

# HAMPSHIRE COLLEGE

## • 1980 FALL TERM COURSE GUIDE • 1981 PRELIMINARY SPRING TERM COURSE GUIDE

### REGISTRATION INFORMATION

Check the course descriptions and schedule of classes thoroughly for enrollment methods. Some courses will hold lotteries the first day of classes; others will either have sign-up sheets or interviews. One day, **Thursday, September 3**, will be used for course interviews, where specified. Some faculty may be available prior to this; however, all faculty will have office hours posted for some time to be available for interviews (where enrollment is limited) prior to the beginning of classes.

After attending classes for a week, you should be ready to decide in which ones you wish to be enrolled. Class list forms, provided by Central Records, will be distributed the second week of classes. Sign the list for each course in which you wish to be enrolled. The lists will be forwarded to Central Records, and they will do the rest of the work.

**\*CLEARLY PRINT YOUR FULL NAME--first/middle/last--NO NICKNAMES\*** Students taking ASTPC courses at the other schools, and Division III students taking no courses, should sign the appropriate lists at Central Records.

#### NOTES:

**Five College Interchange applications** are available at Central Records. Be sure they are completely filled out and have all the necessary signatures (if they are incomplete they may have to be returned to you, causing delays which might affect your ability to get into a particular course). The deadline for filling interchange applications is **Friday, September 19**. **No Five College courses may be added after this date.** Familiarize yourself with all the rules, regulations and penalties associated with Five College Interchange. They are all listed in the Student Handbook, and it is your responsibility to be aware of them.

**Independent Study forms** are available at Central Records and the advising centers. They should be completed during the first two weeks of fall term 1980.

**IF YOU HAVE ANY QUESTIONS REGARDING THIS PROCEDURE, PLEASE CONTACT CENTRAL RECORDS, EXTENSION 470.**

#### NOTE TO FIVE COLLEGE STUDENTS:

Hampshire College courses require different modes of enrollment depending on instructor and course. All students should refer to the schedule of class meeting times to find the method of enrollment for an individual course. Courses with open enrollment do not require permission of instructor.

Grades will be offered to interchange students unless otherwise noted in the course description. Interchange students should discuss this with the instructor during first week of classes.

Although Five College students may participate in lotteries and sign class lists (clearly indicating their home institution), they are still responsible for filling the Five College Interchange form at their own school.

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### THE ACADEMIC PROGRAM

#### DIVISIONS:

Students at Hampshire College progress through three sequential divisions--Basic Studies (Division I), Concentration (Division II), and Advanced Studies (Division III), moving steadily toward greater independence in study. This divisional framework, which replaces the conventional freshman-senior sequence, is designed to accommodate individual patterns of learning and growth.

Each division marks a stage in the student's progress toward understanding and mastery of the subjects chosen for study and each has its own distinctive purposes and procedures.

**DIVISION I:** The Division of Basic Studies introduces students to the aims and methods of liberal education at Hampshire College, giving them limited but direct and intense experience with disciplines in all four schools. This is done not in the customary introductory survey course, but through examination of particular topics of study in courses or seminars and independent projects stressing the method of inquiry. Students in the first division learn how best to inquire into subject matter, how to understand their own educational needs and abilities, and how to develop the arts of self-instruction as they apply to their own style of learning. Students must pass a Division I examination in each school.

A program of Division I proseminars, designed especially for students new to Hampshire College, is offered in fall term 1980 by faculty in all four schools. For further information, see the special section on PROSEMINARS in this Course Guide.

**DIVISION II:** In the Concentration, the student develops a program of studies in one or more fields while continuing to explore other areas. Students determine with their faculty adviser what they want to achieve in their concentration, and design a program of study which will allow them to explore in depth one or more disciplines within one or more of the four schools, and to broaden their knowledge of the linkages among disciplines. The Division II examination includes evaluation of the work done in the Concentration and the student's readiness to proceed to advanced independent work.

