

**CLASS OF 2009 REGISTRATION BOOKLET
FALL 2005 TERM**

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INTRODUCTION

This booklet brings together a variety of useful information concerning your academic program at Colgate and focuses on registration for the first semester. It is not intended to replace the *University Catalogue*, however.

We encourage you to become thoroughly familiar with the materials in the *University Catalogue* as well as the information provided in this booklet. Besides containing important information regarding the philosophy supporting Colgate's academic programs, the *Catalogue* is the official reference for degree requirements, requirements for concentrations (listed at the beginning of each department's course listings), and individual course descriptions.

About the Registration Booklet

Your class schedule for your first semester will consist of four courses, one of which must be a First-Year Seminar (FSEM). This booklet outlines your choices of those seminars; it also details University and departmental requirements, and the courses open to you. Finally, it provides guidelines that you will want to consider when selecting your Fall courses. **Please note that your completed course registration form must be received by the Office of the Registrar no later than Wednesday, July 27.**

We recognize that no one document can possibly respond adequately to the many questions you may have about your upcoming academic program. You should therefore feel free to contact us with additional concerns or problems that may need our attention. Beverly Low, the Dean of First-Year Students, and Gretchen Herringer, the University Registrar, are available to answer your questions concerning both administrative and academic issues. If you would like to speak with someone from a particular academic area, the University Registrar will be glad to refer you. Lynn Waldman, Director of Academic Program Support and Disability Services, is also an important resource person and is prepared to provide assistance to students with special learning needs. All three will be available throughout the summer and welcome your questions.

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Summer Academic Advising

The Office of the Dean of the Faculty has assembled a group of faculty advisors who can offer guidance as you begin to plan your academic program. They welcome your inquiries, whether they are simple requests for information or concern larger issues such as those involving academic or career goals. Below you will find specific information that will help you select an advisor with whom you may wish to consult.

Please take note of the days and times when advisors are available for phone contact. **If you access voice-mail, please leave a message and the faculty member will return your call as soon as he or she is able.**

Julie Chanatry

Oversees laboratory instruction in introductory chemistry and chairs the Health Sciences Advisory Committee.

Professor Chanatry recommends that you read carefully the "Health Sciences" section (under "Other Colgate Programs and Pre-Professional Studies") before contacting her.

Phone: (315) 228-7831

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Jill Harsin

Teaches courses in History, Women's Studies, and the FSEM program

Phone: (315) 824-3395

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Marilyn Rugg

Teaches courses in Spanish (within Romance Languages and Literature), CORE, and the FSEM program

Professor Rugg invites all of your questions about studying languages at Colgate. In addition, she recommends that you study the various sections in this booklet pertaining to language study, including the entry concerning the language requirement. Languages at Colgate are housed in a variety of departments or programs, including Classics, East Asian Languages and Literature, German, Jewish Studies, Romance Languages and Literature, and Russian.

Phone: (315) 228-7288 or (315) 824-2208

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Rebecca Shiner

Teaches courses in Psychology and the FSEM program

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Dan Schult

Teaches courses in Mathematics, including Statistics, and CORE

Professor Schult invites all of your questions about studying mathematics at Colgate. He recommends that you review carefully the "Mathematics" entry in this booklet which provides guidelines for self-placement in mathematics courses and the section on "Distribution" which describes the requirement to complete 2 natural science or math courses, preferably by the end of the fourth semester.

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CURRICULAR REQUIREMENTS

Entrance and First Year Requirements

First-Year Seminar. During the Fall semester, one of the four courses you will take is a First-Year Seminar (FSEM). These courses are designed to introduce students to a variety of liberal arts topics, skills, and ways of learning. The FSEM emphasizes the nature of the learning process, the exploration of individual needs and strengths, learning from classmates, and learning from the multiplicity of resources beyond the classroom. Special emphasis is placed on improving writing skills and using the library's many resources. The merging of these elements in a single course provides a prime opportunity for the student to obtain a breadth of college-level experience and academic perspective.

In terms of their actual content, the FSEMs vary. In some cases, faculty design courses specifically to serve as FSEMs. Such courses offer students opportunities to study topics that are not represented elsewhere in the curriculum. Others serve as introductory courses in particular disciplines, and still others serve as “core” or “distribution” requirements for graduation. In brief, all FSEMs are true academic courses, their demands are high, and each counts toward the general graduation requirement of 32 course credits. Please review the seminar descriptions provided later in this booklet. Each seminar represents an invitation to experiment and to grow.

Your FSEM instructor will serve as your academic advisor and will remain so until you declare a major in the Spring of your sophomore year. It is not necessary to have an advisor who teaches in your intended major field. You will be well advised of academic requirements regardless of your instructor’s specific area of expertise. Each advisor is ready to help you with the choices you will have to make in your first years of study. Moreover, your advisor will know how to refer you to others in the University who can offer specific advice. At the time you officially declare a major, you will select a new advisor in the department or program of your choice. You will then be guided by your departmental or program advisor for the rest of your undergraduate career.

Foreign Language Requirement. Colgate has a graduation requirement of competence in a foreign or classical language. Competence may be demonstrated in one of three ways:

1. By successfully completing the study of a foreign or classical language at Colgate through at least one semester at the intermediate (200) level;
2. By successfully completing at least three years of study of a foreign or classical language in secondary school prior to enrolling at Colgate;
3. By demonstrating basic language skills as measured by tested proficiency—for example, a score of 580 or better on the SAT II subject tests in the foreign or classical language.

If English is not your first language, you may be exempted from the Foreign Language Requirement should you be able to demonstrate basic reading and writing skills as well as speaking ability in your first language.

If you have not already satisfied the Foreign Language Requirement, you will be notified in writing by the University Registrar. In this event, you should register for your first language course in the Fall. This is especially important if you are beginning language study at the introductory level. Mastery of a language through the first semester of the intermediate level (201) is required. Students are expected to complete the language requirement by the end of the fourth term at Colgate.

Colgate has approximately 25 off-campus study groups that allow students to spend a semester studying abroad. A complete listing of these study groups, along with a brief description of each program, can be found in the *Catalogue*. Many of these groups require previous language study. If, for example, you plan to study in France, Germany, Japan, Spain, or China during your junior year, you should begin your language study during the first semester of your first year.

Writing Requirement. Students designated **Priority I** will be informed of their status by a letter accompanying this booklet.

Priority I students are those who have scored 560 or less on the SAT II Writing exam. If there is no SAT Writing score, the guideline is a score of 590 or less on the SAT Verbal, or 22 or less on the ACT English examination. Priority I students are required to complete a composition (COMP) course with a grade of C or better during their first year. While Priority I students are encouraged to enroll for a COMP course (or FSEM 147) during their first semester, seats are limited in these courses due to their small size and writing-intensive nature. Students who are not able to enroll in a COMP course during the Fall term should register for a COMP course in the Spring 2006 term. Please see the listing of courses in the Interdisciplinary Writing (Composition) section of this booklet.

Liberal Arts Core Requirements

Colgate’s Liberal Arts Core curriculum is structured so that students take advantage of the diversity of a liberal arts college. The Core curriculum has two aspects: Distribution and the Core Courses.

Distribution. Colgate’s academic departments are organized into four divisions—Humanities, Natural Sciences/Mathematics, Social Sciences, and University Studies, which comprises interdisciplinary programs and departments (see below). To assure some experience with the characteristic methods of these divisions of the liberal arts, **Colgate requires students to achieve passing grades in courses from two different departments within the Humanities, Natural Sciences, and Social Sciences divisions**, for a total of six courses. Although the completion of these six courses is not required in any specified order or by any specific time prior to graduation, this element of the Core curriculum is designed to encourage students to explore the curriculum as an aspect of making their decisions about concentrations and minor fields. Whenever possible, then, first-year and second-year students who can explore likely concentrations while fulfilling the distribution requirement should do so. Many FSEMs partially satisfy distribution requirements.

Please note that pre-matriculation transfer credit, Advanced Placement credit, and summer transfer courses may not be used to satisfy the distribution requirement.

Colgate’s Divisions are structured as follows:

1. Humanities Division

Art and Art History
Classics
Greek and Latin
East Asian Languages and Literatures
Chinese and Japanese
English
German
Music
Philosophy
Religion
Romance Languages and Literature
French, Italian, and Spanish
Russian

2. Natural Sciences and Mathematics Division

Biology
Chemistry
Computer Science
Geology
Mathematics

Physics and Astronomy
Psychology and Neuroscience

3. Social Sciences Division

Economics
Educational Studies
Geography
History
Political Science
Sociology and Anthropology

4. University Studies Division

Africana and Latin American Studies
Asian Studies
Environmental Studies
Film and Media Studies
Interdisciplinary Writing
Jewish Studies
Liberal Arts Core Curriculum
Medieval and Renaissance Studies
Middle Eastern Studies and Islamic Civilization
Native American Studies
Peace and Conflict Studies
Women's Studies

Liberal Arts Core Courses. The most distinctive element of Colgate's Liberal Arts Core curriculum is its interdisciplinary focus. This aspect of the program consists of a set of courses designed to encourage students to think across the boundaries that divide the traditional disciplines. That is, each course includes materials ordinarily approached through various fields of study. As students progress through the curriculum, they come to appreciate that the important questions about human experience must be addressed from a culturally and historically inclusive perspective.

All Core courses are designed to show the student that learning is an active process. Core courses are therefore moderately sized, small enough to facilitate discussion, to engage students' projects, and to permit writing assignments designed to help students express their perceptions, beliefs, and conclusions in words. In addition, during the course of the term, readings are enhanced by exhibitions and displays, invited guest speakers, concerts, and other campus-wide events.

The four Core areas are *Scientific Perspectives on the World* (CORE 100-150), *Western Traditions* (CORE 151), *The Challenge of Modernity* (CORE 152), and *Cultures of Asia, Africa, and the Americas* (CORE 160-199). General course descriptions are provided in the Department and Course Overview section. **Students may take the four required Core courses in any order. However, they will be expected to complete the four courses by the end of their sophomore year.**

Concentrations or Majors

One area of concentration, or major, is required for graduation. A second or "double" major is optional, as is a declared minor. Requirements for majors and minors vary widely from one department or program to another but are comprised of between eight and thirteen courses. There are over fifty concentrations from which one may choose. It is even possible to develop one's own interdisciplinary or topical concentration in consultation with advisors and division directors. Please see the *University Catalogue* for more detailed information about concentrations.

Other Requirements

Physical Education. As a graduation requirement, all Colgate students must complete four units of physical education credit. A maximum of two units may be earned from participation in at least two seasons of club sport; up to three may be earned by participation in at least three seasons of intercollegiate sport. Physical education units are also earned by completing six-week activity units, Outdoor Education courses, or First-Year Experience (FYE) Program courses. **All physical education requirements must be completed by the end of a student's sophomore year at Colgate.** Please note also that courses carrying the Physical Education code (PHED) do not bear academic credit. Thus, **students should register for PHED courses in addition to four academic courses.**

Special Requirements. Please refer to the *University Catalogue* for requirements that may pertain to special programs of study. Certain opportunities to study abroad, for example, have foreign language pre-requisites. Areas of professional training, such as teacher certification, pre-engineering, pre-medicine, and pre-architecture, have additional stipulations as well.

PRE-MATRICULATION CREDIT

If you have qualifying exam scores or have completed coursework at other colleges or universities that you would like to apply toward your Colgate degree, please review the enclosed "Guidelines for Transfer of Pre-Matriculation Course Credit." **You will be permitted a total of six course units of transfer work based upon credit completed both prior to and during your enrollment at Colgate.** This means, for example, that if you are granted a total of six course units for work taken before your matriculation at Colgate, you will be allowed no additional transfer credit during your subsequent enrollment here.

Transfer Credit

College liberal arts courses completed satisfactorily on a college campus in a cooperative program with a secondary school will be considered for Colgate credit upon receipt of an official college transcript certifying letter grades of C or better in courses bearing three semester or five quarter hours as a minimum of credit. Courses taken on a satisfactory/unsatisfactory, pass/fail, or other ungraded basis courses are not acceptable. Courses must be taken on an accredited college or university campus, in competition with degree candidates of that institution, and taught by a regular member of the faculty. **Transfer credit is not granted for college courses taken on high school campuses,** even if the instructor is a college professor, and even if the course qualifies for transfer credit at other colleges or universities. In addition, the courses must cover work at a level equal to or greater than introductory-level courses at Colgate. It is further expected the courses would be comparable to Colgate courses in terms of term length and/or classroom hours. All requests for approval of official credit for courses completed through high school cooperative programs should be made to the Office of the Registrar.

Official transcripts of any coursework completed prior to matriculation at Colgate must be sent directly to the Office of the Registrar by the deadline for declaration of concentration (i.e., prior to pre-registration during the student's fourth semester at Colgate). If credit is not claimed by this deadline, it will be forfeited permanently.

You should be aware, however, that transfer credit is not automatically awarded. Based upon the courses submitted, individual academic departments may be asked to review your transcripts and to decide whether credit will be awarded. You may be asked to provide course syllabi and should therefore bring these materials with you when you arrive on campus in August. Note also that credit awarded for acceptable pre-matriculation college courses may not be applied toward Colgate's distribution or Core requirements.

Advanced Placement and International Baccalaureate Credit

Colgate credit is granted to first-year students who achieve a score of 4 or 5 on the accepted College Entrance Examination Board Advanced Placement (AP) tests **and** when a department certifies that the exam score indicates a level of competence equivalent to the completion of a specific Colgate course. Credit or exemption for scores of 3 on the Advanced Placement tests will be determined by the appropriate Colgate academic department. Please see the Advanced Placement Credit Summary table (pp. 44-45) and department/program descriptions in the Department and Course Overview section for additional information.

Credit is also granted for scores of 6 or 7 on the Higher Level International Baccalaureate (IB) examinations. The amount of credit and/or placement appropriate is determined by the appropriate Colgate academic department, following the university registrar's review of the tests and records submitted.

First-year students wishing to receive Colgate credit for Advanced Placement or International Baccalaureate exams must submit official scores to the Office of the Registrar by the deadline for declaration of concentration (i.e., prior to pre-registration during the student's fourth semester at Colgate). If AP or IB credit is not claimed by this deadline, it will be forfeited permanently.

Credit awarded for acceptable AP and IB scores may not be applied toward Colgate's distribution requirement. It remains the responsibility of each department to determine whether such credit will count towards fulfillment of the concentration or minor requirements in that department. Such determinations will be certified to the registrar by the department chair.

Students who have successfully completed other internationally recognized programs that typically surpass the standard American high school curriculum—such as the Abitur and the GCE A-levels—may be eligible for Colgate University credit. Given the variety of curricula and quality of work completed within these programs, academic credit will be determined individually based on the student's program of study and scores. Students who have completed such programs must provide full curriculum information to the Registrar's Office for reference in determining appropriate academic credit.

Please note that Colgate University does not grant credit on the basis of the College Level Examination Program (CLEP), New York State Education Department's College Proficiency Examinations, CEEB Achievement Tests, or other programs of credit by exam where the exam does not reflect completion of specific course work.

FIRST-YEAR SEMINARS

One of your four Fall courses will be a First-Year Seminar (FSEM). Though some FSEMs are Core courses and others departmental or divisional offerings, please keep in mind that all FSEMs count equally in the curriculum and that you should let interest be your principal guide in your choices.

FSEM 100 —Western Traditions

Professor: G. Frank

FSEM 101 —Western Traditions

Professor: T. Howard

FSEM 102 —Western Traditions

Professor: M. Mann

In Western Traditions, students will learn about the beginnings of Western thought and its resonance through the ages. They will confront the complexity of Western culture and the impossibility of either embracing or rejecting it reductively. The instructors will choose a core of at least four common works drawn from the ancient world. These works will offer productive connections among themselves, but they will also give students grounding in an era crucially formative of Western traditions. In addition to these works, "response texts" will be chosen by individual instructors to provide a variety of perspectives on Western culture. Through the juxtaposition of these materials, students will gain an enhanced appreciation of the common texts as well as a sense of both the continuity and the diversity of Western traditions. All of these materials will allow students to engage two questions that are central to understanding the past: Does the past continue to speak to us today? To what extent are the ideas and values of the past significantly different from our own?

Georgia Frank is Associate Professor of Religion. Her research and teaching focus on ancient Mediterranean religions, with special focus on early Christian legends that were left out of the Bible.

FSEM 100 will focus on perceptions of death and afterlife in antiquity. Readings will include: the *Epic of Gilgamesh*, Homer's *Odyssey*, Plato's *Symposium*, selections from the Qur'an and the Bible, and Dante's *Inferno*.

Tom Howard, Senior Lecturer in University Studies, earned his Ph.D. in History and taught at West Virginia University from 1975 to 1984. He came to Colgate in 1984 and taught his first FSEM in 1985.

In FSEM 101, students will look at the political and social relationships among people, especially those involving women, and the broader relationship between human beings and their physical environment.

Mark H. Mann received his Ph.D. in Religious Studies from Boston University in 2004. His research interests include the interaction between science and religion (especially psychology and theologies of human transformation), and the history and theology of American perfectionist movements in the 19th and 20th centuries.

In FSEM 102, students will focus on views of Ultimacy (i.e., divinity, fate and free will, etc.) and how these views inform traditional Western beliefs about the nature of the human condition. Special attention will be given to various beliefs about morality, evil, and the afterlife.

Students who successfully complete “Western Traditions” will satisfy their CORE 151 requirement.

FSEM 105—The Challenge of Modernity

Professor: J. Harsin

The nineteenth century marked a crucial turning point in the West. Revolutions in technology and thought transformed Western Culture; in some sense they created modern language and the modern world. This seminar explores the distinctive features of modernity, asking students to put their own experience as inheritors of modernity in perspective by juxtaposing works from a core period of modernity with works of contemporary reaction and response. In this seminar, students gain a clear sense of the problem and promise of modernity for contemporary life.

FSEM 105 focuses on the psychological and ideological responses to the problems of the West in the nineteenth and twentieth centuries, with particular emphasis on the issues of class, race, and war.

Jill Harsin, Professor of History, received her Ph.D. from the University of Iowa in 1981. Her main research and teaching interests include the French revolution and modern France, women’s studies, and film and media studies.

Students who successfully complete “The Challenge of Modernity” will satisfy their CORE 152 requirement.

FSEM 120—Darwin’s “Universal Acid”

Professor: J. Baldani

Darwinian theory has been likened to “universal acid,” a mythical substance so powerful that it eats its way through any container or attempt to contain it. This course examines the far-reaching consequences of Darwinian theory for attempts to understand human nature and human identity. We begin with an overview of Darwinian theory with an emphasis on how mindless algorithmic processes can give rise to complex behavior and an introduction to the game theory and statistical concepts needed to understand the literature on evolution and human behavior. We then turn to broad issues concerning human identity and culture: whether humans are “blank slates” or whether there is an evolved human nature; how altruistic behavior and morality might have evolved under pressures from natural selection; and evolutionary perspectives on motherhood—how genes and environment may interact in ways that challenge the usual conceptions of motherhood. Throughout the course we pay particular attention to the intersection of Darwinian theory and empirical data. Readings are drawn from a variety of disciplines, including biology, economics, philosophy, and psychology.

Jeff Baldani is the coauthor of the textbook *Mathematical Economics* and teaches microeconomics and game theory.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 126—The Art and Science of Leadership

Professor: C. Keating

When groups form, leaders are quick to emerge and easy to identify: Leaders command the attention of group members, cultivate consensus, and compel others to follow their agenda. In this course, we pose questions about the social-psychological forces that explain why some individuals rise to leadership while others tend to follow. To what degree are motives for social dominance or social docility embedded in human nature and traceable through primate evolution? What traits and skills distinguish leaders from followers, and are they the same for females and males? How is it that we become devoted to certain

leaders—even when we shouldn’t? Is their leadership more art than science?

We will explore the art and science of leadership by applying social psychological theory and evidence to leaders we read about or meet. Our investigation will encompass the works of journalists and biographers who have written about leaders as well as research reports composed by academicians who have conducted formal, empirical studies of leadership and social influence. We, too, will put some social-psychological theories of leadership to the test by collecting and analyzing data on leaders and the people they inspire.

Caroline Keating, Professor of Psychology, researches the charismatic traits, skills, and processes by which individuals and groups wield dominance and influence over others, and inspire a following. She teaches introductory psychology, research methods, and specialty seminars in social bonds and cross-cultural human development.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 130—Energy and Sustainability

Professor: B. Parks

Are we running out of energy? Could we use less? *Should* we use less? These questions have been asked for many years, but current rising energy prices make them particularly timely. This course will be about how science attempts to answer these questions, and how economics, political science, sociology, and philosophy help to answer the ones that science cannot.

