

WINTER STUDY PROGRAM

REMINDERS ABOUT WSP REGISTRATION

All students who will be on campus during the 1998-99 academic year must register for WSP. Registration will take place in the early part of fall semester. If you are registered for a senior thesis in the fall which must be continued through Winter Study by departmental rules, you will be registered for your Winter Study Project automatically. *In every other case, you must complete registration.* First-year students are required to participate in a Winter Study that will take place on campus; they are not allowed to do 99's.

Even if you plan to take a 99, or the instructor of your first choice accepts you during the registration period, there are many things that can happen between registration and the beginning of Winter Study to upset your first choice, so you must list five choices. You should try to make one of your choices a project with a larger enrollment, not that it will guarantee you a project, but it will increase your chances.

If you think your time may be restricted in any way (ski meets, interviews, etc.), clear these restrictions with the instructor *before* signing up for his/her project.

Remember, for cross-listed projects, you should sign up for the subject you want to appear on your record.

For many beginning language courses, you are required to take the WSP Sustaining Program *in addition* to your regular project. You will be automatically enrolled in this Sustaining Program, *so no one should list this as a choice.*

The grade of honors is reserved for outstanding or exceptional work. Individual instructors may specify minimum standards for the grade, but normally, fewer than one out of ten students will qualify. A grade of pass means the student has performed satisfactorily. A grade of perfunctory pass signifies that a student's work has been significantly lacking but is just adequate to deserve a pass.

If you have any questions about a project, see the instructor *before* you register.

Finally, all work for WSP must be completed and submitted to the instructor no later than Thursday, January 28th. *Only the Dean can grant an extension beyond this date.*

WINTER STUDY 99'S

Sophomores, juniors and seniors are eligible to propose "99's," independent projects arranged with faculty sponsors, conducted in lieu of regular Winter Study courses. Perhaps you have encountered an interesting idea in one of your courses which you would like to study in more depth, or you may have an interest not covered in the regular curriculum. In recent years students have undertaken in-depth studies of particular literary works, interned in government offices, assisted in foreign and domestic medical clinics, conducted field work in economics in developing countries, and given performances illustrating the history of American dance. Although some 99's involve travel away from campus, there are many opportunities to pursue intellectual or artistic goals here in Williamstown.

99 forms are available in the Registrar's Office. The deadline for submitting the proposals to faculty sponsors is Thursday, 1 October.

AFRICAN AND MIDDLE EASTERN STUDIES

AMES 025 Archaeology, History and National Identity in Jordan and Syria (Same as Religion 025)

(See under Religion for full description.)

AMES 031 Senior Thesis

To be taken by candidates for honors by the thesis route in African and Middle Eastern Studies.

AFRO-AMERICAN STUDIES

AAS 030 Senior Project

To be taken by students registered for Afro-American Studies 491 who are candidates for honors.

AMERICAN STUDIES

AMST 010 American Catholicism in the Novels of Andrew Greeley (Same as History 010)

(See under History for full description.)

AMST 014 "Once Upon a Time:" American History through Historical Fiction (Same as History 014)

(See under History for full description.)

AMST 030 Senior Honors Project

To be taken by students registered for American Studies 491 or 492.

ANTHROPOLOGY AND SOCIOLOGY

ANSO 011 Berkshire Farm Internship

A field placement at Berkshire Farm Center and Services for Youth in Canaan, New York. Berkshire Farm Center is a residential treatment facility for troubled, at-risk adolescent boys who have been remanded to the Farm by the Family Court. These youths come primarily from lower socio-economic strata, are very ethnically diverse, and hail from both urban and rural areas throughout New York State. The problems that they bring to Berkshire Farm are multiple. These include: the psychological scars of dysfunctional families, including those of physical, emotional, and sexual abuse; chemical dependency; juvenile delinquency; inability to function in school settings; and various other issues. Residential treatment is a multi-modal approach that includes anger-replacement training, social skills training, and behavioral modification.

Williams students will commute to Berkshire Farm and work under supervision in one of the following areas: school, cottage life, chemical dependency unit, research, recreation, performing arts, or in individual tutoring.

Students will keep a journal reflecting on their experiences. A weekly seminar with the instructor will draw on service learning experience. Please note: all queries about this course should be directed to the instructor, who can be reached at 518-781-4567, ext. 322.

Prerequisites: placement only through interview with instructor.

Enrollment limited to 15.

Cost to student: none.

Meeting time: mornings and afternoons.

LARI BRANDSTEIN (Instructor)

M. F. BROWN (Sponsor)

Lari Brandstein is Director of Volunteer Services at Berkshire Farm Center and Services for Youth.

ANSO 012 Children and the Courts: Internship in the Crisis in Child Abuse

The incidence of reported child abuse and neglect has reached epidemic proportions and shows no signs of decreasing. Preventive and prophylactic social programs, court intervention, and legislative mandates have not successfully addressed this crisis. This course allows students to observe the Massachusetts Department of Social Services attorney in courtroom proceedings related to the care and protection of children. Students will have access to Department records for purposes of analysis and will also work with social workers who will provide a clinical perspective on the legal cases under study.

The class will meet regularly to discuss court proceedings, assigned readings, and the students' interactions with local human services agencies. Students will keep a journal and submit a 10-page paper at the end of the course. Full participation in the course is expected.

Enrollment limited to 15. Access to an automobile is desirable but not required; some transportation will be provided as part of the course.

Cost to student: \$25 for books and photocopies.

Meeting time: mornings and afternoons.

JUDITH LOCKE (Instructor)

M. F. BROWN (Sponsor)

Judith Locke is the Assistant Divisional Counsel for the Massachusetts Dept. of Social Services.

ANTHROPOLOGY

ANTH 017 "The Feather'd Hook:" An Introduction to Streamside Entomology and Fly-Tying (Same as Environmental Studies 017)

For over a thousand years, anglers have imitated the insects upon which fish feed—most notably trout and salmon—by tying bits of feather, fur, and other materials to their hooks. Over time, the practice has developed into a minor art, with its own tools, techniques, aesthetics, and competing theories of animal behavior. In this course, students will learn the gentle art of fly-tying, concentrating on imitations of the various distinctive stages in the life cycles of the three main insect orders on which trout feed: *Ephemeralia*, *Neuroptera*, and *Diptera* (mayflies, caddis flies, and midges). We will in particular focus on the imitation of species most likely to be encountered in New England trout streams. By means of lectures and readings, students will become acquainted with the gross anatomy and life-cycles of insects imitated by tyers. We will review the history of fly-tying, aided in part by the Chapin Library's excellent collection of classic piscatoriana and in part by a visit to the American Museum of Fly Fishing in Manchester, Vermont. Through a variety of reading and lectures students will also become acquainted with the "theories of attraction" guiding tyers past and present, including the iconoclastic patterns developed by LaFontaine. If possible, one or more guest lectures from notable local practitioners of the art will be arranged.

Students will be evaluated on the basis of class attendance, and a course project testing both their performance in tying and their comprehension of the central concepts of the course.

We will meet thrice weekly for two and one half hours each session.

No prior experience is expected.

Cost to student: approximately 60-\$75 for tools and materials.

Meeting time: mornings.

JUST

ANTH 031 Senior Thesis

To be taken by students registered for Anthropology 493-494.

SOCIOLOGY**SOC 010 Women in Policing**

An analysis of women's experiences in law enforcement, with special emphasis on the expanding role of women in the New York City Police Department. Among key topics to be considered: the historical trajectory of women in policing in New York, from their status as "matrons" to full-fledged officers and detectives; female officers and physical danger on the street; women in undercover work; the problems of women partnering with male officers; women's experiences in a traditionally male organizational culture; women as investigators of violent crimes, with a particular focus on sexual assault and homicide; female investigators' interactions with male criminals; and women as bosses of male officers. The course will feature several speakers, all female police officers, both those in uniform and in the ranks of detectives.

Classes will meet twice a week for three hours per session.

Requirements: regular class attendance and a 10-page paper.

Cost to student: approximately \$35 for books and course materials.

Meeting time: mornings and afternoons.

JANE PERLOV (Instructor)
ROBERT JACKALL (Sponsor)

Jane Perlov is Chief of Detectives of Queens County, New York, the highest ranking female officer in the NYPD.

SOC 031 Senior Thesis

To be taken by students registered for Sociology 493-494.

ART**ART HISTORY****ARTH 010 Local Collections: Renaissance and Baroque Art**

Together the Williams College Museum of Art, the Clark Art Institute, and Chapin Rare Books Library own a variety of paintings, sculptures, and graphics produced in Western Europe during the sixteenth and seventeenth centuries. Some are rarely exhibited. In field trips and class meetings, we will discuss them as objects in the present and as documents of the past.

Evaluation based on a 10-page paper and regular attendance. Two three-hour long meetings each week on Tuesday and Thursday afternoons.

No prerequisites.

Cost to student: none.

Meeting time: afternoons.

FILIPCZAK

ARTH 011 Spaces for Selling or Buying

This field-oriented class will attempt to unravel the diachronic evolution of American retailing and wholesaling spaces, in their fullest panoply. Probably two full days each week will be spent in local and regional site visits and one day in on-campus discussions. We will likely visit an artisan's house and shop, a general store, a shoe repair shop, a butcher's shop, and advance to a department store, various kinds of warehouse or mail order distribution businesses, eventually to discern neighborhood and regional shopping centers, including malls, discount stores, and the impacts of these more contemporary developments upon unfolding patterns of access or mobility, of capital accumulation, and ownership patterns of socio-economic groupings or markets, and factors of scale. We will also attempt to experience Internet and other electronic sales patterns, no aborning. Matriculants will be taking notes on behalf of the class, researching types of businesses we will be visiting, and preparing several short papers on aspects of our overall topic. Skills in interviewing and other field techniques should be inculcated and honed, leading to the class itself, especially in its field guise, constituting one source of information, or learning. This inquiry will be broad-based, with a greater concentration upon the visual expression of commerce in the landscape. There may be a one-day visit to Boston or New York, especially to encounter the historical migrations through urban space of certain business types. Some field sessions will include visits to regional archives, especially for the purposes of encountering the iconography in a specific city or place.

Grade based on several short papers and on participation, especially while on the field sessions.

No prerequisites.

Cost to student: estimated at \$25.

Meeting time: mornings and afternoons.

SATTERTHWAITE

ARTH 031 Senior Thesis

To be taken by students registered for ArtH 493, 494.

ARTH 033 Honors Independent Study

To be taken by candidates for honors by the independent study route.

ART STUDIO**ARTS 010 Icon Painting (Same as Russian 010)**

(See under Russian for full description.)

ARTS 011 Seeing Relationships in Art and Mathematics; the Experience of Creative Visualization (Same as Mathematics 011)

(See under Mathematics for full description.)

ARTS 012 Meet the Right Side of Your Brain: Drawing as a Learnable Skill (Same as Physics 012)

(See under Physics for full description.)

ARTS 013 Mostly Animal Drawing

This course will introduce the student to the basic skills of drawing different animal forms, as well as the human figure. The course will initially approach these two subjects singly and formally. Later work will deal with narrative, metaphor, and humorous juxtapositions. Students will work from life, photographs, and from memory and imagination. Techniques will include gesture and line drawing, as well as longer sustained value work. In addition to charcoal, media will include pen and ink, pencil, and conte crayon. Although the majority of the class time will be spent drawing, there will also be slide presentations and a drawing field trip.

Students will be evaluated on the basis of regular attendance, class participation, and the quality of the work. Drawing sessions will meet three times a week for a total of eight hours/week and there will be two outside assignments during the month. Prospective students are expected to resolve recurring time conflicts between outside activities and the course in favor of the course.

No prerequisites. *Enrollment limited to 12.* Priority is given to juniors and seniors.

Cost to student: \$75 covering materials.

Meeting time: mornings and afternoons.

TAKENAGA

ARTS 014 Ramayana, the Great Epic in the High and Low Arts of India and Southeast Asia

The "Travels of Rama" (Ramayana) is one of the most popular epics of India. It is a heroic tale involving romance, sacrifice, villainy, and warfare on both the human and the cosmic or heavenly scales. To know the Ramayana is to grasp the essentials of Hindu religion, culture, and values.

This course will explore the exciting visual and performing arts inspired by the Ramayana in India, where the story originated, as well as in the lands of southeast Asia where it spread. Arts to be explored will include the great temple sculptures in stone and bronze, large scale and miniature painting, plays, dance and musical drama, batik, puppet shows, even modern day comic books, and film and television productions of the Ramayana.

Social and esthetic issues to be considered may include the roles played by the arts in society; methods and aims of artistic expression; ideals of beauty and of virtue; social status and gender; the various transformations of the Ramayana in both literature and art in various parts of India and by various levels of society ("folk" art vs. "high" art), as well as in the various different cultures of southeast Asia.

Students will be evaluated on attendance (mandatory), participation in class discussions, and the production of an art project or projects (illustrations to the story). No prior artistic training or skill will be required, only enthusiasm and effort.

No prerequisites. *Enrollment limited to 15.*

Cost to student: \$80 covering materials.

Meeting time: mornings.

GARY SMITH (Instructor)
JANG (Sponsor)

Gary Smith has a Master's degree in the art history of India from the University of California, Berkeley, and has traveled widely in India and southeast Asia. He is also a painter, with an interest in illustration, and in both Asian and Western art.

ARTS 015 Drawing: Abstracting From Nature

This is an introductory level course, (advanced students are welcome as well), where students will gain a clear understanding of the basic components that are important to making and understanding a drawing. Through a series of studio projects and slide lectures, students will become familiar with a variety of mediums and approaches to drawing. The visual source for ideas and imagery in this course will come from the natural world, which thought of in the broadest of terms allows for a great deal of subject matter. This will include working from still life, nature-forms, the figure, and animals — all subjects that can be used as sources of inspiration and points of departure.

Students will be evaluated on the basis of regular attendance, completion of in class projects, completion of outside assignments and a final presentation of the work. In

addition to the two regularly scheduled classes each week, (Tuesday and Thursday, 1:00-5:00 p.m.), students should expect to invest a considerable amount of time in completing outside assignments.

No prerequisites. Enrollment limited to 20.

Cost to student: \$50 for materials.

Meeting time: afternoons.

JOHN RECCO (Instructor)
GLIER (Sponsor)

John Recco lives and works in Hoosick, NY and has exhibited in New York, Boston and throughout the Northeast. He has taught at Bennington College, Marlboro College and Williams College and has been a visiting artist at a number of institutions.

ARTS 016 Documentary Photography

This course combines a survey of the twentieth century documentary tradition in photography with the creation of a documentary photographic project by the student. Topics include August Sander, Brassai, Weston's *Daybooks*, Cartier-Bresson and Magnum, Robert Frank's *The Americans*, Diane Arbus, and the new document makers Koudelka, Salgado, Gilles Peress, Sally Mann and Mary Ellen Mark. The student's daily ritual of exploring a documentary topic with their cameras and then processing and editing their work into a formed document will give the students insight into the core issues of documentary photography as well as into their personal photographic vision.

The class will meet Tuesday, Wednesday and Thursday mornings from 10 a.m.-noon. In addition students will be expected to work for two sessions each week in the darkroom.

Students will be encouraged to work on individual projects of their own choice provided that their attention to the documentary process is engaged. Students will be evaluated on classroom and lab participation. Each student will be required to complete a documentary project portfolio of photographs and a weekly written report reflecting on fieldwork and lab work experiences.

Prerequisites: access to a 35mm camera. Basics of black and white film processing and printing skills preferred but not essential. *Enrollment limited to 12.*

Cost to student: \$75 for film and photographic paper.

Meeting time: mornings.

KEVIN BUBRISKI (Instructor)
HEDREEN (Sponsor)

Kevin Bubriski was awarded a John Simon Guggenheim Fellowship in Photography in 1994. His photographic prints are in the permanent collections of the Metropolitan Museum of Art, Museum of Modern Art and the International Center of Photography.

ARTS 018 Editorial Cartooning (Same as Political Science 018)

This course will involve students in "The Ungentlemanly Art" through lecture/discussions and actual hands-on production of editorial cartoons and visual satire.

Classes will meet formally three times per week for discussion of topics including a historical and contemporary overview of editorial cartoons, politics and current events, caricature, technique, mental discipline and the creative process, and the distillation of abstract concepts into clear forms of visual communication.

Students will be expected to keep themselves informed about current events, trends, and developments on a daily basis, and will be asked to produce several cartoons per week to be critiqued in a non-threatening environment. The instructor, who will also be producing daily syndicated cartoons professionally, will be available as a resource for students with individual questions and needs.

Since editorial cartooning is primarily a mental exercise, rudimentary knowledge of drawing is helpful but not essential. This is not a formal art course per se (although drawing technique will be dealt with as needed), but a course in visual conceptualization.

Students will be evaluated based on regular attendance, class participation, and a sincere commitment to the course as manifested in their work.

Cost to student: \$30 covering drawing utensils, ink, and paper.

Meeting time: afternoons.

CHAN LOWE '75 (Instructor)
HEDREEN (Sponsor)

Chan Lowe is the editorial cartoonist for the *Ft. Lauderdale Sun-Sentinel*, and his work is syndicated nationwide by Tribune Media Service. His Cartoons have appeared in *The New York Times*, *Newsweek*, *The Washington Post*, ABC 20/20, etc. He is a winner of the Society of Professional Journalists' Green Eyeshade Award, was runner-up for the Pulitzer Prize in 1990, and is a 1996 recipient of the Williams Bicentennial Medal.

ARTS 025 Village Textiles in India (Same as Political Science 025)

In New Delhi there is a marketplace sponsored by the government for indigenous crafts, Dilli Haat. A monthly changeover in the stalls offers a broad range of products from the Indian tradition. Also in the city is the National Institute of Fashion Technology (NIFT), a private, industry-supported college which trains designers who have, in turn, created new trends in the vast apparel market. Currently, ethnic chic is hot in urban India. An excellent craft museum and tradeshows give further evidence of a lively textile market.

Embroidery is a traditional pastime of many women in western Gujarat during the isolation of monsoon season. Hand-stitched mirrored cloth for garments and household furnishings caught the eye of ethnic clothing designers as well as collectors, developing a commercial demand for the women's craft.

The Rahari, a nomadic people lived in both Gujarat and Rajasthan tending their herds and moving with them to find fodder. As the demand increased for embroidered textiles the women were able to contribute more income to the family which eventually allowed them to settle permanently in villages. New respect and increased political power in their communities followed. Established women's cooperatives have been essential in getting the textiles to market. These are examples of specialty textiles made in villages.

The course will begin with an overview of the many handcrafted textiles displayed in New Delhi. There will be an opportunity to discuss the influence of the rich textile variety with students designers at NIFT. Then the group will venture out into the countryside to learn the tradition of a village's craft: What are their sources of raw materials and why certain patterns and colors are selected? After observing the handwork, the students will practice the skills to make the village's craft. Questions to be considered after the village visit might be: What concessions from custom have been made to satisfy contemporary markets for the textile product? How has the product's success changed village life?

This travel study will appeal to a variety of students including those in art, anthropology, sociology and economics. Travel will be limited to one region of India allowing more time on-site.

each student will be expected to have a valid passport to surrender at a given date for visa application.

Enrollment limited to 10. Evidence of research on Indian village textiles will be required prior to the winter study period.

Cost to student: \$2500 for visa, all travel to, in and from India, lodging, meals, museum or tour fees. The group leader will make a concerted effort to locate sponsors for students (maximum 2) with limited resources.

ELIZABETH MICHAELS (Instructor)
MACDONALD (Sponsor)

Elizabeth Michaels, the group leader, is a textile colorist and designer with 21 years of experience. She lives in Williamstown with her family and taught a 1997 Winter Study on "Creating Color" in the Department of Studio Art.

ARTS 033 Honors Independent Project

Independent study to be taken by candidates for honors in Art Studio.

ASIAN STUDIES

ASST 010 Chinese-American Literature: Culture and Identity

Finding a place between the history and heritage of their parents and American society shapes the narratives of identity of many Chinese-American writers. In this course we will explore questions of cultural heritage and identity through fiction by authors such as Maxine Hong Kingston, Ruthanne Lum McCunn, Amy Tan, and Aimee Liu, as well as through memoirs and critical essays by various writers. Classes will meet three mornings per week for discussion.

Evaluation will be based upon class participation, reading journals, and a final paper.

No prerequisites. *Enrollment limited to 15.*

Cost to student: books and reading packet.

Meeting time: mornings.

SILBER

ASST 011 Korean Society and Culture

This course will begin with an overview of the geographic setting, population, cultural traits, and historical background of Korea. We will discuss the formation and development of yangban society, its Confucian tradition and value systems, the transformation and modernization of Korean society in the last two centuries, and the rise of Korean capitalism. The focus of the course will be on Korean society after the end of the Korean War. In particular, we will examine the relationship between state and market during the period of rapid economic growth and identify some of the key social characteristics that have led to economic development in Korea. We will also discuss political factors and other institutional aspects which are related to the modernization of Korean society. The course will conclude with a discussion of Korean democracy and the reunification issue. Classes will meet three mornings per week for two hours.

Requirements: informed, thoughtful participation in class discussion and three short papers.

No prerequisites. *Enrollment limited to 15.*

Cost to student: books and reading packet.

Meeting time: mornings.