**DIVISION III:** The Division of Advanced Studies occupies students with advanced studies in their chosen field and integrative studies across disciplines. The student designs and completes an independent study project or original work normally requiring half of his or her time for one academic year. In addition, students participate in advanced integrative work--normally a seminar--in which they encounter a complex topic requiring the application of several disciplines. Finally, students engage in some other activity in which they share their increasingly sophisticated knowledge and skills in service to other members of the Hampshire community or broader community.

#### ADVISING:

New students at Hampshire are assigned to an adviser from one of the schools for advice on choice of courses and other academic matters. If this initial assignment is not satisfactory, students may choose a new adviser. Changing of advisers is a relatively simple process done in consultation with the Associate Dean for Advising, Courtney Gordon, 112 Cole Science Center. The associate dean for advising also enlists students who are having problems with progress through examinations, working with both students and their advisers.

The Options Office (112 Cole Science Center) offers advice and assistance in the areas of career counselling, graduate school applications, field study and study abroad. The School Advising Centers, the Whole Woman Center, and the Third World Advising Center are sources of assistance for formulating Division I exams and Division II and III contracts, as well as for more general advice on the academic programs available at Hampshire and at the other colleges in the Valley.

#### STATEMENT ON AFFIRMATIVE ACTION

Hampshire College reaffirms publicly its moral and legal commitment to a policy of equal opportunity in education and employment.

Hampshire College admits students of either sex and any race, color, religion, national and ethnic origin or handicap to all rights, privileges, programs and activities generally accorded or made available to students at the College. It does not discriminate on the basis of sex, race, color, religion, national or ethnic origin or handicap in administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other College-administered programs.

Hampshire College is an Affirmative Action/Equal Opportunity Employer. All employment policies and decisions are made without regard to sex, race, color, religion, national or ethnic origin, age, or handicap.

In all areas of education and employment, the College seeks to comply with all applicable federal and state laws and guidelines including Title VI and VII of the Civil Rights Act of 1964; Executive Order 11246 of 1965 as amended by Executive Order 11375 of 1967; Title IX of the Education Amendments Act of 1972 and Section 504 of the Rehabilitation Act of 1973, as amended.

HAMPSHIRE COLLEGE April 1980 Volume 7 Issue 1

Published quarterly by Hampshire College, 105 Cole Science Center, Amherst, Massachusetts 01002. Second class postage (422690) paid at Amherst, Massachusetts 01002. Postmaster: Send address changes to the Admissions Office, Hampshire College, Amherst, Massachusetts 01002.

### CALENDAR

#### FALL TERM 1980

Students arrive	Mon. Sep. 1
Matriculation, orientation	Tue. Sep. 2 - Wed. Sep. 3
Course interview day	Thu. Sep. 4
Classes begin	Mon. Sep. 8
Course selection period	Wed. Sep. 3 - Wed. Sep. 17
Five College add deadline	Fri. Sep. 19
Tutorial day	Tue. Sep. 30
Colloquy	Fri. Oct. 3 - Sat. Oct. 4
January term proposal deadline	Mon. Oct. 13
Tutorial day	Thu. Oct. 16
Five College preregistration/ January term registration	Mon. Nov. 10 - Fri. Nov. 14
Tutorial day	Wed. Nov. 12
Leave notification deadline	Fri. Nov. 14
Tutorial day	Mon. Nov. 24
Curriculum day (no classes)	Tue. Nov. 25
Thanksgiving break	Fri. Nov. 26 - Sun. Nov. 30
Last day of classes	Fri. Dec. 12
Examination/evaluation period	Mon. Dec. 15 - Fri. Dec. 19
Winter recess (residences close Sat. Dec. 20 at noon)	Sat. Dec. 20 - Sun. Jan. 4
Students arrive	Sun. Jan. 4 (12:00 noon)
JANUARY TERM	Mon. Jan. 5 - Tue. Jan. 27
Commencement	Sat. Jan. 24
Recess between terms	Wed. Jan. 28 - Sat. Jan. 31