A major part of this course will be a service-learning project. Students will answer the question “Could we use less?” by performing an energy audit for a senior housing complex to help the residents save money on utility bills.

Beth Parks is a member of the Physics and Astronomy department with a longstanding interest in issues of energy and the environment. In her laboratory she studies the behavior of materials at very high frequencies, using terahertz spectroscopy as a probe of the quantum mechanical properties of carbon nanotubes and single molecule magnets.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 132—Keeping Secrets: Methods & Issues in Cryptology

Professor: C. Nevison

Cryptography is the practice of encrypting or encoding messages and information in order to hide their contents from unintended eavesdroppers. Its beginnings can be traced back to ancient civilizations. Efforts to break the codes in order to uncover the hidden messages developed into the science of cryptanalysis. Together, cryptography and cryptanalysis make up what is called cryptology. Throughout the years cryptology has played an important although necessarily hidden role in politics, diplomacy, and war. It has acquired renewed significance in the last several years due to its crucial role in the efforts to preserve the privacy of messages and transactions sent through the Internet. This seminar will provide an overview of cryptology and its various aspects. We will examine several classic ciphers, as well as more modern cryptographic methods, such as the data encryption standard (DES) and public key cryptography. The mathematical background required consists only of high school algebra, with other mathematical concepts developed as needed. Students will run computer programs to experiment with enciphering methods, and with cryptanalysis. In addition, the course will examine some of the history of cryptology, its social and political implications, and recent developments affecting computer security. Evaluation will

be based on regular written and computer assignments dealing with the cryptographic techniques, a couple of short papers, a project, and exams.

Chris Nevison, Professor of Computer Science, has done research in distributed and parallel computing and discrete event simulation. He has also been active with the Advanced Placement Computer Science program and is currently developing materials for the introductory curriculum for object-oriented programming in Java.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 134—Dreaming Big by Thinking Small: The Science and Potential Implications of Nanotechnology

Professor: G.R. Geier

Imagine repairing your body without surgery, wearing clothes that never get dirty, driving a car that does not need gas, carrying a supercomputer in your back pocket, and taking an elevator to the moon. Such is the hope and the hype of nanotechnology—the study of materials and devices with dimensions on the nanoscale (1×10^{-9} m, the realm of molecules and assemblies of molecules). This course will provide an introduction to the science and potential implications of molecular nanotechnology. Scientific and sensationalist visions of nanotechnology will be critically examined through a combination of readings, lectures, discussions, and hands-on activities. We will attempt to forge an appreciation for the nanoscale, an understanding of the excitement and challenges, and an awareness of the practical and ethical implications of this emerging technology.

Rick Geier is an organic chemist whose research interests include the development of synthetic methodology for the preparation of a variety of porphyrinic macrocycles (a family of molecules that includes the well-known red heme pigment in blood, and the green chlorophyll pigments in plants), and the investigation of methodology for the derivatization of carbon nanotubes (cylindrical arrays of carbon atoms of great interest in nanoscience and nanotechnology).

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 135—Remote Sensing of the Environment

Professor: C. Hupy

Remote sensing is the art and science of obtaining information about phenomena through devices that are not in contact with the object. The remote sensing process involves collection and analysis of data about energy reflected from or emitted by an object. Remote sensing is used to better understand, measure, and monitor features and human activities on Earth. We will examine the development of remote sensing technology and the principles of acquiring and interpreting data collected by both photographic and non-photographic sensors. In this seminar we will explore how remote sensing has improved our understanding of biophysical trends and processes using a case study approach and consider the ethical implications of remote sensing. A variety of resources including scientific articles and technical reports will be used and students will get lots of hands-on experience in the Geographic Department's well-equipped GIS lab.

Christina Hupy is a geographer who recently received her Ph.D. from Michigan State University. Her research and teaching interests include the application of remote sensing and geographic information science to study vegetation change.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 136—Forensic-Medical Entomology

Professor: J. Novak

Are you a fan of the television show *CSI*? Are you considering a career in the health sciences? Or perhaps you just like bugs? This seminar is designed to familiarize students with various arthropods (insects) of medical and veterinary importance and to recognize insects as a tool in forensic investigations. Initial study will be made of generalized arthropods, life cycles, and the mechanism for transmission of pathogens. Discussion will include myiasis, tick-borne disease, mosquitoes, and venomous arthropods. Students will then conduct a forensic entomological lab to recognize insects that are associated with carrion. Students will conduct standard death scene investigative procedures, the collection and processing of entomological evidence, and the laboratory processing and analysis of this evidence. Pertinent current scientific literature will be assigned, discussed and used to develop a research paper.

John Novak, Professor of Biology, is a behavioral ecologist with a special interest in photography.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 137—The Way the Web Works

Professor: T. Parks

In 2005 we mark the 15th anniversary of the World Wide Web, but the origins of the Web date back more than half a century. The interlinked pages of today's Web form a graph that has evolved organically as many individuals have added new pages and hyperlinks. During its brief existence the Web has grown to rival radio and television as a mass medium.

In this course we will review the history of hypertext, reading original articles by the pioneers of hypertext and the Web. Students will explore hypertext as an expressive medium by constructing documents using HTML, conduct computer laboratory experiments to measure the size and structure of the Web, and use graph theory and statistics to analyze the results of these experiments. Evaluation in this course is based on class participation, writing assignments, computer laboratory exercises, and examinations. No previous computer programming experience is necessary. A firm grasp of high-school mathematics should be sufficient preparation.

Tom Parks is an Assistant Professor in the Computer Science Department. His research interests include computer networking and parallel and distributed computing.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 138—Understanding Oppression: The Psychology of Prejudice

Professor: L. Reid

The United States was founded on the proposition that “all men [sic] are created equal.” Nevertheless, over 200 years later, systematic disparities in economic, social, and physical well-being still exist between Whites and people of color and between men and women. This course explores psychological influences that contribute to prejudice and oppression by majority groups and how the experience of prejudice and oppression can shape the psychology of minority groups. The focus of the course is on Black-White relations in the United States, but gender relations and relations involving immigrants and other racial and ethnic groups are also considered. The course adopts a scientific perspective, begins with an overview of the scientific method and scientific reasoning, and incorporates “hands-on” activities. The

links between scientific evidence and social policy, and current controversial issues are also explored.

Landon Reid, Assistant Professor of Psychology, teaches social psychology. To understand how the fact of race becomes a factor in the lives of individuals on all sides of the color-line, Prof. Reid's research focuses on the experience of racism, the perception of racism, and the structural representation of the domain of racism.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 139—The Good Life: Perspectives from Psychological Science

Professor: R. Shiner

Throughout history, men and women have been captivated by questions of what constitutes the good life and how such a life can be cultivated. What is the nature of human happiness, joy, and pleasure? How can altruism be encouraged? Are some people simply born more content or more kind than other people are?

Are material wealth, spiritual practice, and outward achievements related to happiness? This course surveys contemporary psychological research and theory addressing these enduring questions. Students are introduced to a variety of psychological research methods and apply these methods through hands-on demonstrations. Throughout the course, students are helped to recognize the unique strengths and limitations of the scientific method for approaching questions such as these, and students are encouraged to articulate their own emerging views of what constitutes a life worth living. Evaluation will be based on a midterm and final exam, a major research paper, class participation, and a weekly written response to the readings.

Rebecca Shiner is Associate Professor of Psychology and a clinical psychologist. Her research interests are in the development of personality in childhood, adolescence, and young adulthood, and she currently serves as Associate Editor for the *Journal of Personality*.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 140—Mathematical Innovation and Social Contexts

Professor: K. Valente

This seminar explores mathematical ideas within an historical context; consequently we'll examine many aspects of the discipline that are often overlooked in typical courses. The time period will be primarily the late nineteenth and early twentieth centuries. During this time, continuing developments (algebraic methods) and innovations (non-Euclidean geometry and the concept of "infinity") in mathematical thinking led many to consider seriously, and perhaps for the first time, the question: "What is mathematics?" This question has no simple answer. However, by exploring the discipline's "crisis in foundations," we'll be able to investigate the special nature, production, and limitations of mathematical knowledge. Furthermore, we'll be in a position to pay considerable attention to the various ways in which mathematical debates of the day were promoted, understood, and used to specific ends by those outside of the discipline.

While intellectually demanding, this course is designed for students who have both an interest in history and completed high school level algebra and geometry. Students will be asked to solve a set of selected problems (approximately ten in number) and produce a portfolio of arguments during the semester in order to appreciate the creativity and ingenuity involved in

mathematical reasoning as well as the ways in which mathematicians share their knowledge. Grades will be based on this portfolio, two research papers (one short and one long), and participation in session discussions.

Kenneth Valente's research program focuses on non-professional engagements with mathematical innovations c. 1870–1930. His most recent work on this topic has appeared in the interdisciplinary journal *Nineteenth Century Contexts* and the *British Journal for the History of Science*.

Students who successfully complete this seminar will satisfy their Scientific Perspectives Core requirement.

FSEM 146—On Creativity

Professor: M. Burczyk

What is creativity? Is it innate and inherited, or learned through experience and cultivated by environment? To what extent does culture and society shape the definition of creativity as well as its final form? How does education and schooling effect the creative process? What are the differences between extraordinary genius—such as Virginia Woolf, Charles Darwin, Toni Morrison, Sigmund Freud, Allen Ginsburg, Richard Feynman, Michael Jordan, Jackson Pollock—and good old everyday ingenuity?

These questions have intrigued scholars and individuals for centuries. Through critical reading and writing, discussion, lectures, observation and experiential exercises, this course will explore creativity and its origins, development, processes and contexts. We will look at contemporary theories including ideas of flow, play, symbolization, divergent thinking, motivation, competition and multiple "intelligences." We will examine individual experiences of the creative process across disciplines through writings, visual and performing arts, guest speakers, field trips, peer collaboration and personal reflection. Students will be introduced to library research strategies and will write a final paper on a specific topic related to the course of their own choosing. Students will be evaluated based on their engagement and participation in all aspects of this course.

Monika Burczyk is a Ph.D. candidate at New York University; her dissertation is entitled *The arts and Art in the classroom: The Journey as Arrival*. At Colgate, she has taught in the Educational Studies department and in the past taught courses at both a graduate and undergraduate level in human development, creative arts in therapy and education and qualitative research in New York and Massachusetts.

FSEM 147—Writing across the Disciplines

Professor: D. Byrnes

This course teaches the basic elements of college writing: strategies for reading and effective note-taking, the discovery and development of ideas, thesis development, organization and coherence, and editing skills. We will review the language and structure of writing as it varies across the disciplines by studying texts from the natural sciences, the social sciences, and the humanities. There will be heavy emphasis on revisions and proofreading, writing of multiple drafts, developing each student's individual "voice" as an author, and in-class peer review sessions conducted to foster collegial learning.

Dolores Byrnes received her Ph.D. in Anthropology from Cornell University, has published a variety of written works, and is currently involved in an international research project comparing university practices and reforms. As a post-doctoral research fellow in 2003-2004, she taught writing at Cornell's Knight Institute Program; she has also worked in both research and writing positions in the private and nonprofit sectors.

Students who successfully complete this seminar will receive credit for COMP 103, which is one of several courses that may be used to satisfy the writing requirement for Priority I students.

FSEM 148—Science and Exploration

Professor: A. Leventer

This seminar will address the fundamental question of why humans explore and will investigate scientific achievements based on voyages of discovery. Advancements in all scientific endeavors, from continental scale exploration, to exploration of the deep sea and outer space, to the search for remote and ancient cultures—all these will be examined as we read the adventures of great explorers, ranging from the famous Antarctic explorers Scott and Shackleton, to less well-known astronauts, paleontologists, archeologists, and epidemiologists. We will investigate the complex and crucial relationship between exploration and science, as well as issues of leadership, team building, group dynamics, and personal faith. This seminar will entail a great deal of reading, writing, and discussion. In addition, through the semester, I hope you will learn something about yourselves that you didn't know before and perhaps discover the secret of what makes hard-driven dreamers and achievers succeed. Our pursuit will examine literature that illustrates the range of driving factors that set people off on long and difficult expeditions. We will focus on examples that show how hard it can be to acquire even the most basic scientific and geographic knowledge. How much is a human life worth against the backdrop of potential economic, geographic, and scientific gains?

Amy Leventer is a Geology professor studying climate change in Antarctica. She has participated in 17 research expeditions to Antarctica over the past 22 years.

FSEM 156—Introduction to the Study of Religion

Professor: H. Sindima

This seminar seeks to introduce students to the academic study of religion, emphasizing a variety of approaches. The course will touch on such themes as differing interpretations of texts and scriptures, religion's role in organizing communities, religious constructions of gender and sexuality, and humanity's converse with natural and supernatural worlds. Students will be encouraged to think both about the nature of religion and about approaches to its study. In what ways is religion a basic response to and expression of the human condition? How are conceptions of the sacred shaped by societal institutions and structures? How do these conceptions reshape and, in turn, contest the societies that shape them? A common aim of the course is to open the concept of religion to critical scrutiny.

Harvey Sindima is Professor of Philosophy and Religion. His field of expertise and scholarship is in the relation between religion and society, focusing on African religions, Islam, and Christian theology. He has published several books on religion and society.

Students who successfully complete this seminar will receive course credit for RELG 202 and satisfy one half of their Humanities distribution requirement.

FSEM 158—British Comedy

Professor: J. Godwin

Students will study and perform plays by classic British dramatists Oscar Wilde, George Bernard Shaw, Tom Stoppard, William Shakespeare, and others. We will perform one of these plays for a Humanities Colloquium near the end of the fall semester. Also, students will write several papers that reflect the experiences of both studying and performing the plays. Students

wishing to enroll in this seminar should be able to read dramatic works aloud clearly and fluently. Previous acting experience is very welcome, but not required. **Attention: This course includes a performance by seminar members near the end of the semester. Extra rehearsals will be required.**

Janet Godwin's background is in English Literature and Music. She teaches in the Core Curriculum and works with course-related performances of classic plays.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 159—"Ultimate Things" and the Literary Mind

Professor: M. Leone

Some authors are not happy simply to entertain or instruct us. They want profoundly to test the limits of our understanding, or to wrestle with "ultimate things." As D.H. Lawrence said, "At the maximum of our imagination, we are religious." With a few exceptions, we will read contemporary fiction, and question whether storytelling gets at deep truths, or is simply the refuge of hopeless liars. Reading new works is risky: They may not stand the test of time, or even of re-reading. At the very least, new works force us to make judgments without the support of established authority. We begin with great writers like Tolstoy, and then move quickly to contemporary authors such as John Berger and Denis Johnson before reading fiction that is so new it may not yet be in print. We will take advantage of opportunities to meet with authors in person. Evaluation consists of participation, regular journal writing, two or three essays, and a final exam. Everyone will have a chance to lead discussions.

Matthew Leone is Director of the Chenango Valley Writers' Conference and has been Director of the First-Year Seminar Program. He encourages students who wish to get started on the reading to contact him over the summer at mleone@mail.colgate.edu.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 160—Theory and Practice

Professor: L. Stephenson

Practice and Theory is an introduction to the media, techniques, and theoretical concepts used in the creation and understanding of the visual arts. Through a series of slide lectures, studio exercises, readings, gallery visits, and visiting artists' lectures, this course will provide a foundation of the formal elements and principles of visual organization. This course will also examine the study of perception, visual thinking, creativity, representation as interpretation, and critical method. Studio projects will include conceptual, two-dimensional, and three-dimensional works in a wide range of media. Critiques will be a vital part of this course initiating verbal dialogue and an understanding of the language of art. Visits by outside lecturers who share their expertise in studio art, art history, and art criticism will provide various approaches to the nature of art making, and insight into the art world.

Lynette Stephenson is Associate Professor in the department of Art and Art History, where she teaches painting and drawing. Her current series of paintings depict illogical narratives presenting the familiar in unfamiliar situations.

Students who successfully complete this seminar will receive course credit for ARTS 100 and satisfy one half of their Humanities distribution requirement.

FSEM 161—Survey of British Literature I

Professor: D. Knuth Klenck

Like English 241, this course will sample, rather than strictly "survey," British Literature from about 900 to 1747; students will become aware of a broad array of genres and periods, but also focus on and write about sharp details of individual lines, words, syllables, and even letters in original interpretive essays. Along the way, students will cultivate, in their analysis and in their own writing, a sense of style. This course also encourages students to develop a critical perspective on our twenty-first-century approach to "the past." Towards this end, we shall study, somewhat anachronistically, Tom Stoppard's 1993 play *Arcadia*, a play "about" the temptations of literary scholarship. (We shall also be lucky enough to see a production of *Arcadia* by FSEM 158 "British Comedy.") The British literary canon tends to privilege the discourse of upper-class, university-educated, male writers—and to favor poetry over prose. While the bulk of our reading is indeed poetry—and produced by canonical writers, at that—we also read prose fiction, letters, journal entries, and other forms to appreciate more fully the contexts of literary history.

Deborah Knuth Klenck has been teaching English at Colgate since 1978. Most of her writing concerns eighteenth- and early-nineteenth-century literature, especially the novels of Jane Austen.

Students who successfully complete this seminar will receive course credit for ENGL 241 and satisfy one half of their Humanities distribution requirement.

FSEM 162—Ideas of Community in the Middle Ages

Professor: L. Staley

The course will explore the ideas that informed aspects of communal life in the Middle Ages from the household to the monastery to the city. Readings will begin with late classical and medieval treatises on the communal life. We will consider the ways in which ideas about order and disorder, status, gender, and religion were expressed by a variety of medieval writers. Charters, monastic rules, saints' lives, sermons, pageants, romances, as well as better known texts like the *General Prologue* to the *Canterbury Tales*, the Prologue to *Piers Plowman*, the tales of Robin Hood, or the *Testament* of François Villon all play with language relating to community. Such readings provide a rich resource for considering topics such as inclusion and exclusion, social justice, monetization, and emerging concepts of nationhood.

Lynn Staley, Professor of English, is a medievalist. She writes mainly about the 14th and 15th centuries and the issues pertinent to late medieval English culture.

Students who successfully complete this seminar will receive course credit for ENGL 202 and satisfy one half of their Humanities distribution requirement.

FSEM 163—The History of Rock

Professor: M. Cheng

Rock is a phenomenon in our culture. It began as the language of youth and grew to its present centrality. This course will examine originality and innovation in the songs, primarily from the 50's to the 80's, the era of classic rock. A music course, the goals are to learn how to listen and to analyze songs, to gain insights into the music and lyrics, and to broaden your knowledge of rock music history for this specific period. The focus is on the music and rock trends, not on an accumulation of diverse rock facts. Requirements are two papers (one seven-page and one ten-page), a mid-term and a final exam.

Marietta Cheng is Professor of Music and Conductor of the Colgate University Orchestra; she received the 2005 Distinguished Teaching Award from the Colgate Alumni Board.

She is one of fewer than one-hundred women in the U. S. who is music director and conductor of a professional orchestra: The Orchestra of the Southern Finger Lakes. She has guest conducted 27 MENC All-State orchestras and choruses, including the All-Eastern Orchestra, the New York All-State String Orchestra, Pennsylvania All-State Orchestra and All-State Chorus

Students who successfully complete this seminar will receive course credit for Music 111 and satisfy one half of their Humanities distribution requirement.

FSEM 164—Detection, Confession, Judgment: Fiction and Forms of Narrative

Professor: E. Sun

How do we make sense of events through acts of narration? What do we do when we tell stories? In this course, we will investigate the relationship between historical events and narrative forms by considering how fictions, theories, and even ideologies are generated as attempts to establish, organize, and explain what happened. The paradigm for the event in this course is the crime (which may take the forms of theft, murder, and lying), and the exemplary modes of narration we will study are detection, confession, and judgment. The variety of narratives examined come from different genres and different disciplines: short stories, poetry, case studies from law and psychoanalysis, autobiography, drama, film, political science, and philosophy. Authors studied include Conan Doyle, Poe, Borges, Sophocles, Freud, James, Hitchcock, Rousseau, the U.S. Supreme Court, Coleridge, Plato, Melville, Kurosawa, and Arendt. Emphasis on how stories are told, the relation of fact to fiction, autobiography and the invention of the self, and parallels between the figure of the storyteller and the figure of the reader.

Emily Sun teaches 19th-century British poetry and literary theory in the English Department. She has written on John Keats and is currently developing a project on 19th- and 20th-century reworkings of Shakespeare's King Lear.