HYUK-RAE KIM (Instructor)
C. KUBLER (Sponsor)

Dr. Kim, a sociologist by training, is Associate Director of the Institute for Modern Korean Studies at Yonsei University in Seoul.

ASST 016 Medicine and the Soul: The Healer's Art (Same as Special 016)

This course is intended as an antidote to the dehumanizing experiences many pre-medical students tolerate in the quest to obtain the M.D. degree. Indeed, many students question their decision to enter medicine based on the hoops they have to jump through. Participants will be exposed to areas of medicine of which they might have been ignorant. Phil Pang, a Columbia P&S student and one of our faculty, has written, "Medicine strikes me like the worst, driest, windiest, feistiest desert man has ever known, with a paradise as wondrous as humans can know lost inside—it's all a matter of finding it and holding onto it." We will visit these oases during Winter

Study. This course is open to premeds, as well as all students who are curious about a career in the health sciences. Through guest lectures, readings, open-ended discussions and dinner conversations, we will consider some non-technical aspects of being a doctor. Medicine is a grand calling and can provide an extraordinarily rewarding life for the right person. The faculty is drawn from a group of physicians, medical students, nurses, psychologists, patients, and community members who are concerned with the education and training of future doctors.

No prerequisites.

Meeting time: afternoons.

DAVID J. ELPERN, M.D. (Instructor)
REIKO YAMADA (Sponsor)

Dr. Elpern, a practicing physician, has organized international conferences on the medical humanities for the past ten years.

ASST 025 Study Tour to Taiwan

Interested in learning first-hand about Chinese and Taiwanese culture and becoming acquainted with the so-called "Taiwan (economic and political) miracle"? Want to improve your knowledge (or learn the basics) of the world's most widely spoken language? Then join us on this 28-day study tour to Taiwan, Republic of China. We'll spend the first three weeks in Taipei, the capital city, where three hours of Mandarin language classes will be offered each morning. After class, we'll meet as a group for lunch and discussion. Visits to cultural, historical, and economic sites of interest will be scheduled for some afternoons, with other afternoons, evenings, and most weekends free for individual exploration of the city and self-study. During the fourth week, we'll conduct a seven-day tour of central and southern Taiwan. Two orientation sessions will be conducted on campus in November and December to prepare participants for their experience.

Requirements: satisfactory completion of the language course and active participation in the other scheduled activities.

No prerequisites, though students with some proficiency in Mandarin will have priority. *Enrollment limited to 15.* Interested students must consult the instructor before registration.

Cost to student: \$2000 (includes round-trip air fare from New York City, tuition, textbooks, accommodations, weekday lunches, and tour of central and southern Taiwan; does not include breakfasts and dinners or weekend lunches while in Taipei, estimated at \$200, or incidental expenses).

C. KUBLER

ASST 031 Senior Thesis

To be taken by all students who are candidates for honors in Asian Studies.

CHINESE

CHIN S.P. Sustaining Program for Chinese 101-102

Students registered for Chinese 101-102 are required to attend and pass the Chinese Sustaining Program.

Requirements: regular attendance and active class participation.

Prerequisite: Chinese 101.

Cost to student: one Xerox packet.

Classes meet Mondays, Tuesdays, and Thursdays from 9:00-9:50 a.m.

JIA, LIN

JAPANESE

JAPN S.P. Sustaining Program for Japanese 101-102

Students registered for Japanese 101-102 are required to attend and pass the Japanese Sustaining Program.

Requirements: regular attendance and active class participation.

Prerequisite: Japanese 101.

Cost to student: one Xerox packet.

Classes meet Mondays, Tuesdays, and Thursdays from 9:00-9:50 a.m.

KUWAI

ASTRONOMY

ASTR 012 Leadership in Astronomy: From Copernicus to Hubble and the Age of the Universe (Same as Leadership Studies 012)

Progress in understanding our Universe has undergone major steps as the result of sweeping new ideas introduced by major scientists. Copernicus, in his book of 1543, shook the foundations of ancient science; Tycho, a few decades later, revolutionized the idea of observing the heavens; and Kepler, in 1603-1618, completed the Copernican Revolution by removing the ancient idea that perfect circles were necessary for orbits. Halley and Newton, starting in the 1680's, led the world to comprehend the universality of gravity and linked comets with planets in obeying the law of gravity. In this century, Shapley moved the Sun out of its central place in the Universe and Hubble, in the 1920s, found that our galaxy was only one out of many and that the Universe is expanding all around us. In addition to studying the contributions of these leaders, we will see how Hubble's law of the expanding Universe is being studied as a Key Project of the Hubble Space Telescope and how astronomers hope to soon know accurately the cosmic distance scale and the age of the Universe. We will consider the role of NASA, the space shuttle, and astronaut/astronomers in

shaping the scientific goals.

Readings include Rocky Kolb's *Blind Watchers of the Sky: The People and Ideas that Shaped our View of the Universe*, about the early astronomers, and Gale E. Christenson's biography, *Edwin Hubble: Mariner of the Nebulae*. Videos will include parts of Tom Hanks's *From the Earth to the Moon*. Visiting speakers will join Professor Pasachoff in describing the contributions of historical and current figures. The course will meet one to three mornings per week for lectures and discussions plus occasional sessions with special visitors. Grading will be on the basis of a final paper.

No prerequisites. This WSP course is a cluster course in the program of Leadership Studies and counts as one of the two prerequisites for EXPR 402, Topics in Leadership. *Enrollment limited to 30.*

Cost to student: \$10 for packets.

Meeting time: mornings.

PASACHOFF

ASTR 016 Observational Astronomy

This course, meant for non-majors, will focus on the most basic aspects of astronomy and will be observing-intensive, taking full advantage of various telescopes housed on the Williams College observing deck. Topics to be covered will include the constellations and night sky in general, planets, the moon, the sun, stars, and galaxies. Study of these topics will require a mix of both day and night class sessions during which students will be required to make observations using binoculars, telescopes, and the naked eye. Student observations will be recorded in drawings, notes, and computer printouts and/or photographs.

Observing will take place on all class dates during which the sky is clear. On those days when the sky is cloudy, we will do in-class exercises or discuss current topics in astronomy such as results from the Hubble Space Telescope.

No prerequisites. *Enrollment limited to 15.*

Cost to student: \$10 for materials and \$20 for book.

Meeting time: mainly evening observing sessions; a few afternoon sessions will be used to make arrangements.

S. MARTIN (Instructor)
JAY M. PASACHOFF (Sponsor)

Stephan Martin is Instructor and Observatory Supervisor at Williams College.

ASPH 031 Senior Research

To be taken by students registered for Astrophysics 493, 494.

ASTR 031 Senior Research

To be taken by students registered for Astronomy 493, 494.

BIOLOGY

BIOL 010 Transmission Electron Microscopy

Many basic facts about the cell and its true structure have been discovered using the transmission electron microscope (TEM). Its high magnification, up to 500,000X, allows viewing of viruses and other submicroscopic particles as well as cell constituents, making the TEM valuable in both research and diagnostic pathology.

This course will give an introduction to the TEM, its operation and theory, and the lab techniques needed to prepare a sample for the TEM. Each student will learn 1) to align and operate the TEM and obtain well-focused micrographs, 2) to process their own material for the scope, 3) section their sample on an ultramicrotome, 4) learn enough darkroom procedure to print their own micrographs.

There will be brief reading assignments on EM topics, and some guest speakers in the field of electron microscopy. Lab scheduling is somewhat flexible, but will average six hours each week. Six well-focused micrographs included in a 10-page paper and a short presentation are required in addition to laboratory work. Class will meet for two hours, three times a week plus additional scope time.

No prerequisites. *Enrollment limited to 8.*

Cost to student: approx. \$40 for text and readings.

Meeting time: afternoons.

NANCY PIATCZYC (Instructor)
D. LYNCH (Sponsor)

Nancy Piatczyk received her B.S. in Biology from Tufts University. She attended the School of Electron Microscopy in Albany, NY. She is a trained electron microscopist who operates and maintains the electron microscope facility at Williams.

BIOL 011 Humanity: The Next Generation

This course will explore recent progress in human genetic, reproductive, and developmental technologies. We'll discuss the science as well as the social controversies associated with genetic screening, gene therapy, fetal and animal tissue transplantation, human embryo manipulation, and assisted-reproduction technologies. What advances capture our imaginations? What ones make us shudder? What are the social, economic legal, and ethical implications of "designing" our children, transplanting animal organs into humans, or cloning ourselves? We'll also examine public perceptions of these scientific frontiers as evidenced in newspaper and magazine articles, science fiction films and books, and scientific documentaries. This course will be of interest and accessible to both biology majors and non-majors, first-year students through seniors.

Evaluation will be based on student participation in class discussions and a final 10-page paper.

No prerequisites. *Enrollment limited to 16.*

Cost to student: approximately \$40 for books and readings.

Meeting time: mornings.

ALTSCHULER

BIOL 012 Medical Ethics (Same as Special 012)

This course will examine contemporary issues in medical ethics. The first type of issue that we will discuss regards decisions that are made in the practice of medicine. For example, a current topic of great interest in this area is whether physicians should help terminally ill patients end their lives. Another example of this type of issue is whether a genetic counselor should perform a test to allow parents to learn the sex of their fetus, knowing that the parents will abort if the fetus is of a particular sex. A second type of ethical issue that we will investigate includes larger social issues related to health care. For example, should we ration the use of expensive medical technologies so that we can provide some minimal level of basic medical services for all of our citizens? Also, global problems such as AIDS will be examined; if expensive protease inhibitors prove to be effective treatment for HIV infection and AIDS, what are our obligations to the 90% of AIDS patients who live in developing countries. Finally, future problems such as what to do about the potential for cloning humans will be examined. In discussing these and other issues, we will attempt to understand the moral reasons underlying opposing positions. A major goal of the course is to help participants not only understand these difficult issues but also to develop their own reflections whenever possible.

Short readings will be assigned for each class, and active, thoughtful participation is expected. Students will have a choice of writing a 10-page paper regarding an issue of particular interest, or three short case commentaries. Students of all backgrounds, majors, and career goals are encouraged to enroll, including "nonscience persons." No prerequisites. *Enrollment limited to 15.*

Cost to student: approximately \$50 for books and articles.

Meeting time: afternoons.

MATTHEW FOGG (Instructor)
THEILING (Sponsor)

Matthew Fogg is a third year medical student at New York University where he recently completed the Arthur Zitrin Fellowship in Medical Ethics.

BIOL 013 Don't Put That in Your Mouth! Bacterial Contamination of Food

Did you ever wonder why that fried rice, hamburger, or eggnog made you sick? We have seen extensive media coverage of recent E. coli and Salmonella food poisoning outbreaks, but do you really know how and why food-borne bacteria make a person ill? This course, intended for both non-science and science majors, will discuss how some of the major food-borne bacteria enter the food chain and survive in foodstuffs, discuss the toxins produced by the bacteria, and survey recent outbreaks and their media coverage.

Class will meet three times a week and will be a combination of lecture, discussion, and lab. In the two laboratory sessions, we will determine if there is bacterial contamination of student-contributed food samples, examine the effectiveness of hand washing, and identify microbes harboring in food. Students will be evaluated on class participation, a 3- to 5-page paper, and a poster presentation.

No prerequisites. *Enrollment limited to 24.*

Cost to student: approximately \$5 for handouts.

Meeting time: mornings (labs will meet in the afternoon after a short morning class).

SINDT (Instructor)
D. LYNCH (Sponsor)

Dr. Sindt received her B.S. from Allegheny College and her Ph.D. from University of Virginia. She is currently a postdoctoral fellow in biochemistry working in the laboratory of Charles Lovett, Chemistry Department.

BIOL 014 DNA Typing, the Ultimate Means of Identification

This non-laboratory course is intended for a general audience with a basic knowledge of biology and chemistry. The introduction will include descriptions of the human genome, of DNA, DNA sequences, online databases of DNA sequences, gene patterns, parasitic repetitive sequences, micro-satellite sequences used for DNA typing, and the levels and causes of DNA sequence variations among individuals. Examples of the use of typing, or fingerprinting, will focus on mammalian, and particularly human issues, with classroom discussions of some famous court cases. Discussions of techniques will include elementary descriptions of the handling of samples and degrees of confidence in matches, and the factors that influence interpretations of matches.

Evaluation will be based on class participation and a 10-page paper.

No prerequisites.

Cost to student: approximately \$15-20 for books.

Meeting time: mornings.

RICHARD BLAKE (Instructor)
D. LYNCH (Sponsor)

Richard Blake is University Professor Emeritus of Biochemistry and Chemistry at the University of Maine, having taught and conducted research there for almost 25 years. His research focus is on DNA structure, interactions, and evolution, and includes studies of the evolution and properties of satellite and micro-satellite se-

quences used in DNA typing. He has served as consultant in several pre-court findings regarding the use of DNA typing in cases in Maine.

BIOL 015 The Naturalist's Winter: Birds, Bugs, and Trees (Same as Environmental Studies 015)

We will explore the variety of natural life present in the seemingly barren landscape of a northern winter. During field trips to natural areas near Williamstown, we will investigate and identify plants, animal tracks, birds, and overwintering insects. An examination of these plants and animals in the context of the environment will lead us to consider the adaptations that allow local species to survive New England's winters. Class attendance and completion of independent project will be required: these projects will be carried out by small groups, and will culminate in an oral presentation and an on-line report of the work that was completed.

Requirements: class participation and an independent project.

No prerequisites. *Enrollment limited to 26.*

Cost to student: less than \$40 for books and materials.

Meeting time: one class meeting (morning) and two field trips (mornings) each week.

MEYER and H. WILLIAMS

BIOL 016 Research in Molecular Genetics

This course offers students the opportunity to participate in molecular genetics research on cell-cycle regulation currently being conducted in the Biology Department. Discover what research is like outside the limits of a once-a-week lab period by embarking on an open-ended project. Students will work both collaboratively and independently on related experiments. Projects will be determined by level of student expertise. The course will meet a minimum of three times per week.

Evaluation will be based on laboratory performance and a 10-page project analysis. Prerequisite: Biology 101. *Enrollment limited to 8 students; first-year students and sophomores without previous independent laboratory experience will be given priority.*

Cost to student: \$10 for lab notebook and photocopies.

Meeting time: mornings.

RAYMOND

BIOL 017 In the Beginning? Scientific and Religious Speculation on Human Origins (Same as Religion 017)

The disciplines of biology and religion both ask and answer questions about the nature of humanity in part by asking and answering questions about our origins as individuals and as a species. Where do we come from and why does it matter? In this class, we shall examine a range of theories on the origins and development of life from Aristotle to Aquinas to Darwin, and ask how these theories have shaped our present understandings of conception and evolution. What forces helped to shape these theories? What implications can we draw about the connections between "science" and "religion"? Students will have the opportunity in their projects to explore how these issues have shaped twentieth century discussion on human origins.

Class will meet two times per week for three hours, including observation lab.

Requirements: a 10-page paper and a class presentation.

Cost to student: approximately \$35 for books and reading packet.

Meeting time: afternoons.

BUELL and SAVAGE

BIOL 018 The Science of Sports (Same as Physics 018)

Have you ever wondered: What makes a curveball curve? How does the body convert food into energy for muscles? Why is a tennis serve faster than a baseball pitch? How do they measure the speed of a fastball? How does an outfielder know where a fly ball will land? What makes muscles work? Why do the clap-skates make speed skaters faster? How do they light up the puck in NHL TV coverage? What's going on when we swim? What determines our reaction time? Why are sprinters so much faster than marathoners? Can a piece of tape over the bridge of the nose really increase performance? How significant are statistics given in basketball or baseball telecasts? Why do we sweat?

Science provides answers to questions like these through a few powerful principles. That's what this course is about.

No prerequisites. Intended for non-physics and non-biology majors, but open to anyone.

Format: mix of classroom lecture/discussion and experiments.

Evaluation based on short summaries of reading assignments, and on classroom and lab participation (10 hours per week).

Cost to student: books.

Meeting time: mornings.

AALBERTS and SWOAP

BIOL 031 Senior Thesis

To be taken by students registered for Biology 493, 494.

CHEMISTRY

CHEM 010 Chemical Mechanisms of Life

This course has its foundation in mechanistic organic chemistry, but with focus on the fascinating chemistry that occurs in biological systems. Topics that will be covered include biosynthesis of critical biomolecules (e.g., fatty acids, polyketides, terpenes), biological and non-biological synthesis/degradation of proteins (including

some of the latest advances in protein engineering), the chemistry performed by some of life's most important cofactors (e.g., NAD, FAD, PLP, ATP), remarkable chemical transformations performed by enzymes (e.g., DHQ synthase, chorismate mutase, thymidylate synthetase), and the mechanism of action behind DNA-damaging agents, from carcinogens to anti-cancer drugs. There will be heavy in-class emphasis on mechanistic problem solving and arrow-pushing. Mechanistic problems will also be assigned for outside of class.

Students will be evaluated on attendance and participation in class, problem sets, and an in-class lecture/presentation that takes a topic presented in class to a higher level, preferably drawing from recent chemical and biological literature.

Prerequisite: Chemistry 201-202.

Cost to student: packet(s) of photocopied materials.

Meeting time: mornings.

THOMAS WINTNER (Instructor)

RICHARDSON (Sponsor)

Thomas Wintner is an Assistant Director of Admission at Williams College. After majoring in chemistry at Williams, he received an M.A. from Harvard University in the Department of Chemistry and Chemical Biology, where his research focused on DNA repair. He also taught two semesters of Biological Organic Chemistry while a graduate student at Harvard.

CHEM 011 Science for Kids (Same as Environmental Studies 011 and Special 011)

(See under Special for full description.)

CHEM 012 Combinatorial Chemistry

Combinatorial Chemistry is a strategy for preparing a series of closely related organic compounds via a set of simultaneous, parallel reactions. Over the past decade, these procedures have been the focus of intense efforts by pharmaceutical companies. Their interest is in assembling large "libraries" of compounds suitable for rapid screening for medicinal purposes. Typically, the reactions are carried out on a small scale in a matrix of identical reaction cells under identical conditions. In this manner, five different dipeptides can be prepared simultaneously by coupling one amino acid with five different other amino acids. Or, a library of 25 dipeptides can be prepared at one time by coupling five different amino acids with five different other amino acids. Our project is designed to explore this new field of combinatorial chemistry in theoretical and practical terms. The efficiency of different types of coupling agents in dipeptide formation can be determined by measuring the yields and the absence of racemization; some of the reactions involve original research. A possible outcome of this work is the development of experiments for advanced laboratory courses. Visit our website at itech1.williams.edu/courses for a preview of the apparatus and reagents.

The course involves the following units: Week 1 has four two-hour classroom meetings in which the instructors present background material based on review articles and other secondary sources. Week 2 has four four-hour laboratory periods in which research is conducted. Week 3 has four two-hour classroom meetings in which the students present reports based on current journal articles and other primary sources. Week 4 has two-hour classroom meetings in which the experiments are analyzed and summarized in a jointly-authored final report.

Evaluation is based on class participation, laboratory work, literature presentation, and final report. Prerequisite: Chemistry 201-202. *Enrollment limited to 8.*

Cost to student: none.

Meeting time: mornings.

TRURAN and MARKGRAF (Instructors)

RICHARDSON (Sponsor)

CHEM 013 Genetics Testing: Biology, Psychology, and Ethics (Same as Psychology 013 and Special 013)

How much of a role do your genes play in disease? What is genetic testing? What are the social and public policy issues surrounding genetic testing? This course will provide current information on how disease-related genes are identified, the availability and reliability of genetic tests, and the actual testing methods in current use. We will consider the contribution of genetic predisposition toward illness compared with other known risk factors, including behavior, personality, and stress. We will also discuss the myriad ethical, moral and economic issues that surround genetic testing and counseling. With the completion of the Human Genome Project in 2005, decisions regarding who will be tested and who will have access to this information will be addressed by both judicial and legislative bodies. Our goal for this course is to supply you with sufficient scientific information and theoretical perspective that you will be able to make significant contributions to the coming public discussion of these complex issues. The class will meet three times per week for two hours. Approximately 50% percent of class time will be spent in group discussion of selected readings. Students will prepare written evaluations of case studies, and will discuss each others' positions in class. In addition, the class will visit the Human Genome site at the Whitehead Institute in Boston and meet with some of the scientists directly involved in the project.

No prerequisites. *Enrollment limited to 24.*

Cost to student: none.

Meeting time: mornings.

FRIEDMAN and WEISS

CHEM 014 Emergency Medical Technician—Basic

A course designed to prepare students for the Massachusetts EMT exam and to provide training to become certified as an Emergency Medical Technician. The course teaches the new national standard curriculum which makes reciprocity with many other states possible. This is a time-intensive course involving approximately 135 hours of class time plus 10 hours of emergency room observation and optional ambulance work. Students will learn, among other skills, basic life support techniques, patient assessment techniques, defibrillation, how to use an epi-pen, safe transportation and immobilization skills, as well as the treatment of various medical emergencies including shock, bleeding, soft-tissue injuries, and child birth. Students will most likely take the EMT exam in February, following completion of the course. In addition, the class may meet a few times at the end of the fall semester in order to reduce the number of class hours during Winter Study Period.