#### SPRING TERM 1981

New students arrive/matriculate	Sat. Jan. 31
New students' program	Sat. Jan. 31 - Mon. Feb. 2
Returning students arrive/ matriculate	Mon. Feb. 2
Course interview day	Mon. Feb. 2
Classes begin	Tue. Feb. 3
Course selection period	Tue. Feb. 3 - Fri. Feb. 13
Five College add deadline	Fri. Feb. 13
Tutorial days	Mon. Mar. 2 - Tue. Mar. 3
Spring break	Sat. Mar. 21 - Sun. Mar. 29
Leave notification deadline	Fri. Apr. 10
Parents' weekend	Fri. Apr. 17 - Sun. Apr. 19
Five College preregistration/ advising	Mon. Apr. 20 - Fri. Apr. 24
Tutorial days	Wed. Apr. 22 - Fri. Apr. 24
Last day of classes	Fri. May 15
Examination period	Mon. May 18 - Tue. May 26
Evaluation period (no exams)	Wed. May 27 - Fri. May 29
Commencement (residences close Sat. May 30 at 4:00 P.M.)	Sat. May 30

**Schedule of Classes  
on Pull-out Centerfold  
Pages 16-19**

SCHOOL OF HUMANITIES AND ARTS

In these course listings you will find a quite astonishing range of offerings for the Fall Term. Remember this at the outset as you begin to plan your studies for Division I: the courses in Basic Studies are not intended to serve as introductions to this or that subject matter but as introductions to modes of inquiry.

The difference is so critical that you will underestimate it only at the peril of promoting your own confusion. Each of the great, traditional disciplines of study (English, History, Philosophy, Music...etc.), rather than being treated as a closed system of knowledge in itself, is treated as a perspective on the disciplines of inquiry, discovery, and creation.

There are observably different ways in which the artist and the humanist (as contrasted, say, with the scientist) approach their subjects of study, conceive of their problems, attack them, resolve them, report them, or express them, and that is the main matter of concern in any Division I course.

Those of you entering Division II courses will find that they are more typically focused on some special problem within an academic discipline—for example, the dialogues of Plato or the poetry of Eliot, or that they deal with a general problem in the arts or humanities at a much higher order of complexity than is usual in the first Division. The same emphasis will be placed, however, on the interplay of the humanities and the arts.

Furhaps we in this School are most eager to try this academic experiment of putting the Humanities and the Arts to work together because we share the sense of Erich Fromm about the good that "flows from the blending of rational thought and feeling. If the two functions are core apart, thinking deteriorates into schizoid intellectual activity, and feeling deteriorates into neurotic life-damaging passions."

DIVISION I

DRAWING ONE-ON-ONE HA 101	Superior
INTRODUCTION TO DIRECTING HA 106	TBA
FILM WORKSHOP I HA 110	Ravett
THE DESIGN RESPONSE HA 111	Kramer
AMERICAN FAMILIES, AMERICAN HOMES (proseminar)* HA 118	D. Smith Kindwall Hardie
ODDS, BEASTS AND MORTALS: THE BEGINNINGS AND THE END OF POLITICAL THEORY (proseminar)* HA 121	Heagber
BEGINNING VOICE PRODUCTION HA 122	Aronson

COLLEGE WRITING/UPJOKE: AN ALWAYS IMMINENT JOY HA 134a	F. Smith
COLLEGE WRITING/EUROPEAN WRITERS: SHORT STORIES (proseminar)* HA 134b	F. Smith
WAYS OF SEEING HA 140	Murray
THE MAKING AND UNDERSTANDING OF HUMAN ENVIRONMENT: APPROACHES TO DESIGN HA 145	Juster Pope
STILL PHOTOGRAPHY WORKSHOP HA 150	Liebling Mayea
THE PSYCHOLOGY OF THE BLACK EXPERIENCE: A JUNGIAN APPROACH HA 161	Frye
IDEAS OF ORDER (proseminar)* HA 169	Kennedy
BEGINNING SCENE STUDY HA 178	TBA
THE WORLD OF FEDOR DOSTOEVSKY HA 180	J. Hubbs
<b>DIVISIONS I AND II</b>	
WRITING HA 114/214	Payne
STUDIO EXPERIENCE IN DANCE HA 115/215	TBA
EXPLORING SEXUALITY HA 123/223	C. Gordon L. Gordon
BODY/MIND/WORK: MORNING PRACTICE HA 126/226	F. McClellan
SOUNDHEIM AND COMPANY: A MUSICAL THEATRE SEMINAR HA 127/227	Cohen
POETRY WRITING WORKSHOP HA 131/231a	Sailey
FICTION WRITING WORKSHOP HA 162/263	Sailey
<b>DIVISION II</b>	
ADVANCED STUDIO FORUM HA 207	Murray
THE OBSERVERS HA 209 (SS 208)	D. Smith Vogueson
FILM WORKSHOP II HA 210	Liebling