Students who successfully complete this seminar will receive course credit for a 200-level English "Introduction to Literary Study" elective and satisfy one half of their Humanities distribution requirement.

FSEM 165—Berlin Since 1945

Professor: C. Baldwin

Students in this interdisciplinary seminar will study the history and culture of the city of Berlin since the end of World War II. As the German political capital and a vibrant, culturally diverse metropolis, Berlin offers a focal point for exploring current issues in Germany today. Some of the topics we will consider are Berlin's geographical and political position in Europe, the role Germany's difficult history plays in its sense of national identity, especially as debated in Berlin, the ongoing challenges of German unification, and the contributions of immigrant groups (from Turkey, Russia and other countries) to the cultural life of the city. The city's history since 1945 also presents a fascinating view on post-war international politics. We will examine Berlin's history as a defeated city occupied by allied forces in 1945, its division into eastern and western zones of political influence separated by the fortified border of the Berlin Wall, its representative status in the global conflict of the Cold War, and some of the issues the city now faces in its new role as the capital of a united Germany, the "Berlin Republic." Through discussion of literature, film and architecture, we will explore the ways that Berlin's history has shaped the urban landscape, cultural politics and self-understanding of the city since 1945. The seminar will examine

both the self-representation of the city and the relationship between the profile of Berlin and individual experience of this metropolis and its fates.

The seminar will be taught in English and has no prerequisites. Evaluation will be based on class preparation and participation, homework assignments, several papers, and a midterm and final exam.

Claire Baldwin, Associate Professor of German, lived for several years in Berlin and spends time in the city regularly. Her primary areas of scholarship are the relationships between literature and other arts, German literature and culture of the 18th century, and contemporary German literature and culture.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 166—Writing Japan: Imagining a Nation

Professor: R. Hutchinson

This course takes an interdisciplinary approach to examining how different people have constructed, represented and imagined the nation of “Japan.” We will be using historical and literary sources from both Japan and the West to explore questions of how Japan has been constructed over the years in order to achieve different aims, depending on author and audience. From the early depictions of Japan in Pierre Loti, Oscar Wilde and Rudyard Kipling to the modern imaginations of Arthur Golden and Lian Hearn, issues of power and agency will be examined in relation to students’ own preconceptions and expectations of “Japan.” In the second part of the course, we will examine a number of Japanese literary works and essays that all construct a particular image of Japan for a particular purpose. In determining how and for what reasons the author constructed their own particular version of “Japan,” we will consider the importance of the text-context relationship as well as the question of whether we can use literary texts as historical documents (or conversely, historical documents as literary narrative). Writers examined in this section include Kobayashi Hideo, Tanizaki Jun’ichirō, Mishima Yukio and Saburo Sakai. Finally, we explore the idea of agency and construction in light of the diaspora and issues of hybridity.

Rachael Hutchinson teaches in the Department of East Asian Languages and Literatures, with courses on the Japanese language as well as Japanese literature, film and culture. Her research utilizes theories of Orientalism to explore how major figures in Japanese literature and film have constructed particular visions of the West in their works in order to either arrive at a definition of “Japan” or to criticize Japan’s process of modernization. She is currently co-editing a book called *Representing the Other in Modern Japanese Literature: A Critical Approach*.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 167—The History of European Cinema: Text and Contexts

Professor: J. Spires

The purpose of this course will be to chart the development of national film industries in Europe from the silent era until the present day. It will encourage an appreciation of social and industrial circumstances influencing the production and reading of film during this period, and together we will examine the political, moral and individual concerns each narrative presents. Most importantly, we will analyze the articulation of such issues with reference to filmic techniques and visual styles. The course will be organized around three major components. The first will be the **regular screening of films each Monday and Wednesday**

evening, which will be the basis for that week’s class activities. We will be seeing works by such directors as Lumière, Méliès, Eisenstein, Vertov, Wiene, Renoir, De Sica, Godard, and Bergman. In addition, excerpts from our films will be viewed and analyzed in class. The second major component will be a series of practical and theoretical readings which will be discussed in class and applied to the films. Finally, two critical papers, one research paper, and in-class oral reports will be expected of all students.

Jeffrey Spires specializes in nineteenth-century French literature and modern European intellectual history.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 168—Goldfish in the Technological Ocean?:

Intercultural Communication

Professor: S. Sugiyama

Have you encountered any opportunities to communicate with people from a cultural background different from yours? If you have, what happened then? Did you express yourself differently from the way you usually do? Were there any misunderstandings or difficulties? Did anything exciting happen?

This course examines the process of communication in relation to culture. It asks what role culture plays in communication, compares the patterns of verbal and nonverbal communication across cultures, and studies the dialectic relationship between communication styles and cultural patterns. In addition to gaining theoretical understandings of the process of intercultural communication, the course also aims to increase your awareness of your own culture and communication, and ultimately, to improve your intercultural communication competence. The course will also offer you a forum of exploration on how communication technologies (e.g., mass media, cell phones, the Internet, etc.) relate to culture, pointing to new approaches to intercultural communication.

Satomi Sugiyama, NEH fellow in Philosophy and Religion, specializes in Communication. She is particularly interested in the issues of intercultural communication and communication technology. She is currently completing her dissertation on the mobile phone and fashion.

Students who successfully complete this seminar will satisfy one half of their Humanities distribution requirement.

FSEM 175—Topics in Applied Biology: Sex, Drugs, & Chocolate

Professor: F. Frey

This course explores the many tasty, interesting, useful, mystical, and illegal uses of plants. Starting with basic plant biology, this course provides a framework for understanding where plant products come from, and then rapidly shifts to human-plant interactions. Course topics include the history of agriculture and its effects on land use and the environment, the origin of common crops, historical and modern human uses of plants, as well as the chemistry, pharmacology, and history of drug use. Current botanical issues such as transgenic crops, ownership of genetic stock material, and bioprospecting will be discussed. Students will emerge from this course with a new appreciation for what people eat, drink, smoke, and wear. Evaluation will be based on position papers, controversy discussions, quizzes, an oral project presentation, and a major paper on the impact a particular plant has had on human society.

Frank Frey, Assistant Professor of Biology, studies how selection generated through pollinators, herbivores, and pathogens affects the evolution of plant populations. His current research

projects are focused on the maintenance of floral-color variation, the evolution of floral symmetry, and the evolution of sexual dimorphism.

Students who successfully complete this seminar will receive course credit for Biology 104 and satisfy one half of their Natural Sciences distribution requirement.

FSEM 180—Contemporary Issues in Economics

Professor: D. Jubinski

This seminar is designed to lay a foundation of fundamental economic concepts that can be used to address current economic issues. We will discuss and debate the relative merits of free trade, environmental protection, and central bank policy. Other issues will be added depending on current events.

Students will be expected to read *The Wall Street Journal* on a regular basis. Other selected reading material will be assigned. Evaluation will be based on several short issue papers, a research paper, class participation, a mid-term exam, and a final exam.

Daniel Jubinski is Assistant Professor of Economics. His current research interests include the study of volatility modeling, asset pricing, and derivative securities. Prof. Jubinski, a Colgate graduate, teaches courses on investments, corporate finance, and introductory economics.

Students who successfully complete this seminar will receive course credit for Economics 151 and satisfy one half of their Social Sciences distribution requirement.

FSEM 182—The American School

Professor: M. Schertz

This course is designed to familiarize students with the historical, philosophical and sociological foundations of the American school. A variety of historical accounts, philosophical essays, and qualitative studies will form the theoretical basis for the exploration. The chosen readings are roughly chronological and highlight many of the religious, political, economic and social movements that have shaped the diffuse array of schooling experiences that exist in this country.

Ultimately, these readings serve as a gateway for students to explore the inherent complexity and theoretical richness of the educational endeavor. Moreover, since the study of schooling essentially becomes a study of values, in that schools seek to reproduce the values of a given culture, this course will also constitute a cultural study of American identity.

Matthew Schertz is a visiting assistant professor in the Educational Studies Department. His research interests include philosophy for children, empathy, the history of moral education, and social and moral development.

Students who successfully complete this seminar will receive course credit for EDUC 201 and complete one half of their Social Science distribution requirement.

FSEM 183—Human Impact on the Environment

Professor: P. Klepeis

Historically, people have changed the environments that they occupy and from which they gain their livelihoods. Particularly over the last 300 years, the spatial scale, magnitude, and pace of human-induced environmental changes are unprecedented. Society now has the capacity to alter the very structure and function of the biosphere, the global habitat that can sustain life. For most people, news media are the primary sources of information on environmental issues. These sources often fail to capture the complexities surrounding environmental problems, however. This seminar investigates the patterns and processes of

human impact on the environment, and the regional and global implications of these changes. Students are pressed to question their assumptions about natural resource use, and to consider how society should shape future environments. Is sustainable development possible? These themes are explored using a mix of scholarly readings, films, in-class exercises, multiple writing assignments, and extensive class discussion.

Peter Klepeis is Assistant Professor of Geography. His current research explores forest and grassland degradation in southern Chile, and rural land-use change in Australia.

Students who successfully complete this seminar will receive course credit for GEOG 206 and satisfy one half of their Social Sciences distribution requirement.

FSEM 184—Geosystems under Siege: A Physical Geography of Global Change

Professor: P. Scull

The scale, magnitude, and pace of human-induced environmental change have grown significantly in the past few centuries. Humans have become a super-organism with the capacity to alter the very structure and function of the planet. This course presents a range of environmental problems and explores ways that we might better understand them. We will examine both the physical geography of the systems that have come under siege as well as some of the driving forces (e.g. economic, political, cultural, and demographic) that result in human modification of the natural world. The goal is to not only to review the empirical evidence of particular environmental changes but to explore them from various theoretical perspectives. This course is structured around lectures, films, field excursions, and class discussions. In addition to exploring various dimensions of environmental change, this course seeks to enhance the writing, research, and communication skills of students.

Peter Scull is Assistant Professor of Geography. His current research interests include topics in predictive soil mapping, environmental modeling using GIS, and biogeography.

Students who successfully complete this seminar will receive course credit for GEOG 102 and satisfy one-half of their Social Science distribution requirement.

FSEM 185—Of Landscape and Longing

Professor: P. Pinet

How do our natural surroundings affect the feelings, thoughts, and character of people who spend most of their lives rooted to a particular landscape? Can people be shaped in significant ways by the wind, water, rock, weather, and landforms of the place we choose to live? What human potential might never be realized in people who opt to spend their lives moving about from place to place? These are the critical issues that we will unpack as we explore the power of landscapes to infuse meaning into human existence. The readings include *The Lambing Flat* by Nerida Newton, *The Stream* by Brian Clarke, *Yearning for the Land* by John Simpson, *Pilgrim at Tinker Creek* by Annie Dillard, *The Beast in the Garden* by David Baron, *A Sense of Place, A Sense of Time* by John Jackson, and *Flat Rock Journal* by Ken Carey. We also will take several field trips to explore the character of local landscapes, including the Lake Ontario and the Adirondacks.

Paul Pinet is Professor of Geology. His current scholarship involves writing a book of personal essays (*Living in Deep Time: Essays on Wildness*) that explores a philosophy of being based on an understanding of humans as a species of animal emerging from the geology and ecology of complex landscapes. He also continues his long research on understanding the origin and evolution of the Lake Ontario shoreline.

Students who successfully complete this seminar will satisfy one half of their Social Sciences distribution requirement.

FSEM 187—Urbanism and Civil Society: Decline and ... ?

Professor: M. Johnston

Urbanism not only drove the growth of American cities but also sustained their governance. “Urbanism,” as we will analyze it, was a particular kind of civil society built of dense networks of diverse activities, organizations, and people, and was both cause and consequence of centralized industrial development. Urban places, while nobody’s utopias, were governed reasonably effectively not only by municipal authorities but also by those networks. Since the 1920s, however, technological, economic, and social developments have eroded the comparative advantages of cities and, with them, urbanism itself. Local government was powerless to resist those trends, and as civil society weakened too, urban places became far less governable. Strategies for reviving urbanism or creating new kinds of civil communities have had mixed effects, and the future of civil society is unclear at best. We will read several provocative books—among them Douglas Rae’s *City: The End of Urbanism*; Jane Jacobs’s *The Death and Life of Great American Cities*; and Robert Putnam’s *Bowling Alone*—and will analyze computer simulations of cities, in order to ask whether diverse, vibrant, and governable urban communities are still possible in America.

Michael Johnston is the Charles A. Dana Professor of Political Science, and Division Director for the Social Sciences, at Colgate. His research specialty is comparative political corruption and its effects on democratic development, which includes a long-time interest in political machines and urban politics. He joined the Colgate faculty in 1986; since then he has also served as a consultant to several US Government and international agencies, and also spent a year as a Member of the School of Social Sciences and NEH Fellow at the Institute for Advanced Study in Princeton, NJ.

Students who successfully complete this seminar will satisfy one half of their Social Sciences distribution requirement.

FSEM 190—Massacre and Myth in Africa

Professor: E. Allina-Pisano

Why do we hear so much but understand so little about mass killings in Africa? How have massacres and the myths that surround them shaped the history of Africa? From the rise of the Zulu empire in the early 1800s under the military brilliance of Shaka, to the first genocides of the 20th century under European colonial rule, to the recent slaughters in Rwanda and Darfur, ordinary Africans have felt the sharp edge of modernity. How have these atrocities come about and why do they continue to occur? What role has racism played in the unfolding of these modern massacres and the myths that are linked to them? We will read classic accounts of these events, examine primary sources that document their cataclysmic impact, and seek to understand the myths that helped make them possible as well as those that have been created in their aftermath.

Beyond our study of these events and the narratives that have been written about them, we will also spend part of our time developing strategies and techniques for academic research and writing. This work will focus on how to find and evaluate research material; tactics for effective reading and analysis; and methods for persuasive argumentative writing—skills that students will use to excel in all of their classes at Colgate.

Eric Allina-Pisano, Assistant Professor of History, received his Ph.D. degree from Yale University. He has worked and

conducted research in east and southern Africa since 1988 and is currently writing a book about modern slavery in colonial Africa.

Students who successfully complete this seminar will receive course credit for one 100- or 200-level course required for a History concentration and satisfy one half of their Social Sciences distribution requirement.

FSEM 191—African Americans in Upstate New York, 1830-1970

Professor: C. P. Banner-Haley

This seminar introduces students to the presence of African Americans in Upstate New York from the early 19th century to the late 20th century. In addition to learning about African Americans’ history and struggles against discrimination, students will learn of key social movements that aided in the fight for freedom and the disbanding of the color line in the region.

Students will be required to write at least three papers on course readings and various issues discussed in class. In addition to several required books, there will be hand-outs (articles) that present different aspects of the African American presence in Upstate New York. As this is an interdisciplinary course, the areas covered will include History, Geography, and Sociology.

In the end it is hoped that the class will gain an appreciation for the Upstate area and the often untold story of black people in Upstate New York.

Charles Pete Banner-Haley teaches and researches African American history. He is currently working on a history of African Americans in Upstate New York from 1890 to 2000. He has published two books on the social history of African Americans in Philadelphia and the ideology and culture of the Black middle class in America.

Students who successfully complete this seminar will receive course credit for one 100- or 200-level course required for a History concentration and satisfy one half of their Social Sciences distribution requirement.

FSEM 192—History of Science: Nature and Knowledge in Early Modern Europe

Professor: A. Barrera

Sixteenth-century Europeans began to question medieval natural history and philosophy: how to study nature, how to obtain knowledge about nature, who should provide this knowledge, for whom, and for what purposes. By the end of the seventeenth century, Europeans had created a science based on experiment and observation, scientific journals, and academies. This seminar will explore this transformation in knowledge production and the emergence of empirical scientific practices. We will explore issues of scientific methodology—e.g., empiricism and the rise of experimentation—and the development of scientific institutions; the boundaries and definitions of science over time; the subjects and questions science covers and asks at different periods; its changing view about nature (its constituents, and characteristics) and the production of knowledge (place of experience, authority and reason) involved in the different definitions of science.

Antonio Barrera is Associate Professor of History. His work argues that the commercial and imperial expansion of Spain and England in the Atlantic fostered the development of empirical practices especially in the study of nature. This expansion facilitated interactions between diverse groups (scholars, artisans, merchants, royal officials, and Native Americans). From these interactions emerged a tendency towards empiricism and, eventually, the institutionalization of these practices, which came to characterize sixteenth- and seventeenth-century production of natural knowledge in Europe and America.

Students who successfully complete this seminar will receive course credit for one 100- or 200-level course required for a History concentration and satisfy one half of their Social Sciences distribution requirement.

FSEM 193—Introduction to Sociology

Professor: C. Henke

This course is an introduction to sociology, with special emphasis on American society, using a historical and comparative focus. It introduces students to some of the basic concepts and methods used by sociologists. The course considers a selection of topics: racial inequality, class reproduction, gender roles, work and society, social movements, bureaucracy, and crime and deviance.

Christopher Henke is Assistant Professor of Sociology in Colgate's Department of Sociology and Anthropology. He teaches and conducts research in the areas of science and technology studies, sociology of work, and environmental studies.

Students who successfully complete this seminar will receive course credit for SOAN 101 and satisfy one half of their Social Sciences distribution requirement.

FSEM 194—Introduction to Anthropology

Professor: M. Wehrer

Anthropology is the study of human variation, with a particular focus on its physical, linguistic and cultural aspects. Ethnographies are first-hand accounts of the beliefs, behaviors and organizational patterns of a particular group of people; in this class we will read ethnographic accounts of Trobriand Islanders, Latin Americans, British Muslims and American Jews. We will address the following four questions: (1) How well does the notion of "race" explain human biological and cultural variation? (2) What role do women play in the economic and political life of a community? (3) In what ways do religion and ritual unify a culture over time and space? (4) How does culture operate in a transnational setting?

Since the class is discussion-based, students are expected to read thoroughly and to participate actively in class discussion. Grading is based on class participation, short papers, exams, and a final ethnographic research project of the student's choice.

Margaret Wehrer is a visiting lecturer in anthropology who focuses on how social movements deal with racial conflicts. She is currently studying antiracism campaigns within U.S. peace and justice organizations.

Students who successfully complete this seminar will receive course credit for SOAN 102 and satisfy one half of their Social Sciences distribution requirement.

FSEM 195—Confronting the Nature of Our Humanity: Reflections on Politics, Psychology and Justice

Professor: J. Wagner

Through a multidisciplinary and multimedia approach, this course asks students to reflect on both the tragedy and the promise of human beings, what Immanuel Kant calls "the crooked timber of humanity." We will critically and analytically reflect on how a species that has demonstrated its inherent capacity for art, literature, science, philosophy, love, generosity, democracy, morality, justice, and even wisdom is just as chronically inclined to virulent self and group prejudices manifesting in repression, injustice, brutality and recurring genocidal episodes of extraordinary scope. These tensions give rise to intertwined empirical and normative questions as well as hope for a better world. These are of course central concerns for both politics and political science. During the semester we will use historical,

empirical and philosophical texts, supplemented with novels and movies, to address political, psychological, ethical concerns. The textual materials serve as vehicles for critical, analytical, dialectical, problem-focused reflections. In the spirit of a seminar, no pat answers will be given or accepted. No *a priori* assumptions will be made about whether optimism or pessimism is warranted. The chief lessons of this course will have more to do with the form and *rigor* of thought, than with factual or historical matters per se.

Students taking this class will be asked to engage for extra-credit in two extra class sessions as subjects in either a survey or experimental research activity and will be obliged to participate in no more than 5 extra-class sessions to view films or attend campus lectures.

Joseph Wagner is a professor and currently the chair of political science at Colgate. He has published work on mass media, affirmative action, tolerance, multiculturalism, conservatism, Enlightenment thought, and the liberal arts. Common themes in these works involve rationality, objectivity, meaning and the epistemic nature of truth.

Students who successfully complete this seminar will satisfy one half of their Social Sciences distribution requirement.

DEPARTMENT/PROGRAM AND COURSE OVERVIEW

This section provides an overview of Colgate's departments and programs, as well as courses available to incoming first-year students in the Fall 2005 term. Enrollment may be limited in certain courses, but most will be offered in other semesters.

AFRICANA AND LATIN AMERICAN STUDIES (ALST)

Professor B. Moore, Director

The Africana and Latin American Studies program encompasses two major concentrations and four topical minor concentrations. Major concentrations are available in Africana Studies and Latin American Studies; minor concentrations are available in African Studies, Latin American Studies, African American Studies, and Caribbean Studies.

