chaplain and the associate chaplain are available to meet with students for counseling by appointment.

## Residence Halls

All students are required to room and board in college residences. Exceptions to this policy are made only for students who live with their parents in the Grinnell area; students who are 22 years old or older; students whose children live with them; and a limited number of seniors and third-year students. Depending on room availability in the residence halls and college-owned houses, the College may allow some exceptions for third-year students and seniors. A student may not move out of the residence halls without written permission from the Office of Student Affairs.

The Office of Student Affairs assigns new students to rooms during the summer based on information students supply on the housing information form. Individual requests by students are honored whenever possible. First-year students are assigned in each residence hall. After the first year, students choose rooms in April according to a campuswide room-draw system. An advance payment is required of all students (see Expenses and Financial Aid). The College reserves the right to make essential changes in room assignments at any time during the year. The College does not provide housing for students between semesters and during the spring recess when all college student housing is closed (see Academic Calendar).

After the first year, through a room-draw process, students choose from a variety of living options in the residence halls and college-owned houses. All 19 residence halls are coed by alternating rooms or floors. The North Campus has nine residence halls housing 568 men and women. South Campus includes six residence halls accommodating 406 men and women. East Campus includes four residence halls with rooms for 257 men and women.

In addition to the residence halls, seven college-owned houses adjacent to the campus are used as student residences. Each houses seven to 12 students. Five of these houses are designated as language houses.

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Each student in residence is provided with the basic furniture (desk, desk chair, bed, and dresser), and an Ethernet connection. Students should bring their own towels, pillow, and linens. Students may supplement the college furnishings with small personal items such as a throw rug, fan, and desk lamp. Each room has a telephone with individual voice mail.

## Social Commitment

The mission of the Office of Social Commitment is to encourage Grinnellians to become engaged members of their current and future communities by providing education and resources about postgraduation service opportunities. Founded in 1999, the office builds upon Grinnell's long tradition of producing dedicated members of society, such as Harry Hopkins '12 (head of the Works Progress Administration under FDR) and the more than 300 alumni who have served in the Peace Corps since 1961. Grinnell currently leads the nation in per capita production of Peace Corps volunteers. By promoting postgraduate service through recruitment and individual counseling, the Office of Social Commitment plays an important role in the College's mission of providing a first-rate education "in the spirit of public service."

As a part of this mission, the office sponsors the Grinnell Corps, a group of seven postgraduation service programs that are open only to Grinnell College alumni in the year after graduation. Based on the Peace Corps model, these programs partner with institutions in host communities, both domestic and international, to provide them with needed labor. Current opportunities offered through the Grinnell Corps include teaching positions in Lesotho, China, Greece, Macao, and Nepal; work at a desert research field station in Namibia; and with a poverty alleviation agency in the city of Grinnell. All of these one-year programs are offered at no cost to the participants or partner organizations.

The office also has responsibility for administering the College's nomination process for nationally competitive scholarships and fellowships, including the Rhodes, Marshall, Fulbright, and Watson. Grinnell College students have an impressive track record in all of the competitions; in 2002, Kendra M. Young '02 of Bigfork, Mont., was named as the 14th Rhodes Scholar in Grinnell's history.

## Sports and Recreation

Grinnell emphasizes widespread participation and enjoyment of intercollegiate athletics, intramurals, individual activities, club sports, and outdoor recreation. The Physical Education Complex houses a swimming pool, tennis courts, 200-meter track, handball-racquetball courts, basketball courts, and steam rooms. Outdoor facilities include six tennis courts, a 400-meter track, and playing fields. Students also use local golf courses and bowling alleys.

The new Athletic and Fitness Center houses the Darby performance gym, an auxiliary practice gym, and the Fitness Center. The 8,000-square foot Fitness Center holds both cardio and strength equipment and showcases a state-of-the-art stereo system and seven flat-screen televisions.

Both men's and women's teams are nicknamed the Pioneers to reflect Grinnell's early involvement in intercollegiate sports, dating from the late 1860s. Today Grinnell's men's and women's teams compete primarily with other members of the Midwest Conference composed of institutions in a three-state area: Grinnell in Iowa; Knox, Lake Forest, Monmouth, and Illinois College in Illinois; and Beloit, Carroll, Lawrence, Ripon, and St. Norbert in Wisconsin. Men's teams compete in cross country, football, soccer, basketball, golf, tennis, baseball, swimming and diving, and track (indoor and outdoor). Women compete in volleyball, soccer, swimming and diving, tennis, basketball, cross country, golf, softball, and track and field (indoor and outdoor).

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Intramural competition covers many sports, with coed, men's, and women's teams made up of students as well as faculty and staff members. The Department of Physical Education provides a variety of individual and group activities, emphasizing lifetime sports, recreational skills, and physical fitness. Students with interest in sports not offered at the varsity level have developed a strong club sports program that features 20 different teams.

The Grinnell Outdoor Recreation Program (GORP) visits locations throughout Iowa and offers trips to various parts of the country during academic breaks. Activities include cycling, horseback riding, backpacking, skiing, spelunking, canoeing, kayaking, sailing, and rock climbing. Camping and water-sports gear may be checked out for recreational use. Campus members of the Environmental Action Group promote environmental awareness and engage in nature-oriented activities.

## Student Government

The president and vice-president of the Student Government Association are elected annually by all students. In conjunction with their appointed cabinet, these officers work with the Joint Board of Hall Senators, elected by the various residence halls, to facilitate civic responsibility within, and extracurricular activities for, the student body. The primary aim of the SGA is to include every student in the process of responsible self-governance.

The SGA has important functions in the legislative and judicial processes regulating nonacademic student life and in promoting extracurricular activities. The SGA recommends the apportionment of the student activities fees (approximately \$184,000 per year) for support of the social and cultural activities in and out of the residence halls (including weekly concerts and films), the numerous student groups (such as the Multiethnic Coalition, Concerned Black Students, and Student Organization for Latinas/Latinos) organized to promote particular activities and interests, and its own administration.

The student organization with duties in the academic area is the Student Curriculum Council. The council, elected from the Student Educational Policy Committees of each department, meets to discuss curricular matters and also elects the student members of the college Curriculum Committee.

In addition, students are members of most of the advisory and legislative committees of the College.

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## Student Publications and Radio

Student staffs, headed by student editors and managers appointed by the Student Publications and Radio Committee, have full charge of the weekly campus newspaper, *The Scarlet and Black*; the yearbook, *Cyclone*; and the campus FM radio station, KDIC. Currently, students also run *The Gum*, a comedy magazine, and *The Grinnell Review*, a semesterly collection of student art and literature.

## Student Responsibilities and Regulations

Grinnell College expects all students to act as responsible citizens in a democratic community and emphasizes maturity, self-government, personal contact, and understanding. While it is college policy to impose few rules, certain regulations are necessary. The Board of Trustees has delegated the administration of discipline in the College to the president, who in turn has assigned specific groups the responsibility of hearing cases of alleged misconduct by students.

*The Student Handbook* contains a complete description of the judicial system and an explanation of its procedures, as well as details on various college regulations. Students are expected to know and abide by the policies stated in the handbook. Brief summaries of the most important regulations are given below.

**ALCOHOLIC BEVERAGES:** Students who are 21 years old may consume alcoholic beverages in the individual rooms. In some situations, alcoholic beverages may be distributed in residence halls, houses, Gardner Lounge, and the Harris Center by students of legal age, who have followed college policies and state and federal law, to students of legal drinking age. Possession and consumption of alcoholic beverages in other college buildings is not permitted. Additionally, consumption of alcoholic beverages on college grounds is not permitted. The College expects students to obey the laws of the State of Iowa concerning alcoholic beverages; the legal drinking age in Iowa is 21 years.

**HEALTH INSURANCE:** Students are required to carry health insurance. Students are billed for student health insurance. If student is otherwise covered, they can decline the college health insurance.

**MOTOR VEHICLES:** Students may bring automobiles to campus.

**PERSONAL PROPERTY:** Students are responsible for their own personal property. The College does not have insurance for students' personal belongings and is not liable for loss, theft, or damage to such property. Most students are insured under parents' household insurance policies. The College suggests that students whose parents do not have insurance apply for personal policies covering loss, theft, or damage, including fire damage. Local Grinnell agencies will insure individual student rooms.

**PROPERTY DAMAGE:** Students are liable for willful damage to college property.

# Admission, Expenses, and Financial Aid

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## Admission

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# Admission

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Grinnell College is dedicated to educating people whose achievements show a high level of intellectual capacity, initiative, and maturity. The student who will benefit most from a Grinnell education also possesses a serious interest in learning and the emotional and social maturity needed for independent living and study.

In addition to an excellent academic record, the admission policy favors applicants who have a record of participation in extracurricular activities, including leadership roles, honors, or awards earned.

The academic year is divided into two semesters, fall beginning in late August and spring in late January. First-year or international students may apply only for fall-semester admission. Transfer applicants may choose either fall- or spring-semester entry. Please see the admission timetable for application deadlines and notification dates.

## Visits to the Campus

Prospective students and their families are invited to visit the campus and are encouraged to tour the facilities, attend classes, meet professors and students, and have an admission interview. If you plan to arrange an admission interview, please note that interviews must be completed by the appropriate application deadline. Admission interviews are required for home-school students and Early Admission applicants. Please see admission timetable for application deadlines.

Arrangements should be made 10 business days in advance with the Office of Admission. Students should avoid scheduling visits during the week immediately before major vacation periods. Arrangements may be made by calling the Office of Admission at 800-247-0113 or 641-269-3600.

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Prospective students may also send e-mail to <[askgrin@grinnell.edu](mailto:askgrin@grinnell.edu)> or visit Grinnell's website at <[www.grinnell.edu](http://www.grinnell.edu)>.

## Alumni Admission Representatives

Grinnell is a residential college, and campus life is an essential part of the student's More than 1,000 alumni admission volunteers represent Grinnell throughout the United States and abroad. The names of these alumni may be obtained by writing or calling the Office of Admission. If an applicant is unable to visit the campus for an admission interview, an alumni admission representative may be available to conduct the interview.

## Admission Timetable

### For Fall Semester

Application	Notification Deadline	Candidate's Date	Reply
<b>Date</b>	<b>Early Decision I—First Choice</b>		
<b>Early Decision II—International Admission</b>	<b>First Choice</b>	<b>All Regular and International Transfer</b>	
<b>International Transfer</b>	<b>Transfer For Spring Semester</b>		
Application	Notification Deadline	Candidate's Date	Reply
<b>Date</b>	<b>Transfer Admission</b>		

## Requirements for Regular Admission

1. Scholastic record and class standing that show an ability to do high-level college work. The Admission Board feels that good, consistent performance in a college-preparatory program best indicates a student's preparation for college.
2. Graduation from an accredited secondary school with recommended credit as follows: four years of English, four years of mathematics with minimum completion of pre-calculus or the equivalent, three–four years of laboratory science, three–four years of a foreign language, and three–four years of social studies or history. Home-school students should submit their home-school curriculum, by year, including subject areas studied, texts used, and time spent on each discipline.
3. Recommendation of the secondary-school counselor.
4. Recommendations from two academic instructors.
5. Satisfactory results on the Scholastic Assessment Test (SAT I) or the American College Test (ACT). For some students the Test of English as a Foreign Language (TOEFL) may also be required. Grinnell strongly recommends that home-school students sit for the SAT II, particularly in literature, mathematics, and a third subject area of their own choosing.