Prerequisite: students should have American Heart Association Level C BLS Provider CPR Cards or American Red Cross BLS provider CPR cards before entering the EMT Class. A CPR class will be offered in October for those students wishing to take the EMT class who don't already have CPR cards.

Enrollment limited to 24.

Cost to student: \$300/student plus approximately \$75 for textbook, stethoscope, and BP cuff. Meeting time: mornings and afternoons.

KEVIN GARVEY (Instructor)

RICHARDSON (Sponsor)

Kevin Garvey is a Massachusetts state and nationally approved EMT-I (Intermediate) and an EMT-IC (Instructor/Coordinator). He had been involved with Emergency Medical Services for 15-20 years. Mr. Garvey currently works for Baystate Health Systems as an RN (registered nurse) and EMT-I and also works as an EMT-I for Village Ambulance in Williamstown. Mr. Garvey is also an EMT training instructor at Greenfield Community College.

CHEM 017 Principles and Techniques of Cooking (Same as Special 017)

In this course we will consider the practice and pursuit of the art of cooking; we will give students the opportunity to study both the hands-on aspects of specific techniques in cooking, as well as to explore writings which discuss the preparation and appreciation of food within the context of various cultures. Classes will involve the preparation of menus, with each menu focusing on one or two specific topics; in order to illustrate a given topic, several dishes will be prepared, allowing students to compare a variety of techniques and methods. We will consider each of the specific elements of a recipe, from ingredients to techniques, why each is included and how each works. For instance a menu might focus on different types of shaped pastas, and would include a discussion on why different pastas are paired with specific sauces based on shapes and textures, how specific dishes have evolved, and how similar culinary concepts are represented in the cuisines of other cultures. Readings will include a number of short works that consider very different aspects of food and cooking: the emotive power of familiar foods, the chemical transformations that occur within a cooking process, the symbolism associated with certain foods, and the cultural history of specific dishes. Authors may include Brillat-Savarin, Colwin, M. F. K. Fisher, McGee, Simeti and others. Prior experience is not necessary; you need only a reasonably adventurous palate and a true interest in learning something about food, its preparation, and the different ways in which it is viewed. Students will be expected to provide their own chef's knife, apron, and dishtowel; they should be willing to get messy, work hard, and eat well!

Attendance at all classes is mandatory, and evaluation will be based on performance in the kitchen, as well as on a written assignment; this may be a research paper on the history of a particular ingredient (such as a specific spice) or may be a paper discussing the role of food in a specific culture. Prospective students with potential scheduling conflicts must consult with Professor Park in advance.

No prerequisites. *Enrollment limited to 18.*

Cost to student: In the range of \$100-130, which will cover food supplies (you will get to eat the meals you prepare) and packet of photocopied materials. All equipment other than that listed above will be provided by the instructors.

Meeting time: afternoons (approximately 1-5:30 p.m.), in the Fort Hoosac kitchen (on campus.)

L. PARK and ANGELA CARDINALI (Instructor)

L. PARK (Sponsor)

Park is a professor in the chemistry department as well as a graduate of the Professional Technical Program at Peter Kump's Cooking School in NYC; her training and expertise are in the areas of classical French technique and various Asian cuisines. Cardinali is the editor of several cookbooks, and her expertise is in the area of Italian cuisine.

CHEM 022 Introduction to Scientific Research

An experimental project will be carried out under the supervision of a member of the Department in fields such as biochemistry, inorganic chemistry, organic chemistry, or physical chemistry.

A 10-page written report is required. Nonscience majors are invited to participate. Prerequisite: variable, depending on the project (at least Chemistry 101) and permission of the Department. *Enrollment limited to 12.*

Cost to student: none.

Meeting time: mornings.

RICHARDSON

CHEM 031 Senior Research and Thesis

To be taken by students registered for Chemistry 493, 494.

CLASSICS

CLAS 010 Ovid's *Metamorphoses*

One of the most delightful and influential of all the authors of Classical Antiquity was Ovid. His vast compendium of classical mythology, the *Metamorphoses*, contains the versions of Greek and Roman myths that are the most familiar to us. And when we look at a painting or sculpture of a mythological scene a primary source is almost invariably Ovid. His influence can be seen throughout the art and literature of the Italian and later European Renaissances. Shakespeare knew his Ovid well, and until the Romantic Era Ovid was regarded among the most important classical authors. The *Metamorphoses* was read for the sheer joy of its pagan wit and narrative skill, as an allegory of Christian virtues, and even as foreshadowing the New Testament.

Despite all the delight Ovid has provoked, the *Metamorphoses* remains an enigma in its design, narrative technique, and intent. Two thousand lines longer than the Aeneid, many critics have denied that it is an epic, while the rest cannot agree about its subject and intent. Ovid is recognized as a master storyteller, but there is little consensus about what is at the heart of his narrative technique and exuberant word play. And the significance of his central theme—the metamorphosis of a figure from one form into another—continues to be widely debated.

We will read all of the *Metamorphoses*. After an introductory lecture we will move as the Muses beckon to discussion of certain stories as we seek to understand aspects of Ovid's narrative technique, the "purpose" of his work, and its lasting influence. Several short written exercises, a paper of moderate length, and open discussion of the topics at hand will be required.

No prerequisites save an ability to read, think, and enjoy an intensely varied narrative. *Enrollment limited to 20.*

Cost to student: approximately \$15 for the text.

Meeting time: mornings.

FUQUA

CLAS 011 Sappho's Poetry in Greek: Eros the Sweet-Bitter (Same as Literary Studies 011)

Sappho of Lesbos (6th century BCE) enjoys a privileged status in almost any history of sexuality or history of love poetry. Although only a small portion of her large poetic corpus has survived time's depredations (including book burnings enjoined by early Christian bishops), we have retrieved enough to appreciate why Plato called Sappho "the tenth Muse" and why Solon, the great Athenian lawgiver who was himself a poet, responded to one of Sappho's poems upon hearing it for the first time: "Let me hear it again so that I may learn it and die." Readers of English translations respond to Sappho's poetry with similar enthusiasm, but no translation can fully capture the effects of her word choice, word order, syntactic shifts, sounds and rhythms. No translation can convey the passion, or the restraint, of her every poetic gesture in Greek.

This course is intended for students who do not know any ancient Greek but who would like to read Sappho's poetry in Greek. We will not pretend to "learn Greek" in a month. Rather, this course will provide an introduction to Aeolic Greek, the dialect in which Sappho composed her poems. Through a specially prepared set of lessons, students will learn the Greek alphabet (really very easy) and just enough grammar, syntax, and vocabulary to read closely a selection of Sappho's poetry in Greek and to discuss problems of translation. We will also explore the dynamics of eros in her poetry and consider questions that this poetry, and its original occasions for performance, raise for histories of sexuality, love poetry, and educating young adults.

The class will meet four times a week for one and a half to two hours per session. Students will be expected to attend all classes, to take short quizzes on grammar and vocabulary, and to prepare translations and critical discussions of several poems and a number of fragments.

No prerequisites. *Enrollment limited to 15.* Preference will be given to majors (or intended majors) in English and other languages/literatures (including Latin), and to Women's and Gender Studies concentrators.

Cost to student: \$15.00 or less.

Meeting time: mornings.

HOPPIN

CLAS 031 Senior Thesis

May be taken by students registered for Classics 493, 494.

COMPUTER SCIENCE

CSCI 010 C, UNIX, and Software Tools

This course serves as a guided tour of programming methods in the Unix operating system. The course is designed for individuals who understand basic program development techniques as discussed in an introductory programming course (Computer Science 134 or equivalent), but who wish to become familiar with a broader variety of computer systems and programming languages. Students in this course will work on Unix workstations, available in the Department's programming laboratory. By the end of the course, students will have developed proficiency in the C programming language.

The increasing success of Unix as a modern operating system stems from its unique

ability to "prototype" programs quickly. Students will use prototyping tools, such as Awk and "shell scripts" to write "filters" for transforming data from a variety of sources. In many cases, it will become clear that the overhead of programming in a language, such as C, Pascal, or FORTRAN is unnecessary.

Moreover students will learn to effectively use software tools such as debuggers, profilers, and make files.

Evaluation will be based on four or five programming assignments and shell scripts due throughout the term. While none of the projects in the course will be particularly large, the successful student will develop a toolbox which will extend their computing "effectiveness" in their particular field. Students with computing needs particular to their field are encouraged to advise the instructor before the first meeting.

Prerequisite: Computer Science 134 or equivalent programming experience. *Enrollment limited to 20.*

Cost to students: texts.

Meeting time: mornings.

BALAZS

CSCI 030 Senior Project

To be taken by candidates for honors in Computer Science via a route other than the thesis route.

CSCI 031 Senior Honor Thesis

To be taken by students registered for Computer Science 493-494.

CONTRACT MAJOR

CMAJ 031 Senior Thesis

To be taken by students registered for Contract Major 493, 494.

ECONOMICS

ECON 010 Cases in Business Management Consulting

Students will work on a number of business school cases (Harvard Business School and others) typical of cases in management consulting. This project will not include cases in finance, since regular courses and other WSP's deal with finance. Each case will describe complex decision-making by a real business firm and will illustrate the application of economics. Subjects will include marketing and pricing strategy, mergers and acquisitions, strategic entry and exit from industries, new plant investment, retail store and plant location, "just-in-time" inventory management, major restructuring and downsizing, and ethics. Student teams will present solutions to the entire group and to visiting critics, who will be alumni and others who will work in consulting firms and other business or teach in business schools.

Prerequisite: two courses in economics. *Enrollment limited to 15.*

Estimated cost per student: \$35, to pay for business school case materials.

Meeting time: mornings.

R. BOLTON

ECON 012 Business Management

The project will center on a business management simulation available for computers. The morning of the first day of the Winter Study period will be devoted to a lecture on the simulation, followed by hands-on familiarization with the program. This should take about three hours. Anyone unable to attend this first session should not sign up for this Winter Study project. For the rest of the four weeks, students in teams of two will represent business enterprises and compete with each other. A complete set of decisions will need to be put into the computer each day (Saturdays and Sundays excluded), and each team will probably need to meet for an hour or two each day to decide on the values of the many variables that they wish to input. Time will also be required to feed the data into the computer once the decisions have been made.

Students may choose their partners. However, it is to their advantage to choose a partner who will do his or her share of the work and contribute to the team's success. No prior knowledge of computers or computer programming is required. No programming will be done, and the already prepared program that we use gives detailed instructions on how to make decisions and input the required information.

Requirements for passing the course include attendance at the introductory session (three hours), full participation in the competition (including the daily input of new decisions), and a 10-page paper at the end (word-processing or typing only) based on a critical evaluation of the simulation package.

Enrollment limited to 24.

Cost per student: \$50 for computer software.

Meeting time: mornings.

MCFARLAND

ECON 013 Evaluation of Development: Growth in East Asia

This is a graduate WSP offered at the Center for Development Economics. The course content consists of an in-depth evaluation of a particular issue in development economics. The specific issue to be investigated changes from year to year, depending on the staffing of the course. For the 1998-99 academic year, the class will conduct case studies of how rapid growth has been achieved in the "miracle" economies of East and Southeast Asia. We will investigate the extent to which structural characteristics, initial conditions, fortuitous external developments, and/or "appropriate" domestic policies contributed to the growth performance of these countries.

Among the specific issues to be considered are the relative contributions of productivity growth and factor accumulation, the role of government in allocating resources, the nature of the trade and financial-sector policies pursued by these countries, and the potential contribution that may have been made by macroeconomic management. We will provide a critical evaluation of a variety of lessons that observers have drawn from the experience of these countries, and will explore the extent to which other developing countries can learn from the experience of the "miracle" economies. *Enrollment limited to 25, and undergraduate enrollment accepted only with instructor's permission.*

This class will meet four days per week for two hours at a time. Course evaluation will be based on weekly 5-7 page papers and a class presentation.

Cost to student: approximately \$100 for books and photocopied materials.

Meeting time: mornings.

MONTIEL

ECON 014 Accounting

The project will examine the theoretical and practical aspects of financial accounting. Although the beginning of the course will explore the mechanics of the information gathering and dissemination process, the course will be oriented mainly towards users, rather than preparers, of accounting information. The project will include discussion of the principles involved in accounting for current assets, plant assets, leases, intangible assets, current and long-term debt, stockholders' equity, the income statement and the statement of cash flows. Students will be expected to interpret and analyze actual financial statements. The nature of, and career opportunities in, the field of accounting will also be discussed.

The project is a "mini course." It will present a substantial body of material and will require a considerable commitment of time by the student, including regular attendance and participation in discussion and homework cases and problems.

Enrollment limited to 20.

Cost to student: none.

Meeting time: mornings.

LEO McMENIMEN (Instructor)
C. HILL (Sponsor)

Leo McMenimen is returning to Williams this January from the School of Business, Montclair State College.

ECON 015 Stock Market

Elementary description and analysis of the stock market. Emphasis will be on the roles of the market in our economy, including evaluation of business firms and the success of particular capital investments, allocating savings to different types of investment, and providing liquid and marketable financial investments for individual savers.

The course will focus on the description of mechanics of trading on various exchanges and other markets, stock market indexes of "averages" (Dow-Jones, S&P 500, etc.), how to read the financial news, historical rates of return on stocks and portfolios, role of mutual funds, beta coefficients, and "random walk" theory. The course will also involve a brief introduction to financial reports of firms and analysis of financial ratios.

Each student will participate in discussions, do some homework assignments, follow a hypothetical portfolio during January, and write a 10-page report analyzing the wisdom or folly of having chosen the portfolio.

Not intended for students who already know much about the stock market; students who have had Economics 317 not admitted. The course will involve a two-day field trip to New York City.

Prerequisite: Economics 101. *Enrollment limited to 20.*

Cost to student: \$30 for text plus \$50 for bus transportation to New York City, obligatory and paid at time of registration. Meals and lodging in New York City are not included in this price and are the responsibility of the student.

Meeting time: afternoons.

LEO McMENIMEN (Instructor)
C. HILL (Sponsor)

Leo McMenimen is returning to Williams this January from the School of Business, Montclair State College.

ECON 016 The Causes and Consequences of the Great Depression

The Great Depression of the 1930s remains the most important economic event in American history. Its legacy continues to shape many of our economic, political, and social policies and institutions. Despite its dramatic efforts, there is still considerable disagreement concerning the causes of both the depth and duration of the crisis. The first part of this course examines the most important macroeconomic theories of the Depression. These competing theories have important ramifications regarding both the scope and effectiveness of fiscal, monetary, and exchange rate policies. The second part of this course investigates the continuing impact of the wide array of institutions and programs introduced during the New Deal, such as Social Security and welfare, bank deposit insurance, and agricultural subsidies. In addition, the legacy of other programs in banking, finance, and regulation will also be examined.

The class will largely be conducted as a seminar, and will meet in two-hour sessions, four times per week. Students will be evaluated on the basis of regular attendance and participation, classroom presentations, and several short quizzes. Video documentaries, Hollywood films, and works of fiction will also be incorporated into the course.

Cost to student: price of reading packet.

No prerequisites, although Economics 101 or equivalent is recommended. *Enrollment limited to 15.*

Meeting time: afternoons.

SIEGLER

ECON 017 Golf (and Economics)

You are 225 yards from the pin. Downhill lie. Wind in your face. A front pin position. Water guarding a slippery green. Rough deeper than spinach. One show down against Tiger. You ask your caddie the one relevant question: "What would the wily 'ol Scot Adam Smith do in this @&%!!* situation?"

This course will use the tools of microeconomics and econometrics to enhance your understanding of golf. Topics will depend on your interests and may include course design, pricing, the structure of tournament prizes, advertising and equipment sales, rules, television contracts, and strategy. If there is interest, we'll also learn about club design and actually build some sticks. Students will be expected to do research and present their results to the class. Put on your plus-fours and let the big dog eat!

Requirements: presentation and a 10-page paper.

Prerequisite: Economics 251 or permission of instructor. *Enrollment limited to 12.*

Cost to student: \$50 for readings/materials.

Meeting time: mornings.

ZIMMERMAN

ECON 019 Investment Banking

This course will introduce the student to the theoretical underpinnings and practical aspects of investment banking. The course will cover sales and trading, corporate finance, leveraged buyouts, mergers and acquisitions, reorganizations and the emerging markets. The project will include an introduction to the analysis of financial statements, basic valuation techniques, including discounted cash flow analysis and trading analysis, and the legal, accounting and tax considerations which determine transaction structures. It is expected that a variety of industry participants will make presentations to the class. Each student will be expected to perform a variety of valuations, to analyze potential acquisitions and divestiture targets and to analyze a corporation's capital-raising options in detail. A significant amount of material will be covered and the amount of out of classroom work required may be significantly in excess of some other winter study projects.

No prerequisites, though strong economic and quantitative skills will be useful. Students not familiar with Lotus or Excel are strongly encouraged to become familiar with these programs before beginning the course.

Enrollment limited to 20.

Cost to student: reading packet.

Meeting time: afternoons.

JOHN SIMPSON '79 (Instructor)
BRADBURD and C. HILL (Sponsors)

John Simpson is a Managing Director of Wassterstein Perella & Co., Inc., an international investment banking firm. He graduated from Williams in 1979 and from Harvard Law School in 1982.

ECON 025 Equity, Growth, and Stability: The Challenge of Transformation in South Africa

This travel course will explore the dilemma facing South Africa as the nation grapples with the process of democratic transformation. Apartheid grossly skewed the distribution of social investment (housing, health care, education, job opportunities). Yet addressing this problem requires careful attention to the economic resources available for fostering economic growth and improving social equity. Unsustainable spending on social investment undermines confidence and deters needed investment, yet too much fiscal constraint fuels social and political instability. How can South Africa redress the inequities created by apartheid while expanding economic opportunities, thus mobilizing further resources for redistribution?

Since South Africa's first democratic elections four years ago, the country has implemented a remarkable political transition. Socio-economic progress, however, has been much more difficult. This project will explore how public policy shapes the distribution of social investment as the nation grapples with the imperatives of equity and growth while maintaining political and economic stability. South Africa is a country of contrasts: international polls rank Cape Town as one of the world's three most pleasant cities, yet minutes from the central business district smolder huge pockets of abject urban poverty. This course will investigate how such a skewed distribution of resources has been perpetuated, and why redressing the problem has been so difficult. The learning process will involve visiting poor townships created as economically nonviable entities, investigating inequities in the provision of education and health care, and comprehending the predicament of the rural poor. The paucity of public resources for the majority stands in stark contrast to the abundance provided by the apartheid-era policies to the privileged minority: a health care system that achieved the world's first heart transplant, public schools comparable to the world's best private educational institutions, and first-rate urban amenities.

The course will examine why one of the world's most unequal societies is so resistant to change, and what role public policy can serve in fostering redistribution and growth. Meetings—with policy-makers and community activists, with teachers and labor leaders, with economic researchers and social workers, with public health advocates and bankers—will provide insight into the historical and structural causes of the extreme inequality that characterizes South African society, and the options available for redressing past imbalances and inequities while promoting economic growth and job creation. The theme of social investment unifies the course: how apartheid created one of the world's most skewed distributions of human capital, whose inertial force resists substantive change, and the critical role that public in-

vestment in social infrastructure must serve in transforming the economy. First-hand experiences combined with education presentations and discussions will illuminate the challenges, opportunities, and policy options facing South Africa as the country rebuilds political, social, and economic institutions.

SAMSON

ECON 030 Honors Project

The “Specialization Route” to the degree with Honors in Economics requires that each candidate take an Honors Winter Study Project in January of the senior year. Students who wish to begin their honors work in January should submit a detailed proposal. Decisions on admission to the Honors WSP will be made in the fall. Information on the procedures will be mailed to senior majors in economics early in the fall semester.

Seniors who wish to apply for admission to the Honors WSP and thereby to the Honors Program should register for this WSP as their first choice.

Some seniors will have begun honors work in the fall and wish to complete it in the WSP. They will be admitted to the WSP if they have made satisfactory progress. *They should register for this WSP as their first choice.*

R. BOLTON

ECON 031 Honors Thesis

To be taken by students participating in year-long thesis research (ECON 493-W031-494).

ENGLISH

ENGL 010 Caribbean Literature: A Curricular Development Study Group

This course will explore the field of Caribbean literature (Anglophone, Francophone, and Latino) with the goal of working up a regular-semester course that could be offered in the future. Four or more student majors will work with Professor Carter-Sanborn and one or two other faculty members to develop a reading list, research and writing assignments, a working bibliography of materials, including fiction, poetry, non-fiction, historical background materials, and possibly even a website. A section of the course might be devoted to Caribbean writers in the U.S., but the focus of the Winter Study course and the resultant syllabus will depend, finally, on the interests of the individuals involved.

Requirements: Students will be evaluated on the basis of regular attendance, class participation, participation in group and individual research, and a series of short written and oral reports. Classes will meet three times a week for two hours.

No prerequisites.

Enrollment limited to 10, with first priority given to sophomore and junior majors in English, American Studies, and Literary Studies.

Cost to student: approximately \$80.

Meeting time: mornings.