Africana Studies explores the history and culture of the peoples of Africa and the African Diaspora. Beyond the classroom, the concentration in Africana Studies prepares students for careers in a variety of fields, including ethnic studies, international relations, social services, journalism, international business, and teaching.

Examples of Africana Studies courses include:

ALST/HIST 228: The Caribbean—Conquest, Colonization, & Self-Determination

ALST 281/HIST 281: Slavery & the Slave Trade in Africa

ALST 212/POSC 212: The Politics of Race

ARTS 248/SOAN 248: African Art

CORE 161: The Black Diaspora

CORE 163: The Caribbean

CORE 168: Kenya

HIST 218: African American Struggle for Freedom & Democracy

Latin American Studies offers students the opportunity to undertake the comparative study of Latin American society and culture, drawing from such disciplines as anthropology, archaeology, economics, geography, history, literature, and political science. The program provides a suitable background for engaging in graduate studies or professional work in a variety of fields, including government service, journalism, international

relations, trade and banking, international development, and teaching.

Examples of Latin American Studies courses include:

- ALST 230: Introduction to Latin American Studies
- CORE 161: The Black Diaspora
- CORE 163: The Caribbean
- CORE 171: Mexico
- CORE 191: Michoacan History, Life & Culture (Extended Study Course—Mexico)
- HIST 209: The Atlantic World, 1492-1800
- HIST 230: The Making of Latin America

Most ALST courses are cross-listed with other departments, and students will receive credit for these courses either in ALST concentrations or in the departments themselves. Students concentrating in Africana and Latin American Studies are encouraged to participate in activities sponsored by the program. ALST concentrators are also urged to take advantage of program-sponsored study groups and extended study courses in Africa, the Caribbean, Latin America, and South Carolina.

ART & ART HISTORY (ARTS)

Professor J. Oliver, Chair

Art History:

- ARTS 105: Introduction to Architecture
- ARTS 226: Baroque Painting and Sculpture
- ARTS 248: African Art

While it is advisable to take a 100-level survey (ARTS 101, 102, 103, 104, or 105) before electing more advanced work in art history, these surveys are not prerequisite to other courses in the Department of Art and Art History. All 200-level art history courses are open to first-year students without prerequisites.

Architectural Studies:

- ARTS 105: Introduction to Architecture

Studio Art:

- FSEM 160: Theory and Practice
- ARTS 100: Theory and Practice
- ARTS 201: Digital Studio
- ARTS 211: Drawing I
- ARTS 231: Painting I
- ARTS 241: Photography I
- ARTS 251: Printmaking I

While the largest part of these studio art courses will be devoted to working on studio assignments, other components will include several short papers, slide lectures, and attendance at art-related events sponsored by the Art & Art History Department. Please note that a very limited number of seats in 200-level studio art courses (above) are open to first year students.

Please note that students taking FSEM 160 will receive departmental credit for ARTS 100. Therefore, they may not enroll in ARTS 100 (Theory and Practice) in addition to the FSEM.

Advanced Placement credit is granted in art history and in studio art. Departmental credit for ARTS 102 (Survey of Western Art since the 14th Century) is granted in art history for a 4 or 5.

AP credit for ARTS 100 (Theory and Practice) will be granted for a score of 4 or 5, subject to approval of the department based on a portfolio review. Portfolio must demonstrate competence in a variety of media and conceptual approaches.

Since the studio courses are limited to fifteen students per section and the art history courses to thirty students, the department cannot always accommodate all first-year students who wish to enroll in these courses. Be prepared with an alternate course. All of the introductory courses are an important part of the prospective Art & Art History concentrator's program. Students who are interested in receiving more information about

the concentration should meet with the department and get to know its facilities and faculty.

ASIAN STUDIES (ASIA)

Professor D. Robinson, Director

The interdisciplinary Asian Studies program offers students unique and challenging opportunities to learn about the richness and diversity of Asian societies and cultures, especially in the areas of language, literature, history, religion, and the arts. The program focuses on China, India, Japan, and Chinese and Japanese literature. It also includes course offerings on Southeast Asia and on the experiences of Asians in America. Students may choose either a major or minor concentration in Asian Studies.

In addition to offering a wide variety of courses on diverse aspects of Asia, we encourage students to participate in one or another of our well-established study abroad programs centered in Beijing (China), Chennai/Madras (India), and Kyoto (Japan), or extended study opportunities in Japan and China. We also invite students to consider living in the Asia Interest House, which provides a unique living and learning environment.

Each year, the Asian Studies program offers a diverse range of courses as well as an exciting program of films, speakers, artistic performances, and exhibits. These activities usually complement course offerings, but they are normally open to the public as well.

Fall semester 2005 offers a number of Asian Studies courses open to first-year students. Consider enrolling in Chinese (CHIN 121 or 201) or Japanese (JAPN 121 or 201); JAPN 222, Japan through Literature and Film (in translation); a CORE Cultures courses on China (CORE 165), Japan (CORE 167), or Asia (CORE 182). The earlier you start learning about Asia, the better chance you have to spend an unforgettable semester there before you graduate.

ASTRONOMY (ASTR)

Professor T. Balonek, Director

ASTR 101: Solar System Astronomy

ASTR 101 is a popular lecture course intended for the non-scientist and also as preparation for the more advanced astronomy courses. It deals with observations of the night sky, motions of solar system objects, the origin and evolution of the planets, life in the universe, and the space program. It also includes observations at the observatory. A companion course, ASTR 102 (Stars, Galaxies, and the Universe), is offered during the Spring term.

See also PHYSICS (PHYS).

BIOCHEMISTRY

Professor R. Rowlett, Director

CHEM 101: General Chemistry I

CHEM 111: Chemical Principles

Although no biochemistry courses are open to first-year students, the prerequisites for courses leading to a degree in biochemistry require early enrollment in introductory chemistry. The first two years of the biochemistry curriculum have much in common with the chemistry program. *Therefore, students who want to pursue a degree in biochemistry (or keep that option open) are strongly recommended to enroll in either CHEM 101 or 111 and the appropriate mathematics course (MATH 111 or 112) in the Fall term of the first year.* See Chemistry for details of CHEM 101 and 111, and for the Advanced Placement policy.

BIOLOGY (BIOL)

Professor D. McHugh, Chair

FSEM 175: Topics in Applied Biology—Sex, Drugs, and Chocolate

BIOL 102: Topics in Human Health—Cells, Genes and Disease

BIOL 211: Evolution, Ecology, and Diversity (required foundation course for Biology concentration)

The Biology Department has concentration programs in Biology and Molecular Biology, a topical concentration in Marine Science/Freshwater Science, and an interdisciplinary concentration in Environmental Biology (as part of the Environmental Studies Program). A concentration in the biology department has been the traditional route of undergraduate preparation for students planning to pursue career interests in the biological or health-related sciences. Although the vast majority of concentrators ultimately do pursue careers in the life sciences, a significant number of individuals with no such career interests have chosen the concentration within the liberal arts context.

The Biology Department's curriculum for the concentration in Biology is organized into three components: (1) 100-level topics courses, which are not required; (2) a series of two required foundation courses (BIOL 211 and 212), and (3) an extensive selection of elective course offerings, seminars, and research tutorials that provide students an opportunity to pursue either breadth or specialization. See Molecular Biology, Marine/Freshwater Science, or Environmental Studies in the University Catalogue for a discussion of first-year courses appropriate to those concentrations.

Registration Suggestions: To avoid scheduling difficulties during the upper-class years, incoming students who believe they may choose to concentrate in Biology and/or who plan to pursue careers in the health sciences are strongly urged to begin taking courses in the department during their first year of undergraduate studies.

Because an understanding of the life process is inextricably tied to an understanding of chemistry, potential Biology, Molecular Biology, Environmental Biology, or Marine/Freshwater Science concentrators are strongly urged to begin a study of chemistry during the Fall of their first year. Therefore, biology courses that are taken during the first year (FSEM 175 [fall], BIOL 102 [fall], BIOL 211 [fall or spring]) should be taken concurrently with introductory chemistry (CHEM 101-102 or CHEM 111).

Registration Procedures: Students can choose to begin a concentration in biology this fall either at the 100-level (BIOL 102, FSEM 175) or 200-level (BIOL 211). Students who wish to take an introductory course in biology but do not wish to take a laboratory class in their first semester can register for BIOL 102 or FSEM 175. Students who wish to begin with a foundations course (BIOL 211: Evolution, Ecology and Diversity) may register for this course in their first semester. There will also be an opportunity to take BIOL 211 in the spring semester.

Advanced Placement Policy: Colgate course credit for BIOL 101 (Topics in Organismal Biology) is awarded to students earning a 4 or 5 on the AP Biology exam. Although students with this credit may enroll in BIOL 102 or FSEM 175, only one 100-level biology course can be used toward a biology concentration. **Students earning AP credit are encouraged to enroll in BIOL 211.**

Transfer Credit: A maximum of two biology course credits transferred from other institutions may be accepted and applied toward concentration requirements. For incoming first-year students, courses taken prior to enrolling at Colgate must be

approved by the Biology Department's Exemption Committee shortly after arrival on campus. Copies of the course syllabus, lecture and laboratory notes, and a catalogue description for the course will need to be submitted. This information must include the name and author of the text(s) used, the number of hours of lecture and lab per week and the duration of the course.

If you have questions about the department's courses or requirements, or would like to have information and/or explanations not provided above, please feel free to call the Department Office at (315) 228-7347 and ask to speak to a member of the teaching staff.

CHEMISTRY (CHEM)

Professor R. Rowlett, Chair

CHEM 101: General Chemistry I

CHEM 111: Chemical Principles

These two courses are available for first-year students; the course you select depends on your background in high school science and mathematics. The standard course is CHEM 101, the first half of a two-semester General Chemistry sequence (CHEM 101/102). In addition, an accelerated introductory course (CHEM 111) is available for students who have extensive high school chemistry preparation (see below). Finally, a special CHEM 101 section is also available for students who have had little or no high-school chemistry instruction. Introductory chemistry (CHEM 101/102 or CHEM 111) is crucial for students interested in the health sciences (medical, dental, veterinary schools) because it is not only required for admission to those graduate programs, but is also a prerequisite for both Organic Chemistry (CHEM 263/264) and Molecules, Cells and Genes (BIOL 212). Students interested in biology, molecular biology, biochemistry, or chemistry should enroll in the appropriate introductory chemistry course during the Fall semester of their first year at Colgate. **Please note that neither CHEM 101 nor CHEM 111 are available in the spring term.**

CHEM 101 (*Fall term only*) meets three times a week for lectures, and also includes a four-hour laboratory session each week. A year of high-school chemistry (or its equivalent) is recommended for students taking CHEM 101. **A special section of CHEM 101 is available for students who have had little or no prior chemistry instruction.** This special section of CHEM 101, in addition to 3 classes and one laboratory section per week, will also have two additional meetings per week for problem solving and peer tutoring. **Admission to this special section of CHEM 101 is by permission or invitation only, and can be added during the drop-add period immediately prior to the first day of class. Students considering enrolling in this section should register for CHEM 101A (8:20-9:10 MWF).**

CHEM 111 (Chemical Principles) is a one-semester General Chemistry course (*Fall term only*) for the unusually well-prepared first-year student. CHEM 111 meets four times a week for lectures, and also includes a four-hour laboratory session each week. Admission to CHEM 111 is generally limited to students with Advanced Placement Chemistry scores of 4 or 5, or International A-level scores of B or A.

Completion of either CHEM 111 or CHEM 101/102 fulfills the prerequisite requirements for further study in Chemistry, including Organic Chemistry (CHEM 263).

Advanced Placement credit is available for students receiving a grade of 4 or 5 on the Advanced Placement Chemistry Exam. For students who earn a 5, exemption from and credit for CHEM 101/102 may be arranged through the Department Chair. Students with a grade of 4 may receive credit for CHEM 101 and then enroll in CHEM 102 in the Spring term, or take CHEM 111 in the

Fall term. While a grade of 5 on the AP exam can qualify a student for direct entrance into CHEM 263, experience has shown that students with grades of 4 or 5 are best served by taking one Advanced Placement credit (CHEM 101) and enrolling in CHEM 111 in the Fall term of their first year. Students with Advanced Placement scores of 3 or less should enroll in the CHEM 101/102 sequence. If you have questions about how to best use your Advanced Placement course credits, please see the Department Chair (or any member of the department) during Orientation.

Students who wish to keep open the option of concentrating in chemistry or biochemistry are strongly urged to take CHEM 101 or 111 and the appropriate mathematics course (MATH 111 or 112) during their first semester at Colgate.

CHINESE (CHIN)

See East Asian Languages and Literatures.

CLASSICS (CLAS, GREK, LATN)

Professor R. Garland, Chair

CLAS 230: Classical Mythology

CLAS 233: Greek Art

GREK 122: Elementary Classical Greek II

LATN 121: Elementary Latin I

LATN 201: Intermediate Latin I: Prose

With the exception of 300-level Latin and Greek, all courses offered by the Classics Department are open to first-year students. In fact, first-year students are encouraged to take them. The departmental courses fall into two categories: (1) lecture courses (CLAS) offering broad and penetrating surveys of literature, history, religion, art, and archaeology that require no prerequisites or knowledge of Greek or Latin; and (2) language courses in Greek (GREK) and Latin (LATN) that, at the advanced level, assume language experience.

The language courses in ancient Greek and Latin serve as the basis for a concentration in Classics that can be accomplished in either Greek or Latin, or both, or, with somewhat less emphasis on language, in classical civilization. The language courses have as their object a reading proficiency in the language and the development of a deep, critical appreciation of the great literatures of the Greek and Roman civilizations. The classes are small, the atmosphere is relaxed yet scholarly, and enthusiasm runs high. After the first year of language instruction that naturally concentrates on the acquisition of the rudiments of language and vocabulary, students take a sequence of two intermediate level courses where they develop their skills in reading ancient prose and verse. In upper-level seminars, students examine in depth different genres and authors of Greek and Latin literature.

Those first-year students with high school credit in either Latin or Greek who wish to continue their study of the same language at Colgate should discuss course placement with a professor in the Classics Department.

The department has supplemented its formal course offerings by various extracurricular activities that have included lectures by well-known classicists, opportunities to assist professors in research (on campus and abroad), an extended study course in Rome and Pompeii, and participation in the Venice Study Group.

The Classics faculty are always glad to discuss the program with anyone interested.

COMPUTER SCIENCE (COSC)

Professor C. Nevison, Chair

COSC 101: Introduction to Computing I

COSC 102: Introduction to Computing II

COSC 201: Computer Organization

COSC 100: Computers in the Arts and Sciences

The Introduction to Computing sequence, COSC 101-102 provides an introduction to contemporary programming practice using object-oriented design and programming with Java as the programming language. Students will learn the fundamentals of computer science with graphical interfaces and display. The sequence is suitable for any students who want to learn about programming with interactive graphical displays, as well as the fundamentals of computer science. No previous experience in computer science is required.

COSC 101 (Introduction to Computing I) provides an introduction to programming and problem solving with computers. This course uses the programming language Java, which is an object-oriented, platform-independent language extremely well-suited for programming on the internet. It has become the language of choice for many routine and advanced computer and web applications. As the first of a sequence of courses at Colgate introducing computer science with Java programming, this course introduces the fundamental structures of the language in the context of teaching modern principles of software development, including modular design, object-oriented programming, use of class libraries, and data abstraction. We use an approach that introduces interactive graphics from the beginning of the course. The course has a roughly equal focus on laboratory work and class discussion. Students learn to read and modify larger programs, design and write their own programs, and use their programming skills to analyze and solve computational problems. Persons who are interested in a thorough introduction to computers and programming should take this course. The course will be offered in both the Fall and Spring terms.

The Computer Science Department offers a distinctly different introductory course to meet the needs of students who are interested in the applications of computers to diverse problems (COSC 100). This course is designed to be accessible to any Colgate student, but focuses on different aspects of the subject.

COSC 100 (Computers in the Arts and Sciences) introduces students to the fundamental concepts of computers, and aims to provide the understanding needed to effectively utilize technology and understand its impact on the different aspects of our lives and careers. The course provides an overview of computer systems and networks, including the principles and methods behind the workings of the Internet and the World Wide Web. Students learn to compose web pages using web authoring software as well as HTML. Other computer applications, such as spreadsheets and databases, are also studied, and a gentle introduction to algorithmic and programming concepts is included. Weekly laboratories reinforce and supplement the content of the lectures, and give students an opportunity to practice computer skills.

Students who have a substantial background in computer science may wish to start their studies at Colgate at a higher level. COSC 102 (Introduction to Computing II) and COSC 201 (Computer Organization) are both available to properly qualified students. If you took the *Advanced Placement* Computer Science Exam and received a score of 4 or 5 on the A exam, or a 3 on the AB exam, you automatically qualify for advanced placement in COSC 102 with credit for COSC 101. If you earned a 4 or 5 on the AB exam, you qualify for advanced placement in COSC 201 with credit for COSC 101 and COSC 102. If you did not take the AP Computer Science exam but have had a substantial

introduction to computer science, you should register for COSC 101, but consult with the department chair about appropriate placement when you arrive at Colgate.

The concentration program begins with COSC 102. The department also offers a joint Computer Science/Math concentration as well as a minor in Computer Science for interested students. All programs are described completely in the *University Catalogue*. The faculty of the Computer Science Department are always happy to discuss Computer Science courses with any interested students.

EAST ASIAN LANGUAGES AND LITERATURES (CHIN/JAPN)

Professor G. Bien, Chair

CHIN 121: Elementary Chinese

CHIN 201: Intermediate Chinese

JAPN 121: Elementary Japanese

JAPN 201: Intermediate Japanese

JAPN 222: Japan through Literature and Film (readings and discussion in English)

The East Asian Languages and Literatures Department welcomes participation in all of its courses by first-year students. We offer Chinese and Japanese language courses on four levels, and literature and culture courses that require no knowledge of Chinese or Japanese.

The beginning language courses, CHIN 121 and JAPN 121, are the primary requirement for subsequent participation in the higher-level language courses, study groups, and concentrations. Both meet four periods per week and require about two hours of review and preparation for each hour of class, including work in the language laboratory. Credit is given for a single semester's work in either language. The Humanities Distribution requirement may therefore be partially satisfied by completion of a single course in either Chinese or Japanese.

The intermediate and advanced language courses are open to first-year students who have had previous training. Those interested in Chinese may speak with Professor Bien; those interested in Japanese should speak with Professor Aizawa.

The department sponsors the Japan Study Group that affords students the opportunity to spend the fall semester in Japan and includes a four-month home-stay with a Japanese family in Kyoto. Prerequisites are a year of language study and CORE 167 (Japan). The China Study Group is offered in alternate years during the spring semester. Participants visit Taiwan and Hong Kong prior to their stay at Peking University. Field trips to numerous cities and historical sites in the People's Republic of China are included. One year of language study and CORE 165 (or 180) are prerequisite. Participants in spring study groups may choose to expand their experience by staying in Asia through the summer.

The department offers concentrations and minors in either Chinese or Japanese language and literature. Either language may be applied toward a concentration in Asian Studies or International Relations. Our students have gone on to graduate study, law school, business school, and careers in law, business, academia, and foreign affairs.

Classes are held in the Ho Center for Chinese Studies and in the Japanese Studies Center. Both are open for evening study, with tutors available. Students have additional opportunities to practice speaking with our special exchange students from Kyoto and Beijing, who assist with language instruction, reside with students at the Asia Interest House, and serve as resource persons. Outside class, the department supports activities of the Asian Awareness Coalition, China Club, Japan Club, and the Asia Interest House.

ECONOMICS (ECON)

Professor D. Waldman, Chair

FSEM 180: Contemporary Issues in Economics

ECON 151: Introduction to Economics

ECON 151 is an introduction to the way economists think. Its purpose is to equip students with some of the tools of economic analysis and to apply them to problems of the marketplace and the national economy. Because it is a "staff-taught" course, the same materials are covered in all sections, though different sections may emphasize different current events and/or policy issues.

As a basic theory course, ECON 151 stresses problem-solving and deductive-reasoning skills essential to a successful concentration in the field. It is the first course for all potential concentrators unless they enter with advanced standing, transfer credit, or have elected the option of taking a qualifying examination. In the last instance, the Department Chair must be contacted as early as possible.

Because the course is in great demand, students may not secure a seat on their first try. Please note that students do *not* have to take this course during their first year in order to become an Economics concentrator. Also, *students taking FSEM 180 (Contemporary Issues in Economics) will receive departmental credit for ECON 151. Therefore, they may not enroll in ECON 151 in addition to the FSEM.*

Any student who is considering going on to do graduate work in economics or business is strongly urged to take MATH 111, 112, and 113 (Calculus I, II, and III). Today, graduate work in economics or business relies heavily on math. A good math background makes advanced work in economics at Colgate more accessible and more interesting. Students with advanced training in mathematics may pursue a special concentration in Mathematical Economics.