## Application Procedure

Each candidate should provide the following:

1. A completed application form (Preliminary Application and Common Application), including the essay section, and the \$30 application fee. The Preliminary Application and the Common Application may be submitted electronically.
2. A transcript of his or her secondary-school record.

3. Reports of his or her scores on the Scholastic Assessment Test (SAT I) or the American College Test (ACT).
4. Recommendation of the secondary-school counselor.
5. Recommendations from two academic instructors.

## Transfer Admission

For purposes of admission, a transfer student is anyone who has graduated from high school or the equivalent, and subsequently has earned a minimum of 12 Grinnell credits of allowable transfer coursework from an accredited college or university prior to enrolling at Grinnell. Class standing will be based only on the total number of transfer credits accepted by Grinnell and in no case will the standing be higher than first-semester third year.

Applicants requesting transfer should have the registrar of each college or university attended mail an official transcript of coursework to the Office of Admission. In addition, Grinnell requires two written recommendations from current or former professors or teachers. All transfer applicants are required to submit secondary-school records and the results of the Scholastic Assessment Test (SAT I) or the American College Test (ACT). The Grinnell College registrar will evaluate the transcript to determine which credits are transferrable.

Transfer students interested in the spring transfer process must have completed at least one semester of college work by the spring application deadline to be considered for the spring semester. Spring transfer applicants in their first semester must submit a final, official fall transcript to the Office of Admission by Jan. 6 (via mail or fax) before an admission decision can be made.

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Students are expected to complete at Grinnell at least 62 of the minimum 124 credits needed for graduation. Individual departments generally expect that the majority of courses constituting a major program will be Grinnell courses. Transfer students interested in off-campus study should see the Off-Campus Study section under Courses of Study in this catalog.

For first-time first-year students with an approved program to study off campus for one semester, the semester off-campus is counted toward the residency requirement. For students approved for yearlong off-campus programs, only one semester of off-campus study will count toward the residency requirement, although the credits from both semesters will be accepted.

Transfer students who enter Grinnell College after June 2002 will be required to complete the following minimum number of credits at Grinnell College:

**A transfer student  
who enters as a:**

**Must complete at  
Grinnell at least:**

## Early Decision-First Choice Plan

Available only to first-year students who decide that Grinnell is clearly their first

choice, Early Decision I or II is a commitment to enroll, and those accepted must withdraw applications from other colleges. Candidates who are not accepted under the Early Decision I or II program will be withdrawn from the application process. Students selecting Early Decision I must submit all application materials by Nov. 20 and will be notified of an admission decision by Dec. 20; admitted students will have until Jan. 20 to submit the required tuition and housing deposit. Students selecting Early Decision II must submit all application materials by Jan. 1 and will be notified of an admission decision by Feb. 1; admitted students will have until Feb. 15 to submit the required tuition and housing deposit. If you plan to apply for financial aid and all the required financial aid information is made available to the Office of Financial Aid by Dec. 1, an estimated financial aid decision will arrive with the notice of admission. Early Admission candidates are not eligible to apply under the Early Decision options.

## Early Admission Plan

Grinnell offers Early Admission to superior college-bound secondary-school juniors who will neither complete their senior year nor receive a secondary-school diploma. (Students graduating early from secondary school are considered regular candidates for admission.) Early Admission candidates may file their applications by the Regular Admission application date only. Personal interviews are required of all Early Admission candidates, and must be completed prior to the application deadline.

## Advanced Placement Examination and International Baccalaureate Credits

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A student entering Grinnell will be granted four credits for Advanced Placement (AP) examinations of the College Board upon presentation of a score of 3 (or higher) [calculus (BC), computer science (AB)], 4 (or higher) [art, biology, calculus (AB), chemistry, classics, computer science (A), economics, English language/composition, environmental science, French, German, government, history, music, physics (B or C), psychology, Spanish, and statistics], and/or 5 [English literature/composition].

In addition, Grinnell College recognizes International Baccalaureate (IB) level work and will grant credit for examination scores of 5 or better on Higher Level courses only. Upon receipt of a transcript from the British Examination Authority, the College will also grant 4 credits for each British Advanced-level examination (A-level) score of B or higher. The granting of credit for IB and A-level work is equated to the granting of credit for Advanced Placement.

For satisfaction of graduation requirements, the credits awarded are divisional credits, not assigned to an academic department. However, a student may request permission to apply these AP/IB credits awarded toward satisfaction of the requirements for a major. For exact information about how credits will be awarded, consult the Office of the Registrar.

AP/IB credits will be cancelled upon the successful completion of any equivalent Grinnell course. Students should contact the Office of the Registrar for more details.

Grinnell does not grant credits for the College Level Examination Program (CLEP) test or other such programs.

## Transfer Credit

Students matriculating as first-time first-year students after June 2002 are limited to a maximum of 24 pre- and post-matriculation transfer credits (AP, IB, college credit). For students with an approved program to study off campus for one semester, the program credits are excluded from the 24-credit limit of transfer credits, and the semester off campus is counted toward the residency requirement. For students approved for yearlong off campus programs, only one semester of off-campus study will count toward the residency requirement, although the credits from both semesters will be accepted.

An evaluation of credits earned at properly accredited institutions is done by the registrar. Transfer credit evaluations are done prior to enrollment for all new students who have been approved for admission and for all matriculated students who pursue coursework while on leave or during the summer. Only official transcripts sent directly to Grinnell will be evaluated.

Currently enrolled students who attend another properly accredited institution have the responsibility of submitting the Transfer Approval Form to the Office of the Registrar in a timely fashion. In addition it is their responsibility to consult the *Student Handbook* on the limitations on transfer work after matriculation to Grinnell.

The evaluation of transfer credit by the registrar involves at least two considerations:

1. The comparability of the nature, content, and level of credit earned to what Grinnell currently offers; and
2. The appropriateness and applicability of the credits earned to the programs offered by Grinnell, in light of the student's educational goals.

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Courses in which a grade of C or above (C– is not acceptable) is earned at other institutions are transferable or applicable toward major or degree requirements at Grinnell. In addition, courses that are graded on a pass/fail basis must be accompanied by written documentation from the school issuing the credit that the passing grade reflects work at C or above (C– is not acceptable).

When transfer credits or Grinnell College credits overlap or duplicate Advanced Placement (AP) or International Baccalaureate (IB) credits, the highest credit value will be accepted. For courses that may apply to either a major or a concentration, the department chair of the major or concentration, at the request of the student, will make a determination and notify the Office of the Registrar in writing as to what credits can be applied toward the major or concentration. AP/IB credits will be cancelled upon the successful completion of any equivalent Grinnell course. Students should contact the Office of the Registrar for more details.

Courses considered vocational or remedial, College Level Examination Program (CLEP) credits, or other such placement credits are not transferable.

Grinnell usually does not award course credit for work done through distance learn-

ing, correspondence, extension, or continuing education programs. Only distance learning, extension, or continuing education courses that are (1) in traditional liberal arts subject areas and (2) accepted for credit by the sponsoring accredited institution for its own bachelor's degree may be granted credit subject to all other transfer of credit regulations.

Credit for summer study will not be accepted for transfer unless an official transcript is received by December 1 of the year in which the coursework is taken. Credits for winter interim study will not be accepted after the Office of the Registrar has verified completion of all requirements for graduation.

A transfer student is allowed to apply a maximum of 62 semester credits of transferable work toward a degree at Grinnell. If a transfer student has more than 62 credits of transferable work, the registrar will work with the student to determine which credits, not to exceed 62, will be accepted.

## Deferred Admission

Some applicants may decide that they wish to take a year off before entering college. Applicants who wish to request a deferment should indicate their plans on the application or write to Grinnell if the decision comes after the application is forwarded. Admitted applicants may be granted a deferment for one year, must pay their Advance Tuition Deposit, and may not enroll in another post-secondary institution of higher education during that year.

# Expenses and Financial Aid

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## Tuition and Fees for First-Year Students, 2007–08

Tuition, for Full-time Enrollment .....	\$33,910
Full Meal Plan (see Meal Options, below) .....	4,304
Room.....	3,726
Student Activities Fee .....	340
Health Fee .....	142
 TOTAL.....	 \$42,422

The tuition for transfer students will be determined based on expected graduation date. The College reserves the right to increase the rates charged with due notice.

## Tuition and Fees for Returning Students, 2007–08

Tuition, for Full-time Enrollment .....	\$29,710
Full Meal Plan (see Meal Options, below) .....	4,304
Room.....	3,726
Student Activities Fee .....	340
Health Fee .....	142
 TOTAL.....	 \$38,222

## Payment of Fees

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An advance tuition deposit of \$200 is required of all students. For newly admitted students, the deposit is credited to the student's account when she or he enters Grinnell. For returning students, the deposit is prerequisite to room draw and preregistration. Notification of the due date for this payment is given to students and parents in March of each year. In addition, an advance tuition deposit is required before a leave is granted. The advance tuition deposit is nonrefundable.

After advance payments are credited to the student's account, the remaining charges for tuition and fees are due approximately one month before the start of each term. If an account is not paid in full by those dates, the College regards the student's account as delinquent. Students whose accounts are delinquent are not entitled to meals, room, registration, admission to classes, or issue of transcripts. Delinquent balances are subject to a monthly finance charge of 1.5 percent from the date the account is considered delinquent.

For parents who prefer to pay college expenses in monthly installments, the College offers options administered by outside agencies. For further information, contact the Cashier's Office.

For the parents of students who receive no financial aid from Grinnell, the College offers the College Tuition Stabilization Plan. Under this plan, the tuition for four

years is prepaid at the current rate (\$33,910 x 4 for 2007–08), thereby avoiding any increases in tuition for the four years. More information about the College Tuition Stabilization Plan may be obtained by contacting the Cashier's Office.

## Refunds

The College engages its faculty and assigns residence hall space in advance of each semester in accordance with the number of students who have signified intent to be enrolled. When students withdraw during the semester, they leave vacancies that cannot be filled. The following rules concerning refunds protect Grinnell from losses when students withdraw. Exceptions to these rules are made only under conditions determined by the College.

A student withdrawing from the College within the first six weeks of the semester is held responsible for tuition, room, meal plan, and other fees on a prorated basis as of the date the student withdraws. If a student withdraws after six weeks into the semester, no tuition, room, meal plan, and other fees will be refunded. The same policy applies to emergency leaves.

Tuition, room, meal plan, and other fees will not be refunded for students suspended or dismissed for academic or conduct reasons during the semester.

**FINANCIAL ASSISTANCE:** After withdrawal adjustments to tuition, required fees, room, and meal option, funds are returned to payment sources in the following order:

1. Unsubsidized FFELP loans
2. Subsidized FFELP loans
3. Federal Perkins loans
4. FFELP PLUS loans
5. Federal Pell grants
6. Federal Academic Competitiveness grants
7. National SMART grants
8. Federal SEOG grants
9. Other Title IV aid
10. State loans
11. State grants
12. Private grants
13. Institutional loans
14. Institutional grants
15. Other payment sources
16. Student

A prescribed federal refund calculation governs students who receive federal Title IV financial assistance. Examples of federal refund and repayment calculations are available from the controller.