CARTER-SANBORN

ENGL 012 Bad Poetry

Most poems are bad. Yet formal education provides us with few examples, and prefers, not surprisingly, to promote the good and great over the mediocre and trivial. However instructive it is to admire masterpieces, much can be learned by looking closely at—and arguing intelligently about—works that are imperfect, seriously flawed, even desperately unsuccessful. Much of this course will consist of such argument, and many of the poems discussed will be recently published and therefore critically untested. Our aim will be to discover some of the properties of a good poem by describing accurately the failures of a poor one. In this endeavor we will have to challenge and sharpen what we take to be our own values, judgments, and preferences. As a prelude to these discussions, we will spend some time looking at a few poems by major writers about which critics have radically disagreed, examining both the poems and the critical assertions. We will also devote a class to exploring how poems are revised, reading preliminary notes and drafts that illuminate the way a mediocre beginning can be transformed into something beautiful (or, sometimes, how promising material can be ruined).

Requirements: one critical paper (10 pages), several short exercises, and regular participation in class presentations and discussions. Class will meet three times a week for two hours.

Prerequisite: English 101. *Enrollment limited to 15, with preference to English majors.*

Cost to student: approximately \$10.

Meeting time: mornings.

RAAB

ENGL 013 American Cinema of the 1970s: The Other American Renaissance

A consideration of an extraordinarily fertile and still hugely influential period in American filmmaking, principally through the study of three filmmakers: Robert Altman, Francis Ford Coppola, and Martin Scorsese. Films to be studied include Peckinpah's *The Wild Bunch*; Fosse's *Cabaret*; Polanski's *Chinatown*; Altman's *McCabe and Mrs. Miller* and *Nashville*; Coppola's *The Godfather, The Godfather Part II, The Conversation*, and *Apocalypse Now*; and Scorsese's *Mean Streets, Taxi Driver*, and *Raging Bull*.

Requirements: evaluation will be based on in-class performance and one ten-page paper. Classes will meet three times a week for two hours.

No prerequisites. *Enrollment limited to 20.* Preference given in this order: (1) Students who have taken a film course previously; (2) English majors; (3) Seniors.

Meeting time: afternoons.

J. SHEPARD

ENGL 014 Queer Literatures

Beginning with Radclyffe Hall, perhaps the best-known of early-twentieth-century, openly-lesbian writers, this course will introduce you to gay/lesbian writing in English. In particular, the majority of the course will focus on fiction written after the Stonewall Rebellion of 1969, which many gays and lesbians credit as the turning point in the modern gay/lesbian rights movement. Questions we will explore may include: Why is the “happy ending” such a conflicted question in gay/lesbian writing? Do representations of “transgressive” desires require “transgressive” literary forms? Or should queer literature seek to represent queer life as “realistically” as possible? We will also debate the difference that race, class, and gender might make in representing queer sexualities, as well as the ways in which contemporary queer writing seeks to trouble gender itself as a category. Readings may include works by the following authors: James Baldwin, Ann Bannon, Edmund White, Rita Mae Brown, Audre Lorde, Neil Bartlett, Jeannette Winterson, Emma Perez, David Wojanowicz, Sky Lee, Randall Kenan, Dennis Cooper, Junot Diaz, and Leslie Feinberg.

Requirements: in addition to the readings, students will be expected to turn in regular journal/list-serv assignments, lead class discussion once, and write a 8-10 page final paper. Two three-hour meetings per week.

Prerequisite: English 101. *Enrollment limited to 20, with preference to seniors, then juniors, etc.*

Cost to student: approximately \$80 for books

Meeting time: mornings.

KENT

ENGL 015 Voices of Contemporary Drama

This course will consider both literary merit and production values in plays selected from the work of such writers as Edward Albee, Tina Howe, David Mamet, Emily Mann, Sam Shepard, Harold Pinter, Tom Stoppard, and August Wilson. The voices of these living playwrights reflect and shape the social, literary, historical and dramatic tone of the latter half of this century, so we will examine closely their cultural importance. But as we consider the plays on both the page and stage, we will also explore the differing dramatic techniques—Pinter's use of silence, Stoppard's allusions, Mamet's staccato dialogue, for example—to create character, action, and theme. The course will culminate with a series of informal staged readings of scenes chosen by students from the work of the playwrights studied.

Requirements: one four-page paper per week; active participation in discussion and in-class scene readings; and a role in the final staged reading. Three two-hour meetings per week.

Prerequisite: English 101. *Enrollment limited to 18, with preference to English or Theatre majors, then to seniors, and then to others.*

Cost to student: approximately \$60.

Meeting time: mornings.

FRANK BELLIZIA (Instructor)
PYE (Sponsor)

Frank Bellizia is Professor of Graduate Studies at Vermont College of Norwich University. He has directed more than one-hundred plays in educational, community, and professional theatre, and has taught English, theatre, and speech.

ENGL 016 The Short Script

To approach some structural and aesthetic aspects of writing a film, a writer might begin by writing a short script. This course encourages (in fact, requires) students to complete one screenplay of any length, but preferably one of more than ten and less than fifty pages. Students will be writing, re-writing, and reading aloud in class. In the final week, the scripts will be presented in staged readings, for which the writers will serve as their own casting directors. The class will meet twice weekly for three hours per meeting, with an additional class likely to be added in the final week.

No prerequisites. *Enrollment limit to 15.*

Cost to student: minimal.

Meeting time: afternoons.

STACY COCHRAN (Instructor)
PYE (Sponsor)

Stacy Cochran graduated from Williams in 1981 and received an MFA in film from Columbia in 1991. She has written and directed two films—*My New Gun* (1992) and *Boys* (1996)—and is currently preparing to shoot a third, which she also wrote.

ENGL 017 Film Noir

This course will focus on the “noir,” or “dark,” style that prevailed in the American crime film of the 1940s and 1950s. We will also consider both the film noir's literary origin in the classic “hard-boiled” detective fiction of the 1930s, and its recent revival in the “neo-noir” cinema of directors like David Lynch (*Blue Velvet*) and Quentin Tarantino (*Pulp Fiction*), and in the television style of *The X-Files*. Distinguished by an extreme use of light and shade, and a combination of flashback structures and voice-over narration, the film noir traced the struggles of its semi-official protagonist (private investigator, insurance agent, medical examiner) against a stark urban environment saturated with greed, political corruption, and sexually predatory *femmes fatales*. Chief among our concerns as a class will be: What motivates the film noir hero? What motivates its villain? What threats are inherent to the American city or society? What role does race play in these films and novels, which are understood to

share a common “noir-ness” or “blackness”? What happens when this “hard-boiled” style is wielded by a woman or an African-American writer? In addition to the works mentioned above, we will read novels by Dashiell Hammet, Raymond Chandler, Chester Himes, and Patricia Cornwell, and screen films directed by John Huston (*The Maltese Falcon*), Billy Wilder (*Double Indemnity*), Otto Preminger (*Laura*), Jacques Tourneur (*Out of the Past*), Robert Siodmak (*The Killers*), and Rudolph Mate (*D.O.A.*).

Requirements: attendance at all classes, one in-class presentation, and a 10- to 15-page paper. Three two-hour meetings per week.

No prerequisites. *Enrollment limited to 25, with preference to seniors and then to English majors.*

Cost to student: approximately \$40 for books.

Meeting time: mornings.

BENJAMIN WEAVER (Instructor)
PYE (Sponsor)

Benjamin Weaver is completing his doctorate in American literature at Duke University, and is currently Visiting Lecturer in English at Williams.

ENGL 018 English Rhymes and Rhythms

This course is designed to increase awareness of the expansive possibilities of the traditional sounds of English verse, those established patterns of rhyme and rhythm from which “free verse” is free. We will not only read verse, but listen to it, speak it, and write it, in pursuit of a fuller experience of past and present poetry. Each student will also create a “memory anthology” of individually chosen poems. Our goal is to awaken the ear as well as the mind. Though the course should improve the ability to recognize and analyze poetic forms and prosodic effects, it will proceed through practical exercises rather than analytic essays, with a strong tilt toward the actual writing of verse. We will examine poems by such versifiers as Dr. Seuss, Herbert, Hopkins, and Larkin, with others suggested by the class and verse written by class members. We will end with a reading of Vikram Seth’s brilliantly formal (and informal) novel in verse, *The Golden Gate*.

Requirements: students will be evaluated on the basis of their verse exercises, their regular and active attendance, and the care and commitment with which they present their anthologies, to be spoken from memory in the presence of the instructor. Two three-hour meetings per week.

No prerequisites. *Enrollment limited to 15.*

Cost to student: about \$25.

Meeting time: afternoons.

CLARA PARK (Instructor)
PYE (Sponsor)

Clara Park is Senior Lecturer Emerita at Williams.

ENGL 019 Structuring Your Novel

This course is designed primarily for students who are either writing novels or else anticipate writing novels—that is, students who are either hip-deep already, or else are contemplating that first sweet step. Though many general principles of structure will be explored, and the structure of several famous novels will be discussed, students whose first interest is in other people’s fiction should understand that the heart of the course, and nine-tenths of the work, will be the presentation to the group of an original novel, consisting not of actual prose text, but of an ordered and complete pattern of summarized scenes. These presentations will start at the mid-way point of the course and will run to the end. Passing the course depends on submitting to the instructor, on the last day, a revised version, based on comments you receive. The course will meet twice a week for the first half of January, and then probably every day (depending on how many students are enrolled).

No prerequisites. *Enrollment limited to 15.*

Cost to student: minimal (mostly photocopying costs).

Meeting time: afternoons.

PAUL PARK (Instructor)
PYE (Sponsor)

Paul Park has published five novels, and a small but meager body of short fiction.

ENGL 020 Journalism

In this introduction to journalism, students will learn reporting, writing and editing skills through written assignments and in-class exercises. We will examine how different styles of writing serve different needs, and the practical and legal limits within which journalists work. Assignments will include writing a news story, a feature article, a review, and an editorial. Students will also practice the essential art of rewriting.

Requirements: Each student will submit articles on deadline; read and discuss current newspapers and magazines; and attend all classes. Classes will meet for four two-hour sessions each week.

No prerequisites. *Enrollment limited to 15, with preference to first-year students.*

Cost to student: approximately \$20

Meeting time: mornings.

SALLY WHITE (Instructor)
PYE (Sponsor)

Sally White worked at Time Inc. magazines in New York and Washington for thirteen years. She is now a freelance magazine writer.

ENGL 030 Honors Project: Specialization Route

Required during Winter Study of all seniors admitted to candidacy for honors via the specialization route.

ENGL 031 Honors Project: Thesis

Required during Winter Study of all seniors admitted to candidacy for honors via the thesis route.

ENVIRONMENTAL STUDIES

ENVI 011 Science for Kids (Same as Chemistry 011 and Special 011)

(See under Special for full description.)

ENVI 012 Writing Winter: Essays, Poetry, and Stories

This course will explore the nature of winter through reading, writing and poetry. Students will be introduced to the history of journal-keeping (from Gilbert White to Hannah Hinchman) and will also read and discuss a wide variety of contemporary nature writers, including Gary Snyder, Annie Dillard and Mary Oliver. Each student will choose a personal “study-plot” on the Williams College campus to draw and write about in depth. They will also spend time indoors investigating the different forms their own writing might take, from essays and journal-writing to memoirs, sketches, stories and poems. Emphasis will be placed on close-looking and describing, as well as remembering and mapping special places from childhood. The month’s work will culminate in a display of nature journals, and a celebratory reading.

Designed for students with interests in environmental studies, natural history writing, and drawing.

No prerequisites. *Enrollment limited to 15.*

Cost to student: \$50 for books and art supplies.

Meeting time: mornings.

CHRISTIAN MCEWEN (Instructor)
ART (Sponsor)

Christian McEwen is the editor of *Jo’s Girls: Tomboy Tales of High Adventure, True Grit & Real Life* (Beacon Press, 1997). She lives in Buckland, Massachusetts.

ENVI 013 Paralyzed Intellectuals and Management Consultants: Why Should Activists be Williams Students?

This course explores the intersection between liberal arts education, activism and business. What kind of training does a Williams education provide for living in our modern capitalist society? Is the fact that so many Williams alumni are successful entrepreneurs in every field, from high finance to social and environmental activism, contingent upon their liberal arts background or not causally linked to their undergraduate careers at all? Even if a Williams education proves valuable for success in the business world, how can it be of service to an activist? Why should someone interested in a life of environmental or social service come to a place like Williams, hardly a hotbed of activism and political engagement? Springing off this last point, are the students of the 90’s as apathetic as many people assume that they are? What is our relationship to the almost mythic 60’s, and how does it relate to current types and levels of activism? The course will examine these questions and offer suggestions of solutions and lenses through which to view these issues, without providing closure and definite answers (in fine Williams tradition). We will also explore the critical examination of values and belief structures that many of the humanities courses at Williams prompt students to, and debate whether this type of skepticism and scrutiny is beneficial or detrimental to an activist’s career and confidence. Finally, this course will take up the question: Do the environmental and social activism sectors need Williams students, and if so, why? Why should Williams students be activists?

The course will begin with readings and discussion. The class will usually meet three times a week for two hours. During the month we will have a series of speakers, from the college community, local towns, and the alumni population, who will share their perspectives on these questions with us. We may also take some short field trips. The course will culminate with the customary 10-page paper (however alternative projects may be developed as appropriate).

Evaluation will be based on class participation and the final paper.

No prerequisites. *Enrollment limited to 15.*

Cost to student: minimal.

Meeting time: mornings.

JOSHUA L. SOLOMON (Instructor)
ART (Sponsor)

Josh Solomon ’97 is program assistant at the Center for Environmental Studies.

ENVI 015 The Naturalist’s Winter: Birds, Bugs, and Trees (Same as Biology 015)

(See under Biology for full description.)

ENVI 017 “The Feather’d Hook:” An Introduction to Streamside Entomology and Fly-Tying (Same as Anthropology 017)

(See under Anthropology for full description.)

ENVI 020 Environmental History of the White Mountains National Forest (Same as Geosciences 020)

(See under Geosciences for full description.)

ENVI 025 Wintering at Merck Forest

Wintering is a course offered to students on-site at Merck Forest and Farmland Center, an Environmental Center located in Rupert, Vermont, approximately one hour north of Williams College on the ridge top of the northern Taconic Mountains. This course is a focused, dynamic experience which immerses the student in an exploration of winter ecology, sustainable living, and group living.

Key components of the course are significant outdoor study daily; a winter camping overnight; active participation in running your remote (1.5 miles into the backcountry), off-the-grid residence; assisting with the running of a small diversified farm; and a balance of experiential lessons, readings, discussion, lecture, and journal writing.

Students will be evaluated on the basis of their level of engagement while on-site, quality of their journal as a reflection of their experience, and the completion of a 10-page paper based on their journal after the completion of the course.

No prerequisites. *Enrollment limited to 10.* Students must apply electronically or by hard copy to Merck Forest; forms will be available in October at CES. Additional information: Colleen Balch, (802) 394-7836.

Cost to student: \$350 (lodging, meals, instruction), plus course materials costing less than \$40. Students will be responsible for providing clothing appropriate for activities outdoors in winter.

Meeting time: in residence at Merck Forest, January 4-15 (including weekend); independent writing in Williamstown the balance of Winter Study.

COLLEEN E. BALCH (Instructor)
ART (Sponsor)

Colleen Balch is program director at the Merck Forest.

ENVI 031 Senior Research and Thesis

To be taken by students registered for Environmental Studies 493-494.

GEOSCIENCES

GEOS 020 Environmental History of the White Mountains National Forest (Same as Environmental Studies 020)

Founded in 1911 and encompassing 770,000 acres, the White Mountain National Forest, located in New Hampshire and western Maine, provides important recreational opportunities to many in the densely populated northeast. It contains the highest mountains in the northern Appalachians, the largest Alpine zone in the United States east of the Mississippi, four wilderness areas, and hundreds of miles of remote hiking trails, including a long stretch of the Appalachian National Scenic Trail. It also contains 22 campgrounds, dozens of remote lean-to shelters and campsites for backpackers, and backcountry huts operated by the Appalachian Mountain Club (AMC). The White Mountain National Forest has been and continues to be managed for multiple uses and is an important regional source of raw timber and clean water. The central issue of this course is how to balance the demand for backcountry recreation and the need to preserve and protect the environment that makes this region so special.

We will develop a broader perspective, by briefly examining the geology, climate, and archaeology of the region. We will then look at early land use including farming and logging and the pressure that led to the formation of the National Forest. We will examine how land and recreational use have evolved since the creation of the National Forest. This is an excellent time to explore these issues, because the Appalachian Mountain Club is currently applying for a new 530-year special permit to continue operating its 6 huts located on National Forest property and the Pinkham Notch Visitor Center. An enormous amount of research has recently been conducted in conjunction with this application. We will also acquire first-hand experience of the facilities by visiting Zealand Falls and Carter Notch huts, which will require skiing or snowshoeing, and the Pinkham Notch Visitor Center.

Evaluation will be based on a final 10-page paper. The class will take a 4 day/3 night trip to the White Mountain National Forest during January; participants should be willing to cross country ski or snowshoe into the remote huts.

Class will meet Tuesday, Wednesday, and Thursday mornings.

No prerequisites. *Enrollment limited to 10 with preference given to Environmental Studies concentrators.*

Estimated cost to student: \$90 for food and lodging.

Meeting time: mornings.

KARABINOS

GEOS 025 Baja California Field Geology

A traditional "actualistic" approach to geology is the study of contemporary environments and their ancient counterparts. This field course is designed to explore modern and ancient rocky shorelines featuring a wide range of variables between outer shores with high wave surge and sheltered inner shores. Modern intertidal environments on both the Pacific and Gulf coasts of the Baja California peninsula will be visited, as will several examples of ancient rocky shorelines spanning the Cretaceous to the Pleistocene. Field experience will emphasize the complex interrelation-

ships of prevailing winds, ocean currents, patterns of upwelling, and local geography.

Participants will meet in San Diego, California and travel round-trip overland via Mexican Federal Highway 1 from Tijuana in the north to Loreto in the south. The course will conclude with a group exercise leading to a geological-paleoecological map of a Pliocene rocky shoreline at El Mangle near Loreto. This field course is organized as a camping trip and participants should expect primitive conditions. Course evaluation will be based on the completion of a daily travel journal and a final geological map with explanatory text (10-page equivalent).

Prerequisite: Geosciences 253T (offered only during the Fall Term 1998). *Enrollment limited to 10.*

Cost to student: Food (\$200) plus airfare to and from San Diego (cost will vary with departure point, but generally \$200 to \$700)

M. JOHNSON and DAVID BACKUS (Research Associate)

GEOS 031 Senior Thesis

To be taken by students registered for Geology 493-494.

GERMAN

GERM S.P. Sustaining Program for German 101-102

Something new and different for students enrolled in German 101-102. Practice in the use of German for everyday purposes; creation and performance of short dramatic sketches through group collaboration; games; songs; storytelling; reading. No homework.

Class meets four times a week for 50 minutes.

Requirements: active participation and regular attendance earn a "Pass" grade.

Prerequisite: German 101 or equivalent. *Limited to German 101-102 students.*

Cost to student: the price of one paperback text.

Meeting time: 9:00-9:50 a.m.

GERM 017 Bismark (Same as History 017)

Whatever else it may have been, Bismarck's twenty-eight-year tenure as chancellor of Prussia and then Germany was definitely one of the most fascinating public lives of the modern era. We will explore the "Iron Chancellor's" career from his famous "Blood and Iron" speech of 1862 through Emperor Wilhelm II's sensational dismissal of him in 1890. Seeking generally to comprehend the essence of his great creation—the Second Reich—we will give special attention to his commitment to "Realpolitik," his struggle to coordinate political and military strategy, the influence of religion on his ideas and practice, and the tension between tradition and modernity in his conceptions of democracy, socialism, capitalism, and nationalism. We will read biographical and historical studies as well as a selection of Bismarck's speeches, letters, and autobiographical writings.

Evaluation will be based on class participation and two five-page papers.

No prerequisites. *Enrollment limited to 15.*

Cost to student: \$50 for books and xerox packet.

Meeting time: mornings.

B. KIEFFER

GERM 025 German in Germany

Begin or continue study of the German language at the Goethe Institute in Prien, Germany. The Goethe Institute program attracts students from all over the world. A typical course meets for four weeks, 18 hours/week, generally providing the equivalent of one semester course at Williams. To earn a pass, the student must receive the Goethe Institute's *Teilnahme-Bestätigung* which denotes regular attendance at classes, completion of homework, and successful completion of a final test.

Students wishing to apply must fill out an application, obtainable in the office of the Center for Foreign Languages, Literatures, and Cultures in Weston, and return it to the Goethe Institute *as soon as possible* (admission is on a first-come, first-served basis).

Prerequisite: none, but any student interested in beginning German with this course and then entering German 102 at Williams should contact Professor Newman by December 1, at the latest. *Enrollment limited to 15. Not open to first-year students.*

Cost to student: from approximately \$1300 to approximately \$1800 for tuition and room and board, plus round trip travel costs. The Goethe Institute arranges for room and board at various levels upon students' request, but students must make their own travel arrangements. *This course is not defined as a "trip" for financial aid purposes. The maximum reimbursement to financial aid students is \$300.*

B. KIEFFER

GERM 030 Honors Project

To be taken by honors candidates following other than the normal thesis route.

GERM 031 Senior Thesis

To be taken by students registered for German 493-494.