EDUCATIONAL STUDIES (EDUC)

Professor D. K. Johnston, Chair

FSEM 182: The American School

EDUC 201: The American School

The Educational Studies Department offers two distinct undergraduate programs of a liberal arts nature: (1) a concentration in educational studies, and (2) courses leading to certification for teaching in elementary and secondary schools.

Courses are designed for liberal arts students interested in studying the problems and prospects of education, the nature and function of educational inquiry, the processes and outcomes of educational practice, and the relation of educational institutions to other social institutions. In these courses, students learn about a variety of methodologies and perspectives. In addition, we move students beyond the borders of Colgate by offering them a variety of opportunities to apply the theoretical knowledge they gain through course work to practical endeavors in local schools and community centers.

Typically, courses center on an analysis of several primary works in the field of education, and student performance is evaluated by means of exams, research papers, peer teaching, and active class participation. In particular, we encourage first-year students to consider taking our introductory course, EDUC 201, The American School. This course is also offered as FSEM 182. Readings from a number of texts introduce students to the historical, cultural and philosophical foundations of schooling, to contemporary problems in the teaching and learning of diverse students in public and private schools, and to the possible futures of American education. This course provides students opportunities to explore some of the most contentious issues in education—affirmative action, single-sex schooling,

multiculturalism, whether schools can construct democratic teaching and learning environments. Examination of these issues also helps students develop a deeper and more critical understanding of the purpose and process of their own educational experience at Colgate.

For further details on programs and courses, consult the *University Catalogue*, our website, and/or the department chair. **Students interested in entering our elementary and secondary teacher education programs are encouraged to contact us as soon as possible during their first semester at Colgate.**

ENGLISH (ENGL)

Professor J. Pinchin, Chair

English Literature:

FSEM 161: British Literature I

FSEM 162: Ideas of Community in the Middle Ages

FSEM 164: Detection, Confession, Judgment—Fiction and Forms of Narrative

ENGL 206: Approaches to Literary Analysis—Innocence and Experience

ENGL 209: American Texts and Contexts—Visions and Revisions of the Antebellum South

ENGL 211: Tragedy & the Tragic Vision

ENGL 241: British Literature I

ENGL 242: British Literature II

ENGL 243: American Literature I

ENGL 244: American Literature II

Theater Program:

ENGL 250: Stagecraft

ENGL 252: Scenic Design

ENGL 254: Basic Acting

First-year students take English courses because they want to take a course in literature, because they wish to explore English as a possible area of concentration for their degree, or because they are interested in the programs in creative writing and theater that, at Colgate, are part of the English Department.

At the 200 level, three categories of literature courses, particularly important to prospective concentrators, are very good electives for all students. These categories are (1) introductions to literary study, (2) literary forms and genres, and (3) surveys of literature in English. Students concentrating in English are required to take two 200-level courses, one in each of two different categories.

Several introductions to literary study, as well as courses in the category of literary forms and genres, will be offered in Spring 2006. In the Fall 2005 term, there are a limited number of seats reserved for first-year students in each of the English Literature courses listed above.

Several courses in the Theater Program are currently open to first-year students, although they have a very limited number of seats available. ENGL 250 (Stagecraft), ENGL 252 (Scenic Design), and ENGL 254 (Basic Acting) are offered both Fall and Spring semesters.

Descriptions of all of the English courses with openings for first-year students follow:

ENGL 206 (Approaches to Literary Analysis: Innocence and Experience) is an introduction to literary study with attention to essential questions: What counts as literature? Why group writers in literary periods? What effect does a work's genre or mode have on a reader? In this course, some works, sharing a thematic concern with innocence and experience, facilitate the examination of those questions. These works may include William Blake's *Songs of Innocence and Experience*, Upton Sinclair's *The Jungle*, and F. Scott Fitzgerald's *The Great Gatsby*.

ENGL 209 (American Texts & Contexts—Visions & Revisions of the Antebellum South) is an introduction to literary study exploring the relations among texts and various contexts, both historical and critical. Addressing questions about why, what, and how people read in the discipline of English, this course focuses on five texts representing the antebellum South: *The Narrative of Frederick Douglass, an American Slave*, Harriet Beecher Stowe's *Uncle Tom's Cabin*, Mark Twain's *Adventures of Huckleberry Finn*, Margaret Mitchell's *Gone with the Wind*, and William Faulkner's *Absalom, Absalom!*

ENGL 211 (Tragedy and the Tragic Vision) focuses on man's creation—and continual re-creation—of the Western tragic vision as expressed in the drama. Readings, ranging from classical texts to the present-day comic tragedians, explore theories and definitions of tragedy. Topics for discussion include the tragedy of history, enlightenment, manners, family, society, diplomacy, and the psychology and aesthetics of the tragic.

ENGL 241 (British Literature I) is a survey of authors, texts and genres in British literature from medieval times through the eighteenth century.

ENGL 242 (British Literature II) is a survey of authors, texts and genres in British literature from the eighteenth century through 1945.

ENGL 243 (American Literature I) is a survey of authors, texts and genres in American literature from the early colonial period to the Civil War, with attention to important historical developments.

ENGL 244 (American Literature II) introduces students to the development of U.S. literature from close of the Civil War through the Gilded Age, Progressivism, the Jazz Age, and the Great Depression, examining works of fiction, prose non-fiction, and poetry as literary art and also in the context of the movements of the times: Realism, Regionalism, Naturalism, and Modernism.

ENGL 250 (Stagecraft) is a study of technical aspects of theater, including set and properties construction, scene painting, costumes, lights, and sound. Course requirements include 20 hours of backstage work on University Theater productions. *A very limited number of seats are available for the Fall term. This course is offered in the Spring term as well.*

ENGL 252 (Scenic Design) focuses on elements of scenic design from initial concept to practical realization, including script analysis, the creation of a ground plan, elevations, renderings, and a model. Aspects of costume design are also covered. Course requirements include 12 hours of backstage work on University Theater productions. *A very limited number of seats are available for the Fall term. This course is offered in the Spring term as well.*

ENGL 254 (Basic Acting) introduces students to acting technique, improvisation, and ensemble work. It is also a prerequisite for advanced acting. Course requirements include eight hours of backstage work on University Theater productions. This course is offered every term. *A very limited number of seats are available for the Fall term. This course is offered in the Spring term as well.*

Colgate does not have a required composition course for first-year students. The Interdisciplinary Writing Program offers such courses as electives.

ENVIRONMENTAL STUDIES (ENST)

Professor R. Fuller, Director

ENST 100: Earth and Environmental Processes

ENST 232: Environmental Justice

Colgate's Environmental Studies Program is designed to enhance students' awareness of the seriousness and complexity of regional and global environmental issues and to underscore the

consequences and impacts of the human experience on the environment. Environmental Studies concentrators learn to think, speak, and write clearly and articulately about environmental issues from a variety of perspectives.

The Environmental Studies program is within the Division of University Studies. Its teaching faculty apply their knowledge and expertise to teaching and research endeavors that cross disciplinary boundaries. The concentrations in Environmental Biology, Environmental Economics, Environmental Geography, and Environmental Geology all have a required core of ENST courses that provide a common experience and an interdisciplinary flavor to the curriculum. At the same time, students gain depth in a particular discipline. Colgate views environmental studies as a dynamic, relevant, and important field of intellectual inquiry, one that provides opportunities for students to engage in an interdisciplinary endeavor.

Registration suggestions: Students interested in any of the ENST concentrations or the ENST minor should consider beginning their program of study in the Fall semester by taking ENST 100 or a 200-level ENST course depending on their interests. Students considering an Environmental Biology concentration are strongly encouraged to take Chemistry in the Fall. Students interested in Environmental Economics may want to take ECON 151 in the Fall. Students interested in Environmental Geography might consider registering for GEOG 101, 102, or 206, or FSEM 135, 183 or 184. Potential Environmental Geology concentrators should consider GEOL 101 or 105.

FILM AND MEDIA STUDIES (FMST)

Professor L. Schwarzer, Director

FMST 200: Introduction to Film and Media Studies*

JAPN 222: Japan through Literature and Film

ARTS 201: Digital Studio I*

ARTS 241: Photography I*

**A very limited number of seats in these art courses are open to first year students. Please see the Art and Art History Department section for additional information on the Studio Art courses.*

The Film and Media Studies (FMST) minor concentration enables students to engage in a critical study of film and visual mass media. FMST will introduce students to a range of methodologies which examine how film and visual mass media serve as powerful determinants of ideology, identity, and historical consciousness. Courses offered in a range of departments and programs will constitute the Film & Media Studies minor, recognizing that image based research cuts across disciplines and that images are called upon to function increasingly as icons and arguments, as well as data and documents.

It has been said that, collectively, the visual mass media represent the most important and widely shared context for the receipt of information and ideas in contemporary experience. FMST recognizes the centrality of visual experience to everyday life and questions the consequences of our passive consumption of visual media as both entertainment and information. Courses in this program will provide students with the tools to formulate a coherent critique of the media they consume by engaging with visual culture through the structured critique of mass media images and practices, their production, circulation and impact on human consciousness.

The goal of the FMST minor will be to develop in our students the critical skills necessary to analyze representation and experience as they are constructed by new and emerging visual

technologies. The program seeks a balance between history, theory and practice. There will be one required class, FMST 200 (Introduction to Film and Media Studies), and four additional courses comprising the minor. Students may take the courses that comprise the FMST minor in any order. Taking FMST 200 early in the program is highly recommended. ***A very limited number of seats are available in FMST 200 for the Fall term. This course is offered each semester.***

FRENCH (FREN)

See Romance Languages and Literatures

GEOGRAPHY (GEOG)

Professor R. Elgie, Chair

FSEM 183: Human Impact on the Environment

FSEM 184: Geosystems under Siege—A Physical Geography of Global Change

GEOG 101: Global Change—Geographic Perspectives

GEOG 102: Introduction to Environmental Geography

GEOG 206: Environmental Issues

The Geography Department at Colgate offers courses in both environmental geography, with close ties to the physical and natural sciences, and social geography, with close ties to the social and behavioral sciences. Three introductory-level courses are particularly appropriate for first-year students.

GEOG 101 uses the geographic perspective as a vehicle to enrich students' critical understanding of several dimensions of contemporary global change. The course examines, in sequence, GeoDemographic, GeoEconomic, GeoPolitical, GeoCultural, and GeoEnvironmental change. These segments include topics such as: population growth and international migration; infectious disease epidemics; the dynamics and consequences of foreign direct investment; democratization; nationality-based conflict; the cultural impacts of global media; global warming; and the biodiversity crisis. Examples of these phenomena and their consequences are drawn from various geographic settings.

The objective of GEOG 102 is to provide students with a general understanding of the processes and spatial distribution of the Earth's primary physical systems and the ways in which humans interact with these systems. Course emphasis is divided into three areas: atmospheric processes, the spatial dynamics of vegetation and soils, and landform development. Students are introduced to the basic physical processes and interactions that operate within each of these categories, with special focus on the ways in which these factors relate to contemporary environmental problems.

GEOG 206 examines the spatial scale, magnitude, and pace of human-induced environmental changes over the past 300 years are unprecedented. It is essential to undertake reasoned assessments of the complex and interrelated political, socioeconomic, technological, cultural, and biophysical factors leading to environmental changes if society is to manage them appropriately. This course is an introduction to the major environmental problems of resource depletion, pollution, and ecosystem transformation. It explores the effects of environmental changes on society, as well as societal responses to them, and enhances understanding of the causes of these changes from multiple theoretical perspectives.

GEOLOGY (GEOL)

Professor B. Selleck, Chair

GEOL 101: Environmental Geology

GEOL 105: Megageology—Origin and Evolution of the Planet Earth

GEOL 135: Introduction to Oceanography

The Geology Department offers courses that deal with the processes occurring in and on the planet Earth. Topics include oceanography, ground water, plate tectonics, earthquakes, volcanoes, and the origin and evolution of life. Students with an interest in these topics and in the environmental sciences should consider taking an introductory course in geology.

GEOL 101 (Environmental Geology) asks how do geologic processes and events directly influence human societies? How have humans changed the Earth? Fundamental geologic concepts such as plate tectonics, geologic time, and surficial processes are used as a basis for understanding a variety of natural geologic hazards including earthquakes, volcanoes, landslides, floods, tsunamis and other forms of coastal erosion. Real-world examples of the interplay between human activities and the environment include soil and groundwater contamination, mineral and energy resource development, and threats to the Earth's biodiversity. Also, the course takes a closer look at the geologic record of global change and the debate over global warming. This course is an interdisciplinary approach to environmental geosciences. Three lectures per week and a weekly field or laboratory experience.

GEOL 105 (Megageology—Origin and Evolution of the Planet Earth) traces the history of the Earth from the origin of the solar system to the present. Also considered are the origin and evolution of the Earth's crust and interior; continental drift and mountain building; absolute age dating; the origin of the hydrosphere and atmosphere; earthquakes and volcanism. The results of recent planetary exploration are incorporated into an examination of the origin of the solar system.

GEOL 135 (Introduction to Oceanography) is a study of the major contemporary concepts of biological, chemical, geological, and physical oceanography. The nature and origin of ocean basins by global plate tectonics, sedimentation, sea water composition, water masses, oceanic circulation, waves, tides, life in the sea, biological productivity, and human impact are all discussed. The importance of the ocean as a dynamic ecosystem is stressed throughout the course.

Any one of the introductory courses given by the department is equally well-suited for initiating a geology concentration. These include 101 (Environmental Geology), 105 (Megageology—Origin and Evolution of the Planet Earth), 115 (Evolution: Dinosaurs to Darwin), and 135 (Introduction to Oceanography). Occasionally, a first-year student with an exceptionally good earth science background may be allowed to take upper-class courses without 101, 105, 115, or 135. This, however, requires permission of the instructor.

As stated in the *University Catalogue*, a concentration in Geology requires a minimum of nine one-semester courses. There is some flexibility in the choice of these courses and in their sequence. The department also offers a concentration program in Environmental Geology, which includes interdisciplinary course work. For further details, please refer to the *University Catalogue* and consult the Department Chair or other Geology faculty members.

GERMAN (GERM)

Professor C. Baldwin, Chair

FSEM 165: Berlin since 1945 (taught in English)

GERM 101: Beginning German (no prerequisite)

GERM 201: Intermediate German (prerequisite generally 2-3 years of high school German)

GERM 351: Introduction to German Literature (prerequisite generally 4 years of high school German)

GERM 485: Drama (requires permission of instructor)

All courses in the German Department are potentially open to first-year students: 101 without prerequisites, and all other courses with appropriate language background and skill to be demonstrated by the student. We have no formal placement exam, but instead confer individually with each student to ensure the most suitable course placement. Please contact the Department Chair if you are unsure about which course is best for you.

The first year of language instruction (GERM 101-102) aims to teach students basic grammatical structures of German and to develop skills in speaking, comprehension, reading and writing German within a cultural context. The second year language sequence (201-202) reviews basic grammar while expanding language skills and incorporating more demanding reading and writing assignments.

GERM 351, conducted in German, introduces students to a variety of German literary texts from the 18th century to the present and develops skills of textual analysis and academic discussion in preparation for more advanced literature and culture seminars on the 300 and 400 level. This course also helps students strengthen their command of grammar and develop more sophisticated language facility, with a focus on reading and academic writing.

The 400-level literature and culture seminars are also conducted in German and provide students the opportunity for focused study of different authors, genres and periods in German literature and culture. GERM 485 is open to first-year students only by permission of the instructor, Prof. Hoffmann.

This fall an additional course in German Studies will be taught through the First Year Seminar program. "Berlin Since 1945" is an interdisciplinary seminar on the history and culture of the current German capital since the end of World War II. It is taught in English, has no prerequisites, and is open only to first-year students. For more information please see the FSEM course listings.

The German Department encourages all concentrators to participate in the Freiburg Study Group in the spring of their junior year. This semester-long program in Germany includes courses for the Colgate group as well as individually chosen courses at the University of Freiburg and offers all students a rich learning experience abroad that is an end in itself, as well as excellent preparation for graduate school or fellowship programs after graduation. Non-German concentrators with adequate language preparation are also encouraged to participate in the Study Group. Our flexible program in Freiburg allows students to combine their German studies with their other academic fields of interest (e.g., art history, chemistry, economics, music, political science, philosophy) at one of the oldest European universities, while gaining valuable first-hand experience living abroad. Even students with no previous German background who begin German 101 in their first semester will be eligible for the Freiburg Study Group in their junior year, as will students who enter the German program at a more advanced language level.

In addition to our course offerings, the German Department sponsors many co-curricular activities such as German Club, German film series, special programs and guest speakers.

The faculty of the department, Professor Baldwin, Professor Hoffmann and Professor Swensen, are always pleased to discuss the program with anyone interested.

GREEK (GREK)

See *Classics (CLAS)*

HISTORY (HIST)

Professor K. Stevens, Chair

- FSEM 190: Massacre & Myth in African History
- FSEM 191: Upstate New York History
- FSEM 192: History of Science—Nature & Knowledge in Early Modern Europe
- HIST 101: The Growth of National States in Europe
- HIST 102: Europe in Crisis since 1815
- HIST 103: American History to 1877
- HIST 200: History Workshop
- HIST 203: Age of the American Revolution
- HIST 209: The Atlantic World, 1492-1800
- HIST 212: The Emergence of the Modern Woman
- HIST 218: The African American Struggle for Freedom and Democracy
- HIST 228: The Caribbean—Conquest, Colonization, and Self-Determination
- HIST 230: The Making of Latin America
- HIST 272: War and Holocaust in Europe
- HIST 281: Slavery and the Slave Trade in Africa

Advanced Placement Credit: Students with AP credit in U.S. history receive one course credit for, and are therefore excluded from (cannot receive credit for) HIST 103 and 104. Students with AP credit in European history receive one course credit for, and are therefore excluded from (cannot receive credit for) HIST 101 and 102.

Students considering a concentration in history may begin with 100-level surveys, or 200-level courses. (Choosing an FSEM taught by a history professor is another good way to sample college-level history.) 100-level survey courses introduce students to the college-level study of history: Prospective concentrators with AP history credit should consider enrolling in 200-level history courses that pique their interest. They may also want to enroll in HIST 200: History Workshop, a course on methods and skills required of all history concentrators.

A concentration in History requires a minimum of nine courses. For further details, see the *University Catalogue*, or contact the department chair, Professor Kira Stevens, at kstevens@mail.colgate.edu.

INTERDISCIPLINARY WRITING (COMP)

Professor M. Darby, Chair

- FSEM 147: Writing across the Disciplines
- COMP 103: Writing across the Disciplines
- COMP 131: Introduction to Writing in the Humanities
- COMP 132: Introduction to Writing in the Social Sciences
- COMP 210: Options in Sentence Structure

Interdisciplinary Writing faculty are members of traditional academic disciplines in the three major divisions of the University—the Humanities, Natural Sciences, and Social Sciences—who have special expertise in writing as a communication and learning skill. They offer a variety of resources for all Colgate students to strengthen their academic writing skills through the department's *applied* composition courses in all three divisions and at different levels of difficulty. Applied courses teach students how to write better expository

papers. Those at the 100- and 200-level are open to first-year students and meet the Priority I Writing Requirement.

100-level courses are introductory-level courses designed for students who need to be better prepared for college writing.

200-level courses are intermediate-level courses designed for students who feel adequately prepared for college writing but who wish to strengthen their writing skills.

300- and 400-level courses are designed for upper-class students who wish to pursue specialized interests in writing in the disciplines.

The department also offers *theoretical* courses in language and composition for upper-class students, as well as a minor concentration in Interdisciplinary Writing. Students are encouraged to consult the department Chair or the *University Catalogue* for more information about departmental offerings or the minor.

The Writing Center offers assistance with papers for any course at any level. The highly trained consultants, representing some of Colgate's finest writers, assist students in 45 minute one-to-one sessions. The Writing Center can offer guidance in any stage of the writing process, from helping students work through writer's block to a final review of a paper. Because they are Colgate students, the consultants understand the difficulties that students face when writing, and they help them work through any issues they may bring to a session. And remember, the Colgate Writing Center is for **everyone**, regardless of writing ability.

To help students reach their full potential as writers, the Writing Center offers consultants from a variety of disciplines, plenty of reference materials for writers of any level, and even software for specific writing needs.