## Meal Options

Listed below are the meal plan options available to students living in the residence halls and their charges per year:

1. First-year students
  - A. 21 meals per week—Meal Plan 01.....\$4,304
2. Returning/Transfer students living in residence halls
  - A. 21 meals per week—Meal Plan 01 .....\$4,304
  - B. Any 15 meals per week plus—Meal Plan 02 .....\$4,350
  - C. Any 15 meals per week—Meal Plan 03 .....\$3,950
  - D. Any 10 meals per week plus—Meal Plan 04 .....\$4,130
3. Students living in college-owned housing, excluding the residence halls, have a variety of options, ranging from no meal plan to the full 21 meals per week (Meal Plan 01). Meal plan options are distributed in the spring of each year for the following fall semester.
4. Students living in Cowles Apartments are required to participate at a minimum in Meal Plan 5, 80 meals plus per semester, \$1,760 per year.
5. Students living in noncollege housing off campus may purchase any meal plan option from the Office of Dining Services.

## Music and Dance Fees, per semester

Studio instruction, for each area of private instruction:	239
Music 120, 220.....	\$370
Music 221, 420, Theatre 204 .....	\$630

Studio instruction, for each area of small-class instruction:	
Music 122.....	\$290
Theatre 104 .....	\$290

These fees cover individual instruction, use of the music library, use of a college musical instrument for regular practice, and use of practice room facilities.

## Special Fees

Alumni Course Fee .....\$150 per course  
 Grinnell College graduates are eligible to enroll for credit. Enrollment is limited to one course per semester on a “space available” basis.

Ninth Semester Teaching Fee .....\$225

Application fee, payable on first application for admission and not refundable .....\$30

Key deposit—Room key.....	\$30
Credentials file activation .....	\$25
(includes a one-time set-up fee of \$5 and the processing of 10 copies, additional copies sent for \$2 each). Credential file forms are available from the Career Development Office.	
Telephone access fee per semester.....	\$65
Monthly finance charge for late payment of fees.....	1.5% / month
Penalty for late registration .....	\$40
Tuition, auditing courses without credit, per credit (not charged to regularly enrolled students) .....	\$36
Tuition, registration for more than 18 credits (except studio instruction in theatre and music and PHE 101), per credit (returning students 2007–08).....	\$928
(first-year students 2007–08) .....	\$1,060
Tuition for special students, per credit.....	\$1,060
Tuition for students not in residence as regular students but doing work for credit under the supervision or instruction of a Grinnell College faculty member, per credit .....	\$1,060

## Contingent Charges

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All Grinnell students make a \$100 damage deposit that is separate from the advance tuition deposit and is included in the first-semester billing. The deposit is applied to any fines or outstanding bills at the end of each semester. Before registration each fall semester, students must restore the damage deposit to \$100 (if necessary). Any unused portion of the deposit will be returned upon graduation or withdrawal from Grinnell.

## Tuition and Fees for Off-Campus Study Programs

Grinnell College charges its own tuition and a handling fee for any student enrolling in an off-campus program for which the tuition and required fees are equal to or less than Grinnell's tuition. For off-campus programs for which the tuition and fees exceed those of Grinnell, the College charges students the tuition and fees of those off-campus programs. Board, room, program fees, travel, and other miscellaneous expenses are billed according to the charges from each individual program.

Students will be eligible to receive financial aid toward the full cost of the off-campus program, but may need to increase their contribution (e.g., through summer work, loans, etc.).

## Tuition and Fees for Ninth Semester Teacher Certification

### **Students enrolled in the Ninth Semester Program from fall 2006 to spring 2009:**

Tuition is waived for those approved for the ninth semester. For those who teach full time for a year within three years following completion of the program, the tuition is forgiven; otherwise it is payable at the going rate in effect at the time of study in the ninth semester. Each student is responsible for a \$225 student-teaching fee due at the beginning of the semester.

**Beginning in the 2009–10 academic year,** tuition will be waived for those approved for the ninth semester. For those who teach full time for two years within five years following completion of the program, 50 percent of the tuition will be forgiven. For those who teach three years within five years following completion of the program, 100 percent of the tuition will be forgiven. Otherwise, the tuition will be payable on the fifth anniversary of program completion at the going rate in effect at the time of study in the ninth semester. Each student is responsible for a \$225 student-teaching fee due at the beginning of the semester.

For purposes of the tuition forgiveness policy, teaching includes teaching in an accredited school; teaching experiences in Grinnell-sponsored programs such as in Nanjing, China, Nepal, and Lesotho; and in some Peace Corps programs. Students should consult with the Cashier's Office for information about whether teaching (other than in an accredited school) will count toward fulfilling this expectation.

## Financial Aid and Scholarships

In 2006–07, the College allotted more than \$29 million for scholarships, grants, and other aid. Furthermore, more than 88 percent of Grinnell's students received some type of financial assistance.

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Most financial aid is awarded on the basis of need; however, need is not considered when determining a student's eligibility for admission to Grinnell. If a student qualifies for admission, the College makes every effort to meet the demonstrated institutional financial need.

Awards are generally mailed at the time of the admission decision. The College requires admission before an award is offered. Financial aid is awarded on an annual basis and may be adjusted in subsequent years if the family's financial situation or number of family members in college changes, the financial aid application deadline is missed, or satisfactory academic progress is not maintained.

## Scholarships, Grants, Employment, and Loans

Institutional grants and scholarships form the largest part of Grinnell's financial aid funds and are available as a result of great generosity and stewardship over many decades and involving many alumni, parents, and other friends. After your graduation, please plan to contribute financially to your alma mater so that future generations of Grinnell students can also afford the wonderful education available here.

The federal and state governments also provide gift assistance to eligible students. Most of these grants are established for very high-need students.

In addition to the financial aid offered by Grinnell College, there are many private sources of scholarships, grants, and loans. Be sure to apply for outside scholarships, as they often reduce loans. Many printed and online resources are available, including: <[www.fafsa.ed.gov](http://www.fafsa.ed.gov)>, <[www.collegenet.com](http://www.collegenet.com)>, <[www.finaid.org](http://www.finaid.org)>, and <[www.fastweb.com](http://www.fastweb.com)>.

Student jobs on campus are funded by Grinnell and the federal government. Grinnell offers jobs first to students with demonstrated financial need. Students who work eight hours a week can expect to earn about \$1,800 during the academic year.

Grinnell awards educational loans primarily from the federal loan programs. These programs provide students and their parents with long-term, low-interest loans.

## **Financial Aid Application Procedures and Deadlines for New Students**

To apply for financial aid and scholarships, a new student must complete the Grinnell College Application for Financial Aid and Scholarships (AFA) included with the application for admission. You can also print the AFA from our website: <[www.grinnell.edu/offices/financialaid/forms](http://www.grinnell.edu/offices/financialaid/forms)>. In addition, the AFA is required to apply for aid from the Associated Colleges of the Midwest, Great Lakes College Association, tuition exchange, and staff tuition remission.

Entering students should complete the AFA by the following deadline to receive maximum consideration for all types of assistance. Applications received after the deadline will be awarded on a funds-available basis.

- December 1 for Early Decision
- January 1 for Early Decision II
- February 1 for Regular Admission
- May 1 for Transfer Admission

The financial aid process is complex and at times confusing; if questions arise, please contact us.

# Directories

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## Board of Trustees

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# Board of Trustees

When Iowa College (1846) merged with Grinnell University (1856) in 1859, the merged college was continued at Grinnell under the charter of the older institution. The name of the corporation continued to be The Trustees of Iowa College, even though the institution has been known as Grinnell College since 1909. As of June 17, 1990, the corporate name was changed to conform with its public identity, and hence the institution is now officially Grinnell College.

## Officers

David White '90, Chair; Patricia Jipp Finkelman '80, Vice-Chair; Clinton D. Korver '89, Vice-Chair; Russell K. Osgood, President; Susan M. Schoen (Assistant to the President), Secretary; David S. Clay (Vice-President for Business and Treasurer), Treasurer

## *Ex Officio Member*

**M. Leslie Stearns '87**, B.A., J.D., Los Angeles County Public Defender, Los Angeles, California; Alumni Council President (2007)

## Members

The date in parentheses at the end of each listing indicates the year of election to the board.

**Russell G. Allen '68**, B.A., J.D., Attorney, Newport Beach, California (2000)

**Trish Fitzgibbons Anderson '80**, B.A., M.A., Marriage and Family Therapist, Long Lake, Minnesota (2006)

**Robert F. Austin Jr. '54**, B.A., M.D., Pediatrician, Houston, Texas (2003)

**Elizabeth Ballantine**, B.A., M.A., Ph.D., J.D., EBA Associates, Washington, D.C. (1980; Life Trustee, 2003)

**J. Robert "Bob" Barr '57**, B.A., J.D., LL.B., Attorney, Sidley Austin Brown and Wood (retired), Chicago, Illinois; Evanston, Illinois (1996)

**Richard W. Booth '54**, B.A., Chairman, Lennox Foundation (retired), Dallas, Texas; Hot Springs Village, Arkansas (1982; Life Trustee, 2002)

**David B. Braman '75**, B.A., M.B.A., Senior Partner, Pantheon Ventures Inc., San Francisco, California (2006)

**Nordahl L. Brue '67**, B.A., J.D., Attorney and Entrepreneur, Burlington, Vermont (1996)

**Carolyn Swartz Bucksbaum '51**, B.A., Chicago, Illinois (1970; Life Trustee, 1998)

**Warren E. Buffett**, B.S., M.S., Chairman of the Board, Berkshire Hathaway Inc., Omaha, Nebraska (1968; Life Trustee, 1987)

**Robert A. Burnett**, B.A., Chairman of the Board, Meredith Corporation (retired), Des Moines, Iowa (1979; Life Trustee, 1999)

**Thomas R. Cech '70**, B.A., Ph.D., President, Howard Hughes Medical Institute, Chevy Chase, Maryland (1998; Inactive, 2006)

**Henry Cornell '76**, B.A., J.D., Managing Director, Goldman Sachs & Company, New York, New York (1998)

**John F. Egan '57**, B.A., M.S., Ph.D., Vice-President, Corporate Officer, Lockheed Martin Corporation (retired), Nashua, New Hampshire (2002)

**Vernon E. Faulconer '61**, President, Vernon E. Faulconer Inc., Tyler, Texas (1984; Life Trustee, 2003)

**Florence Fearrington**, B.A., New York, New York (2000)

**Laura M. Ferguson '90**, B.A., M.D., Physician, Grinnell Family Medicine, Grinnell, Iowa (2003)

**Patricia Jipp Finkelman '80**, B.A., M.B.A., Granville, Ohio (1998)

**Harold "Hal" W. Fuson Jr. '67**, B.A., M.S., J.D., Senior Vice-President, Copley Press, La Jolla, California (2004)

**Ronald T. Gault '62**, B.A., M.A., Managing Director, J.P. Morgan Securities Inc. (retired), Johannesburg, South Africa (1987; Life Trustee 2002)

**I. Craig Henderson '63**, B.A., M.D., Adjunct Professor of Medicine, University of California-San Francisco; Board Member, ALZA Pharmaceuticals, San Francisco, California (2000)