HISTORY

HIST 010 American Catholicism in the Novels of Andrew Greeley (Same as American Studies 010)

Andrew Greeley is a Roman Catholic priest, sociologist and best-selling author of fiction. His novels cover an equally wide spectrum of genres, such as fantasy, psychological suspense, and murder mysteries. The common thread in all of Greeley's writing is his concern with the central issues of today's crisis in Catholicism. In this course we will read selected novels and focus on the ways in which Greeley presents such interwoven themes as hierarchy versus spirit, the feminine divine versus patriarchal institution, laity versus clergy, human sexuality, clerical celibacy, the role of women in the church, miracle and everyday life, and religious zeal versus social toleration. While these issues are especially poignant for Catholics, Greeley strives to make them equally accessible to people of other religions. This course will follow his lead.

Requirements: class attendance and participation; a 10-page essay on course readings. Class will meet three times a week.

No prerequisites. *Enrollment limited to 20.*

Cost to student: \$30 covering books and Xeroxes.

Meeting time: mornings.

BERETZ

HIST 011 Film, Gender and Empire in Africa and Asia

This course will focus on how popular film have portrayed the European empire in Asia and Africa. Most of the films center on European experiences in the empire more than on the experiences of the natives, so our goal will be to study the ways in which the empire has been represented by the West. The major question we will be addressing is how these films justify or criticize the colonial project. We will also scrutinize how elements of European masculinities and femininities were constructed, reworked, and remade in the empire and how some of these ideas were in turn borrowed by or imposed on the natives. Some of the films include "A Passage to India," "Chocolat," "Out of Africa," "Under the Sheltering Sky," "The Lover," "White Mischief" and "Indochine." Students will be expected to have some familiarity with the novels from which some of these films were adapted.

Requirements: class participation and attendance, three film screenings per week, each averaging about two and one half hours. Class will meet twice a week to discuss the films. A 10-page essay will be required.

No prerequisites. *Enrollment limited to 20.*

Cost to student: less than \$30.

Meeting time: mornings.

MUTONGI

HIST 012 Women and Orthodoxy in pre-Revolutionary Russia

Russian Orthodoxy generally is portrayed in scholarly literature as being essentially misogynous and the source of ideals and institutions that have served to limit the activities of Russian women and to confine them to subordinate positions in the family, society, and the state. Yet in the nineteenth and early twentieth centuries Imperial Russia witnessed a remarkable and rapid growth of female monasticism and other Orthodox women's service organizations. During this period Russian Orthodox monasticism became overwhelmingly feminized, with monastic women coming to constitute nearly a third of the Orthodox clergy as a whole. At the same time, moreover, monastic women and other female religious activists considerably expanded their social activities, in the process helping to redefine Orthodox ideals of monasticism, charity, and women. Through a variety of primary and secondary sources, this course will seek to explore the sources and significance of this apparent paradox and to understand the meaning of Orthodoxy for Russian women in the century before the Russian Revolution.

Requirements: The class will meet three times per week (with the exception of the week after a mandatory field trip to a Sunday service at the Trinity-St. Sergius Russian Orthodox Monastery). Evaluation will be based on regular attendance, thoughtful participation in each class, and three short (4 pages) papers based on class readings.

No prerequisites. *Enrollment limited to 20.*

Cost to student: \$50 for books and photocopies.

Meeting time: mornings.

WAGNER

HIST 013 This Old House

The historic preservation movement in the United States continues to work at raising the public's consciousness about the importance of "saving" early buildings of all kinds. Undoubtedly the movement's greatest success has been with domestic structures. In general, old houses have a wide variety of possible uses, and they can often be "restored" for relatively little money. Our attention will be devoted to a series of case studies of individual historic houses and the whys and wherefores of their preservation. Examples will include structures currently used for private, commercial, and educational purposes, as well as museum buildings. "Behind-the-scenes" tours and meetings with owners, contractors, and museum personnel will be supplemented by regular reading assignments.

A number of day-long trips and possibly one overnight stay will be involved. In addition, students will write a 12- to 15-page paper.

No prerequisites. *Enrollment limited to 20.*

Cost to student: \$50 for cost of day trips and possible overnight.

Meeting time: mornings.

R. DALZELL

HIST 014 "Once Upon a Time:" American History through Historical Fiction (Same as American Studies 014)

Over the past two hundred years, authors as diverse as Washington Irving, Winston Churchill, Toni Morrison and Gore Vidal have all tried to retell the story of our nation in their fictional writings. This course will introduce students to some of the basic events and themes of American History through a study of major works of historical fiction. We will examine how several key turning points in our nation's past, such as the American Revolution, the Civil War, and the Civil Rights Movement have been represented and interpreted by different novelists and short story writers over time. We will also compare some of these fictional accounts with very short works of non-fiction, analyzing the different research techniques, rhetorical strategies, and thematic concerns of novelists and professional historians in an attempt to understand the broader relationship between history and fiction. Some of the texts that may be covered in the course include: James Fenimore Cooper's *Drums Along the Mohawk*, Charles Johnson's *Middle Passage*, Gore Vidal's *Lincoln*, Michael Shaara's *The Killer Angels*, Lewis Nordan's *Wolf Whistle*, and the films *Last of the Mohicans*, *Gone with the Wind*, *Glory*, and *Malcolm X*.

Students in the class will be required to attend all class sessions and will be given a choice between writing a 10-page interpretative essay on several assigned texts or writing their own short work of historical fiction. Class will meet three times a week. No prerequisites. *Enrollment limited to 20.*

Cost to student: books and offset materials.

Meeting time: afternoons.

JESSICA MEYERSON '90 (Instructor)

WOOD (Sponsor)

Jessica Meyerson '90 is completing her Ph.D. in History at Princeton University.

HIST 015 Montaigne's Essays on the Threshold of Modernity (Same as Philosophy 015)

Michel Eyquem de Montaigne (1533-1592) was born into a life of public responsibility and aristocratic privilege in late Renaissance France. At the age of 37, however, despaired by the futility of political action in an age of conflict and violence, Montaigne gave up his official duties and retired to his castle in order to figure out "how best to die." Montaigne started writing about himself, his times, and the opinions which he found in the books of his rich library. He sought answers to basic questions: "What do I know?," "Who am I?," and "Is there a best way to do things in life?" Montaigne did not succeed in avoiding public duties entirely, for he later became mayor of Bordeaux and a mediator during the Wars of Religion. Nor did he find clear and simple answers to the questions he asked. His intellectual project, however, resulted in an enduring literary masterpiece that has influenced Western culture ever since the Essays. By turns skeptical, iconoclastic, humorous and poignant, Montaigne's Essays address a wide, even bizarre, range of subjects with titles such as "On the power of the imagination," "Of the inconsistency of our actions," "Of Cannibals," "Of the custom of wearing clothes," and "Of thumbs." The Essays take us into the mind of a troubled though courageous sixteenth-century man. They also provide us with an understanding of the cultural and intellectual crisis that brought an end to the Renaissance and gave birth to modern individualism, science, and secularism.

Requirements are a 10-page paper and regular and thoughtful participation in class discussion.

No prerequisites. *Enrollment limited to 20.*

Cost to student: \$30 for books.

Meeting time: afternoons.

LEWIS BEILIN (Instructor)

WOOD (Sponsor)

Lewis Beilin is a Ph.D. from the University of Chicago who specializes in Early Modern European History.

HIST 016 Building Histories at Williams

Ever wondered how much was spent to build Lasall Gymnasium? Or what building was on the site of Thompson Chapel? What about the person for whom your dorm was named? Ever wanted to go treasure hunting in the dusty stacks behind those closed doors inside Stetson Hall? The aim of this course is to introduce students to historical research using the wide variety of resources available in Sawyer Library and the College Archives. These resources will enable us to research and to compose essays that will illuminate the histories and meanings behind the campus facades, monuments, and sites that we so often take for granted. Student work is planned for inclusion in a proposed online, interactive historical campus map project. Students will be responsible for producing a building/site essay and biographical sketches of individuals related to the site (approximately 10 pages), and for selecting visual and

documentary materials to illustrate the essay and sketch(es). Class will meet three times a week.

No prerequisites. *Enrollment limited to 20.*

Cost to student: \$30 for books and photocopies.

Meeting time: afternoons.

LEE DALZELL (Instructor)
WOOD (Sponsor)

Lee Dalzell is Head of Reference Services at Sawyer Library.

HIST 017 Bismark (Same as German 017)

(See under German for full description.)

HIST 031 Senior Thesis

To be taken by students registered for History 493-494.

LEADERSHIP STUDIES

LEAD 010 Corporate Leadership and Social Responsibility

This course considers the responsibilities of leadership in corporate life through the perspectives of visiting alumni who hold leadership positions in American corporations. It examines the social obligations created by success in business, the risks versus rewards of corporate leadership, the benefits and the costs of fulfilling or exceeding expectations, and the range of professional, social, and personal dilemmas faced by leading figures in modern corporations. Readings will include material from philosophy and psychology, as well as relevant biography and autobiography.

Evaluation will be based on attendance and participation in class discussions and a final 10-page paper.

No prerequisites. *Enrollment limited to 20.*

Cost to student: approximately \$30 for books.

Meeting time: mornings.

G. GOETHALS and B. RAFFELD

LEAD 012 Leadership in Astronomy: From Copernicus to Hubble and the Age of the Universe (Same as Astronomy 012)

(See under Astronomy for full description.)

LEAD 020 Emerging Leaders

This is an experiential course which will focus on identifying and building leadership skills. The goal of the course will be to offer students an opportunity to develop clear and concise approaches to leading groups. Class activities, lectures and discussions will focus on assessing, identifying and evaluating personal leadership styles, group dynamics, values and ethics clarification.

Evaluation will be based on active participation in class discussion, experiential activities, lectures, weekly journal writing and a final ten page paper.

The text for this course will be *Exploring Leadership* by Susan R. Komires, Nance Lucas and Timothy R. McHachon

No prerequisite. *Enrollment limited to 25.*

Cost to student: approximately \$30.

Meeting time: afternoons.

WANDA LEE (Instructor)
G. GOETHALS (Sponsor)

LITERARY STUDIES

LIT 010 ¡Almodóvar! The Complete Films (Same as Spanish 010)

(See under Spanish for full description.)

LIT 011 Sappho's Poetry in Greek: Eros the Sweet-Bitter (Same as Classics 011)

(See under Classics for full description.)

LIT 031 Senior Thesis

To be taken by students registered for Literary Studies 493, 494.

MATHEMATICS

MATH 010 The Game of Chess

Chess is a beautiful and very inspiring game. No game has surpassed chess in its popularity in all countries for many centuries. One of the oldest games, it has a history spanning 1400 years and has offered inspiration to scientists, artists, and writers. Such is the subtlety of the game that no one has been able to determine whether it is an art, a science, a sport, or a combination of them all. This course will be an introduction to the beautiful and inspiring world of chess. Topics include basic principles: openings, middle-game and endings; mathematical aspects of chess; general theory of a middle-game play; end-game strategies. We will look at some famous games, discuss chess problems

and organize a tournament among students and computer programs.

Evaluation will be based on class participation and problem assignments.

No prerequisites. *Enrollment limited to 30.*

Cost to student: \$30 for Xeroxed materials and miscellaneous supplies.

Meeting time: afternoons.

CHKHENKELI

MATH 011 Seeing Relationships in Art and Mathematics; the Experience of Creative Visualization (Same as ArtS 011)

The main purpose of this course is to convey how to see both as an artist and a mathematician. This is primarily a hands-on course where the student creates art in two and three dimensions that is motivated by mathematics. Included will be sequential prints, fractal stone prints, hyperspace, hyperseeing, and hypersculptures as well as space curve sculptures and minimal surfaces from knots. There will also be slide presentations and videos of the work of Naum Gabo, Max Bill, Eduardo Chillida, Jose de Rivera, Barbara Hepworth, Henry Moore, and contemporary artists whose work is related to mathematics. Evaluation will be based on hands-on projects.

No prerequisites. *Enrollment limited to 30.*

Cost to student: approximately \$25 for materials.

Meeting time: afternoons.

NATHANIEL FRIEDMAN (Instructor)
ADAMS (Sponsor)

Nathaniel Friedman is Professor of Mathematics at the State University of New York at Albany. He is the author of "Introduction to Ergodic Theory," published by Van Nostrand in 1969, as well as numerous research articles in mathematics. He has been a sculptor for over 20 years, and the organizer of three recent annual international conferences relating mathematics, art, and architecture.

MATH 013 Baseball's Highest Honor

Baseball's Highest Honor is election to the Hall of Fame. The history of the election process, however, has been fraught with controversy, confusion, and accusations of favoritism. A sticking point is that there is no clear definition of what a Hall of Famer should be, other than a player of the caliber usually elected to the Hall of Fame. But with diverse standards applied by a myriad of committees, the Hall of Fame is a self-defining institution that has failed to define itself, to paraphrase author Bill James. What should the criteria be, and what, in fact, have the criteria been? How should one define "greatness"?

In this course, we will discuss the history of the Hall of Fame, methods of rating players, and election criteria. Two focuses of the course will be (1) to review modern statistical methods for evaluating players (sometimes referred to as "sabermetrics"), including models for run production and comparisons across eras, and (2) to contrast systematic, "scientific" methods for player evaluation with the ad hoc campaigning typical of Hall of Fame arguments seen today. We may also discuss related issues, such as the improvement or decline in quality of play over time, the relative importance of pitching and hitting, etc.

Evaluation will be based on participation, class presentations, and a final project. Class will meet for two hours a day, three days a week.

No prerequisites. *Enrollment limited to 30.*

Cost to student: approximately \$50 for books.

Meeting time: afternoons.

WANG

MATH 014 Building and Cracking Codes: How Will We Protect Information in the Coming Centuries? (Same as Physics 014)

Living in the early decades of the information age, we find ourselves depending more and more on codes that protect messages against either noise or eavesdropping. We begin this course by studying some of the most widely used codes for both of these purposes, including linear codes, which in addition to being mathematically elegant are the most practical codes for error correction, and the RSA public key cryptographic scheme, popular nowadays for internet applications. Looking ahead by several decades, we show how a "quantum computer" could crack any RSA code in short order, and how quantum cryptographic devices could achieve security through the Heisenberg uncertainty principle. Throughout the course students will have the opportunity to try their hands at both designing and cracking codes and cryptographic protocols. The codes created by students will be tested against noise and eavesdropping, usually provided or modeled by other students. There will also be homework assignments in which students will be expected to solve problems and explain their reasoning.

Evaluation will be based on homework sets and coding projects.

Prerequisites: There are no specific courses required, but students should be familiar with vectors, matrices, and complex numbers.

Meeting time: mornings.

LOEPP and WOOTTERS

MATH 018 Muller Dance Technique (Same as Special 018)

This modern dance class will be based on the technique developed by Jennifer Muller, with whom the instructor danced professionally for five years in New York City and in Europe. Jennifer Muller was a soloist in the dance company of José Limón before she started her own company in 1974. She has added her own style of movement to the Limón technique, creating an expansive, free-flowing dance that is won-

derful to do and to watch. We will finish the course with a short lecture-demonstration illustrating what the students have learned. Although dance experience is preferred, it is not a requirement for participation.

Cost to student: under \$20.

The class will meet six hours per week.

Meeting time: mornings.

SYLVIA LOGAN (Instructor)
C. ADAMS (Sponsor)

Sylvia Logan received her B.A. in Slavic Literature from Stanford University. She danced professionally with the Jennifer Muller Dance Company, a modern company based in New York, for five years.

MATH 022 Color Photography: People and Places (Same as Special 022)

This will be an introductory course in color photography. The main themes will be portraiture and the landscape. No previous knowledge is assumed, but students are expected to have access to a 35 mm camera, preferably with manual override or aperture priority. The topics covered will include composition, exposure, camera use and properties of film, direction and properties of light, and digital imaging. Students will develop their eye through the study of the work of well-known photographers and the critical analysis of their own work. We will discuss the work of photographers such as Henri

Cartier-Bresson, Joel Meyerowitz, Dorothea Lange, Eugene Richards, Constantine Manos, Philip-Lorca diCorcia and Galen Rowell.

Students will be expected to spend a considerable amount of time practicing their own photography outside of class (using 35 mm color slide film). There will be one required local half-day field trip. Students will also be introduced to the program Photoshop used to manipulate images digitally, and will work on their own pictures with this program. The film used will be color slide film, but students will learn to scan their slides and produce prints using a digital printer.

Evaluation will be based on class participation, two quizzes and a final project.

No prerequisites. *Enrollment limited to 18.*

Cost to student: \$110 for purchase and processing of film and a text.

Meeting time: mornings.

SILVA

MATH 030 Senior Project

To be taken by candidates for honors in Mathematics other than by thesis route.

MATH 031 Senior Thesis

To be taken by students registered for Mathematics 493-494.

MUSIC

MUS 010 The Life and Music of Hildegard of Bingen

The year 1998 marks the 900th anniversary of the birth of St. Hildegard of Bingen, the 12th century German nun, composer, poet, playwright, artist, theologian and mystic. This course will explore this extraordinary woman's intellectual and artistic life and times through the window of her musical, dramatic, and poetic creations. Topics will include her music, writings and paintings as expressions of her mystical theology, and her contemporary appeal as a cult icon of popular culture in new age music and spirituality, in modern feminism, and in the early music movement. Student will do a final project, which may take the form of a research paper, an individual or group performance of music by Hildegard, or individual creative work (musical composition, poetry, drama) inspired by Hildegard.

Evaluation will be based on class participation and completion of a final project.

No prerequisites. No musical background required or assumed; students interested in all aspects of medieval studies, women's studies, and religion welcome.

Cost to student: \$30 covering reading packet and a CD.

Meeting time: mornings.

BLOXAM

MUS 011 Music at the Last Century's End

As we near the end of the 20th century, a chance to reflect on and hear, in live performance, some of the major works which were new as the last century ended. We will journey out of Williamstown to hear and see Mahler's Fourth Symphony (Boston Symphony), Massenet's use of Goethe's Werther as an opera (the Metropolitan Opera in New York), orchestral music of Elgar (the London Symphony appearing in NY) and music of Richard Strauss (perhaps the Montreal Symphony). Class sessions before the travel will introduce the student to the styles, the composers' vocabularies, and the art of listening. At the end of the month, the student will write a paper describing the music experienced from the month. A passing grade will be determined by attendance, participation in class and at concerts, and the written paper due at the end of the month.

Prerequisites: none, but not open to students who have had Music 101 or 103. Open especially to those for whom the involvement with western music and the concert experience is new and who wish to find out about the era and the musical listening experience.

Class members must attend the out-of-town events; schedules must be cleared of conflict before acceptance in the course.

Enrollment limited to 15.

Cost to student: about \$275.00 (four concert/opera admissions, group transportation, meals, two overnights.)

Meeting time: mornings.

K. C. ROBERTS

MUS 012 Music Technology

A study of the principles and practices in music technology including MIDI (Music Instrument Digital Interface), digital synthesis, sequencing, controlled random generation of musical parameters, music printing, editing and manipulating digital sound files and working with real audio over the internet. Includes both theoretical study and practical application of the technology. May include specific projects using music department concert and other concert recordings. Topics subject to change depending upon available hardware and software which is currently planned to be in place by Fall, 1998.

Requirements include outside reading, quizzes and "hands on" assignments to be completed during individual lab times spent in the MIDI Studio in Bernhard Music Center.

A passing grade will be determined by successful completion of assignments, attendance, and class participation.

No prerequisites, however, music reading ability highly recommended. *Enrollment limited to 8.*

Meeting time: afternoons.

KECHLEY

MUS 013 Introduction to the Music of John Coltrane

This course would be an overview of the major style periods of the music of John Coltrane (1926-1967), one of the most influential musicians of the century. Coltrane's evolution from "jazz" instrumentalist, to composer, to his explorations into the integration of "jazz" with other world musics would be examined through the prism of Lewis Porter's recent musical biography (University of Michigan Press, 1998), without doubt the most definitive and comprehensive study of Coltrane's music to date. Coltrane's early work with Johnny Hodges' small group, his subsequent work as a sideman with Thelonious Monk and Miles Davis, his own legendary quartet, his extended works ("A Love Supreme"), use of atonal principles gleaned from the writings of Nicolas Slonimsky, as well as his explorations into "free" jazz, non-Western music, and spirituality, will be examined in sequence, through the use of recordings, readings, and video. Although seemingly quite technical, all of these elements in Coltrane's music are aurally accessible, and can be learned and appreciated by musician and non-musician alike.

No prerequisite. *Enrollment limited to 25.*

Cost to student: about \$30 for textbook.

Meeting time: afternoons.

A. JAFFE (Instructor)
KECHLEY (Sponsor)

MUS 014 The Development of the Modern Orchestra

The development of the orchestra from the 18th to the 20th centuries as demonstrated in the works of Bach, Haydn, Beethoven and Mozart through Berlioz, to Strauss and Mahler. Optional exercises in orchestration and instrumentation will be provided for those interested. Concentration on the socio-political placements of the orchestra during these times. For the general student.

Evaluation will be based on a paper, class presentation, and attendance.

No prerequisites.

Cost to student: about \$125 for concert tickets and transportation.

Meeting time: mornings.

R. SUDERBURG

MUS 031 Senior Thesis

To be taken by students registered for Music 493, 494.

NEUROSCIENCE

NSCI 031 Senior Thesis

To be taken by students registered for Neuroscience 493-494.