INTERNATIONAL RELATIONS

Professor F. Chernoff, Director

- ECON 151: Introduction to Economics
- POSC 232: Fundamentals of International Relations

For those interested in the study of international relations as a concentration, Colgate offers an interdisciplinary approach to the subject. International Relations concentrators are expected to acquire a broad knowledge of world politics through directed study in political science, economics, diplomatic history, and language training. Students are also invited to participate in on-campus programs offered or supported by the International Relations program. In addition to campus activities and study, students are strongly encouraged to participate in an off-campus study group for a semester. This may be done by joining the International Relations study group to Geneva, Switzerland in the spring semester, other Colgate study groups, or by participation in programs of other colleges and universities that are approved by the International Relations Program Director. Students interested in concentrating in International Relations should begin language training and take the program's basic introductory course, POSC 232 (Fundamentals of International Relations) or ECON 151 (Introduction to Economics). Multiple sections of ECON 151 and POSC 232 will also be offered in the Spring term.

JAPANESE (JAPN)

See *East Asian Languages and Literatures*

JEWISH STUDIES (JWST)

Professor S. Kepnes, Director

Jewish Studies is an interdisciplinary program that offers students the possibility of combining their interest in Judaism with a wider exploration of Jewish culture (especially literature),

history, and politics. The Jewish Studies minor concentration therefore involves faculty and course offerings from the divisions of humanities and social sciences. Students are also encouraged to pursue independent interdisciplinary work under the guidance of one or more faculty members.

First-year students interested in Jewish Studies should consider one of the following courses:

CORE 174: Multi-Ethnic Israel

HEBR 101: Elementary Hebrew

HEBR 201: Intermediate Hebrew

RELG/JWST 283: Living Judaism

HEBR 101: This course teaches modern Hebrew as spoken in Israel and is designed for students who are interested in developing oral and written Hebrew skills. The course is helpful to those who are interested in deeper knowledge of Jewish culture and wish to improve their knowledge of Hebrew for religious studies. HEBR 101 and 102 (Spring semester) are also helpful in preparing students for travel in Israel. HEBR 101 is designed for students with no previous Hebrew background and students who have learned to read phonetically without comprehension.

HEBR 201: This is the continuing course for students who have completed HEBR 102 and for students with equivalent or advanced knowledge of modern Hebrew. This course aims at enhancing the students' reading, writing, comprehension, and speaking skills and involves extensive teaching of grammar. Instruction tools include audiovisual materials, popular texts, Israeli newspapers, and exercises in the language laboratory.

RELG 283: Please see the "Philosophy and Religion" section for course description.

LATIN (LATN)

See *Classics (CLAS)*

LIBERAL ARTS CORE (CORE)

Professor L. Rojas, University Studies Division Director

CORE 100-150: Scientific Perspectives on the World

CORE 151: Western Traditions

CORE 152: The Challenge of Modernity

CORE 160-199: Cultures of Africa, Asia, and the Americas

Each of the four Liberal Arts Core components is designed to address questions of identity, culture, and knowledge. **Students may take the four required Core courses in any order.** The first component is titled **Scientific Perspectives on the World (CORE 100-150)**. These courses explore the issue of what it means to be a person living in a world that has been significantly shaped by science and technology. Courses focus on the process of science as a way of coming to know one's world.

The second and third Core courses focus on continuity and change in the West. **Western Traditions (CORE 151) and The Challenge of Modernity (CORE 152)** investigate aspects of the development of Western identity and culture by examining the classical roots of Western traditions and by considering modern ideals and sources that have helped to shape contemporary Western identity, values, and ideals. These courses enable students to address the question of "Who am I?" by exploring how contemporary Western culture has come to be what it is. Together, the objective of CORE 151 and 152 is not simply to "fill in" what students might otherwise miss in the disciplinary curricula but, rather, to encourage students to begin the complex process of trying to understand Western culture through some of the most influential works that have been produced within it. Faculty from all over the University (e.g., from Philosophy, Computer Science, and Political Science) teach these courses.

The fourth Core component examines cultures that are distinct from the Western traditions. Courses on **Cultures of Africa, Asia, and the Americas (CORE 160-199)** enhance students' understanding of Western identity and experience by an investigation of a distinctly different culture. Courses in this component also develop an appreciation of the individual culture for its own sake in ways that will expand students' awareness and understanding of the world's cultural diversity.

Students will be expected to complete the four Core courses by the end of their sophomore year. Exceptions may be made for students completing certain programs (for instance, pre-medical study) and for students with special individual circumstances.

Approximately half of the Fall 2005 FSEMs fulfill a CORE requirement.

LITERATURE IN TRANSLATION

Professor J. Jacobs, Director

CLAS 230: Classical Mythology

JAPN 222: Japan through Literature and Film

RUSS 253: Duelers, Gamblers, and the Women Who Endured Them—The Nineteenth-Century Russian Novel

Although Colgate does not have a program in comparative literature, it is fortunate to have a number of courses of foreign language literatures in English translation. These courses, all of which are in English, are taught by faculty members proficient in the original languages and cultures and are scheduled by the pertinent departments. Some of these courses are offered in conjunction with all-university programs, but all count toward satisfying the distribution requirement in the Division of the Humanities. Please check the departmental listings for more complete information.

MATHEMATICS (MATH)

Professor D. Lantz, Chair

MATH 111: Calculus I

MATH 112: Calculus II

MATH 113: Calculus III

MATH 214: Linear Algebra

MATH 250: Number Theory and Mathematical Reasoning

The Calculus Sequence consists of MATH 111, 112, and 113. MATH 111 (Calculus I) provides an introduction to the basic concepts of differential and integral calculus together with applications. Topics include limits and continuity (a non-theoretical approach); definition of the derivative; differentiation of sums, products, and quotients; the chain rule; calculus of exponential, logarithmic, and elementary trigonometric functions; implicit differentiation; higher derivatives; the Mean Value Theorem; related rates, velocity, and acceleration; curve sketching; maximum/minimum problems; definition of the definite integral; the Fundamental Theorem of Calculus; and areas of plane regions. Prerequisite: three years of high school mathematics.

MATH 112 (Calculus II) continues the study of calculus begun in MATH 111. Topics include the calculus of inverse trigonometric functions; techniques of integration; L'Hopital's Rule; improper integrals; applications of integration; parametric equations; Taylor polynomials and Taylor series. Prerequisite: MATH 111 with a grade of C- or better, or equivalent experience in a high school calculus course.

MATH 113 (Calculus III) is a course in the calculus of functions of two or three variables. Among the topics considered are surfaces in 3-dimensional space; partial derivatives; the Chain Rule; gradients; maxima and minima for functions of several

variables; Lagrange multipliers; and double and triple integrals. Prerequisite: MATH 112 with a grade of C- or better, or equivalent experience in a high school calculus course.

MATH 111, 112, and 113 are offered in both the Fall and Spring terms. Although individual sections of these courses may close at registration time, there are usually openings in some sections of the courses.

Placement: Many students entering Colgate will have had exposure to calculus in high school. Whether you have received AP credit or not, you should carefully consider your placement within the calculus sequence. Please consult the list of topics under MATH 111, 112, and 113 (listed above) and use it as a guide for placement. As a general rule, anyone who has had a full year of calculus in high school should register for MATH 112 or 113. Anyone who has completed a course preparing for AP credit through the calculus BC exam should enroll in Math 113. Anyone who has completed a course preparing for AP credit through the calculus AB exam should enroll in Math 112 or 113. The syllabus for the AB exam includes about half of MATH 112 and many AB students can go directly into MATH 113, especially those not interested in the physical sciences; Math 113 depends mostly on Math 111, not Math 112. We have found that, for borderline cases, enrolling in a higher level course is generally the better long-term decision. Students are allowed to drop back from a higher level course to a lower level calculus course at any time during the first month of classes. Members of the Mathematics faculty will be available during the Orientation Program to advise students about placement within the calculus sequence and the mathematics program more generally. The departmental policy on the granting of credit for Advanced Placement calculus appears at the end of this section.

MATH 214 focuses on the study of systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues, eigenvectors, and diagonalization. Prerequisite: MATH 113 or coregistration in MATH 113.

MATH 250 focuses on questions about the positive integers 1, 2, 3, and so on, that have fascinated people for thousands of years. The ancient Greeks noted the existence of right triangles with sides of integral lengths, corresponding to equations such as $3^2 + 4^2 = 5^2$ and $5^2 + 12^2 = 13^2$. Is there a way of describing all such "Pythagorean Triples"? As another example, we observe that $5 = 1^2 + 2^2$, $13 = 2^2 + 3^2$, $17 = 1^2 + 4^2$, while none of the primes 7, 11, or 19 can be expressed as the sum of two squares. Do you see a pattern? Does it continue forever? This course focuses on such questions as a means for introducing students to the spirit and methods of modern mathematics. The emphasis throughout will be on developing the ability to construct logically sound mathematical arguments and communicate these arguments in writing. MATH 250 is required of all Mathematics concentrators and provides an introduction to conceptual, theoretical mathematics. The prerequisite for MATH 250 is MATH 112 or equivalent experience in a high school calculus course. MATH 250 may be taken concurrently with MATH 113.

Advanced Placement: Policy on the granting of Colgate course credit to students who have taken a College Board Advanced Placement (AP) Examination in mathematics: (1) Students earning 4 or 5 on the Calculus-BC AP Exam will receive credit for MATH 111 and MATH 112; (2) Students earning 3 on the Calculus-BC AP Exam will receive credit for MATH 111; (3) students earning 4 or 5 on the Calculus-AB AP Exam will receive credit for MATH 111; (4) students earning 4 or 5 on the Statistics Advanced Placement Exam will receive credit for MATH 102; (5) there are no other circumstances under which a student will receive

Mathematics credit at Colgate University for a course taken in high school. Please note, however, that if a student drops back to a lower level course for which he or she has received AP credit, the AP credit will be removed from the student's academic record.

MEDIEVAL AND RENAISSANCE STUDIES

Professor S. Cerasano, Director

The Medieval and Renaissance Studies (MARS) minor concentration enables students to explore the richness and variety of European civilization from the late Roman era through the Renaissance and Reformation. It is intended as a supplement to traditional majors in being broadly interdisciplinary. Spanning the humanities and social sciences, MARS covers history, art, literature, music, philosophy, science, and religion from the fourth to the seventeenth century. Students may elect to concentrate in either the medieval or Renaissance period, or a combination of both.

First-year students interested in Medieval and Renaissance Studies should consider one of the following courses:

FSEM 161: British Literature I

FSEM 162: Ideas of Community in the Middle Ages

ARTS 226: Baroque Painting and Sculpture

ENGL 241: British Literature I

FREN 351: French Literature I—Early and Classical Eras

MOLECULAR BIOLOGY

Professor D. Hugh, Director

Molecular biology is the study of the molecular interactions characteristic of living cells, especially the relationship between the biological informational macromolecules—nucleic acids and proteins. Fields of biology as diverse as cell biology, developmental biology, neurobiology, and medicine have become increasingly more molecular in focus in the past decade. This concentration requires courses in chemistry, physics, and math in addition to selected courses in biology. First-year students contemplating the possibility of a Molecular Biology concentration should take CHEM 101 and 102, or CHEM 111 (see description under CHEMISTRY) in the first year. Students can also choose to take BIOL 102, FSEM 175, or BIOL 211 during the first term. Although neither of these courses are required for the concentration, one 100- or 200-level biology course can be used toward a molecular biology concentration. Those who do not take a biology course should consider taking a mathematics course in the first semester, since one course in mathematics or computer science is required for the concentration.

MIDDLE EASTERN STUDIES AND ISLAMIC CIVILIZATION

Professor O. Safi, Director

This minor focuses on the Middle East and North Africa while also studying the wider Islamic world. It provides students with an understanding of the origins and development of the Islamic faith in its heartland, as well as an awareness of the multi-cultural and dynamic character of modern Islam. It also trains students in the history, culture, politics, and political economy of the Middle East, North Africa, and the Islamic world.

The area encompassed by this minor extends from Morocco to the Philippines. It contains an extraordinary variety of linguistic and ethnic groups such as Arabs, Iranians, Turkic peoples, Kurds, Baluchis, Malays, and others. This region is home to over 1.4 billion Muslims, who constitute more than one-fifth of the world's population. It is the source of a rich religious and intellectual tradition that emerged from the same roots as the Western tradition and evolved over a long history of interaction

with the West. It also plays an important role in global peace, security, and prosperity. These demographic, cultural, and strategic considerations will lead to a steady increase in contact between the Islamic world and the West in the future. The MIST minor equips Colgate students with the knowledge and conceptual tools needed to understand and manage this relationship.

The themes addressed by the minor include: the history and development of the Islamic faith; colonialism and its impact on the cultures, economies, and politics of the region; the rise of nationalism and its relationship to tribal, religious, and ethnic identities; the emergence and impact of political Islam; the Arab-Israeli conflict; the prospects for democratization; and, United States foreign policy toward the Middle East, North Africa, and the Islamic world. Courses counting toward the MIST minor are drawn from various departments and programs: art history, the Core curriculum, history, philosophy and religion, political science, sociology and anthropology, and others. CORE 183 (The Middle East), the gateway course for the minor concentration, is offered in Fall 2005 term. Other MIST courses offered in the Fall term include CORE 174 (Multiethnic Israel), HEBR 101 (Elementary Hebrew I), HEBR 201 (Intermediate Hebrew I), and POSC 215 (Comparative Politics: The Middle East). The program also offers Elementary and Intermediate Arabic language courses. Students with background in Arabic are encouraged to contact the program director or Registrar's Office about Intermediate Arabic (MIST 201).

MUSIC (MUSI)

Professor L. Klugherz, Chair

FSEM 163: The History of Rock

MUSI 103: Basic Musicianship and Songwriting

MUSI 203: Harmony I

MUSI 213: Music History III—Classic and Romantic Periods

MUSI 307: Composer Studies—J.S. Bach

The 100-level Music courses, including FSEM 163 and MUSI 103, are designed for those interested in music who have little or no formal training (instrumental lessons, chorus or band experience, etc.).

MUSI 203: Students planning a major or minor in Music at Colgate should elect Harmony I as soon as possible. This is an introduction to the central harmonic system of Western music, including four-part writing, chord structures and progressions. This course includes ear-training.

MUSI 213: The music history series (MUSI 211, 212, 213, and 214) is intended for those students who have had previous experience in music which they want to deepen. Such experience may be a number of years of private lessons on an instrument or singing with a chorus or even composing on one's own. Ability to read music is a prerequisite. MUSI 213 is the third course in a four-course survey of western music, and these courses are often taken by non-concentrators who have some previous musical training. The four *need not* be taken in order.

MUSI 307: This course covers examples of every type of J.S. Bach's work: organ and harpsichord music, chamber and orchestral music, cantatas, passions, and the *B Minor Mass*. Performance experience is required for this course.

Performance: First-year students are encouraged to perform and therefore to audition for the University Orchestra, the University Chorus, Chamber Music, and the Jazz Band, although they cannot register for course credit in the first semester. (Normally, two consecutive terms are required for a student to receive a single course credit.) For auditions, see the Music

Department secretary as soon as possible during the first week of classes.

Private lessons, half-hour or one-hour each week, are available in most instruments and in voice. See the Music Department secretary during the first week of classes for details.

NATIVE AMERICAN STUDIES

Professor S. Wider, Director

The Native American Studies program offers students the opportunity to undertake a comparative and historical study of the pre-Columbian, colonial, and contemporary indigenous cultures of North, Central, and South America. Course offerings include art, archaeology, culture, education, geography, history, literature, and religion.

During the Fall term, first-year students may enroll in CORE 171 (Mexico), CORE 188 (The Iroquois), or NAST 211 (American Indian Image on Film). In NAST 211 students will critically analyze American Indian images in documentary films, Hollywood productions, and television formats, from the early days of the moving image to the present. The course will assess the historical representation of Native Americans by non-Indians, as well as the contemporary work of American Indian filmmakers, comparing the cultural contexts and social implications of the two sets of viewpoints. The course is designed to offer another perspective on—and of—American Native peoples, as opposed to that created by Hollywood's mythic "reality."

For further details, refer to the *University Catalogue* and consult the Program Director.

NEUROSCIENCE (NEUR)

Professor S. Kraly, Director

NEUR 170: Introduction to Brain and Behavior

Neuroscience is the study of the nervous system at many different levels, ranging from the structure and activity of a single neuron to brain organization and its implications for the behavior of the whole organism. The interdisciplinary faculty is a distinctive feature of the Neuroscience Program. They include a cell biologist/neurochemist, a zoologist/neurophysiologist, a physiological psychologist, and a cognitive neuropsychologist with postdoctoral training in neuroanatomy and neurophysiology. The rich curricular offerings reflect the faculty's diverse interests and expertise. In addition, concentrators take courses in Biology, Chemistry, and Psychology, and are encouraged to take courses in Philosophy and in the Scientific Perspectives Core that focus on the mind and/or brain.

First-year students who wish to explore Neuroscience as a possible concentration may take NEUR 170 (Introduction to Brain and Behavior). This course is normally team-taught each semester by two members of the Neuroscience faculty. It introduces students to the entire spectrum of concerns from cellular to behavioral neuroscience. This course is also offered as PSYC 270.

Requirements for a concentration with a behavioral or cellular focus are listed on the Neuroscience Web page (<http://departments.colgate.edu/neuroscience/>). Students who wish to learn more about this concentration should contact Professor Kraly at skraly@mail.colgate.edu.

PEACE & CONFLICT STUDIES (PEAC)

Professor D. Monk, Director

PEAC 111: Introduction to Peace & Conflict Studies

PEAC 214: Social Justice & Social Change

PEAC 225: Theories of Peace & Conflict—War, State & Society

PEAC 250: Conflict Resolution and Mediation

Peace Studies offers both major and minor concentrations to students looking for an interdisciplinary degree that focuses on key global problems such as war, peace, conflict, violence, aggression, and the role of nonviolence in social change. The core courses deal with peace and conflict at the individual, cultural, and community levels, as well as internationally.

Peace Studies offers a wide choice of courses—both the core Peace Studies courses and other interdisciplinary courses as well as selected departmental offerings. Some of the Peace Studies courses are cross-listed and offer credits both in the program and in such departments as Philosophy and Religion, Political Science, History, and Sociology and Anthropology. PEAC 111, 214, 225, and 250 serve as a good introduction to Peace Studies.

PEAC 111: This course functions as a survey of key issues and debates in the study of peace and conflict, tracing the history of key concepts in peace and conflict studies, and showing their links with related disciplines, such as sociology, history, and political science. It concludes with an analysis of peace and conflict studies in the wake of the Cold War. Open to first-year and sophomore students. The course is expected for concentration and minor concentration in Peace & Conflict Studies.

PEAC 214: How have social and political movements attempted to make peace and foster social justice? This course examines the particular mechanisms of social change in a variety of different historical and cultural contexts, as well as the ways in which those same methods have been interpreted as models for the transformation of society as a whole. Working through case studies that span from national liberation movements to contemporary anti-globalization campaigns, the course offers tools for researching and analyzing the relation between social movements and changing conceptions of social justice as a whole.

PEAC 225: This course examines problems of institutional systems and the articulation of power. The course first introduces students to critical evaluation of the major theoretical approaches to the study of power and politics. The course considers rationalist, functionalist, and interpretive approaches in the social sciences, as they relate to questions of peace and conflict. Students will examine the specific operative theories that have emerged out of these intellectual traditions—that is, theories of state formation, security, international norms, and transnational networks—as they have been incorporated into and further developed in the study of Peace and Conflict. Students will test major theories on case studies linked to major world events. For example, deterrence theory will be examined in light of the end of the Cold War.

PEAC 250: This course examines the formal attributes of human conflict, its sources, and various techniques for reducing conflict. Topics covered include: negotiating and bargaining strategy, alternative dispute resolution techniques (e.g., mediation and arbitration), escalation of conflict, cross-cultural differences in negotiation, and different theoretical models that can be used to understand better the conflict/negotiation process. The course looks at a wide range of conflicts, starting with interpersonal conflict and going all the way to international disputes. A substantial part of the course involves experiential learning in which students have the opportunity to try out some of the conflict resolution techniques discussed in class.

Peace Studies students are encouraged to live in the Peace Theme House, the Ralph Bunche International House, situated on Broad Street. Each year, Peace Studies offers a program on campus of outstanding movies and speakers that is open to all, often linked to classes, and also workshops, exhibitions. These are frequently linked to a dialogue about current conflicts both at home and abroad.