**Steve Holtze '68**, B.A., B.S., M.S., Chairman, Magnolia Hotel Company, Denver, Colorado (2002)

**Kihwan Kim '57**, B.A., M.A., Ph.D., International Adviser, Goldman Sachs Asia, Seoul, South Korea (2003)

**Clinton D. Korver '89**, B.A., M.S., Ph.D., Co-founder and CEO, myDecide Inc., Mountain View, California (2001)

**Todd C. Linden**, B.S., M.A., President and CEO, Grinnell Regional Medical Center, Grinnell, Iowa (2000)

**Caroline H. Little '81**, B.A., J.D., Chief Executive Officer and Publisher, Washingtonpost.NewsweekInteractive, Arlington, Virginia (1996)

**Fred A. Little Jr. '53**, B.A., J.D., Attorney, Pillsbury, Winthrop, Shaw, and Pittman (retired), Washington, D.C., San Francisco, California (1976; Life Trustee, 1996)

**James H. Lowry '61**, B.A., M.P.I.A., Vice-President, The Boston Consulting Group, Chicago, Illinois (1969; Life Trustee, 1995)

**Susan Holden McCurry '71**, B.A., Board Member, Holden Family Foundation, Naples, Florida (2003)

**Randall C. Morgan Jr. '65**, B.A., M.D., Orthopedic Surgeon, University Park Orthopedics, Sarasota, Florida (1993; Life Trustee, 2005)

**Robert C. Musser '62**, B.A., M.S., Controller, Mobil Corporation (retired), Alexandria, Virginia (1995)

**Gregg Narber '68**, B.A., M.A., J.D., Ph.D., The Principal Financial Group (retired), Des Moines, Iowa (2000)

**Patricia Meyer Papper '50**, B.A., Miami, Florida (1983; Life Trustee, 2003)

**John Roy Price Jr. '60**, B.A., M.A., J.D., President and CEO, Federal Home Loan Bank, Pittsburgh, Pennsylvania, (1970; Life Trustee, 1995)

**Paul G. Risser '61**, B.A., M.S., Ph.D., Acting Director, National Museum of Natural History of the Smithsonian Institute, Washington, D.C. (2007)

**Ronald B.H. Sandler '62**, B.A., M.D., Orthopedic Surgeon, Mezona Orthopaedic Professional Association (retired), Mesa, Arizona (1983; Life Trustee, 2003)

**Penny Bender Sebring '64**, B.A., M.Ed., Ph.D., Director, Consortium on Chicago School Research, University of Chicago, Chicago, Illinois (1993; Life Trustee, 2005)

**Karen E. Shaff**, B.A., J.D., Principal Financial Group Inc., Des Moines, Iowa (2007)

**George Shott**, B.A., Senior Managing Director, Shott Capital Management, San Francisco, California (2002)

**M. Anne Spence '66**, B.A., Ph.D., Professor Emerita, University of California, Irvine, California (2001)

**Lonabelle Kaplan Spencer '47**, B.A., Sarasota, Florida (1993; Life Trustee, 2005)

**Joel R. Spiegel '78**, B.A., Amazon.com (retired), Woodinville, Oregon (2007)

**Donald M. Stewart '59**, B.A., M.A., M.P.A., Ph.D., Visiting Professor, University of Chicago Harris School of Public Policy, Chicago, Illinois (1972; Life Trustee, 1995)

**Jessie L. Ternberg '46**, B.A., M.D., Professor Emerita of Surgery and Pediatrics, Washington University School of Medicine (retired), St. Louis, Missouri (1984; Life Trustee, 2003)

**Barrett W. Thomas '97**, B.A., M.S., Ph.D., Professor, University of Iowa, Tippie College of Business, Iowa City, Iowa, (2005)

**David White '90**, B.A., J.D., Managing Principal, Entertainment Strategies Group, Los Angeles, California (1999)

**Henry T. Wingate '69**, B.A., J.D., U.S. Chief District Judge, Southern District, of Mississippi, Jackson, Mississippi (2000)

# Faculty and Administration

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In the following listings, the first date, in parentheses, indicates initial appointment to the College; the second date indicates appointment to the latest rank.

## Faculty

### Emeriti

**Atwell, Roberta** (1973). Professor Emerita of Education, 2002–. B.S.Ed., Southwest Missouri State College; M.Ed., Ed.D., University of Missouri-Columbia.

**Bowers, Edd W.** (1960). Professor Emeritus of Physical Education, 1987–. B.A., Grinnell College; M.A., University of Iowa.

**Burkle, Howard R.** (1958). Professor Emeritus of Philosophy and Religious Studies, 1995–. B.A., Central Missouri State College; B.D., S.T.M., Ph.D., Yale University.

**Christiansen, Kenneth A.** (1955). Professor Emeritus of Biology, 1994–. B.A., Boston University; Ph.D., Harvard University.

**Clotfelter, Beryl E.** (1963). Professor Emeritus of Physics, 1996–. B.S., Oklahoma Baptist University; M.S., Ph.D., University of Oklahoma.

**Dawson, John C.** (1957–69; 1971). Professor Emeritus of Economics, 1996–. B.A., Middlebury College; Ph.D., Cornell University.

**DeLong, Karl T.** (1966). Professor Emeritus of Biology, 1996–. B.A., Oberlin College; Ph.D., University of California-Berkeley.

**Drake, George A.** (1960–61; 1979). Professor Emeritus of History, 2004–. B.A., Grinnell College; B.A., M.A., Oxford University (England); B.Div., M.A., P.D., University of Chicago.

**Durkee, L. H.** (1962). Professor Emeritus of Biology, 1993–. B.S., M.S., Ph.D., Syracuse University.

**Durkee, Lenore T.** (1963). Professor Emerita of Biology, 1999–. B.A., M.S., Syracuse University; Ph.D., University of Iowa.

**Erickson, Luther E.** (1962). Professor Emeritus of Chemistry, 2003–; B.A., St. Olaf College; Ph.D., University of Wisconsin-Madison.

**Frazer, Catherine S.** (1980). Professor Emerita of Philosophy, 1995–. B.A., Wellesley College; M.A., Ph.D., Yale University.

**Fudge, James T.** (1969). Professor Emeritus of Music, 1995–. B.Mus., Westminster College (Pennsylvania); M.Mus., University of Michigan; Ph.D., University of Iowa.

**Graham, Benjamin F. Jr.** (1959). Professor Emeritus of Biology, 1991–. B.S., M.S., University of Maine; Ph.D., Duke University.

**Haas, Dennis W.** (1966). Professor Emeritus of Religious Studies, 2005–. B.A., Franklin and Marshall College; M.Div., Union Theological Seminary; S.T.M., Lancaster Theological Seminary.

**Hays, Elizabeth L.** (1977). Associate Professor Emerita of Music, 2006–. B.A., University of California-Berkeley; M.A., Ph.D., Stanford University.

**Kintner, Philip L.** (1964). Professor Emeritus of History, 1996–. B.A., College of Wooster; M.A., Ph.D., Yale University.

**Kissane, James D.** (1956). Professor Emeritus of English, 2000–. B.A., Grinnell College; Ph.D., Johns Hopkins University.

**Klausner, Neal W.** (1944). Professor Emeritus of Philosophy, 1975–. B.A., Lawrence University; B.D., Colgate Rochester Divinity School; Ph.D., Yale University.

**Kurtz, Ronald J.** (1961). Professor Emeritus of Anthropology, 1997–. B.A., Carleton College; M.A., Ph.D., University of New Mexico.

**Liberman, Mathilda** (1960). Lecturer Emerita in English, 1998–. B.A., University of Michigan; M.A., University of Connecticut.

**Luebben, Ralph A.** (1957–61; 1967). Professor Emeritus of Anthropology, 1991–. B.S., Purdue University; M.A., University of New Mexico; Ph.D., Cornell University.

**McKibben, William T.** (1952). Professor Emeritus of Classics, 1982–. B.A., M.A., Stanford University; Ph.D., University of Chicago.

**Moffett, Alexander S.** (1971). Professor Emeritus of Theatre, 2006–. B.A., M.A., University of North Carolina; Ph.D., Florida State University.

**Moore, Edward M.** (1967). Professor Emeritus of English, 2006–. B.A., University of the South; M.A., Ph.D., Harvard University.

**Noble, Beth W.** (1949). Professor Emerita of Spanish, 1980–. B.A., Albertus Magnus College; M.A., Ph.D., Yale University.

**Obermiller, Raymond J.** (1966). Professor Emeritus of Physical Education, 1998–. B.S., Iowa State University; M.A., University of South Dakota.

**Parslow, Morris A.** (1962). Professor Emeritus of French, 1992–. B.A., St. John's College (Maryland); M.A., Ph.D., Princeton University.

**Percas de Ponseti, Helena** (1948). Professor Emerita of Spanish, 1990–. B.A., Institution Maintenon (France); B.A., Barnard College; M.A., Ph.D., Columbia University.

**Pfitsch, John A.** (1948). Professor Emeritus of Physical Education, 1990–. B.A., University of Texas; M.A., University of Kansas.

**Shipley, Helen B.** (1955). Cataloger in the Library with Faculty Rank as Associate Professor Emerita, 1977–. B.A., Elmhurst College; B.S. in L.S., University of Illinois; M.A., University of Minnesota.

**Smith, D. A.** (1970). Professor Emeritus of History, 2006–. B.A., Vanderbilt University; B.A., M.A., Oxford University (England); Ph.D., Yale University.

**Verrette, Victor S.** (1961). Professor Emeritus of French, 2002–. B.A., University of New Hampshire; Ph.D., University of California-Berkeley.

**Wack, Anna M.** (1955). Professor Emerita of Physical Education, 1991–. B.A., University of Northern Iowa; M.A., University of Iowa.

**Walker, Waldo S.** (1958). Professor Emeritus of Biology, 2001–. B.S., Upper Iowa University; M.S., Ph.D., University of Iowa.

**Wellborn, Beryl E.** (1958–62; 1972). Professor Emeritus of Education, 1995–. B.S.Ed., Northeast Missouri State College; M.A., University of Iowa.

**Zirkle, Merle W.** (1961–64; 1971). Professor Emerita of Art, 2004–. B.A., University of Mississippi; M.F.A., Southern Illinois University-Carbondale.

## Faculty

**Adelberg, Arnold** (1962). Myra Steele Professor of Mathematics, 1991–; Professor of Mathematics, 1972–. B.A., Columbia University; M.A., Ph.D., Princeton University. Senior Faculty Status.

**Ainsworth, David** (2007). Assistant Professor of English, 2007–. B.S., B.A., University of Arizona; M.A., Ph.D., University of Wisconsin-Madison.

**Andelson, Jonathan G.** (1974). Director of Center for Prairie Studies, 1999–; Rosenfield Professor of Social Science, 2006–; Professor of Anthropology, 1991–. B.A., Grinnell College; M.A., Ph.D., University of Michigan.

**Andrews, Stephen R.** (1999). Associate Professor of English, 2006–. B.A., M.A., Ph.D., University of Washington.

**Anger, Jenny** (1997). Associate Professor of Art, 2003–. B.A., University of Southern California; M.A., Ph.D., Brown University.

**Aparicio, Yvette** (2000). Associate Professor of Spanish, 2006–. B.A., Pomona College; M.A., Ph.D., University of California-Irvine.