PHILOSOPHY

PHIL 012 Philosophy of Sex

The point of doing philosophy is not to learn more about some specific aspect of the world; one can — and perhaps should — try to think philosophically about any subject matter whatever. In that spirit, the class will focus philosophical attention on human sexuality — about which both individuals and societies indeed think a lot — in the hope of articulating and critically examining assumptions, beliefs and reasons which underlie and motivate our views.

The first part of the course will focus on scientific attempts to provide an understanding of human sexual differences and sexual orientations; we will be looking, primarily, at biology, medicine, psychology and sociology. In the second part of the course, we will critically examine some social, political and moral debates concerning human sexual behavior and customs, such as sexual equality and sexual discrimination, sexual harassment, prostitution, pornography, and moral questions concerning sexual faithfulness and adultery.

To pass the course, students will be expected to attend lectures and participate in

class discussions, and to write two short (2-3 pages) papers, and a final longer paper (5-7 pages).

Cost to student: no more than \$50.00 (for books and reading package).

Meeting time: afternoons.

MLADENOVIC

PHIL 015 Montaigne's *Essays on the Threshold of Modernity* (Same as History 015)

(See under History for full description.)

PHIL 025 Among Strangers: Taking Theories About the "Other" to Real Cultural Differences

How do we, and how should we, make sense of people who live in radically different cultures from our own? A number of courses across our curriculum consider this question on a theoretical level. It is central to reading Salman Rushdie and Edward Said, questioning the methods of anthropology or the study of religion, and examining the philosophy of Hans-Georg Gadamer, Jacques Derrida, or Donald Davidson... All of these thinkers have theories — very elaborate theories, and theories that conflict with one another — designed to answer this question. How do these theories measure up in practice? Are any of them useful when one actually finds oneself in an alien cultural environment? That is the question this Winter Study is intended to explore. An attractive side effect is that the class will also bring to the fore, in general, the issue of the relationship of academic work to practice.

The course will be open only to students who have taken one of the courses listed in the prerequisites, below. Students who have taken such a course may then apply for admission to the Winter Study, with a proposal describing a) course of immersion-oriented travel (low budget, focused one or two places, and preferably making use of homestays), with one other Williams student or other companion, in a developing Asian or African country that they have not hitherto visited and b) how they plan to make use of one of the theorists they have already studied to examine their own experience in understanding the people they meet when they travel. A student might propose for example, a critical reading of Clifford Geertz while visiting pilgrimage sites in Morocco, or a consideration of whether Peter Winch's emphasis on *Verstehen* helped her achieve a helpful level of patience and respect while dealing with Nigerian bureaucrats. Two students traveling together need not, and probably should not, propose the same topic. And whatever topic students propose to work on, they must demonstrate that they have already engaged in some depth with the writer or writers they choose — a five page paper on that writer should be submitted as part of the application. That paper then gets expanded, over the course of the WSP, to include a focused examination of how their study of the theory did or did not help them in their actual travels. Finally, the papers are shared, upon return to Williamstown, in an oral presentation to the other students in the class, together with the professors of the classes that were taken as prerequisites.

Those admitted will receive substantial help from the instructor in planning their trip — group and individual orientation sessions will be held, and handouts offered, on issues ranging from medical and safety precautions, cultural sensitivity, and getting help from the US Consulate, to packing wisely and planning a budget; practical tasks like purchasing flight tickets and arranging homestays will also be taken care of by the instructor. Students will not, however, be accompanied on their travels by a faculty member, nor indeed by anyone other than their chosen companion. Traveling in a group, and with a faculty member, tends to lessen one's sense of responsibility for one's travel decisions, limit one-on-one conversations with members of the other culture, and provide intra-group social experience that fill in time one might otherwise spend reflecting on questions like, "whatever led me to think I should come here?" The idea of this course is to promote the kind of travel that requires courage and fosters intense reflection on the nature of culture shock, while at the same time setting this experience in the context of theoretical frameworks that allow the reflections to be self-critical and deep.

Prerequisites: a willingness to take some risks and endure some discomfort, plus at least one of the following courses, preferably taken no earlier than Fall, 1997: ANTH 101, 331, or 312T; ANSO 205; ENGL 342 or 392; PHIL 204, 215T; REL 281, 283, or 304. Interested students must consult the instructor before registration. *Enrollment limited to 10 (five pairs).*

Cost to student: will range (depending on country chosen), but generally will run around \$2400. Financial aid is available, both from the financial aid office and from the Gaudino Fund.

Meeting time: mornings.

FLEISCHACKER

PHIL 031 Senior Thesis

To be taken by students registered for Philosophy 493-494.

PHYSICS

PHYS 010 Light and Holography

This course will examine the art and science of holography. It will introduce modern optics at a level appropriate for a non-scientist, giving the necessary theoretical background in lectures and discussion. Demonstrations will be presented and students will make several kinds of holograms in the lab. Thanks to a grant from the National Science Foundation, we have seven well-equipped holography darkrooms available for student use.

At the beginning of WSP, the class will meet for lecture and discussion three times a

week and for lab twice a week. Later classes will be mainly laboratory. Students will be evaluated on the basis of regular attendance, completion of four laboratory exercises, and a holography laboratory project or a 10-page paper.

No prerequisites. *Enrollment limited to 30.* Preference will be given to students with no previous college course in physics more advanced than Physics 100.

Cost to student: about \$50 for holographic film, chemicals, and photocopies.

Meeting time: morning lectures; afternoon labs.

MAJUMDER

PHYS 011 Introduction to Photography

This course provides an introduction to the basic technical and creative aspects of black and white photography. Students will develop a working understanding of an SLR 35 mm camera as well as the developing and printing processes, and be encouraged to use these tools as a means to personal expression. Some of the major concepts in Photography's aesthetic history will be introduced and explored through slide lectures, videos, and assignments. Supervised lab sessions and group critiques will provide feedback on student work.

Evaluation will be based on completion of photographic assignments and a class presentation, with attention to content, effort, and development of the work. Attendance and participation will also be taken into account.

We will meet twice a week for three hour sessions, with extra supervised lab times scheduled in accordance to our needs. Most shooting and darkroom work will be completed outside of class.

Enrollment limited to 20.

Cost to student: \$75. Students must supply their own fully adjustable (manual option) 35 mm camera.

Meeting time: afternoons.

CECILIA HIRSCH (Instructor)
STRAIT (Sponsor)

Cecilia Hirsch, a local photographer, holds an MFA from the Massachusetts College of Art and has taught photography at a variety of institutions including the Smithsonian, the Art Institute of Boston and Bowdoin College.

PHYS 012 Meet the Right Side of Your Brain: Drawing as a Learnable Skill (Same as ArtS 012)

Representational drawing is a not merely a gift of birth or a magical ability granted by angels, but a learnable skill. If you ever wanted to draw, but doubted you had the ability or believed you could not learn, then this course is for you. This intensive course utilizes discoveries in brain research to teach representational drawing. By using simple techniques and extensive exercises you will discover and develop the perceptual shift from your symbol based left hemisphere to your visually based right hemisphere. This cognitive shift enables you to accurately see and realistically represent the physical world. You will learn to draw a convincing portrait, self-portrait, and still life. This course is designed to develop your powers of observation and enhance your innate creative problem solving abilities, which are applicable in any field. Students need no previous artistic experience, just the willingness and desire to learn a new skill. Students will be expected to attend and participate in all sessions. They will also be required to keep a sketchbook recording their progress and complete a final project.

Evaluation will be based on participation, effort, and development. The class will meet three times per week (about 10 hours lecture and group exercises) with substantial additional independent student work.

No prerequisites. *Enrollment limited to 30.*

Cost to student: text and drawing materials (approximately \$30).

Meeting time: afternoons.

DALE BRADLEY (Instructor)
STRAIT (Sponsor)

Dale Bradley is a printmaker and graphic artist living in Williamstown.

PHYS 013 Automotive Mechanics

The purpose of this course will be to provide an understanding of the basic function of the major components of the modern automobile. Through lectures, demonstrations, and hands-on experience, individuals will learn basic maintenance of an automobile. In addition, students will be expected to study in depth one of the major automotive systems which include carburetor or fuel-injection systems, the lubrication and cooling system, the electrical system, the steering, brake and suspension system, and the power train for both manual and automatic transmissions.

The course will meet two hours a day, three times a week for classroom instruction. In addition, students will meet at the Flamingo Motors in Williamstown one evening each week for practical demonstrations and hands-on activity.

Students will be required to attend class regularly, read assigned material from the text, actively participate in work at the garage, and pass written midterm and final examinations.

No prerequisites. Preference given to seniors. *Enrollment limited to 30.* The class will be broken into three sections for lab work.

Cost to student: approximately \$40 for text.

Meeting time: morning and evenings.

MICHAEL FRANCO (Instructor)
STRAIT (Sponsor)

Michael Franco is the owner of Flamingo Motors in Williamstown.

PHYS 014 Building and Cracking Codes: How Will We Protect Information in the Coming Centuries? (Same as Mathematics 014)

Living in the early decades of the information age, we find ourselves depending more and more on codes that protect messages against either noise or eavesdropping. We begin this course by studying some of the most widely used codes for both of these purposes, including linear codes, which in addition to being mathematically elegant are the most practical codes for error correction, and the RSA public key cryptographic scheme, popular nowadays for internet applications. Looking ahead by several decades, we show how a “quantum computer” could crack any RSA code in short order, and how quantum cryptographic devices could achieve security through the Heisenberg uncertainty principle. Throughout the course students will have the opportunity to try their hands at both designing and cracking codes and cryptographic protocols. The codes created by students will be tested against noise and eavesdropping, usually provided or modeled by other students. There will also be homework assignments in which students will be expected to solve problems and explain their reasoning.

Evaluation will be based on homework sets and coding projects.

Prerequisites: There are no specific courses required, but students should be familiar with vectors, matrices, and complex numbers.

Meeting time: mornings.

LOEPP and WOOTTERS

PHYS 015 Electronics

Electronic instruments are an indispensable part of modern laboratory work throughout the sciences. This course will cover the basics of analog electronic circuits. Students will build and test a variety of circuits chosen to illustrate the kinds of electronic devices and design problems a scientist is apt to encounter.

Class will meet afternoons for a mixture of lab, lecture, and discussion, providing ample opportunity for hands-on experience. In the last week, students will design and build a final project, or will write a 10 page paper.

Evaluation will be based on participation, effort, and the quality of the final project or paper.

Prerequisite: Mathematics 104 or equivalent calculus. No prior experience with electronics is required. *Enrollment limited to 16.*

Cost to student: \$95 for two textbooks.

Meeting time: afternoons.

STRAIT

PHYS 018 The Science of Sports (Same as Biology 018)

Have you ever wondered: What makes a curveball curve? How does the body convert food into energy for muscles? Why is a tennis serve faster than a baseball pitch? How do they measure the speed of a fastball? How does an outfielder know where a fly ball will land? What makes muscles work? Why do the clap-skates make speed skaters faster? How do they light up the puck in NHL TV coverage? What’s going on when we swim? What determines our reaction time? Why are sprinters so much faster than marathoners? Can a piece of tape over the bridge of the nose really increase performance? How significant are statistics given in basketball or baseball telecasts? Why do we sweat?

Science provides answers to questions like these through a few powerful principles. That’s what this course is about.

No prerequisites. Intended for non-physics and non-biology majors, but open to anyone.

Format: mix of classroom lecture/discussion and experiments.

Evaluation based on short summaries of reading assignments, and on classroom and lab participation (10 hours per week).

Cost to student: books.

Meeting time: morning lectures; afternoon experiments.

AALBERTS and SWOAP

PHYS 022 Research Participation

Several members of the department will have student projects available dealing with their own research or that of current senior thesis students. Approximately 35 hours per week of study and actual research participation will be expected from each student. Students will be required to keep a notebook and write a five-page paper summarizing their work. Those interested should consult with members of the department as early as possible in the registration period or before to determine details of projects then expected to be available.

Prerequisite: permission of specific instructor. *Enrollment limited to 1 or 2 per project.*

Cost to student: none.

Meeting time: to be arranged with instructor.

STRAIT and members of the department

PHYS 031 Senior Thesis

To be taken by students registered for Physics 493, 494.

STRAIT and members of the department

POLITICAL ECONOMY

POEC 031 Honors Thesis

To be taken by students registered for Political Economy 493.

POLITICAL SCIENCE

PSCI 010 The Political Economy of the National Football League

Professional sports is a business. It is also a passion. This course will consider both sides of this duality by focusing on the National Football League. On the business side, we will look at three kinds of issues in particular: the sources of the NFL’s profits, what they do to the unionization of players and the role of agents, and the politics and economics of stadia deals (focusing especially at the Raiders). On the sports side, we will consider why fans care about football games, the experience of players and coaches, and different strategies of developing championship teams.

Course requirements: class participation and a 10-page paper.

Class will meet three times a week for two hours each session.

Cost to student: \$25 to \$50 for books and offset readings.

Meeting time: mornings.

MACDONALD

PSCI 013 Conspiracy Theories in American Politics

Was Dwight Eisenhower an unconscious agent of the international communist conspiracy? Did the CIA order the assassination of JFK? Was the Black Panther Party really decimated by J. Edgar Hoover and the FBI? Is there currently a vast right-wing conspiracy determined to destroy the Clinton administration? This course will examine some of the more popular and enduring conspiracy theories in American politics over the last fifty years. While conspiracy theories have been around forever, we will pay particular attention to how the rise of the Internet has transformed a very ancient form of political behavior. In addition, we will also have class presentations by infamous contemporary conspiracy theorists. Our primary objective will be to determine why seemingly absurd theories of political events often have a very strong and enduring appeal for millions of Americans on both the Right and the Left.

Class will meet three times a week for two hours each session.

Requirements: a 10-page paper examining any conspiracy theory.

Cost to student: one required textbook.

Meeting time: mornings.

MCALLISTER

PSCI 014 Screening Slavery

Hollywood helps to script popular understandings of history: many of our most potent images of the past come from film and television. This is especially true of slavery, which has played an important role in the creation of American mass culture. Just as it provided the material for nineteenth century America’s most influential novel *Uncle Tom’s Cabin* and most significant form of commercial live entertainment (blackface minstrel shows), slavery has occupied center screen in some of Hollywood’s pivotal productions, from the origins of silent film, through the creation of the Technicolor spectacular, to the elaboration of the TV miniseries. In this course we will watch and discuss some of the most interesting of these productions. In tracing the evolution of representations of slavery, we will pursue the following questions: What does that evolution tell us about changes in American society? About the meaning and cultural construction of “race?” What special symbolic resources has the subject of slavery offered filmmakers? What kind of history can we reasonably expect from the entertainment industry? How should we understand the political work done by film and television? Films and shows discussed may include *Uncle Tom’s Cabin*, *Birth of a Nation*, *Gone with the Wind*, *Band of Angels*, *The Skin Game*, *Mandingo*, *Roots*, *Nightjohn*, and *Amistad*.

In addition to watching and discussing the films, students will be required to do occasional readings, keep a journal, and write a short final paper. Class will meet three times a week for two hours each session.

No prerequisites.

Cost to student: offset readings.

Meeting time: mornings.

REINHARDT

PSCI 015 Game Theory, Game Practice

We will invent a board game that captures the essence of international politics, and at the end of the class try to sell it to a major toy company. Nothing on the market comes close to reflecting leaders’ basic, daily decisions: taxing your people to pay for armies, aiding your own poor while sending money overseas (to pay off allies or relieve starvation), staying in office without getting slapped with an international boycott for torturing your opponents, handling natural disasters, responding to a condemnation by the United Nations, and so on. A first step might be to integrate Risk and Monopoly—you could sell off hotels to pay for armies, use armies to invade Park Place, etc.—and then go on from there. The goal is not to develop some tedious multi-day game, but rather to capture international politics as simply as possible without reducing it to a single dimension (e.g., just guns).

No special expertise is necessary. Preference will be given to people who read the newspaper and can prove it. Readings include selections from works on game theory and strategic interaction (e.g., Robert Putnam, Thomas Schelling) and from *The New York Times*.

Requirements: Grades will be based on 1) attendance—more than one absence results in a failure; 2) the quality of the game you group produces, and 3) a three-page paper explaining the game’s strengths and weaknesses.

No prerequisites.

Class will meet three times a week for two hours each session.

Cost to student: approximately \$30 for a small course packet and construction mate-

rials, like dice and commercial board games, which students will have to buy on their own.
Meeting time: mornings.

SHANKS

PSCI 016 Philanthropy and the Nonprofit Sector

What is philanthropy? Charity is the religious tradition of altruism, compassion, and one-to-one giving. Philanthropy, on the other hand, seeks to better the human condition by depersonalizing and institutionalizing giving, focusing beyond the immediate condition of people to root causes of human problems and systemic reform, recognizing a responsibility to the public interest, and helping to effect societal change. Rather than associating charitable giving exclusively with the rich and powerful, the increasingly professionalized field of institutional philanthropy in the United States deserves more critical analysis. This course will provide a brief overview of the role and function of institutional philanthropy in the nonprofit sector in the United States. It will give some but necessarily limited attention to the nonprofit organizations that convert philanthropic and public dollars into educational, social, and other services (the “doers”), and place more extended emphasis on foundations which make grants to support these service organizations (the “donors”). Through hands-on case studies and grantmaking simulations, students will consider the mission and programmatic agendas of a variety of private funding sources and gain a working knowledge of how foundations carry out their functions, particularly focusing on the grantmaking process itself.

Requirements: attend all class activities and write a short paper. Class will meet three times a week for two hours each session.

No prerequisites. *Enrollment limited to 15.* The course will culminate in a day trip to New York City where students will participate in a grantmaking simulation.

Cost to student: approximately \$60 for offset readings and one day travel to New York City.

Meeting time: afternoons.

MARA BURNETT '88 (Instructor)
MACDONALD (Sponsor)

Mara Burnett is a 1988 Williams alum currently working with a New York private foundation. Among the numerous benefits of this WSP will be that it will complement Alex Willingham's fall course, PSCI 331T on Nonprofit Organization and Community Change.

PSCI 017 “The Politics of New England Food: Why New Englanders Eat What They Eat”

Have you ever wondered why the food of New England is bland: is it the people, the land, the economy? Do New Englanders like their diets or are they forced into them? This course will investigate these kinds of questions by looking at the political, economic, cultural, and climactic factors that have shaped the diet and culture of New Englanders.

We will begin our course by learning about the ecology and culture of food developed by Native Americans: how did they hunt, gather and farm, and how did their methods of procuring food form their relationship to nature and the division of labor? Then we will consider the diet of the first white settlers, the interaction between Puritan and Native American cultures of food, the role of Puritan asceticism in shaping diets, and the consequent impact on family and social structures. Next we will examine how food was used to socialize immigrants from Europe, looking particularly at the pioneers of nutritional science (home economics), such as Fannie Farmer and her Boston Cooking School, and why they struggled to convince immigrants to reject their traditional foods in favor of their less nutritional—but more bland—“American” substitutes. Finally, we will conclude with a look at how the change in the production of food from the family farm to agribusiness has touched families, communities, and the role of women. We will enjoy an historically accurate demonstration of life in the 1700's at Historic Deerfield, a tour of the Bennington Museum and farm life in the 1800's, a visit to a community supported farm in our time, a guest speaker and several movies.

No prerequisites. *Enrollment limited to 15.*

Requirements: a 10-page paper, reading and class participation.

Cost to student: \$30 for museum entrance fees.

Meeting time: afternoons.

ROBIN LENZ MACDONALD (Instructor)
MACDONALD (Sponsor)

Robin MacDonald received her B.A. and M.A. in Political Science from UC Berkeley. She has written several articles about “food and its history” and has extensive experience in her field. She owns “Robin's Restaurant” on Spring Street, Williamstown.

PSCI 018 Editorial Cartooning (Same as ArtS 018)

(See under ArtS for full description.)

PSCI 025 Village Textiles in India (Same as ArtS 025)

(See under ArtS for full description.)

PSCI 030 Senior Essay

To be taken by students registered for Political Science 491 or 492.

PSCI 031 Senior Thesis

To be taken by students registered for Political Science 493-494.

PSCI 032 Individual Project

To be taken by students registered for Political Science 495 or 496.

PSCI 033 Advanced Study in American Politics

To be taken by students registered for Political Science 481-482.

PSYCHOLOGY

PSYC 010 Abnormal Psychology in Film and Theatre

This course will investigate the portrayal of mental illness in film and in the theatre. Disorders covered will include depression, alcoholism, schizophrenia, personality disorders and other major mental disorders. Participation will involve watching films, reading plays and classroom discussion. These discussions will focus on the accuracy of the portrayal (including the cause of the disorder and treatment approaches) and its implications—especially in terms of the stigma faced by the mentally ill.

Requirements: class participation and a term paper.

No prerequisites.

Cost to student: none.

Meeting time: afternoons.