A large proportion of Peace Studies graduates go on to graduate and professional schools in areas as diverse as peace studies, law, journalism, religion, and the social sciences. Graduates also work in non-profit or non-governmental and international organizations concerned with global peace and justice.

PHILOSOPHY AND RELIGION (PHIL/RELG)

FSEM 156: Introduction to the Study of Religion

PHIL 201: Introduction to Philosophical Problems

PHIL 213: Ethics

RELG 202: Introduction to the Study of Religion

RELG 236: Religion, Science & the Environment

RELG 243: Religion in America

RELG 283: Living Judaism

Study in philosophy and religion encourages critical inquiry into the persistent questions about human existence, God, and the world which are at the center of a liberal education. Some of the courses are methodological, others historical and literary, while others deal systematically with ethical, religious, and philosophical issues and their relation to everyday problems.

PHIL 201: Readings and discussions are organized around such classic problems of philosophy as the existence of God, free will and determinism, the relation of mind and body, knowledge of the external world, the meaning of "good" and moral action, etc.

PHIL 213: What makes a good life good? What makes some actions right and others wrong? Are there human rights that everyone has? For what are we morally responsible? How far do our moral responsibilities go? Are there good answers to these questions, or is it all relative? Some of the philosophers considered are Socrates, Plato, Aristotle, Kant, Bentham, Mill, and some significant contemporary thinkers.

RELG 202: This course seeks to introduce students to the academic study of religion, emphasizing a variety of approaches. Instructors touch on such themes as differing interpretations of texts and scriptures, religion's role in organizing communities, religious constructions of gender and sexuality, and humanity's converse with natural and supernatural worlds. Students will be encouraged to think both about the nature of religion and about approaches to its study. In what ways is religion a basic response to and expression of the human condition? How are conceptions of the sacred shaped by societal institutions and structures? How do these conceptions reshape and, in turn, contest the societies that shape them? A common aim of the course is to open the concept of religion to critical scrutiny and prepare the way for advanced work in religious studies.

RELG 236: In the seventeenth century, religion lost its claim to the cosmos; the religious knowledge of the order of nature ceased to possess any legitimacy in the new paradigm of science that came to dominate the West. Until the 1960s, Christian thinkers considered it the great glory of Christianity that it alone among the world's religions had permitted purely secular science to develop in a civilization in which it was dominant. After several centuries of an every-increasing eclipse of the religious significance of nature in the West and a neglect of the order of nature, we are now experiencing environmental crisis: global

warming; the destruction of the ozone layer; climatic and weather pattern changes; soil erosion; death of animals, birds, and marine life; and the disappearance of some plant species. Today the very fabric of life is threatened and the future of our world hangs in balance as nature is threatened by destruction caused by an environmental crisis that has gone unchecked for several centuries. What can be done? What can be learned from religions of the world that will save humanity and nature? What is the relation between religion, nature, science, and technology? Or what is the role of religion in technological development? These are some of the questions examined in the course. Discussions include views from various religious traditions concerning nature, concept of the human, notions of progress and destiny, faith and science, ecological theology, ecofeminism, justice and sustainability, and spirituality.

RELG 243: This course studies selected significant religious questions, themes, and texts from American religious history. Students study and respond to representative writers from the Protestant tradition (including that of Black Christianity in America), the Roman Catholic, and the Jewish traditions as well as the traditions of other American religious communities.

RELG 283: This course explores central Jewish laws, stories, festivals, and important notions such as monotheism, the chosen people, the land of Israel, and the messiah. The course begins with an investigation of the break with Israelite religion and the crystallization of Rabbinic Judaism around its central text, the Talmud. After exploring the ways in which this text defines an entire way of life, students look at challenges to this way of life in the modern world. The course concludes with a brief study of one or two contemporary reformulations of Judaism such as Reform Judaism, Jewish Feminism, or Modern Orthodoxy.

Students interested in other entry-level department courses for the Fall should attend Drop/Add or consult with the Department Chair or individual faculty. In the Spring, all entry-level courses (200 numbers) are open to first-year students.

PHYSICS (PHYS)

Professor J. Amato, Chair

PHYS 111: Fundamental Physics I

PHYS 120: General Physics I

PHYS 111 is the first semester of a two-semester non-calculus introduction to physics. There are four class meetings (three lectures plus one recitation) plus a three-hour laboratory period each week. PHYS 111 plus the second-semester PHYS 112 are open to all students, satisfy the requirements for Molecular Biology and the Health Sciences, and are recommended for students who are interested in physics but do not intend to concentrate. PHYS 111 and 112 cannot be counted toward the concentrations in Physics, Astronomy-Physics, or Pre-engineering.

PHYS 120 is the first semester of a three-semester sequence of introductory calculus-based physics. It is an introduction to physics that presents the new concepts and discoveries of the twentieth-century around the theme of the *atom*. Topics of modern physics, such as atomic structure and dynamics, relativity, photons, and quantum nature, are introduced and developed quantitatively. The course has four class meetings (two lecture, two recitation) plus one laboratory session per week. It is open to first-year students who are currently enrolled in MATH 111 or a higher-level calculus course, and those who have received credit for MATH 111. Since it is a course that offers a modern and current view of physics, it is also suited to students who want to learn physics as part of their liberal art education. PHYS 120 is a prerequisite for all physics courses. **Prospective physics and**

astronomy-physics concentrators should take the course in the Fall semester of the first year, as it is very difficult to complete the physics major if this course is postponed until the sophomore fall. Likewise, students interested in pre-engineering must enroll in PHYS 120 in their first Fall semester.

Advanced Placement credit is available for students receiving a score of 4 or 5 on the AP Physics B or C exams. Students who receive a 4 or 5 on the Physics B and/or the Physics C-Mechanics exams will receive credit for PHYS 111; students earning a 4 or 5 on the Physics C-Electricity & Magnetism will receive credit for PHYS 112. Students who receive credit for PHYS 111 and/or 112 are still eligible to take General Physics courses (PHYS 120, 121, 122).

Pre-Engineering Combined Plan: Students are offered two ways to prepare for engineering. They can concentrate in Physics and then go to graduate school in engineering, or they can use the Combined Plan. In the Combined Plan, students combine liberal arts education with engineering education by going first to Colgate and then to Columbia University, Rensselaer Polytechnic Institute, or Washington University. This can be done in different ways. Three years can be spent at Colgate and then, after two years at an engineering school, bachelor's degrees from both schools can be earned—the "3-2 Combined Plan"; or both degrees can be earned by going to Colgate for four years and an engineering school for two—the "4-2 Plan." Financial aid for the latter option is severely limited, so interested students should discuss their plans with the Department as soon as possible.

POLITICAL SCIENCE (POSC)

Professor J. Wagner, Chair

POSC 150: America as a Democracy (American politics in comparative perspective)

POSC 151: Politics and Moral Vision (democratic theory)

POSC 152: Global Peace & War (international relations)

POSC 208: Comparative Democracies

POSC 210: Congress

POSC 212: The Politics of Race

POSC 215: Comparative Politics—The Middle East

POSC 232: Fundamentals of International Relations

POSC 260: Foundations of Political Thought

The three 150-level courses introduce students to the discipline of political science, an excellent concentration for students interested in the study of government, political behavior, public policy, courts, public good, public morality, justice, foreign policy, international organizations, social change, transnational, and politics of Africa, Middle East, Asia, Europe, Russia, etc. as well as careers in public service, diplomatic service, law, or business. The 200-level courses focus more directly on different aspects of the department's three subfields (Politics and Government, Theory, and International Relations).

The concentration consists of nine courses—two of the three 150-level courses listed above, and a total of seven courses at the 200, 300-or 400-level, at least one (but not limited to one) must be a seminar. No more than three 200 level courses can be counted toward the concentration. Concentrators are required to take at least two courses in each of three subfields. (Students may count only two of the 150-level courses toward the concentration or minor.) **Transfer credits are not accepted in lieu of POSC 150, 151, or 152.**

Colgate's Washington Study Group, the oldest such program in the nation, offers the opportunity to live, work, and take courses in the nation's capital. If you are interested in applying for this group, you should take POSC 150 or 151, and POSC 210

(Congress and Decision-Making in American Government) or POSC 211 (Presidency) as soon as possible. The Geneva Study allows students to focus on the study of international relations, European diplomacy and politics. The group emphasizes the importance and historical evolution of international organization with an emphasis on problems of global governance and related issues of European security and integration. The department also offers an Honors program to advanced students involving focused original research conducted under the supervision of a faculty member. Questions about Political Science programs may be directed to the Department Chair (315-228-7753); students should also closely consult the *University Catalogue* and the department's Web page (<http://departments.colgate.edu/polisci/>).

PSYCHOLOGY (PSYC)

Professor A.J. Tierney, Chair

PSYC 150: General Psychology

PSYC 270: Introduction to Brain and Behavior

PSYC 150 introduces students to areas of psychology, including brain and behavior, psychopathology, principles of development, human cognition, and behavior in groups. There are three lectures and one discussion period each week. This course is open to first- and second-year students.

PSYC 270 is normally team-taught each semester by two members of the Neuroscience faculty. It introduces students to the entire spectrum of concerns from cellular to behavioral neuroscience. This course is also offered as NEUR 170.

PSYC 150 is the prerequisite for PSYC 200, the Research Methods course required of all Psychology concentrators. PSYC 270 is the only course that satisfies the prerequisite for upper-level neuroscience courses and a topical concentration in Neuroscience. PSYC 270 is required for the Psychology concentration.

Students who receive scores of 4 or 5 on the Advanced Placement exam in psychology will receive credit for PSYC 109, Contemporary Issues in Psychology. This course does not count toward the Psychology concentration.

Students who are interested in Psychology as a possible concentration area should consult Professor Tierney (atierney@mail.colgate.edu) at their earliest opportunity to work out a program of courses.

RELIGION (RELG)

See *Philosophy and Religion*

ROMANCE LANGUAGES AND LITERATURES

Professor F. Luciani, Chair

The following Fall courses are open to first-year students with the appropriate background. Descriptions appear in the *University Catalogue* or on-line at <http://cwis.colgate.edu/catalog/>.

FREN 101: Elementary French

FREN 201: Intermediate French: Conversation and Composition

FREN 202: Intermediate French: Language and Literature

FREN 351: Introduction to French Literature I—Early and Classical

FREN 352: Introduction to French Literature II—18th & 19th Centuries

FREN 353: Introduction to French Literature III—20th Century

ITAL 201: Intermediate Italian

SPAN 101: Elementary Spanish

SPAN 201: Intermediate Spanish

SPAN 202: Intermediate Spanish: Language and Literature

SPAN 353: Spanish Literature—Modern Spain in Crisis

SPAN 361: Advanced Composition & Stylistics

NOTE: The 400-level courses are open to first-year students with departmental permission only—and very rarely.

Please note the following: (1) For all Romance Languages, degree credit for 101 is contingent upon the successful completion of 102, which is offered only in the Spring. Students eligible to register for 102 without having had 101 must contact the instructor early to find out how they can most effectively prepare to enter this ongoing course in January. (2) Participation in the study groups in Dijon and Madrid requires previous language study. See information at the end of the departmental description.

Placement Guidelines: Pre-requisite guidelines are included in the course listings to assist first-year students in selecting the appropriate course at Colgate. More detailed placement information for French, Italian, and Spanish is available on the Department of Romance Languages and Literature's website: <http://departments.colgate.edu/romancelanguages/placement.html>. Students who are unsure of the appropriate language course are encouraged to contact the Department Chair. In all matters of placement, the department makes the final determination, usually on the first day of classes, when students will be asked to fill out a language background questionnaire. The department will also have information about students' previous language studies supplied by the Office of the Registrar. After reviewing this information, the department will either confirm your placement in the course you select or will tell you which course is appropriate for you. Again, be aware that some courses at Colgate are not offered both terms. Course 102 is offered only in the Spring term.

Students who have scored 4 or 5 on the Advanced Placement exams will be credited with specific departmental courses. Students will then normally register for courses at the next higher level. Students receive concentration or minor credit for an AP score of 5. See the "Advanced Place Credit Summary" on pages 44 and 45, the "Advanced Placement" heading under the Romance Languages and Literatures section of the *University Catalogue*, or consult with the Department Chair.

Students who have learned a language in an unusual way, such as lengthy foreign residence, or who have earned college credit in a language before matriculating at Colgate, should consult the Department Chair for placement.

Exceptions: (1) Students who have completed two years of foreign language study in high school and need to meet the language requirement are automatically permitted to register for 101 if they consider their prior achievement to be poor. (2) Students who will have had a break in their language study of two years or more or who have SAT verbal scores below 450 may in some instances, with permission of the Department Chair, register for a course at a lower level than indicated above.

Programs and Opportunities: Concentrations and minors are offered in French and Spanish, but not in Italian. The *University Catalogue* has a complete description of the requirements for concentrations and minors, and first-year students who are interested should plan their courses accordingly.

Foreign study programs, open to non-concentrators as well as concentrators, are conducted in France, Spain, and Italy. The program in Dijon, composed mainly of juniors, requires prerequisite work through the 400-level. The Madrid program, also composed mainly of juniors, requires work through the 300-level. The program in Venice is open to sophomores and upper-class students and requires knowledge of elementary Italian (2-3 years of high school Italian, ITAL 101-102 at Colgate, *or* intensive summer language study in Venice). More detailed information on these groups and on prerequisites is available from the Department of Romance Languages and Literatures. Interested

first-year students are also encouraged to attend the information meetings that are held during the academic year.

RUSSIAN (RUSS)

Professor A. Nakhimovsky, Chair

RUSS 101: Elementary Russian

RUSS 201: Intermediate Russian I

RUSS 253: *Duelers, Gamblers, and the Women Who Endured Them—The Nineteenth-Century Russian Novel* (readings and discussion in English)

Russia has always been a strange and fascinating place, with its mixture of globe-shaking politics and world-class culture. Our goal in Russian Studies is to prepare students to observe and understand Russia, past and present. We hope that students will follow their predecessors in going to Russia and taking part in new developments there; but even if they don't, they acquire many things with us: the disciplinary keys to the humanities and social sciences, a language with a rich past and present, and a working knowledge of an important part of the world. This combination of knowledge and skills is a strong preparation for any profession that builds on a liberal education.

Our program is multifaceted and multidisciplinary. We cover everything from Russian language, literature, and civilization to the problems of the post-Soviet world. Our six faculty members have research specialties in literature, political science, anthropology, and history. We are proud of our multi-media program for intermediate language study, a collaboration between faculty members in Russian and computer sciences, and of our collection of photographs by the Soviet photojournalist Evgeny Khaldei, a gift to Colgate students.

The Moscow Study Group is open to all interested Colgate students, including those with no prior knowledge of Russian. The purpose of the group is to live and work in Russia's capital city, to experience first-hand the political, cultural, and economic transformations of this highly dynamic society. The program begins in the summer with a month-long, on-site course in survival Russian (for non-speakers) and conversational proficiency (for intermediate and advanced students). In Moscow, students are housed with specially chosen Russian families. During the Fall term, students continue their language study, take courses in post-Soviet society, and pursue individually tailored internships in Russia-based businesses, agencies, and other groups and organizations.

For the Fall term, students are encouraged to register for one of the following courses:

RUSS 101, Elementary Russian, combines an overview of Russian grammar with an emphasis on classroom communication and vocabulary development. We follow the video adventures of a young American photographer and his Russian friends in post-perestroika Moscow. An interactive CD-ROM program supplements the video- and text-based portions of the course. By the end of the year students should be able to converse effectively in a variety of everyday situations in Russian. Degree credit only when both terms (101 and 102) are completed.

RUSS 201, Intermediate Russian, along with RUSS 202, complete the presentation of the fundamentals of the language. Both courses use reading and film to break out of the textbook mode and present students with real-life Russian in its home context. The film for 201 is "Irony of Fate." Students use the Colgate-developed MANNA program to work their way through digitized segments of the film, presented on the computer screen and linked to a commentary, dictionary, and transcription. Grammar for 201 includes a review of cases and an introduction to various topics in Russian syntax.

In RUSS 253, *Duelers, Gamblers, and the Women Who Endured Them: The Nineteenth-Century Russian Novel*, students read and discuss the literary masterpieces of Pushkin, Gogol, Lermontov, Turgenev, Tolstoy, and Dostoevsky that made the Russian novel a classic of world literature. Essential nineteenth-century Russian background is covered in lectures, but the focus is on analysis and class discussion of the novels themselves and the issues they raise. This course is open to qualified first-year students by permission. All readings and discussion are in English.

SOCIOLOGY AND ANTHROPOLOGY (SOAN)

Professor N. Ries, Chair

FSEM 193: Introduction to Sociology

FSEM 194: Introduction to Anthropology

SOAN 101: Introduction to Sociology

SOAN 102: Introduction to Anthropology

SOAN 248: African Arts

SOAN 101 is an introduction to sociology, with special emphasis on American society, using an historical and comparative focus. It will introduce students to some of the basic concepts used by sociologists, such as status, roles, and norms. The course considers a selection of topics such as urban social life, the nature of work in contemporary society, changing values of children and the family, contemporary political movements, social inequality, and bureaucracy.

SOAN 102 provides an introduction to the discipline of anthropology and is intended to help students arrive at a better understanding of human cultures and societies through the analysis and comparison of specific cases. Students will study diverse societies drawn from a wide range of geographic areas and will examine topics such as kinship and marriage, economic organization, religion, gender, and social change. Students will also learn about some of the major theories and theorists in anthropology and will examine the ways anthropologists collect and interpret data, particularly in the course of fieldwork.

SOAN 248 provides a study of the principal art styles of sub-Saharan Africa, this course gives attention to the formal and cultural aspects of indigenous art. The manufacture and usage of art objects is examined within the contexts of local religious, social, and political systems, as well as within the larger framework of language and cultural areas. Traditional art styles are analyzed as products of both collective aesthetics and individual innovation. Attention is given to transmission of art forms from culture to culture, and to the persistence of traditional art in the face of social change. This course is also listed as **ARTS 248**.

SPANISH (SPAN)

See Romance Languages and Literatures

WOMEN'S STUDIES (WMST)

Professor H. Julien, Director

WMST 202: *Women's Lives—Introduction to Women's Studies*

Women's Studies involves the examination of the importance of gender as a critical category in understanding ourselves and the world around us. Courses in Women's Studies enable female and male students to explore the position of women in our society and cross-culturally; the contributions and representations of women in art; the philosophy and impact of the feminist movement; the role of gender in politics, economics, and literature; and many other related subjects.

Women's Studies offers both major and minor concentrations as well as a wide variety of interdisciplinary courses for students. Some of these courses are listed as WMST courses. The basic introductory course is WMST 202 (Women's Lives: Introduction to Women's Studies). In this course, students examine the development of women's studies as a field, explore the past and present circumstances of women, and envision future possibilities for change.

Most Women's Studies courses are cross-listed with departments and will give credit either in Women's Studies or in the department itself.

Students in Women's Studies, as well as the campus community as a whole, are encouraged to participate in activities sponsored by the Center for Women's Studies located on the lower level of East Hall. During each year, the Center initiates a wide variety of educational programming, including films, discussions, and student projects, which aim to establish an open dialogue about the many ways race, class, cultural differences, and sexual orientation both interact with and shape gender roles.

Concentrators in Women's Studies typically go on to graduate or professional school in a number of different fields or work in areas of social policy, social change, and human services.

OTHER COLGATE PROGRAMS AND PRE-PROFESSIONAL STUDIES

Interdisciplinary Programs

Colgate is unique among colleges of its kind in the variety of interdisciplinary programs that it offers. Interdisciplinary programs are characterized by the fact that they draw on the insights and methodologies of more than one discipline. For example, students concentrating in Asian Studies may take courses in art, economics, history, language, music, philosophy, political science, and religion. Most interdisciplinary programs are administered by the Division of University Studies. The interdisciplinary program most important to first-year students is the Core curriculum. This program is described in detail on the following pages. However, there are many other interdisciplinary programs that offer either a major or minor concentration. These include:

- African Studies*
- Africana Studies
- African American Studies*
- Asian Studies
- Astrogeophysics
- Biochemistry
- Caribbean Studies*
- Computer Science/Mathematics
- Environmental Biology
- Environmental Economics
- Environmental Geography
- Environmental Geology
- Environmental Studies*
- Film and Media Studies*
- Humanities
- Interdisciplinary Writing*
- International Relations
- Jewish Studies*
- Latin American Studies
- Mathematical Economics
- Medieval and Renaissance Studies*
- Middle Eastern Studies and Islamic Civilization*

- Molecular Biology
- Native American Studies
- Neuroscience
- Peace and Conflict Studies
- Physical Science
- Southeast Asian Studies*
- Women's Studies

*Minor Concentration Only

Normally, the courses constituting an interdisciplinary program are offered by regular departments. In fact, many of the courses listed in the Course Overview in the preceding pages serve as introductory courses to interdisciplinary programs. For example, Japanese 121 serves as an introductory course to Asian Studies/Japan, and Chemistry 101 or 111 to the Biochemistry program. However, occasionally you will find a course that has been specially designed for an interdisciplinary program. This Fall, courses open to first-year students are ALST 230 (Introduction to Latin American Studies), ENST 100 (Earth & Environmental Science), PEAC 111 (Introduction to Peace & Conflict Studies), PEAC 214 (Social Justice & Social Change), PEAC 250 (Conflict Resolution & Mediation), and WMST 202 (Women's Lives: Introduction to Women's Studies). Descriptions of these courses are given in the *University Catalogue*, where further information on interdisciplinary programs can also be found.