**Armstrong, Todd P.** (1993). Associate Professor of Russian, 1999–. B.A., University of Oregon; M.A., Ph.D., Ohio State University.

**Arseneault, David M.** (1989). Associate Professor of Physical Education, 1997–. B.A., Colby College; M.Ed., Brock University (Canada).

**Aspler, Lawrence** (2007). Assistant Professor of Physics (EKI/Earth Systems Science), B.S., McGill University (Canada); Ph.D., Carleton University (Canada).

**Barber, Sigmund J.** (1977). Professor of German, 1993–. B.A., M.A., Ph.D., State University of New York-Albany.

**Barlow, George** (1990). Associate Professor of American Studies and English, 1995–. B.A., California State University-Hayward; M.A., M.F.A., University of Iowa.

**Benning, Heather** (1996). Assistant Professor of Physical Education, 2001–. B.A., Grinnell College; M.A., University of Iowa.

**Benoist, Maria Valerie** (1998). Associate Professor of Spanish, 2004–. B.A., College of Charleston; Ph.D., Emory University.

**Bensonsmith, Dionne** (2005). Instructor in Political Science, 2005–. B.A., University of Notre Dame; M.A., Syracuse University.

**Bentley-Condit, Vicki** (1995). Associate Professor of Anthropology, 2001–. B.A., University of Louisville; M.A., Ph.D., Emory University.

**Bonath, Gail J.** (1977). Associate Librarian of the College; Associate Professor, 1992–. B.S., Iowa State University; M.A., University of Iowa.

**Bonjean, Elizabeth** (2006). Assistant Professor of Theatre, 2006–. B.A., M.A., San Francisco State University; Ph.D., University of Washington.

**Brouhle, Keith R.** (2005). Assistant Professor of Economics, 2005–. B.A., Grinnell College; M.S., Ph.D., University of Illinois-Urbana-Champaign.

**Brown, Jennifer Williams** (2005). Assistant Professor of Music, 2005–. B.A., University of Illinois; M.A., Ph.D., Cornell University.

**Brown, Jonathan** (1995). Associate Professor of Biology, 2000–. B.A., Carleton College; Ph.D., Michigan State University.

**Brown, Victoria B.** (1989). L.F. Parker Professor of History, 2006–; Professor of History, 2004–. B.A., M.A., University of Wisconsin-Madison; Ph.D., University of California-San Diego.

**Byrd, Vance L.** (2007). Instructor in German, 2007–. B.A., University of Georgia; M.A., Ph.D. (in progress), University of Pennsylvania-Philadelphia.

**Cadmus, Robert R. Jr.** (1978). Breid-McFarland Professor of Science, 2006–; Professor of Physics, 1992–. B.A., Swarthmore College; M.A., Ph.D., University of Wisconsin-Madison.

**Campbell, David G.** (1990). Henry R. Luce Professor of Nations and the Global Environment; Professor of Biology, 1990–. B.A., Kalamazoo College; M.S., University of Michigan; Ph.D., Johns Hopkins University.

**Carl, Janet** (1999). Assistant in the Writing Laboratory and Lecturer, 1999–. B.A., M.A., University of Iowa.

**Carter, Eric** (2007). Assistant Professor of Anthropology (EKI, Geography), B.A., University of California-Berkeley; M.S., Ph.D., University of Wisconsin-Madison.

**Case, William B.** (1980). Professor of Physics, 1992–. B.S., M.S., Ph.D., Syracuse University.

**Caulkins, D. Douglas** (1970). Donald Wilson Professor of Enterprise and Leadership, 2005–; Professor of Anthropology, 1989–. B.A., Carleton College; Ph.D., Cornell University. Senior Faculty Status.

**Cavanagh, W. Michael** (1971). Orville and Mary Patterson Routt Professor of Literature, 2003–; Professor of English, 1989–. B.A., Kansas State University; M.A., Ph.D., University of Minnesota. Senior Faculty Status.

**Chamberland, Marc** (1997). Associate Professor of Mathematics and Statistics, 2003–. B.M., M.M., Ph.D., University of Waterloo (Canada).

**Chasson, R. Timothy** (1980). Associate Professor of Art, 1984–. B.A., Washington University; M.A., University of Minnesota; M.A., Ph.D., University of California-Berkeley.

**Chenette, Jonathan L.** (1983). Associate Dean of the College, 2004–; Blanche Johnson Professor of Music; Professor of Music, 1997–. M.Mus., Butler University; B.A., Ph.D., University of Chicago.

**Coahran, Marge M.** (2006). Instructor in Computer Science, 2006–. B.S., University of Massachusetts; M.S., University of Toronto (Canada).

**Cohn, Edward D.** (2007). Instructor in History, 2007–. B.A., Swarthmore College; Ph.D. (in progress), University of Chicago.

**Connelly, Christopher B.** (1999). Assistant Professor of Theatre, 1999–. B.A., Baldwin Wallace College; M.A., State University of New York-Binghamton; Ph.D., University of Georgia.

**Cook, Scott** (1996). Associate Professor of Chinese and Japanese, 2002–. B.A., University of Southern California; M.M., M.A., Ph.D., University of Michigan-Ann Arbor.

**Cook-Martín, David** (2007). Assistant Professor of Sociology, 2007–. B.A., Wheaton College; M.A., University of Houston; Ph.D., University of California-Los Angeles.

**Crim, Kevin L.** (1975). Assistant in the Writing Laboratory and Lecturer, 1978–. B.A., College of William and Mary; M.A., University of Wisconsin-Madison.

**Cummins, Monessa** (1985). Assistant Professor of Classics, 2005–. B.A., Wichita State University; M.A., Ph.D., University of Cincinnati.

**Cummins, W. Joseph** (1984). Associate Professor of Classics and Philosophy, 1990–. B.A., Xavier University; M.A., Ph.D., Emory University; M.A., Ph.D., University of Cincinnati.

**Cunningham, Charles E.** (1993). Professor of Physics, 2006–. B.S., Harvey Mudd College; M.S., Ph.D., Stanford University.

**Davis, Janet** (2006). Assistant Professor of Computer Science, 2006–. B.S., Harvey Mudd College; M.S., Ph.D., University of Washington.

**Delmenico, Lesley** (2000). Associate Professor of Theatre, 2006–. B.A., M.A., Ph.D., Northwestern University.

**DeRidder, Benjamin** (2007). Assistant Professor of Biology, B.S., Calvin College; Ph.D., Purdue University.

**Diemer, Lydia** (2007). Assistant Professor of Art, 2007–. B.F.A., University of Wisconsin-Madison; M.A., M.F.A., University of Iowa.

**Dobbs, Elizabeth A.** (1976). Orville and Mary Patterson Routt Professor of Literature, 2000–; Professor of English, 1991–. B.A., St. John’s College (Maryland); M.A., Ph.D., State University of New York-Buffalo.

**Dobe, Jennifer** (2005). Assistant Professor of Philosophy, 2007–. B.A., University of New Hampshire; M.A., Ph.D., University of Pennsylvania.

**Dobe, Timothy S.** (2005). Assistant Professor of Religious Studies, 2007–. B.A., University of New Hampshire; M.Div., Princeton Theological Seminary; Th.D., Harvard Divinity School.

**Drwal, Jason** (2003). Assistant Professor of Psychology, 2003–. B.A., University of Michigan; M.A., Ph.D., University of Connecticut.

**Duke, Charles L.** (1969). Professor of Physics, 1979–. B.S., North Carolina State University; Ph.D., Iowa State University. Senior Faculty Status.

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## Administration

### Executive Administration

**Osgood, Russell K.** (1998). President of the College, 1998–. B.A., J.D., Yale University.

**Allen, Christopher S.** (2007). Dean of Admission and Financial Aid, 2007–. B.A., M.S., Johns Hopkins University.

**Bernal, Elena M.** (2007). Special Assistant to the President for Diversity and Achievement, 2007–. B.A., Grinnell College; M.S., Illinois State University; Ph.D., Pennsylvania State University.

**Chavez-Silva, Monica** (2000). Director of Community Enhancement, 2000–. B.A., Harvard University.

**Clay, David S.** (1986). Vice-President and Treasurer of the College, 1994–. B.B.A., University of Iowa; C.P.A., State of Iowa.

**Crady, Thomas M.** (1982). Vice-President for Student Services, 1999–. B.S., M.A., Northern Michigan University; Ph.D., Iowa State University.

**Kalkbrenner, John W.** (1999). Vice-President for College Services, 2002–. B.A., Vassar College; M.S., Pace University; M.B.A., Rensselaer Polytechnic Institute.

**Munley, Michael J.** (1993). Vice-President for College and Alumni Relations, 2005–. B.A., Grinnell College; M.B.A., University of Iowa.

**Sortor, Marci** (1989). Vice-President for Institutional Planning, 2005–. B.A., M.A., Ph.D., University of California-San Diego.

**Sumner, James M.** (2000). Senior Counselor, 2007–. A.B., Pacific University; Ed.M., Springfield College.

**Swartz, James E.** (1980). Vice-President for Academic Affairs and Dean of the College, 1998–. B.S., Stanislaus State College; Ph.D., University of California-Santa Cruz.

**Thomas, Frank** (1991). Senior Counselor, 2005–. B.A., Grinnell College; J.D., Indiana University School of Law.

**Wright, Lesley** (1999). Director of the Faulconer Gallery, 1999–; Lecturer in Art, 2004–. B.A., Swarthmore College; A.M., Ph.D., Stanford University.

## Academic Affairs

**Swartz, James E.** (1980). Vice-President for Academic Affairs and Dean of the College, 1998–. B.S., Stanislaus State College; Ph.D., University of California-Santa Cruz.

**Baechtel, Mark** (2006). Director of Forensics, 2006–. B.A., American University; M.F.A., University of Iowa.

**Bright, Richard E.** (1989). Director of Off-Campus Study, 1992–. B.A., University of Lancaster (England); B.A., M.B.A., University of Colorado-Boulder.

**Chenette, Jonathan L.** (1983). Associate Dean of the College, 2004–. M.Mus., Butler University; B.A., Ph.D., University of Chicago.

**Cutchins, Doug** (1999). Director of the Office of Social Commitment, 1999–. B.A., Grinnell College; M.A., University of Connecticut.

**Geissinger, Anne** (2000). Director of the Office of Special International Programs, 2000–. B.A., Grinnell College; M.P.H., University of North Carolina-Chapel Hill.

**McKee, Valerie** (1989). Administrative Assistant to the Vice-President for Academic Affairs and Dean of the College, 1999–. B.A., Central College.

**Sortor, Marci** (1989). Associate Dean of the College, 2002–. B.A., M.A., Ph.D., University of California-San Diego.

**Skerrett, Kathleen** (1997). Associate Dean of the College, 2007–. B.A., Mount Allison University; LL.B., Dalhousie University (Canada); M.T.S., Ph.D., Harvard University.

**Story, Angie** (1982). Assistant to the Associate Dean and Coordinator of Academic and Technical Support Assistants, 1999–. B.A., William Penn University.