BUCHANAN

PSYC 011 Culture and Psychology: An Exploration

Much of what people think of as scientific psychology has been developed in Western cultures. In fact, much of what is taught in typical psychology classes comes from an even smaller part of the world—the United States. The purpose of this course is to broaden this focus. Clearly, a multicultural perspective in understanding human behavior will be essential to individuals as they compete in the global marketplace and live in an ever more interconnected world. In the present course we will look at a variety of core topics in social and personality psychology from a cross-cultural viewpoint. We will explore such questions as: 1) Are there difference across cultures in how people experience and express emotions? 2) How does culture impact the way individuals construe the self and the basic values that shape behavior? 3) What is the nature of cultural differences in the role of males and females in society and in norms that govern dating patterns and interpersonal relations? 4) How do leadership styles vary across cultures? We will also discuss the methodological challenges that exist as one tries to conduct meaningful cross-cultural research. For example, what does the term “culture” really mean? How (or can) culture best be studied? Can one ever be an unbiased cross-cultural researcher?

Students will be required to participate in class discussions and to write and to present to the class a 10-page research proposal on a cross-cultural topic of their choosing.

Prerequisites: Psychology 242: Social Psychology. *Enrollment limited to 10.*

Cost to student: approximately \$40.00.

Meeting time: afternoons.

VIRGINIA MURPHY-BERMAN, PH.D. (Instructor)
G. GOETHALS (Sponsor)

Dr. Murphy-Berman, who received her doctorate from Northwestern University, is a Research Professor of Psychology at the University of Nebraska. She is spending one year teaching and doing research at Williams College. Dr. Murphy-Berman has published numerous articles in the area of cross-cultural psychology and has been a visiting professor at several different foreign Universities including those in India, Germany and Austria. Along with her husband, who is also a social psychologist, she is currently conducting a major study on cross-cultural differences in the nature of fairness and perceptions of social justice.

PSYC 012 Play

The meaning of play in the young child's life will be considered, both through readings and practical experience. The group will discuss several theoretical approaches to play, and each student will work mornings or afternoons with children in natural play settings, e.g. nursery school or day-care center. A journal relating reading and experience will be kept, and a final 10-page paper, relating theories of play to the student's observations of children at play will be written.

Enrollment limited to number of available placements in children's programs.

Students who are interested must consult with the instructor prior to registration.

Cost to student: none.

Meeting time: mornings.

CRAMER

PSYC 013 Genetic Testing: Biology, Psychology, and Ethics (Same as Chemistry 013 and Special 013)

How much of a role do your genes play in disease? What is genetic testing? What are the social and public policy issues surrounding genetic testing? This course will provide current information on how disease-related genes are identified, the availability and reliability of genetic tests, and the actual testing methods in current use. We will consider the contribution of genetic predisposition toward illness compared with other known risk factors, including behavior, personality, and stress. We will also discuss the myriad ethical, moral and economic issues that surround genetic testing and counseling. With the completion of the Human Genome Project in 2005, decisions regarding who will be tested and who will have access to this information

will be addressed by both judicial and legislative bodies. Our goal for this course is to supply you with sufficient scientific information and theoretical perspective that you will be able to make significant contributions to the coming public discussion of these complex issues. The class will meet three times per week for two hours. Approximately 50% percent of class time will be spent in group discussion of selected readings. Students will prepare written evaluations of case studies, and will discuss each others' positions in class. In addition, the class will visit the Human Genome site at the Whitehead Institute in Boston and meet with some of the scientists directly involved in the project.

No prerequisites. *Enrollment limited to 24.*

Cost to student: none.

Meeting time: mornings.

FRIEDMAN and WEISS

PSYC 014 Human Behavior in the Holocaust

What does it take to turn an ordinary person into a cold-blooded killer? Under what circumstances will ordinary men and women condone, accept, and encourage conditions of horror, humiliation, and widespread cruelty? Why do some individuals give aid to victims of oppression at the risk of their own lives? What influences the altruistic response in people? How can we recognize the human potentials lurking within each of us? These and other searching questions of human behavior will be explored in order to better understand how people made the Holocaust possible. We will examine the psychological extremes of human action as portrayed in selected, rarely seen documentary films and eyewitness written accounts of the most significant and traumatic event in twentieth-century history. We will study an era which profoundly altered our understanding of human nature and the extent to which human behavior can develop. Topics covered: understanding violence and depravity versus care and compassion as human motivators; the human response to bigotry and hatred; factors in human denial and the distortion of reality; conditions of human bravery and examples of self-sacrifice.

Requirements: attendance in class and a final exam.

Prerequisite: one of the following: an introductory course in psychology, sociology, anthropology, criminology, history, or religious studies.

Cost to student: approximately \$60 for books.

Meeting time: mornings.

ELIZABETH WILEN-BERG (Instructor)
G. GOETHALS (Sponsor)

Dr. Elizabeth Wilen-Berg is a licensed psychologist in private practice in Pittsfield, Massachusetts. Dr. Wilen-Berg's mother is a holocaust survivor who participated in the Warsaw Ghetto Uprising in 1943 and was sent to a Nazi extermination camp.

PSYC 015 Principles of Psychotherapy

This course, outlining the principles underlying the "talking cure," represents the kind of overview of psychotherapy the instructor wishes he had received as an undergraduate. Topics covered will include the particular arrangements for therapy, how they differ from other social situations, the initiation of therapy, how a therapist's counter-transference, and principles of personal history investigation and interpretation. Of particular interest will be to describe how, during psychotherapy, persons change.

By using both imagined therapy dialogues and published student auto-biographies, efforts will be made at each stage to illustrate ways in which the general principles work out in practice. For the course paper, students will be asked to describe an issue of concern in the student's own experience and to imagine how a therapist might collaborate in working on that issue. At the end of the course the instructor will discuss each paper individually with each student.

Requirements: readings, class discussion, and a 10-page paper.

No prerequisites. *Enrollment limited to 10.* Preferences given to juniors and seniors.

Cost to student: approximately \$25.

Meeting time: mornings.

RICHARD Q. FORD (Instructor)
G. GOETHALS (Sponsor)

Richard Q. Ford received his Ph.D. in Clinical Psychology from the University of Chicago in 1970. He was for twelve years on the medical staff of the Austen Riggs Center in Stockbridge, Massachusetts, and has for the past fifteen years been in the private practice of psychotherapy in Williamstown. He is co-author with Sidney J. Blatt of *Therapeutic Change: An Object Relations Perspective*.

PSYC 017 Teaching Practicum

Students interested in teaching may submit applications for a Winter Study assignment as a teacher's aide at Mt. Greylock Regional High School or at the Williamstown elementary school. Those accepted will work under the supervision of a regular member of the teaching staff and submit a report on their work at the end of the Winter Study Period. This project involves a four week commitment to full time affiliation with the school. Interested students should consult before WSP registration with Professor Goethals, Psychology Department, Room 311, Bronfman Science Center. He will assist in arranging placements and monitor students' progress during the four week period. Criteria for pass include full time affiliation with the school and a final 10-page report. The final report should summarize the student's experiences and reflections as drawn from a daily journal.

Prerequisite: Approval of Professor Savitsky is required. *Enrollment limited to number of places available at the two participating schools.*

Cost to student: none.

SAVITSKY

PSYC 018 Institutional Placement

Students interested in a full-time January placement in a mental health, social service or applied psychology (e.g., advertising, law) setting may consult with members of the Psychology Department to make appropriate arrangements. Students should first make their own contacts with an institution or agency. They should also arrange to obtain a letter from a sponsor at the institution who will outline and supervise the student's duties during January. The student must agree to keep a journal and to submit a final paper summarizing and reflecting upon the experiences outlined in the journal.

Requirements for a passing grade are a satisfactory evaluation from the institutional sponsor and a 10-page final paper.

No prerequisites. *Enrollment limited to 20.*

Cost to student: none.

SAVITSKY

PSYC 031 Senior Thesis

To be taken by students registered for Psychology 493-494.

RELIGION

REL 010 Tibetan Buddhism and the Practice of Meditation

During this session students will have the opportunity to be exposed to the teachings of the Nying-Ma tradition of Tibetan Buddhism. We will have the privilege to have with us Kenpo Namdrol, an eminent and highly qualified scholar, who has taught Tibetan Buddhism to many Tibetans and Westerners. He will teach students in the traditional way, outlining the main principles and practices of his tradition. He will also lead a few meditation sessions during which students will be able to practice what he has taught. Students will be expected to attend classes and read the relevant books. They will be also asked to keep a journal which will serve as a basis for the final project.

Readings: Wallace, *A Passion for Solitude*, Dalai-Lama, *The Dalai Lama at Harvard*, Khetsun Sangpo, *Tantric Practice in Nying-ma*, Sogyal Rinpoche, *The Tibetan Book of Living and Dying*.

Requirements: 10-page paper based on journal

No prerequisites. *Enrollment limited to 25.*

Cost to student: \$60 for books.

Class will meet three times a week, for two hours.

Meeting time: afternoons.

DREYFUS and NAMDROL

Kenpo Namdrol is abbot of the Nying-Ma monastery in Bylakuppe, Mysore district in southern India and a leading teacher of the Nying-Ma tradition

REL 014 Language of the Holocaust

How name what is unnameable, unthinkable, unimaginable? Is silence the only response to unspeakable acts? Or, if you can articulate a name, an authority, an identity, a reason for genocide, for the annihilation of the Jewish people, how do you express or represent the experience without the luxury of artifice? What are the terms of such expression? What claims does the experience make on those who wish to define it? Is there an ultimate fiction greater than fact that such an event requires? This course will concentrate on the relationships between historical/recorded (mimetic) interpretations (i.e., first person accounts, religious and historical texts, documentary footage) and constructed (poetic) interpretation of the Holocaust. The latter will include a sampling of films, novels, poems, art of victims and survivors and others using the material of genocide as primary source for the creation of a work of art. Within this framework questions regarding both the particular and universal nature of the Holocaust will be addressed. Course readings and material will offer provocative pairings to sharpen and question the necessary yet paradoxically unstable distinction between the mimetic and poetic mode: These might include Wiesel's *Night*; selections from the Old Testament (*Akidah* and *Book of Job*) and the Zohar, Borowski's *This Way to the Gas Chambers, Ladies and Gentlemen* and *Scrap of Time and Other Stories*; Charles Reznickoff's *Holocaust* and Artie Spiegelman's *Maus I* and *Maus II*; Expressionistic and concentration camp art; various historical accounts; and selections from the work of Paul Celan, Nelly Sachs, A. Sutzkever, Edmund Jabes, Aharon Appelfeld, Andre Schwarz-Bart, Terrence Des Pres and Daniel Goldhagen. Films might include *Europa Europa*, *Nasty Girl*, *Shop on Main Street*, *Shoa* and *Schindler's List*.

Requirements: a 10-page paper, class participation and regular attendance.

No prerequisites. *Enrollment limited to 25.*

Cost to student: \$60 for books and xeroxes.

Class will meet three times a week, two hours per class.

Meeting time: mornings.

DAVID RAFFELD (Instructor)
DARROW (Sponsor)

A poet and writer, Williamstown resident, David Raffeld has written widely on the themes to be developed in this course. In addition to offering this course several times, Raffeld has taught Winter Study term courses at Williams in the Departments of Religion, Philosophy, and English. He has also been a Writer-in-Residence in the Department of Theater for the production of his Issac Oratorio, which was written in part in response to the Holocaust.

REL 017 In the Beginning? Scientific and Religious Speculation on Human Origins (Same as Biology 017)

The disciplines of biology and religion both ask and answer questions about the nature of humanity in part by asking and answering questions about our origins as individuals and as a species. Where do we come from and why does it matter? In this class, we shall examine a range of theories on the origins and development of life from Aristotle to Aquinas to Darwin, and ask how these theories have shaped our present understandings of conception and evolution. What forces helped to shape these theories? What implications can we draw about the connections between "science" and "religion"? Students will have the opportunity in their projects to explore how these issues have shaped 20th century discussion on human origins. Class will meet two times per week for three hours, including observational lab. Requirements: 10-page paper; one class presentation. No prerequisites. *Enrollment limited to 20.* Cost to student: approximately \$35 for books and reading packet. Meeting time: afternoons.

BUELL and SAVAGE

REL 025 Archaeology, History and National Identity in Jordan and Syria (Same as African and Middle Eastern Studies 025)

In this project, we will examine both the archaeological treasures of Syria and Jordan and also the current use made of that heritage in forming Jordanian and Syrian national identity. We will visit sites in Jordan and Syria to investigate the archaeological and architectural remains of the classical, late antique and Islamic periods in the area of the greater Levant. In so doing, we will develop a sense for both the profound changes that were brought by the Islamic conquest of this area and also the continuities that are also detectable. We will also have lectures on the contemporary scene in these two countries with special attention to how these archaeological remains are used for the construction of national identity and the role of tourism in the economies of these two countries. We will have the opportunity to spend an extended period in Damascus, one of the oldest continuously occupied cities in the world where home stays will be provided to give participants an opportunity to get to know a Syrian college student and his/her family. We will fly directly to Amman and spend a week in Jordan visiting Petra, Wadi Rum and Aqaba, as well as sites closer to Amman including Jerash, Qasr Amra, Madaba and Mount Nebo. We will then travel overland to Damascus. After a week in Damascus we will travel north to visit Palmyra, Dura Europos, Rusafa, Aleppo, Qalat Siman and the Crac des Chevaliers. Lectures on the history and art of the region and extensive visit to museums will round out our investigations. Each student will arrange for a research focus with the instructor before departing and prepare a descriptive/analytical paper upon return. Projected cost per student: \$2900.

DARROW

REL 031 Senior Thesis

To be taken by students registered for Religion 493-494.

ROMANCE LANGUAGES

FRENCH

RLFR S.P. Sustaining Program in French 101-102

Students registered for 101-102 are required to attend and pass the sustaining program during the Winter Study Period. There are three 50-minute meetings per week. Meeting time: 9:00-9:50 a.m.

Teaching Assistant

RLFR 010 European Literature and Cinema: The Meaning of Life

This course, conducted in English, is a study of some of the greatest and most profound (short) works of modern European literature and cinema that directly address the question of the meaning of life. Although a writer like Voltaire mocks the very idea of a search for life's meaning, other writers and film-makers, whose works we will also examine, see the search for meaning as a courageous and heroic quest, a noble end in itself. Still others believe that human beings can create meaning as well as moral beauty in their lives. Texts include the following novellas, short stories, and plays: Voltaire's *Candide*, Gogol's *The Overcoat*, Flaubert's *A Simple Heart*, Tolstoy's *The Death of Ivan Ilych*, Beckett's *Waiting for Godot*, and Malraux's novel *Man's Fate*. Films include Fellini's *La Strada* and *La Dolce Vita*, Rossellini's *Stromboli*, De Sica's *The Bicycle Thief*, and Truffaut's *The Four Hundred Blows*. (Readings are all in English translation but may be read in French or Russian if desired.) Class will meet three times a week, two hours per meeting. Requirements: active participation in all class discussions and three 3-page papers. No prerequisites. *Enrollment limited to 20.* Cost to student: books only. Meeting time: afternoons.

DUNN

RLFR 030 Honors Essay

To be taken by candidates for honors other than by thesis route.

RLFR 031 Senior Thesis

To be taken by students registered for French 493-494.

ITALIAN

RLIT S.P. Sustaining Program for Italian 101-102

Students registered for 101-102 are required to attend and pass the sustaining program during the Winter Study Period. Three 50-minute meetings per week. Meeting time: 9:00-9:50 a.m.

Teaching Assistant

SPANISH

RLSP S.P. Sustaining Program for Spanish 101-102

Students registered for 101-102 are required to attend and pass the sustaining program during the Winter Study Period. Three 50-minute meetings per week. Meeting time: 9:00-9:50 a.m.

Teaching Assistant

RLSP 010 ¡Almodóvar! The Complete Films (Same as Literary Studies 010)

We will screen, study, and discuss all of Almodóvar's movies, from *Pepi, Luci, Bom* (1980) on through *The Flower of My Secret* (1995) and (if possible) *Live Flesh* (1997). In addition, a film or two by other Spanish directors who work along comparable lines (e.g., Bigas Luna's *Jamón jamón*) will be viewed. Screenings will take place in the evenings (as part of an Almodóvar film festival). The films will be analyzed from a variety of perspectives, including the changing atmosphere of post-Franco Spain, the representation of sexuality and gay sensibility, the use of pop culture, the satiric and parodic strain, and the ironic cult of camp and kitsch (among others). *Conducted in English.*

Note: all of these films contain sexually explicit scenes and dialogue; it will therefore be necessary to discuss those episodes in class. A student who feels uncomfortable with such subject matter should strongly consider whether he/she wishes to be enrolled in this course.

Requirements: a weekly journal commenting on each of the film offerings, and a final 10-page paper.

No prerequisites, although a taste for the outrageous and bizarre certainly helps. *Enrollment limited to 20.*

Cost to student: maximum \$50.

Meeting time: afternoon the first day, mornings thereafter.

BELL-VILLADA

RLSP 030 Honors Essay

To be taken by candidates for honors other than by thesis route.

RLSP 031 Senior Thesis

To be taken by students registered for Spanish 493-494.

RUSSIAN

RUSS S.P. Sustaining Program for Russian 101-102

Required of all students enrolled in Russian 101-102. Three meetings per week, 50 minutes per session. Practice in speaking and comprehension based on material already covered as well as some new vocabulary and constructions. Designed to maintain and enhance what was acquired during fall semester, using new approaches in a relaxed atmosphere. No homework.

Regular attendance and active participation required to earn a "Pass." Open to all. Meeting time: 9:00-9:50 a.m.

RUSS 010 Icon Painting (Same as Arts 010)

This course is a step-by-step exploration in the ancient technique of icon painting. Icon painting represents the oldest painting tradition still practiced and is the mother of Western painting. It is a good way to learn about art history through application of technique, Russian history, and early Christianity. It will introduce students to the history and origins of this ancient art form and its symbolism and iconography. The course will include lectures on the history of icon painting as well as hands-on experience in traditional egg tempera technique used by Russian Orthodox icon painters. This class requires no previous artistic training.

Each class will begin with a lecture and proceed to technical exercises. Students will learn the following steps: 1) Choosing and preparing an icon board. 2) Transfer and engraving the image. 3) Application of clay and gilding. 4) Coloring schemes and procedures. 5) Varnishing.

By the end of the course, students will produce two finished paintings and a research journal. The first icon will be made in class under instructor supervision. The second will be produced as an independent project. Students will keep a journal throughout the class, which will serve as a guide for future projects. The class will meet three times a week.

Grading will be based on the completion of two projects and participation in a final group exhibition.

No prerequisites. *Enrollment limited to 12.*

Cost to student: lab fee of \$75.00.

Meeting time: mornings. The instructors will be available afternoons for independent work.

IVAR and ANNA KRONICK (Instructors)
GOLDSTEIN (Sponsor)

Anna and Ivar Kronick are professional painters and have studied icon painting and conservation at the Repin Academy of Art in Saint Petersburg, Russia. Ivar Kronick also worked at the Williamstown Art Conservation Center.

RUSS 012 Tolstoy's War and Peace

Let Winter Study be your chance to read the world's greatest novel from cover to cover and to discuss Tolstoy's phenomenal depiction of life's "troubling questions" in nitty-gritty detail. In this course, we will focus on a close reading of Tolstoy's masterpiece of nineteenth-century realism. We will also watch two film adaptations of *War and Peace* (one Russian and one American), as well as Woody Allen's hilarious parody of the big Russian novels, *Love and Death*. We will examine briefly the historical and literary context in which Tolstoy wrote *War and Peace* to gain a broader understanding of the novel's significance and its profound impact on successive generations of readers around the world. We will meet three days a week for two-hour discussions of assigned readings (100-200 pages each). Students will also keep a diary of their reactions, ideas, and questions that arise while reading the novel. The final project will be a 5-page paper (or its equivalent on videotape or in cyberspace) that examines a single facet of Tolstoy's astonishing description of human experience and aspiration. The final grade will be based on regular attendance to class and film screenings, active participation in discussions, and completion of the diary and final project.

No prerequisites. *All readings and discussions will be conducted in English.*

Cost to student: \$14 for the greatest novel ever written.

Meeting time: morning discussions, three evening film screenings.

CASSIDAY

RUSS 025 The Georgian Republic in Transition (Same as Special 025)

Williams is reviving its historic exchange with Tbilisi State University in the Republic of Georgia! Now we are part of a consortium with Wellesley and Mt. Holyoke, whose students will also participate in this WSP program. The program is designed to offer students immersion in Georgian culture as well as practical expertise through internships in the field of their choice, including (but not limited to) democracy-building, public health, humanitarian aid, archaeology, music, art, and ethnography. Students will travel as a group to Tbilisi, the capital of Georgia, where they will live for three weeks with an English-speaking Georgian family. Each day students will work at their chosen internship; in the evenings the group will get together with the American faculty advisers for lectures on Georgian culture and society and to discuss the issues that arise from the students' experiences. Excursions both within the city and to the countryside will be part of the program, as will regular social gatherings with Georgian students. At the end of the course students will write a 10-page paper assessing one aspect of Georgian culture, based on their WSP experience. Knowledge of Russian or Georgian is NOT required.

No prerequisites. *Enrollment limited to 8.*

Cost to student: approximately \$1750.

GOLDSTEIN

RUSS 030 Honors Project

May be taken by candidates for honors other than by thesis route.

RUSS 031 Senior Thesis

To be taken by students registered for Russian 493-494.