Health Sciences

Professor J. Chanatry, Committee Chairperson

The Health Sciences Advisory Committee is composed of faculty who are interested in counseling students planning for careers in the health professions. The committee believes it is important that first-year students receive complete and accurate information related to planning careers in medicine, dentistry, veterinary medicine and other health science professions. Admission into professional schools in the health sciences is highly competitive. Consequently, an undergraduate must show consistently high academic performance throughout his or her undergraduate career. Colgate has prided itself on providing students with an excellent background preparation for the health sciences without sacrificing the ideals of a liberal arts education.

The following comments may be helpful in scheduling your courses. Although specific requirements for courses vary among medical, dental schools and veterinary schools, most require two laboratory courses in animal biology, one year of general chemistry (with laboratory), one year of organic chemistry (with laboratory), one year of physics (with laboratory), one year of mathematics, and one or two courses in English. An increasing number of schools are also requiring biochemistry. Individual schools may have special requirements in psychology, the social sciences, foreign languages, and so forth. At Colgate, minimum requirements are usually met through BIOL 212 and an additional laboratory course in physiology (either BIOL 381, BIOL 210 or BIOL 384) (Note: BIOL 211 or any of the laboratory courses in animal or cellular biology may also fulfill the minimum biology requirement); CHEM 101-102 or CHEM 111 and CHEM 263-264; PHYS 111-112 or PHYS 120-121; MATH 111-112 or one semester of calculus and one semester of statistics; and two semesters of English/Composition. Students frequently take one course in English literature and another English (or Composition) course that emphasizes writing.

CHEM 101-102 (or CHEM 111) is strongly recommended for the first year because of its value as a background for health-sciences students and students who may concentrate in chemistry,

biology or neuroscience. Likewise, MATH 111-112 is recommended for the first year because of its value as a background for science courses and is particularly recommended for those who may concentrate in one of the physical sciences. Although BIOL 212 and the physiology courses are not open to first year students, students can enroll in BIOL 211 which will count toward a concentration in biology.

Students interested in specific schools in the health sciences should consult either the Medical School Admissions Requirements, an annual publication of the Association of American Medical Colleges, or the Admission Requirements of U.S. and Canadian Dental Schools, published by the Association of American Dental Colleges, or the Veterinary Medical School Admissions Requirements, published by the Association of American Veterinary Medical Colleges. Copies are available at the offices of members of the Health Sciences Advisory Committee and at the Health Sciences Office (327 Olin Hall).

A student may concentrate in any field, science or non-science, and is urged to explore all possibilities. General experience has shown, however, that those concentrating outside of the sciences must perform proportionately better in their required science courses because they will have fewer science courses to present on applications to health professional schools. The Health Sciences Advisory Committee strongly recommends that a non-science concentrator take one or two additional science courses beyond the minimum required by the professional school for admission in order to further demonstrate proficiency in science subjects. Students who are uncertain about entering the health professions should proceed under the premise that they will do so. It is far more difficult to begin the required prerequisite courses in the sophomore and junior years and still be admitted to a medical or dental school immediately upon graduation.

If possible, required courses should be completed by the end of the junior year to assure proper preparation for the standardized admissions tests or other appropriate entrance examinations. These are usually taken during the Spring of that year. The academic record, recommendations, non-academic activities, health-related experiences, and personal interviews are also evaluated by the professional schools.

Students are urged to participate as fully as possible in extracurricular activities. However, some caution should be observed that academic performance does not suffer as a result. The first year is a period of adjustment to a new life, new surroundings, and new people. Students who in high school were able to participate in rigorous, competitive athletics, take part in student activities, and still perform very well academically may find that the demands of college life no longer allow them the luxury to do so. Students needing advice, or having difficulties academically or non-academically, should seek help as soon as possible. Your First-Year seminar instructor and your Administrative Advisor are ready to help you in any way that they can. Similarly, the members of the Health Sciences Advisory Committee are eager to assist students. The Committee currently consists of the following individuals: Ms. Julie Chanatry, Chemistry Laboratory Instructor; Dr. Merrill Miller, Director of Student Health Services; Mr. Ernest Nolen, Associate Professor of Chemistry; Ms. Barbara Hoopes, Associate Professor of Biology; Mr. Spencer Kelly, Assistant Professor of Psychology; Mr. Kevin Rask, Associate Professor of Economics; Mr. Jeffrey Buboltz, Assistant Professor of Physics and Astronomy; Mr. Kenneth Belanger, Associate Professor of Biology; and Ms. Jill Ford, Coordinator of the Health Sciences Advising Office.

It is important that first-year students attend the Health Sciences Advisory Committee meeting during the Orientation Program. This will provide an opportunity for students to become acquainted with members of the Committee and to ask specific questions. For additional information, visit the Health Sciences Advising Office web site: <http://offices.colgate.edu/hsa>

Pre-Architecture Studies

Professor N. Aksamija, Advisor

Normally, students preparing for graduate work in Architecture are expected to take at least one semester of calculus, one semester of physics (PHYS 111), and develop a visual portfolio, which requires at least ARTS 211/Drawing I and ARTS 263/Sculpture. In addition, the Art and Art History Department offers a range of courses focusing on architectural issues and history: ARTS 105/Introduction to Architecture (offered Fall 2005), ARTS 215/Romanesque and Gothic Art, ARTS 220/Italian Renaissance and Baroque Architecture, ARTS275/American Architecture, and ARTS 277/Modern Architecture. Students are encouraged to participate in a number of semester long or summer pre-architecture programs offered by several institutions in this country and abroad (especially Denmark and Italy). For more information on preparing for an architectural career, contact Professor Aksamija (Art and Art History Department; naksamija@mail.colgate.edu and 315-228-7979).

Teacher Certification Program

Professor D. K. Johnston, Educational Studies Department Chair

Colgate's Educational Studies Department offers teacher certification programs for those planning to teach in grades 1 through 12. There are certification programs at both the undergraduate (for both elementary and secondary) and at the graduate level (for secondary certification only). Students wishing to teach at the elementary level (grades 1-6) earn a teaching certificate in Childhood Education. Students seeking elementary certification can concentrate in any subject other than Educational Studies. At the secondary level (grades 7-12, what New York State terms Adolescence Education), Colgate offers certification in the following areas:

- Biology
- Chemistry
- Earth Science
- English Language Arts
- Mathematics
- Physics
- Social Studies

Students seeking secondary certification should choose a concentration closely associated with the secondary subject they wish to teach.

While according to New York State law, teacher certification candidates do not concentrate in education or educational studies; the teacher certification program is effectively a second concentration. Nine Educational Studies courses are required for secondary certification and ten are required for elementary certification. Certification students will student teach in "The Professional Semester," the second semester of senior year. Student teaching is an intensive, full-time commitment that typically requires curtailing most extra curricular activities.

Students pursuing teaching certification typically take EDUC 201: The American School (or FSEM 182) as their first education course. Those interested in teacher certification should meet with

an Educational Studies professor as early as possible and not later than fall of sophomore year (if they wish to complete one of the undergraduate programs). The MAT program is a *minimum* of nine courses. With careful planning that includes the completion of several Educational Studies classes before completing the undergraduate degree, a student may be able to complete the MAT within a single calendar year. The faculty contacts for the different certification areas are:

- Childhood (Grades 1– 6): Prof. Kay Johnston
- English Language Arts and Social Studies (Grades 7 – 12): Prof. Barbara Regenspan
- Mathematics and Science (Grades 7–12): Prof. Don Duggan-Haas

REGISTRATION INSTRUCTIONS AND SCHEDULE

Academic Planning for First-Year Students

The requirements described on pages 1-4 will help shape your undergraduate career by giving it both breadth and depth. The University's liberal arts curriculum—the completion of four “core” courses during your first four terms and the completion of two courses in each of the University's three divisions before graduation—ensure breadth of study. Your eventual choice of a concentration or a “major” area of study ensures depth. Beyond requirements, however, lies the challenge to pursue unique formative interests, and by so doing, to define yourself. No one has ever devised a set of rules by which this is best done, and that's where the best efforts of you and your advisors come in. Indeed, some of your best choices may well be in areas that you are not required to pursue. The choices you will make with your advisors over the next four years will shape and enrich you.

Designing your academic career is an ongoing process that involves your academic and administrative advisors, the University Registrar, and your professors. You will have ample assistance in planning your program of study; however, please keep in mind that *you* are expected to assume the primary responsibility for your education.

A program of courses for any semester should provide a well-considered, balanced schedule. In the early semesters especially, your program should aim at a fairly broad distribution of courses. In general, students in the early semesters need to elect courses in several areas they think might be likely majors. If these electives can also fulfill distribution requirements, that is an advantage. But keep in mind that ***although the four CORE courses are normally completed in the first four semesters, you have eight semesters to complete distribution requirements. The urge to focus early in one area is to be avoided as much as the urge to take everything all at once.*** The normal load is four courses.

Completing the Registration Form

After you have thoroughly reviewed the information contained in this booklet and have selected the courses for which you would like to register, you should complete the registration form, which is included in this mailing. Your objective is to select the four courses that will make up your Fall semester class schedule. In so doing, we ask that you keep in mind the following items:

1. One of your four courses must be a First-Year Seminar (FSEM). Be sure to provide several alternates, as FSEMs have small enrollments (14-18 students) and may fill quickly.

2. One of the four required CORE courses should also be included in your schedule. Please bear in mind that your FSEM may fulfill a Core requirement. **In general, we suggest that students NOT register for more than one CORE course per term.**

3. Priority I students are encouraged to register for a COMP course or FSEM147, which fulfills the writing requirement.

4. Students who have not fulfilled the Foreign Language requirement should register for a foreign or classical language.

5. List your preferred courses on the “Primary” lines. Refer to the day/time information included in the course listings and the day/time schedule on page 43 to ensure that your primary courses—and their accompanying laboratory sections—do not conflict.

6. When registering for a course that has a laboratory component, provide section information (e.g., A and BL) for both the lecture and the laboratory.

7. List alternate courses on the “Alternate” lines. **Because of the limited availability of seats in many courses, it is imperative that you provide alternate selections for all courses.**

8. For courses with multiple sections (e.g., CORE 151, CORE 152, CHEM 101, ECON 151), the Registrar's Office staff will make every effort to register for you the section indicated on your registration form. If that section is closed, we will attempt to place you in another section.

9. Students who have received Colgate credit based on Advanced Placement scores may not “repeat” courses for which they have received credit without written permission from the department. For instance, students who have submitted a score of 4 or 5 for the AP Calculus AB (and thus received credit for MATH 111) exam may not register for MATH 111 without permission from the course instructor or department chair. Please refer to the Advanced Placement Credit Summary Table on pages 44-45.

The completed registration form must be received (via mail or fax or email) by the Office of the Registrar no later than July 27, 2005. You will be able to view your schedule online in mid-August, but no schedule (course) changes will be permitted until the drop/add period begins on Sunday, August 28.

Registration Schedule for the Class of 2009

Registration for the class of 2009 will begin following the July 27 registration form deadline. ***Students' registration forms will be processed according to the alpha groupings listed below. Within each group, registrations will be processed alphabetically.*** Registration forms received after the July 27 deadline will be processed at the end of their alpha group.

Group 1:	Last Names Beginning A-B
Group 2:	Last Names Beginning C-D
Group 3:	Last Names Beginning E-G
Group 4:	Last Names Beginning H-K
Group 5:	Last Names Beginning L-M
Group 6:	Last Names Beginning N-R
Group 7:	Last Names Beginning S
Group 8:	Last Names Beginning T-Z

Note: **The registration order will be different each term.** The alpha groups will “roll” in groups of two for each term's registration, thereby ensuring that each alpha group has the opportunity to be first or second once in the first four terms of enrollment, and first or second once in the last four terms of enrollment.

Please mail the registration form to **Office of the Registrar, Colgate University, 13 Oak Drive, Hamilton, NY 13346;** fax the form to **315-228-7125;** or email a scanned copy to **gherringer@mail.colgate.edu** or **registrar@mail.colgate.edu**

If you have questions or concerns, please contact the Office of the Registrar at 315-228-7408 or 315-228-7419.

COLGATE DAY / TIME SCHEDULE

Monday		Tuesday		Wednesday		Thursday		Friday	
8:20		8:20		8:20		8:20		8:20	
			8:30				8:30		
9:10		9:10		9:10		9:10		9:10	
			TR				TR		
9:20		9:20		9:20		9:20		9:20	
			9:45				9:45		
10:10		10:10		10:10		10:10		10:10	
			9:55				9:55		
10:20		10:20		10:20		10:20		10:20	
			TR				TR		
11:10		11:10		11:10		11:10		11:10	
			11:10				11:10		
11:20				11:20		11:20		11:20	
		11:30							
12:10		Common		12:10		12:10		12:10	
12:20		Period		12:20		12:20		12:20	
1:10		1:10		1:10		1:10		1:10	
1:20	1:20	1:20	1:20	1:20	1:20	1:20	1:20	1:20	
	MW		TR		MW		TR		
2:10		2:10		2:10		2:10		2:10	
	2:35		2:35		2:35		2:35		2:30
	2:45		2:45		2:45		2:45		
	MW		TR		MW		TR		Colloquium Period
	4:00		4:00		4:00		4:00		4:00

The chart above is included as an aid in the planning of your course schedule. It is recommended that you write the course number or title in the appropriate box for each meeting of every course for which you intend to register. This should help you to organize your schedule, avoid conflicts, and better plan your week of classes.

ADVANCED PLACEMENT CREDIT SUMMARY

Please see the department/program overview section of this booklet (pages 13-31) and the department/program descriptions in the current *Colgate University Catalogue* for additional information.

<u>Subject</u>	<u>AP Exam</u>	<u>Score</u>	<u>Colgate Credit Awarded</u>
Art & Art History	AP Art History	4 or 5	ARTS 102 (1 course credit)
	AP Studio Art	4 or 5	ARTS 100 (1 credit, pending review & approval of portfolio)
Note: Students must pass both the 2-D and 3-D Design exams with a score of 4 or 5 to be eligible for ARTS 100 credit.			
Biology	AP Biology	4 or 5	BIOL 101 (1 course credit)
Chemistry	AP Chemistry	4	CHEM 101 (1 course credit)
		5	CHEM 101 & CHEM 102 (2 course credits)
Note: Please see the Chemistry Department and Health Sciences sections for additional information.			
Computer Science	AP Computer Science-A	4 or 5	COSC 101 (1 course credit)
	AP Computer Science-AB	3	COSC 101 (1 course credit)
	AP Computer Science-AB	4 or 5	COSC 101 & COSC 102 (2 course credits)
Economics	AP Economics-Micro	4 or 5	Students must pass <i>both</i> the Micro and Macro exams with scores of 4 or above to receive credit for ECON 151 (1 course credit)
	AP Economics-Macro	4 or 5	
French	AP French Language	4	FREN 202 (1 course credit)
	AP French Language	5	FREN 301 (1 course credit)
	AP French Literature	4	FREN 202 (1 course credit)
	AP French Literature	5	FREN 202 (1 course credit) and exemption from a concentration credit at the 350-level
Geography	AP Human Geography	4 or 5	GEOG 101 (1 course credit)
German	AP German Language	4 or 5	GERM 202 (1 course credit)
History	AP European History	4 or 5	HIST 101 (0.5 course credit) & HIST 102 (0.5 course credit)
	AP U.S. History	4 or 5	HIST 103 (0.5 course credit) & HIST 104 (0.5 course credit)
Latin	AP Latin Literature or AP Vergil	4 or 5	LATN 102, following completion of a higher-level LATN course (e.g., LATN 201) at Colgate.
	AP Latin Literature and AP Vergil	4 or 5	LATN 102 & 201, following completion of a higher-level LATN course (e.g., LATN 202) at Colgate.
Mathematics	AP Calculus AB	4 or 5	MATH 111 (1 course credit)
	AP Calculus BC	3	MATH 111 (1 course credit)
	AP Calculus BC	4 or 5	MATH 111 & MATH 112 (2 course credits)
	AP Statistics	4 or 5	MATH 102 (1 course credit)
Music	AP Music Theory	4 or 5	MUSI 203 (1 course credit)
Physics	AP Physics B and/or AP C-Mech	4 or 5	PHYS 111 (1 course credit)
	AP Physics C-E & M	4 or 5	PHYS 112 (1 course credit)

ADVANCED PLACEMENT CREDIT SUMMARY

Please see the department/program overview section of this booklet (pages 13-31) and the department/program descriptions in the current *Colgate University Catalogue* for additional information.

<u>Subject</u>	<u>AP Exam</u>	<u>Score</u>	<u>Colgate Credit Awarded</u>
Psychology	AP Psychology	4 or 5	PSYC 109 (1 course credit)
Spanish	AP Spanish Language	4	SPAN 202 (1 course credit)
	AP Spanish Language	5	SPAN 361 or 362 (1 course credit)
	AP Spanish Literature	4	SPAN 202 (1 course credit)
	AP Spanish Literature	5	SPAN 202 (1 course credit) and exemption from a concentration credit at the 350-level

ACADEMIC CALENDAR, 2005-2006

FALL 2005 TERM

AUGUST	25	Thursday	First-Year Students Arrive
	27	Saturday	Upper-Class Student Residences Open
	28	Sunday	Academic Advising and Drop/Add Day
	29	Monday	Founder's Day Convocation First Day of Classes (Half-Day Schedule)
SEPTEMBER	7	Wednesday	End of Drop/Add Period
OCTOBER	1	Saturday	Homecoming
	8-11	Saturday-Tuesday	Mid-Term Recess
	28	Friday	Last Day to Withdraw (with grade of W) from Fall Course
	28-30	Friday-Sunday	Family Weekend
NOVEMBER	7-11	Monday-Friday	Registration for Spring 2006 Term
	23-27	Wednesday-Sunday	Thanksgiving Recess (no class on Wednesday)
DECEMBER	9	Friday	Last Day of Classes
	10-11	Saturday-Sunday	Review Days
	12-13	Monday -Tuesday	Final Examination Period
	14	Wednesday	Review Day
	15-16	Thursday-Friday	Final Examination Period
	17	Saturday	Residence Halls Close to All Students
	27	Tuesday	Final Grades Due to the Registrar

SPRING 2006 TERM

JANUARY	21	Saturday	Residences and Dining Halls Open
	22	Sunday	Academic Advising and Drop/Add Day (tentative)
	23	Monday	First Day of Classes (Half-Day Schedule)
	24	Tuesday	Beginning Date for Submission of Applications for Fall 2006 and/or Spring 2007 Academic Leaves of Absence
FEBRUARY	1	Wednesday	End of Drop/Add Period
	24	Friday	Deadline for Submission of Applications for Fall 2006 and/or Spring 2007 Academic Leaves of Absence
MARCH	11-19	Saturday-Sunday	Mid-Term Recess
	29	Wednesday	Last Day to Withdraw (grade of W) from Spring Course
APRIL	3-7	Monday-Friday	Registration for Fall 2006 Term
MAY	2	Tuesday	Awards Convocation
	5	Friday	Last Day of Classes
	6-7	Saturday-Sunday	Review Days
	8-9	Monday-Tuesday	Final Examination Period
	10	Wednesday	Review Day
	11-12	Thursday-Friday	Final Examination Period
	13	Saturday	Residence Halls Close to All Students except Seniors
	15	Monday	All Senior Grades Due to the Registrar
21	Sunday	Baccalaureate-Commencement	
	22	Monday	Final Grades Due to the Registrar; Residence Halls Close
JUNE	1-4	Thursday-Sunday	Reunion Weekend