## Admission

**Allen, Christopher S.** (2007). Dean of Admission and Financial Aid, 2007–. B.A., M.S., Johns Hopkins University.

**Adams, Sara P.** (1998). Admission Counselor, 1999–. B.S., Stanford University.

**Best, Eli** (2007). Admission Counselor, 2007–. B.A., Grinnell College.

**Coy, Bryan** (2007). Assistant Dean of Admission/Coordinator of Multicultural Admission, 2007–. B.A., Grinnell College.

**Edwards, Jonathan** (2007). Associate Dean of Admission/Coordinator of International Admission, 2007–. B.A., Luther College; M.A., University of Illinois-Chicago.

**Huacuja, Misty** (2002). Assistant Dean of Admission, 2002–. B.A., Grinnell College.

**Jacks, Marlene Spraggins** (1999). Associate Dean of Admission, 1999–. B.A., Augustana College; M.S.Ed., Western Illinois University.

**Newport, Constance J.** (1990). Administrative Assistant, 1992–. B.A., University of Northern Iowa.

**Sumner, James M.** (2000). Senior Counselor, 2007–. A.B., Pacific University; Ed.M., Springfield College.

**White, Sarah** (1999). Assistant Dean of Admission, 2002–. B.A., University of Iowa.

## Bookstore

**Wherry, Cassandra J.** (1988). Manager, Bookstore, 1999–. B.S., Iowa State University.

**McIlrath, J. Harley** (2000). Assistant Manager, Bookstore, 2000–. B.A., M.A., University of Northern Iowa.

## College and Alumni Relations

**Munley, Michael J.** (1993). Vice-President for College and Alumni Relations, 2005–. B.A., Grinnell College; M.B.A., University of Iowa.

**Bailey, Jayn L.** (2005). Assistant Director of Alumni Relations, 2007–. B.A., Grinnell College.

**Bair, Margaret E. Jones** (1994). Director of Donor Relations, 2006–. B.S., Centre College; M.S., Florida State University.

**Bly, Rachel R.** (1998). Director of Conference Operations, 2005–. B.A., Grinnell College; M.A., Drake University.

**Boulton, Buddy** (2006). Assistant Director of the Pioneer Fund, 2007–. B.A., Simpson College; M.A., Drake University.

**Dinh, Khoi** (2007). Assistant Director of Development Research, 2007–. B.B.A., Cameron University; M.B.A., Missouri State University.

**Dralus, Donna** (2006). Assistant Online Media and Web Coordinator, 2006–. B.A., Grinnell College.

**Durbala, Sandy** (1995). Associate Director of Planned Giving, 2006–.

**Fields, Jeffrey** (2007). Assistant Director of the Pioneer Fund, 2007–. B.A., Grinnell College; J.D., University of Iowa College of Law.

**Goltz, Neill E.** (2000). Director of Planned Giving, 2000–. B.A., Brown University.

**Gregor, Christine M.** (1976). Director of Alumni and Donor Services, 2004–.

**Hall, Effie** (2001). Associate Director of Major Gifts, 2007–. B.A., University of the Philippines (Philippines); M.S., Syracuse University; M.B.A., Ph.D., University of Iowa.

**Hess, James** (2007). Director of Alumni and Community Relations, 2007–. B.A., The George Washington University.

**Ivanov, Leonid** (2001). Online Media and Web Coordinator, 2001–. B.A., M.A., Moscow State University (Russia).

**McCue, Daniel** (2006). Assistant Director of Alumni Relations, 2006–. B.A., Hope College; M.A., University of Nevada-Las Vegas.

**Muckler, Janet** (1995). Administrative Assistant for College and Alumni Relations, 1996–.

**Powell, Charles E.** (2007). Director of Development, 2007–. B.A., Washington and Jefferson College.

**Powers, James A.** (1987). Associate Director of Communication and Events, 2001–. B.F.A., University of Iowa.

**Roberts, Severin** (2005). Director of the Pioneer Fund, 2005–. B.A., University of Missouri-Columbia; M.A., University of Kansas.

**Scheckter, Abigail C.** (2005). Assistant Director of Major Gifts, 2006–. B.A., Grinnell College.

**Stolze, Jacqueline Hartling** (1997). Editorial Director; Editor, *The Grinnell Magazine*, 2002–. B.A., M.A.W., University of Iowa.

**Worster, Catherine B.** (2006). Director of Communication, 2006–. B.A., Grinnell College.

## College Services

**Kalkbrenner, John W.** (1999). Vice-President for College Services, 2002–. B.A., Vassar College; M.S., Pace University; M.B.A., Rensselaer Polytechnic Institute.

**Hegg, Kim** (2000). Manager of Campus Mail Services, 2005–.

**Wade, Vicki J.** (1997). Services Coordinator, 2007–. A.A., Des Moines Area Community College; B.A., Drake University.

## Community Enhancement

**Chavez-Silva, Monica** (2000). Director of Community Enhancement, 2000–. B.A., Harvard University.

## Corporate, Foundation, and Government Relations

**Wiese, Karen** (1995). Director of Corporate, Foundation, and Government Relations, 1995–. B.A., Grinnell College; M.S., Iowa State University.

**Cleaver, Richard** (2000). Grant Writer, 2000–. B.A., Grinnell College; M.A., University of Sheffield (England).

## Dining Services

**Williams, Richard D.** (1999). Director of Dining Services, 1999–. B.S., M.S., University of Nebraska-Kearney.

**Kirk, Mary** (1998). Assistant Director of Dining Services, 2004–. B.S., Northeast Missouri State University.

**Moser, Jeanette A.** (1995). Associate Director of Dining Services, 1998–. B.S., North Dakota State University.

**Turley, Scott D.** (1999). Managing Chef, 1999–. A.A., The University of Akron.

**Waltersford, Terry** (2004). Assistant Director of Dining Services, 2004–.

## Facilities Management

**Godar, Mark E.** (1995). Director of Facilities Management, 1995–. A.A., Kirkwood Community College; B.S., .B.A., Iowa State University.

**Bair, Chris** (2006). Environmental and Safety Coordinator, 2006–. B.A., Grinnell College.

**Bartachek, Bonita** (1984). Custodial Supervisor, 2002–.

**Burt, Michael G.** (1989). Associate Director of Facilities Management—Grounds, Landscape, and Hauling, 1991–. B.S., M.S., Iowa State University.

**Hansen, Dixie** (2000). Office Manager, 2001–.

**Ollinger, Leslie A.** (1985). Associate Director of Facilities Management—Procurement, Operations, and Custodial Services, 1999–.

**Saunders, Kenneth** (1997). Maintenance Manager, 2000–.

**Whitney, Richard S.** (1995). Associate Director of Facilities Management—Construction and Maintenance, 1995–. B.S., Iowa State University.

## Faulconer Gallery

**Wright, Lesley** (1999). Director of the Faulconer Gallery, 1999–; Lecturer in Art, 2004–. B.A., Swarthmore College; A.M., Ph.D., Stanford University.

**Jenkins, Kay E. Wilson** (1983). Curator of the Collection, 1986–. B.A., Rockford College.

**Severe, Milton** (1989). Director of Exhibition Design, 1998–. B.A., Grinnell College.

**Strong, Daniel** (1999). Associate Director and Curator of Exhibitions, 1999–. B.S., Nazareth College of Rochester; M.A., Williams College; M.A., Princeton University.

## Financial Aid

**Woods, Arnold A. Jr.** (1993). Director of Student Financial Aid, 1993–. B.S., Southern Illinois University.

**Sittig, Pam** (1996). Assistant Director of Student Financial Aid, 2003–. B.S., Truman State University; M.B.A., William Woods University.

**Zimmermann, Gretchen M.** (1986). Associate Director of Student Financial Aid, 1994–. B.B.A., University of Iowa.

## General Administration

**Bosse, Carolyn J.** (1990). Biology Department Technician, 1990–. B.A., Augustana College.

**Brown, Barbara M.** (1990). Psychology Department Technical Assistant, 1990–. B.A., Grinnell College.

**Dudak, Edward D.** (1978). Physics Department Technical Assistant, 1989–. B.S., University of Wisconsin-Platteville.

**Groenendyk, Robert L.** (1990). Biology Department Greenhouse/Field Technician, 1990–. B.A., Central College.

**Hueftle, Karen A.** (1986). Art Department Slide Curator, 1989–. B.A., Kearney State College.

**Colbe, Susan E.** (1992). Biology Laboratory Assistant, 1992–. B.S., Iowa State University; M.T.-A.S.C.P., Schoitz Medical Center.

**Mottl, Larissa** (2000). Manager of Conard Environmental Research Area, 2000–. B.A., University of Minnesota-Morris; M.S., Iowa State University.

**Nelson, Paul E.** (1990). Music Department Technical Assistant, 1990–. B.A., Winona State University.

**Princer, J. Michael** (1977). Chemistry Department Technical Assistant, 1989–. B.S., Ferris State College.

**Sanning, Erik G.** (1991). Technical Director, 1998–. B.A., Grinnell College.

**Veerhusen-Langerud, Karen** (1997). Director/Lead Teacher of the Preschool Laboratory, 1997–. B.S., Iowa State University; M.A., University of Northern Iowa.

## Health Services

**Cochran, Karen** (1988). Director of Health Services, 2000–. R.N., St. Lukes School of Nursing.

## Human Resources

**Lovig, Kristin K.** (2000). Director, 2000–. B.B.A., Iowa State University.

**Johnson, Jana** (2000). Generalist, 2000–. B.A., University of Northern Iowa.

**Koehler, Stacy** (2000). Generalist, 2000–. B.A., University of Northern Iowa.

## Information Technology Services

**Francis, William D.** (1987). Director of Information Technology Services, 2000–. B.A., State University of New York; M.S., Ph.D., University of Pittsburgh.

**Albers, Andrew J.** (1990). Database Administrator, 1995–. B.B.A., B.S., Iowa State University.

**Bartachek, Phil** (1999). Programmer Analyst, 2000–. A.A.S., Kirkwood Community College; B.A., Coe College.

**Dale, David P.** (1985). Project Manager for Physical Infrastructure, 2000–. B.A., Grinnell College.

**Ellis, David W.** (1987). Network Services Manager, 2000–. B.A., Northwestern College.

**Grubb, Derrick** (2007). Applications Programmer Analyst, 2007–. B.S., Iowa State University.

**Helt, Ralph F.** (2005). Audio-Visual Services Coordinator, 2005–. B.A., Simpson College.

**Jaeger, Brent T.** (1994). Assistant Director of Information Technology Services, 2006–. B.A., Wartburg College.

**Ludwig, Linda** (1995). Software Applications Specialist, 2007–. B.A., M.A., Truman State University.

**McRitchie, Karen J.** (1998). Green Team Leader, Information Technology Support Specialist, 2000–.

**Miller, Mark E.** (1989). Deputy Director of Information Technology Planning and Business Operations, 2002-. B.A., M.A., Ph.D., University of Notre Dame.

**Pifer, Mike** (1997). Network Specialist, 2000-. B.A., Grand View College.

**Twitchell, Wayne** (1998). Applications Integrator/Developer, 2001-. B.S., Central Michigan University; Ph.D., Purdue University.

**VanWilligen, Carlie** (1996). Applications Project Coordinator/Business Process Analyst, 2003-. B.A., Simpson College; M.A., St. Ambrose University.

**Watts, Mark D.** (1998). Blue Team Leader, Information Technology Support Specialist, 2000-. B.A., University of Northern Iowa.