SOCIOLOGY—See under ANTHROPOLOGY AND SOCIOLOGY

THEATRE

THEA 010 The Art of the Mask

This course is an intensive study of three primary aspects of mask work. Students will begin by studying the historical and social significance of masks in various cultures. This will be followed by demonstrations of and practical lab sessions in various mask-making techniques. The third component of the work will be a practical study of mask performance techniques, including animating the mask, character, masked movement and voice. We may also be able to schedule a field trip depending on regional theatre/museum offerings. The course will culminate in a presentation of the work developed in the class. There will be reading assignments and some film/video viewings, and each student will complete a brief research project on some aspect of mask use, mask making, or mask performance to be presented to the class. Grades will be based on this presentation, class participation, assignments, and attendance.

No prerequisites. *Enrollment limited to 16.*

Cost to students: \$60.00 for mask-making materials, audio-visual materials and re-

producing costs for handouts. There may be additional costs if we are able to schedule a field trip.

Meeting time: mornings.

HAMILTON

THEA 030 Senior Production

May be taken by students registered for Theatre 491, 492 but is not required.

THEA 031 Senior Thesis

May be taken by students registered for Theatre 493, 494 but is not required.

WOMEN'S AND GENDER STUDIES

WOST 030 Honors Project

To be taken by candidates for honors other than by thesis route.

WOST 031 Senior Thesis

To be taken by students registered for Women's and Gender Studies 493, 494.

SPECIALS

SPEC 011 Science for Kids (Same as Chemistry 011 and Environmental Studies 011)

Are you interested in teaching? Do you enjoy working with kids? Do you like to experiment with new things? Here is a chance for you to do all three! The aim of this Winter Study Project is to design a series of hands-on science workshops for elementary school children and their parents. Students, working in groups of 2-4, will spend the first three weeks of Winter Study planning the workshops. This will involve deciding on a focus for each workshop (based on the interests of the students involved) followed by choosing and designing experiments and presentations that will be suitable for 4th-grade children. Then, on the third weekend of Winter Study (January 23, 24) we will bring elementary school kids with their parents to Williams to participate in the workshops. You will get a chance to see what goes into planning classroom demonstrations as well as a sense of what it's like to actually give a presentation. You'll find that kids at this age are great fun to work with because they are interested in just about everything and their enthusiasm is infectious. You'll also be giving the kids and their parents a chance to actually do some fun hands-on science experiments that they may not have seen before, and you'll be able to explain some scientific concepts to them in a manner that won't be intimidating. Students will be evaluated based on participation in planning and running the workshops and each group will be expected to write up descriptions of the experiments included in the workshop it designs. Prerequisites: There is no need to be a science major; all that is needed is enthusiasm and a willingness to learn something more about topics that may be somewhat unfamiliar. Scheduling: We will meet 3 times/week for approximately 2-3 hours each time for the first 3 weeks of Winter Study. We will run the workshops on the third weekend of Winter Study (January 23, 24), so you will need to be available from approximately 9:00 AM - 3:00 p.m. on these days. We will also need to call one or two brief meetings late in the fall term for some preliminary planning. *Enrollment limited to 20.*

Cost to student: none.

Meeting time: mornings.

PEACOCK-LOPEZ

SPEC 012 Medical Ethics (Same as Biology 012)

(See under Biology for full description.)

SPEC 013 Genetic Testing: Biology, Psychology, and Ethics (Same as Chemistry 013 and Psychology 013)

(See under Chemistry or Psychology for full description.)

SPEC 014 Winter Emergency Care, CPR, Ski Patrol Rescue Techniques

The course is in three parts. When successfully completed it can lead to a certification as a National Ski Patrol member and certification in Professional Rescue CPR. It will also be designed to teach wilderness and outdoor emergency techniques. The Winter Emergency Care course designed by the National Ski Patrol is the main ingredient. It will be supplemented by the professional *Red Cross CPR* course "Respiratory and Circulatory Emergencies." An additional 14-hour outdoor course in Ski Patrol rescue techniques will be taught. Passing all three courses will certify the student as a National Ski Patrol member if he/she is a competent skier. The course will deal with wounds of all types, shock, respiratory emergencies, poisoning, drug and alcohol emergencies, burns, frostbite and other exposures to cold, strokes, bone, joint, and back injuries, and sudden illnesses such as heart attacks, convulsions, etc. It will also teach the use of all splints, backboards, bandages, and other rescue equipment. It will teach extrication and other emergency situations and the use of oxygen. The outdoor course will include rescue toboggan handling, organization of rescues, and outdoor practical first aid. Classroom work will include lectures, seminars, and practical work. There will be a mid-term and a final exam which will be both written and practical. Classroom hours will be held for a total of approximately 18 hours per week, primarily mornings. The outdoor course will be held at Brodie Mountain and Jimmy Peak in two three-hour afternoon sessions per week. Attendance at all classes is mandatory. *The*

course will be limited to 18 students, chosen on the basis of skiing interest and ability and prior first aid experience.

Cost to student: \$85 which will include all materials and books.

Meeting time: mornings and afternoons.

JAMES BRIGGS (Instructor)
PECK (Sponsor)

Jim Briggs was the Outing Club director at Williams for many years. He has led trips to the Alps on a number of occasions.

SPEC 015 Deaf and Proud: An Introduction to Deaf Language and Culture

The aim of this course is to introduce students to the language and community/culture of deaf people. Representations of deafness as a disability will be challenged from the perspective of those who argue that deaf people comprise a linguistic minority. Students should expect to develop a basic understanding of the linguistic status of American Sign Language (A.S.L.), a language in which the grammar is expressed on the face and which does not share the grammatical structures of English. We will give specific attention to the social and economic status of the deaf community at large and to the social and political constraints imposed upon them by a hearing community which denies them education in their own language. Three approaches to deaf education will be addressed: oral, signed English, and A.S.L. Several native signers will be invited to lecture on A.S.L. and to engage in dialogue with students about deaf politics and culture.

The course will be taught by an instructor with extensive experience as an interpreter in the deaf community. In addition to exploring deafness from the perspectives of deaf people, students will learn about the role of the interpreter in both deaf and hearing communities.

Students will be required to attend three class meetings per week, two hours each session, or two three-hour meetings per week. Evaluations will be based on the following: brief journal entries, a 5-page critical response essay to an assigned topic, class participation, and a final project (i.e., oral presentation, performance, essay, etc.).

Major texts for the course may include the following: *In This Sign*, by Joanna Greenberg, a child of deaf adults; *The Mask of Benevolence*, by Harland Lane; *Voices from a Culture*, by Padden and Humphries; and a collection of articles and videos.

No prerequisites. *Enrollment limited to 30.*

Cost to student: \$30 for books.

Meeting time: mornings.

Laurie Benjamin (Instructor)
SAWICKI (Sponsor)

Laurie Benjamin is a graduate from the University of Massachusetts in multicultural and international education. Ms. Benjamin has taught deaf students at the secondary level. She is a nationally certified A.S.L. interpreter for the deaf of Massachusetts and New York with extensive experience in a wide range of interpreter settings including mental health and performance interpreting.

SPEC 016 Medicine and the Soul: The Healer's Art (Same as Asian Studies 016)

(See under Asian Studies for full description.)

SPEC 017 Principles and Techniques of Cooking (Same as Chemistry 017)

(See under Chemistry for full description.)

SPEC 018 Muller Dance Technique (Same as Mathematics 018)

(See under Mathematics for full description.)

SPEC 019 Medical Apprenticeship

A student is assigned to a local physician, dentist, or veterinarian to observe closely his or her practice in the office and/or at the North Adams Regional Hospital, Berkshire Medical Center (Pittsfield, MA), or Southwestern Vermont Medical Center (Bennington, VT). It is expected that a student will spend the better part of the day, five days a week, with the physician or a period mutually agreed upon by the student and the physician as being educationally significant. The program has proven to be extremely successful in giving interested students a clear picture of the practice of medicine in a non-urban area. An effort is made to expose the student to a range of medical specialties.

A 10-page report written on some aspect of the month's experience is required.

Prerequisite: *interested students must attend a mandatory information meeting in early October, prior to applying for this course.* Preference is given to juniors, and then sophomores, whose course work has been suggestive of a firm commitment to preparation for medical school. *Enrollment limited to 44.*

Cost to student: none, except for local transportation and vaccinations.

TEACHING ASSOCIATES (Instructors)

DEBORAH AUGUST, M.D.
KEVIN P. BARUZZI, M.D.
DANIEL I. BECKER, M.D.
JAMES BOVIENZO, D.O.
CHRISTOPHER BRANDY, M.D.
ROBERT BROOKS, M.D.
BRIAN CUNNINGHAM, M.D.
RUTLEDGE CURRIE, M.D.
LEE DELANEY, D.V.M.
MICHAEL R. DEMATTEO, M.D.
PAUL DONOVAN M.D.

COLLEEN KELLEY, M.D.J
OSHUA KLEEDERMAN, D.M.D.
WILLIAM KOBER, M.D.
JONATHAN KRANT, M.D.
IRA LAPIDUS, D.M.D.
JOAN E. LISTER, M.D.
PAUL MAHER, M.D.
RONALD S. MENSCH, M.D.
RANDALL MILLER, M.D.
STEVE NELSON, M.D.
CHARLES O'NEILL, M.D.

STUART DUBUFF, M.D.
DAVID ELPERN, M.D.
ROBERT FANELLI, M.D.
STUART FREYER, M.D.
MICHAEL L. GERRITY, M.D.
CYNTHIA GEYER, M.D.
BENJAMIN GLICK, M.D.
HENRY M. GOLD, M.D.
DAVID M. GORSON, M.D.
AMY GRIFFIN, M.D.
BONNIE H. HERR, M.D.
DOUGLAS V. HERR, M.D.
ROBERT HERTZIG, M.D.
JUDITH HOLMGREN, M.D.
ROBERT C. JANDL, M.D.
LAURA JONES, D.V.M.
THOMAS KAEGI, M.D.

JUDY H. ORTON, M.D.
NORMAN PARADIS, M.D.
MICHAEL C. PAYNE, M.D.
FERNANDO PONCE, M.D.
HENRY RICHMOND, M.D.
DANIEL S. ROBBINS, M.D.
OSCAR RODRIQUES, M.D.
SIMRITA SIDHU, M.D.
CHARLES SILBERMAN, M.D.
JULIE SILBERSTEIN, M.D.
ANTHONY M. SMEGLIN, M.D.
ERWIN A. STUEBNER, JR., M.D.
DANIEL M. SULLIVAN, M.D.
KATHERINE URANECK, M.D.
CHARLES I. WOHL, M.D.
JEFFREY A. YUCHT, M.D.
MARK ZIMPFER, M.D.

SPEC 021 The Tarot

The Tarot began life in the Renaissance as a card game formed around allegorical images. Though the pictures show echoes of alchemy, mythology, and even possible Gnostic heresies, the deck remained a game until the end of the eighteenth century, when a French occultist declared it a secret Book of All Knowledge, handed down from Ancient Egypt. Over the last 200 years, the esoteric interpretation of the Tarot has become more and more complex (as well as more historically accurate). Over the last 25 years, a new and major change has occurred. Tarot readings, once dismissed as fortune-telling, have evolved into mirrors of self-knowledge and tools for change. Further, the cards have fostered creativity—in visual artists, such as Salvador Dali and Niki de St. Phalle, who have created radical new versions, and in writers, such as Italo Calvino and Jeanette Winterson, who have used them to inspire stories.

This seminar will allow students to approach Tarot from any of these angles. Class time will focus on each of these areas. Students can choose one of several possibilities for individual projects: historical investigation—considering the varied theories of the Tarot's development. Symbolism—a deeper look at the web of images. Readings—developing personal skills and techniques. Creativity—visual: creation of several Tarot "cards" in any medium, including sculpture, photography, and performance; or Literary: writing a short work of fiction, poetry, or theater, either based on Tarot symbolism or improvised by a random choice of cards.

Meeting time: afternoons.

RACHEL POLLACK (Instructor)
Sponsored by the Winter Study Committee

Rachel Pollack is a writer and artist living in Rhinebeck, NY. She has published three novels and several books on the history, symbolism, and use of the Tarot, on which she is an internationally recognized expert.

SPEC 022 Color Photography: People and Places (Same as Mathematics 022)

(See under Mathematics for full description.)

SPEC 023 Book Publishing

This course combines practical 'hands-on' workshops in editing, marketing, graphic design, and production/manufacturing with lecture/teaching sessions conducted by professionals from all aspects of the publishing process. Primarily devoted to book publishing, the purpose of the workshops and discussions is to provide student with 'real-life' experience in actually performing the tasks they would at a publishing house. Students will be given practical assignments in writing advertising and publicity copy, and in preparing an overall marketing plan for a list of forthcoming titles. Experienced professionals will lead the workshops, which will include some on-site sessions at Storey Communications, a local book publishing company in Williams-town. Students will develop a clear sense of their own aptitude and ability in this profession.

We will meet three times a week for approximately three hours each session for the first two weeks of Winter Study. Workshops and project preparation may run longer during the third and fourth weeks. There may also be a meeting held late in the fall term for some preliminary planning.

Students will be evaluated on the basis of regular attendance, class participation, completion of the workshops and assignments, and on the preparation and presentation of their publishing project.

Enrollment limited to 20.

Cost to student: none.

Meeting time: afternoons.

M. JOHN STOREY '65
Sponsored by the Winter Study Committee

M. John Storey '65 is owner and president of STOREY COMMUNICATIONS, INC., a book publishing company.

SPEC 025 The Georgian Republic in Transition (Same as Russian 025)

(See under Russian for full description.)

SPEC 027 Teaching and Writing at Theodore Roosevelt High School

Students choosing this Winter Study project will live in New York and travel daily to Roosevelt, a large comprehensive high school in the Bronx. A typical day includes: conducting small group work in selected classes (mostly English and Social Studies, but others are possible), working one-on-one with selected students, working in school departments (e.g. daycare center, college guidance office, tutoring center), and seminar-style meetings in which we discuss and write on issues that emerge from the work with students and teachers.

Requirements: Active and reliable participation in tutoring and discussion during January; participation in several brief orientation meetings before January (possibly including a half-day trip to TRHS), a journal during the program, a written report in a format of the student's choice at the end.
Prerequisites: Strong interest in working with young people. *Enrollment limited to approximately 15 sophomores, juniors and seniors.*
Cost to student: Approximately \$350 for transportation and food. We will attempt to provide housing for tutors. Consult with instructor.

NEWMAN

Sponsored by the German and Russian Departments

SPEC 028 Teaching Practicum, the Bronx and Manhattan

Participating students will be expected to pursue a full day's program of observing, teaching, tutoring, and mentoring at Christopher Columbus High School in the Bronx or A. Philip Randolph High School in Manhattan. Each of the schools will provide a resident supervisor for the Williams teaching interns who will meet regularly with the interns to assist with questions and to arrange individual schedules. Criteria for a pass include full-time affiliation with the school for WSP, keeping a daily journal, and submitting a 5- to 10-page report at the end of Winter Study reflecting upon and summarizing the month's learning experience. Interested students should talk with Dean Smith who will arrange orientation meetings and a visit to the high schools prior to the beginning of January.
Cost to student: approximately \$350 for food and transportation. Dean Smith will arrange housing in NYC where necessary.

P. SMITH

SPEC 034 The Contemporary Singer/Songwriter

Objective: To learn to express thought, feelings, opinions, and stories in song form. To develop communication as an outgrowth of personal expression, and to acquire the skills necessary to perform original works in a public setting. Class will meet three times a week, culminating in a public performance of material written during the course. Students should expect to spend 6-8 hours a week in class, in addition to working on assignments and preparing for performance. *Enrollment limited to 15.*
Cost should not exceed \$25 (books, notebooks, and copies of lyrics for the class). Meeting time: afternoons.

BERNICE LEWIS (Instructor)
KECHLEY (Sponsor)

Bernice Lewis is an accomplished singer and songwriter who has performed her work throughout the country. She lives in Williamstown.

SPEC 035 Making Pottery on the Potter's Wheel

Each class will begin with a lecture-demonstration, followed by practice on the potter's wheel. Each student will have the use of a potter's wheel for each class. We will work on mugs, bowls, pitchers, plates, jars, lids, vases, and bottles, and will finish these shapes as required by trimming and adding handles, lugs, lids, spouts, and knobs. We will also work on several different handbuilding projects. After the tenth class session, all class work will be biscuit-fired. The eleventh class will be devoted to glazing the biscuit pieces. Glazing techniques will include pouring, dipping, layering, brushing, and stamping, and using wax resist and other masking techniques to develop pattern and design. The completed work will then be glaze-fired. The last meeting will be devoted to a "final exam" gallery show of your best work. Woven into lecture-demonstrations will be presentations on various topics relating to the science and history of pottery making. The two most important requirements for this course are attendance at all class sessions and enthusiasm for learning the craft of pottery making. *Enrollment limited to 9.*
Cost to student: \$135 plus makeup class fees (\$25 per class) if applicable. Meeting time: mornings.

RAY BUB (Instructor)
Sponsored by the Winter Study Committee

Ray Bub is a ceramic artist and potter at Oak Bluffs Cottage Pottery in Pownal, Vermont. He also teaches pottery making at Southern Vermont College.

SPEC 036 Teaching Practicum: St. Aloysius School, Harlem

An opportunity for up to five sophomore, junior, or senior students to observe, tutor, and teach at St. Aloysius School in Harlem under the direction of Principal Laurel Senger. Interested students should speak with Dean of Admission Phil Smith in Mather House who will arrange an orientation meeting and a visit to the school in December, prior to Winter Study. Criteria to pass include full-time participation at St. Aloysius for the month, keeping a daily journal, and submitting a 5- to 10-page report at the end of WSP reflecting upon and summarizing the month's learning experience. *Enrollment limited to 5 sophomores, juniors, and seniors, interested in teaching.*
Cost to student: approximately \$350 for transportation and food. Dean Smith will attempt to arrange housing in NYC where needed.

P. SMITH

SPEC 039 "Composing a Life:" Finding Success and Balance in Life After Williams

To be at Williams, you have learned to be a successful student, but how do you learn to be successful in life? What will be your definition of a successful career? What will be your definition of a successful personal life? How will you resolve the inevitable tradeoffs between your personal and professional lives, between family and ca-

reer? In short, what will constitute the "good life" for you?

We borrow the concept of "composing a life," from a book of that title by Mary Catherine Bateson, as a very apt metaphor for the counterpoint and resolution of issues in defining success and balancing family and career. This course is designed to offer students an opportunity to explore their own assumptions and goals about life after college (with particular focus on the challenges of balancing career and family). More specifically, the course objectives would be: 1) to offer undergraduates, on the threshold of entering adulthood, an opportunity to examine and define their beliefs, values, and assumptions about their future personal and professional lives, in the broader context of life planning and composition, and to consider how they might achieve a successful balance; 2) To encourage students to gain a better understanding of how culture, ideology, and opportunity affect their choices about career and family; and 3) To provide an opportunity for students to "try on" different models of success and balance. An emphasis on case studies and "living cases" (in the form of guests from various professions who have made different life choices) will enable students to simulate real life without the actual risks of reality. We will look at the choices and tradeoffs, the consequences, and adaptations to the various models with the assumption that there is no one right answer to the dilemmas one might face in life after Williams.

Through the use of selected readings, case studies, guest speakers and field interviews, we will explore both the public context of the workplace and institutions as well as the private context of individuals and their personal relationships in determining life choices and career/family decisionmaking.

Students will complete a survey at the beginning of the course to explore their attitudes about defining success and balancing career and family in the future. They will also conduct one interview with a couple who has dealt with career/family issues to explore further the life choice decisionmaking process and its consequences. A major requirement of the course will be to write a final paper (10 pages) where students will be asked to discuss how the course materials, class discussions, interviews, and guest speakers have informed, validated, or challenged their personal thinking on defining success and balancing career and family in life after Williams. The final paper, we would hope, might become the foundation of a personal decisionmaking framework for future life choices.

Course requirements: regular attendance, class participation, field interview, and a 10-page final paper.

No prerequisites. *Enrollment limited to 20.*

Cost to student: photocopied articles, cases, and/or books.

Meeting time: mornings.

CHIP CHANDLER '72 and MICHELE MOELLER CHANDLER '73 (Instructors)
MURPHY (Sponsor)

Michele Moeller Chandler '73 and Chip Chandler '72 taught a similar Winter Study course in 1997 and 1998. They have been both personally and professionally engaged in the course topic. Michele's career has been in college administration, and she has an M.A. from Columbia, and a Ph.D. from Northwestern. Her Ph.D. dissertation focused upon the career/family decisionmaking of professional women who altered their careers because of family obligations. Chip is a senior partner with McKinsey & Company, an international management consulting firm, and he has an M.B.A. from Harvard. He will share the teaching load on a part-time basis. Guest speakers and faculty will address related topics. If you have questions about the course, you can contact the instructors via e-mail (chandler@bcn.net).

WILLIAMS-MYSTIC PROGRAM IN AMERICAN MARITIME STUDIES

An interdisciplinary one-semester program co-sponsored by Williams College and Mystic Seaport which includes credit for one winter study. Classes in maritime history, literature of the sea, marine ecology, oceanography, and marine policy are supplemented by field seminars: offshore sailing, Pacific Coast, Nantucket Island, and New York harbor. For details, see "Williams-Mystic Maritime Studies Program" or our website: www.mysticseaport.org/williams-mystic.