**Wilkins, Mike** (1997). Network Specialist, 2000-. A.A.S., Marshalltown Community College; B.A., Coe College.

## **Institutional Planning**

**Sortor, Marci** (1989). Vice-President for Institutional Planning, 2005-. B.A., M.A., Ph.D., University of California-San Diego.

## **Institutional Research**

**Baumler, Scott J.** (1998). Director of Institutional Research, 2003-. B.S., Iowa State University; M.S., Pennsylvania State University.

## **Library**

**Fyffe, Richard** (2006). Librarian of the College, 2006-. B.A., M.A., University of Connecticut; M.S., Simmons College Graduate School of Library and Information Science.

**Bonath, Gail J.** (1977). Associate Librarian of the College, 1994-. B.S., Iowa State University; M.A., University of Iowa.

**Clayton, Sharon G.** (1983). Administrative Assistant to the Librarian of the College, 1991-. A.A., Marshalltown Community College.

**Dunn, Kathryn** (2006). Reference and Instruction Librarian, 2006-. B.S., University of Wisconsin-Platteville; M.L.S., Indiana University.

**Engel, Kevin R.** (1986). Science Librarian, 1987-. B.S., Iowa State University; M.A., University of Iowa.

**Jones, Phillip W.** (2004). Reader Services Librarian, 2004-. B.A., Purdue University; B.A., Adams State College; M.L.S., University of Arizona; M.A., University of Kentucky.

**Knight, R. Cecilia** (1993). Catalog Librarian, 1993-. B.A., Blackburn College; M.L.S., Rosary College.

**Rod, Catherine M.** (1987). Associate Librarian of the College, 1994-. B.A., Augustana College; M.A., University of Iowa; M.A., Iowa State University.

**Stuhr, Rebecca A.** (1988). Collection Development and Preservation Librarian, 1988-. B.A., St. Olaf College; M.L.I.S., University of California-Berkeley.

## Multimedia Technologies

**Conner, Mike** (2004). Curricular Technology Specialist, 2004–. B.A., M.A., Iowa State University.

**Hagemeister, Fredrick** (2002). Curricular Technology Specialist, 2002–. B.S., Miami University; M.S., Ph.D., Purdue University.

**Price, Jared** (2003). Curricular Technology Specialist, 2003–. B.A., Doane College.

## Office of Diversity

**Bernal, Elena M.** (2007). Special Assistant to the President for Diversity and Achievement, 2007–. B.A., Grinnell College; M.S., Illinois State University; Ph.D., Pennsylvania State University.

**Skerrett, Kathleen** (1997). Associate Dean of the College, 2007–. B.A., Mount Allison University; LL.B., Dalhousie University (Canada); M.T.S., Ph.D., Harvard University.

## Office of the President

**Osgood, Russell K.** (1998). President of the College, 1998–. B.A., J.D., Yale University.

**Bernal, Elena M.** (2007). Special Assistant to the President for Diversity and Achievement, 2007–. B.A., Grinnell College; M.S., Illinois State University; Ph.D., Pennsylvania State University.

**Schoen, Susan M.** (1982). Secretary of the College; Assistant to the President, 2001–. B.A., Concordia College.

**Sortor, Marci** (1989). Vice-President for Institutional Planning, 2005–. B.A., M.A., Ph.D., University of California-San Diego.

**Thomas, Frank** (1991). Senior Counselor, 2005–. B.A., Grinnell College; J.D., Indiana University School of Law.

## Physical Education

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**Wallace, Gregory A.** (1988). Director of Athletics, 2007–. Associate Professor of Physical Education, 2004–, B.S., Missouri Valley College; M.S., Central Missouri State University.

**Anderson, Jason** (2005). Assistant Football and Assistant Baseball Coach, 2005–. B.A., Grinnell College; M.S., United States Sports Academy.

**Baumgartner, Nancy** (1997). Administrative Assistant to the Director of Athletics, 2005–.

**Benning, Heather** (1998). Assistant Professor of Physical Education, Head Women's Soccer Coach and Assistant Women's Track Coach, 1998–. B.A., Grinnell College; M.A., University of Iowa.

**Fletcher, Zachary J.** (2006). Assistant Football Coach, Recruitment Coordinator, Strength and Conditioning Coach, 2006–. B.A., Grinnell College.

**Phelps, Steven** (2006). Sports Information Director, 2006–. B.A., Buena Vista University.

**Rose, Kelly** (2001). Assistant Athletic Trainer, 2004–. B.S., University of Iowa; M.P.A., Drake University.

**Zeiss, David** (1987). Director of Recreational Services, 1989–. B.A., Lawrence University.

## Registrar

**Adams, Gerald S.** (1998). Registrar, 1998–. B.S., University of Washington; Ph.D., Oregon State University.

## Security

**Briscoe, Stephen A.** (1998). Director of Security, 1998–. B.A., Columbia College; M.S., Central Missouri State University.

**Motta, Russell** (1994). Assistant Director of Security, 1999–. B.S., University of Colorado-Boulder.

## Student Affairs

**Crady, Thomas M.** (1982). Vice-President for Student Services, 1999–. B.S., M.A., Northern Michigan University; Ph.D., Iowa State University.

**Alexander, Janet** (1998). Assistant Dean and Director of International Student Services, 2006–. B.A., University of Iowa; M.A., University of Northern Iowa.

**Andrews, Sheree** (2000). Assistant Dean and Director of Residence Life, 2004–. B.A., University of Washington.

**Bierniek, Jennifer** (2006). Residence Life Coordinator, 2006–. A.A., Fergus Falls Community College; B.S., North Dakota State University; M.S., South Dakota State University.

**Bryant, Linda** (2001). College Organist, 2001–. B.M., Drake University; M.L.S., Valparaiso University; B.A., Fairmont State College.

**Caulkins, D. Douglas** (1970). Acting Dean for Career Development and Employment, 2006–. B.A., Carleton College; Ph.D., Cornell University.

**Graves, Amy B.** (1992). Director of Internship and Employment Counseling, 2006–. B.A., Lake Forest College.

**Hinds-Bruch, Kimberly M.** (2005). Residence Life Coordinator, 2005–. B.A., M.Ed., University of Nevada.

**Krohn, Jennifer R.** (1989). Dean of Student Life, 2001–. B.S., University of Wisconsin; M.A., Lewis and Clark College; Ph.D., Pennsylvania State University.

**Litwin, Daveen H.** (2006). Rabbi and Other Duties, 2006–. B.A., Brandeis University; M.A., Hebrew Union College.

**Lukowicz-Armstrong, Hanna** (2000). Multicultural Counselor, 2006–. B.A., University Gdansk, Poland; M.A., Ohio State University.

**Mason, Moses** (2007). Religious Life Intern, 2007–. B.A., Grinnell College; M.Div., Chicago Theological Seminary.

**Menard, Bradley J.** (2006). Residence Life Coordinator, 2006–. B.S., State University of New York-Oneonta; M.Ed., Iowa State University.

**Menard, Tiffany** (2007). Residence Life Coordinator, 2007–. B.A., Hartwick College; M.Ed., Iowa State University.

**Perry, Megan C.** (2006). Residence Life Coordinator, 2006–. B.A., Loras College; M.A., Ball State University.

**Shorb, Deanna** (1996). College Chaplain, 1996–. B.A., West Chester University; M.Div., Yale Divinity School.

**Sims, Michael D.** (1997). Senior Associate Dean for Student Life, 2006–. B.S., University of Wisconsin-La Crosse.

**Slick, Daria** (2006). Director of Multicultural Affairs, 2006–. B.A., University of Iowa; M.A., University of Northern Iowa.

**Stern, Joyce M.** (1999). Dean of Student Academic Support and Advising, 2006–. B.A., Grinnell College; M.A., Stanford University.

**Taylor, Vanessa O.** (2006). Residence Life Coordinator, 2006–. B.A., Grinnell College; J.D., University of North Dakota School of Law.

**Wise, Shai** (2006). Religious Life Intern, 2006–. B.A., Earlham College; M.A., United Theological Seminary of the Twin Cities.

### Treasurer

**Clay, David S.** (1986). Vice-President and Treasurer of the College, 1994–. B.B.A., University of Iowa; C.P.A., State of Iowa.

**Anderson, Amy** (2000). Associate Controller, 2004–. B.A., Wartburg College.

**Carlson, Paige** (2005). Investment Analyst, 2005–. B.A., Grinnell College.

**Carstensen, Ruth A.** (1984). Collections Manager, 1997–.

**Combs, Nancy** (2002). Controller, 2004–. B.B.A., University of Iowa.

**Maschmann, Marsha A.** (1988). Accounting Manager, 1993–.

**Moes, DeNeil K.** (1992). Treasury Operations Assistant, 2004–.

**Mulholland, James R. Jr.** (1988). Assistant Treasurer, 2004–. B.S., Bemidji State University; C.P.A., State of Iowa.

**Voss, Karen L.** (1990). Associate Treasurer, 2004–. B.B.A., University of Iowa.

# Alumni Association

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The Alumni Association of Grinnell College was established in 1879 with 151 charter members. Today the association, headed by the Alumni Association Council, includes more than 18,000 active class members living in every state of the union, various U.S. territories, and 68 other countries. The alumni volunteers—class agents, fund directors, Asa Turner chairs, class committees, regional planning committees, alumni admission representatives, career development volunteers, and class committee members—all work to encourage support for the College. The College provides its alumni with such services as *The Grinnell Magazine*, coordination of regional activities, promotion of regular class reunions, alumni awards, and classletters.

## Officers

M. Leslie Stearns '87, President; Mike Ison '93, Past President;  
Sam Perlman '90, President-elect

## Council Members

Jim Bowhay '81, Joan Vander Naald Egenes '58, G. Barry Huff '73, William Ingram '53, Michael G. Ison '93, Rob Killion '90, Jeffrey W. Kohlman '66, Dean Lerner '74, Judy Mahle Lutter '61, Avram C. Machtiger '74, Karmi J. Mattson '97, Ellen McDonald '81, P. Carter Newton '77, Dorothy Smardack Palmer '62, Renee Bourgeois Parsons '96, Sam Perlman '90, Paul G. Risser '61, Makino (Kino) Ruth '79, Samir Sashikant '00, Kartik Sheth '93, M. Leslie Stearns '87, Jack Swenson '61, Gretchen Osterhof Thomson '62, Lisa van Sand '85, Lee D. Weisel '62

## Alumni Awards, 2007

Wallace H. Douma '51  
Norma Tong Dang '53 (Distinguished Award)  
Marilyn Clarke Sippy '57  
Harold T. Tanouye '57  
Thomas J. Cole '71  
Richard A. Deyo '71

David N. Feldman '71  
Philip B. Mears '71  
Mitchell D. Erickson '72  
Michele Weiner-Davis '73  
Elizabeth L. Powley '93

# Presidents of Grinnell College

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The Trustees of Iowa College .....	1846–65
George Frederic Magoun .....	1865–84
Samuel J. Buck .....	acting, 1884–87
George Augustus Gates .....	1887–1900
John H. T. Main .....	acting, 1900–02
Dan Freeman Bradley .....	1902–05
John H.T. Main .....	acting, 1905–06; 1906–31
John Scholte Nollen .....	1931–40
Samuel Nowell Stevens .....	1940–54
Rupert Adam Hawk .....	acting, 1954–55
Howard Rothmann Bowen .....	1955–64
James Hartmann Stauss .....	acting, 1964–65
Glenn Leggett .....	1965–75
President Emeritus of the College .....	1979–2003
A. Richard Turner .....	1975–79
George A. Drake .....	1979–91
President Emeritus of the College .....	2005–
Waldo S. Walker.....	acting, 1987
Pamela A. Ferguson .....	1991–1997
Charles L. Duke .....	acting, 1998
Russell K. Osgood .....	1998–

# Profile

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# Core Values of Grinnell College

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## Excellence in Education for Students in the Liberal Arts

- « varied forms of learning, in and out of the classroom and beyond college
- « creative and critical thinking stimulated by the free, open exchange of ideas
- « education that reflects on its own process
- « excellent teaching as the highest priority of the faculty
- « active scholarship in traditional and interdisciplinary fields
- « need-blind admission of students with strong academic potential

## A Diverse Community

- « a wide diversity of people and perspectives
- « a residential campus in a setting that promotes close interactions
- « personal, egalitarian, and respectful interactions among all members of the community
- « meeting full demonstrated financial-aid need of admitted and continuing students
- « support for professional well-being of all whose work contributes to the College

## Social Responsibility

- « our strong tradition of social responsibility and action
- « our strong tradition of self-governance and personal responsibility
- « learning from and communicating with the world beyond the campus
- « lifelong connections that support friendship, work, and learning
- « continuing to build institutional strength for educating tomorrow's students

# Grinnell College Profile

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**Founded:** 1846

**Type:** Private, coed, residential, liberal arts

**Location:** Grinnell, Iowa (population 9,100); on or near Interstate 80, U.S. Highways 6 and 63, State Highway 146; one hour from airports at Des Moines and Cedar Rapids

**Contact:** 1121 Park St., Grinnell, Iowa 50112-1690; phone 641-269-4000; <[www.grinnell.edu](http://www.grinnell.edu)>

**Degree Conferred:** Bachelor of Arts

**Enrollment:** Approximately 1,500 students, generally from all states and about 50 countries

**Six-Year Graduation Rate:** 90 percent

**Student:Faculty Ratio:** 8:1

**Academic Year:** Late August through mid-May (two semesters)

**Accreditation and Affiliations:** Accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, telephone 312-263-0456; on the approved list of the American Chemical Society; Phi Beta Kappa chapter chartered in 1907; member of the Midwest Conference, National Collegiate Athletic Association (Division III); member of the Associated Colleges of the Midwest, Great Lakes Colleges Association, American Council on Education, Association of American Colleges and Universities, Council for Higher Education of the United Church of Christ, College Board, and other national and regional associations

**Libraries:** The Grinnell College libraries—consisting of Burling Library, Windsor Science Library, and the Music Library—hold more than a million books and government documents, more than 20,000 serials, roughly 30,000 audiovisual units, and nearly 8,000 e-books; select depository for federal documents

**Academic Support Laboratories:** Library Lab, Math Lab, Reading Lab, Science Learning Center, Writing Lab

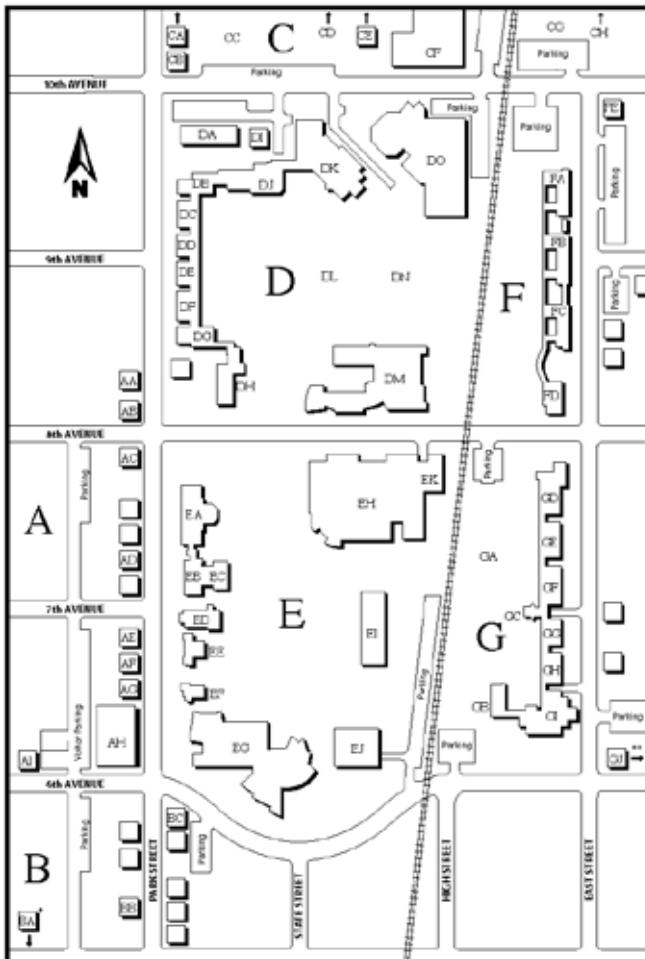
**Distinguished Programs:** Center for Prairie Studies, Center for the Humanities, Center for International Studies, Noun Program in Women's Studies, Peace Studies Program, Rosenfield Public Affairs Program, Donald L. Wilson Program in Enterprise and Leadership

**Campus:** 120 acres, 64 buildings (including 19 residence halls), 365-acre environmental research area

**Colors:** Scarlet and Black

**Nickname:** Pioneers

# Campus Map



## Campus Facilities

Alumni Recitation Hall (ARH)	EA
Athletic and Fitness Center	CF
Baseball Diamond	CD
Bookstore	EC
Bucksbaum Center for the Arts	EG
Burling Library	EJ
Carnegie Hall	CB
Clark Residence Hall	DC
Cleveland Residence Hall	GH
Conney M. Kimball Black Cultural Center	CB
Cooling Plant	EK
Cowles Residence Hall	DJ
Darby Gym	CF
Dibble Residence Hall	DB
East Residence Hall	FA
Faculty House	AB
Facilities Management **	GJ
Forum	EI
Gale Observatory	CE

Gates Residence Hall	DD
Goodnow Hall	EF
Grinnell House	BB
Haines Residence Hall	GF
Harris Center	DK
Harry Hopkins House	AE
Heating Plant	DI
Herrick Chapel	ED
James Residence Hall	GG
Jane Springer	
Athletic Field	CC
Joe Rosenfield '25 Center	DM
John Chrystal Center	AH
Kershaw Residence Hall	FC
Langan Residence Hall	DF
Lazier Residence Hall	FD
Les Duke Track	CD
Loose Residence Hall	GD
MacEachron Field	DL
Main Residence Hall	GI
Mears Cottage	GB
Nollen House	AG
Noyce Residence Hall	DD
Old Glove Factory *	BA

Physical Education Complex (PEC)	DO
Preschool Lab	AD
President's House	CA
Rawson Residence Hall	DE
Read Residence Hall	GE
Rose Residence Hall	FB
Rosenblom Football Field	CD
Smith Residence Hall	DG
Soccer Field	CH
Softball Diamond	CH
Steiner Hall	EE
Student Publications	DM
Tennis Courts	CG
Volleyball Courts	GA
Ward Field	DN
Windsor House	BC
Younker Residence Hall	DH
1102 Broad Street	AI
1233 Park Street	AF
1321 Park Street	AC
1432 East Street	AA

## Campus programs and spaces

Academic Advising	DM
Accounting *	BA
Admission	AH
Alumni and Community Relations *	BA
Athletics	DO
Audio Visual Services	EA
Bob's Underground Coffeehouse	GI
Career Development Office	AF
Cashier/Bursar	AH
CERA Director	AE
Chaplain	AC
College and Alumni Relations *	BA
College Services	EI
Communication	BC
Community Enhancement *	BA
Community Service Center	AF
Conference Operations and Events	DM
Corporate, Foundation, and Government Relations	AG
Dean of the College	AG
Development *	BA
Dining Hall	DM
Dining Services	DM
Donor Services *	BA
Experiential Learning Center for	AF
Faulconer Art Gallery	EG
Financial Aid	AH
Flanagan Arena Theatre	EG
Health Center	EI
Help Desk	EI
Human Resources *	BA
Humanities, Center for the	EE
Information Technology Services	EI
Institutional Research	AH
International Student Services	DM
International Studies Center for	GB
Mail Services	DM
Multicultural Affairs	DM
Off-Campus Study	GB
Pioneer Fund *	BA
Prairie Studies Center for	AE
President of the College	AG
Print and Drawing Studio Room	EJ
Reading Lab	AA
Registrar	AH
Roberts Theatre	EG
Security Department	FE
Social Commitment, Office for	AF
South Lounge	EI
Special International Programs	GB
Stonewall Resource Center	DM
Student Affairs	DM
Student Government Association	DM
Student Housing	DM
Treasurer *	BA

\* on the southwest corner of Broad Street and Third Avenue  
 \*\* located on the east edge of Grinnell at 1917 6th Avenue

# Academic Calendar

All dates are inclusive

<b>First semester</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>	<b>2010–11</b>
<b>new student days Begin</b>	August 25 Saturday	August 23 Saturday	August 22 Saturday	August 21 Saturday
<b>registration</b>	August 29 Wednesday	August 27 Wednesday	August 26 Wednesday	August 25 Wednesday
<b>First day of Classes</b>	August 30 Thursday	August 28 Thursday	August 27 Thursday	August 26 Thursday
<b>Fall Break Begins</b>	October 20 Saturday	October 18 Saturday	October 17 Saturday	October 16 Saturday
<b>Classes resume</b>	October 29 Monday	October 27 Monday	October 26 Monday	October 25 Monday
<b>thanksgiving recess</b>	November 22 Thursday	November 27 Thursday	November 26 Thursday	November 25 Thursday
<b>Classes resume</b>	November 26 Monday	December 1 Monday	November 30 Monday	November 29 Monday
<b>Last day of Classes</b>	December 14 Friday	December 12 Friday	December 11 Friday	December 10 Friday
<b>exam Week Begins</b>	December 17 Monday	December 15 Monday	December 14 Monday	December 13 Monday
<b>Last day of exam Week</b>	December 21 Friday	December 19 Friday	December 18 Friday	December 17 Friday
<b>second semester</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>	<b>2010–11</b>
<b>First day of Classes</b>	January 21 Monday	January 19 Monday	January 25 Monday	January 24 Monday
<b>spring Break Begins</b>	March 15 Saturday	March 14 Saturday	March 20 Saturday	March 19 Saturday
<b>Classes resume</b>	March 31 Monday	March 30 Monday	April 5 Monday	April 4 Monday
<b>Last day of Classes</b>	May 9 Friday	May 8 Friday	May 14 Friday	May 13 Friday
<b>exam Week Begins</b>	May 12 Monday	May 11 Monday	May 17 Monday	May 16 Monday
<b>Last day of exam Week</b>	May 16 Friday	May 15 Friday	May 21 Friday	May 20 Friday
<b>Commencement</b>	May 19 Monday	May 18 Monday	May 24 Monday	May 23 Monday

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