EFFORT/SHAPE: LANGUAGE OF MOVEMENT AND OBSERVATION HA 213	F. McClellan
THE FICTION OF HISTORY: HISTORICAL TRUTH AND IMAGINATIVE INVENTION IN THE NOVEL HA 219	Marquez
PHOTOGRAPHY WORKSHOP II HA 225	Mayea
THE ANCIENTS AND THE MODERNS HA 230	Russo
POETRY WRITING WORKSHOP HA 231b	Goldeneohn
CANIS HA 234	Meagher
AMERICAN LITERARY REALISM: MARK TWAIN, HENRY JAMES, STEPHEN CRANE, THEODORE DREISER HA 236	Lyon
AUTOBIOGRAPHY AS AN AMERICAN GENRE HA 246	Maclock
INTERMEDIATE SCENE STUDY HA 248	TBA
MODERN DRAMA AND "REALITY" HA 250	C. Hubbs
HEEL I HA 251	Bradt
WOMEN IN NATURE SEMINAR HA 256 (OP 256)	Greenberg
HEIDEGGER'S BEING AND TIME HA 258	Bradt
ORIGINS OF ROMANTICISM HA 269	J. Hubbs
STUDIO ART CRITIQUE HA 280	Superior
SHAKESPEARE AND WOLF HA 289	Kennedy
HISTORY OF FILM/PHOTOGRAPHY HA 297	Ravett
PLAYWRIGHTS' WORKSHOP HA 299	Cohen
<p>Note about HSA courses in current listings: At the current stage of planning, a number of courses are still tentative. There will be two integrative seminars, one of which will be ARTS AND SOCIETY (literature, theatre, design, and social theory). Additional courses in the following areas will be forthcoming when our current faculty searches are concluded: Dance 2, Music 3, Studio Arts 1, Literature 2.</p>	

SCHOOL OF LANGUAGE AND COMMUNICATION

The concept of a School of Language and Communication is unique to Hampshire College. The school represents a synthesis of disciplines concerned with the forms and nature of symbolic activity. These are some of the most vital areas of study in current intellectual life, and their emerging interconnections are among the most important interdisciplinary developments in this century, only at Hampshire are they grouped together and taught as a central part of a liberal arts education. The school's curriculum is wide-ranging. The areas of study described here make significant contact with most of the major questions in intellectual life and with most students' interests.

**Cognitive studies.** The nature of the human mind depends on its capacity to receive, store, transform, and transmit symbolic forms, or information. The cognitive sciences are devoted to the study of these fundamental properties of mind. Linguistics and cognitive psychology investigate human language, thought, perception, and memory. Computer science and mathematical logic provide a general theory of symbolic structures and processes that is used in linguistics and psychology and that makes possible the construction of machines with mental powers, called computers. Many of the classic questions in philosophy fall in the domain of mind, for example, those concerned with the nature of knowledge, of meaning, of rational thought, and with the relationship between mind and brain. The cognitive sciences also have important applications in education. The school offers an integrated set of courses in cognitive studies that draws on linguistics, psychology, computer science, mathematics, philosophy, and education. This interdisciplinary area offers one of the major perspectives on human nature.

**Language, culture, and society.** Symbolic forms... the medium of communication as well as of mind. The use of language, our richest instrument of communication, reflects, maintains, and creates social structures and cultural forms. The issues that are addressed in the school's courses range from the role of social relationships in two-person conversation, to the way in which literary artists exploit the structure of language to create aesthetic effects, to the interplay between social structure and language use in societies that are bilingual or multilingual. In L&C such phenomena are studied using theories of the fundamental and universal aspects of language structure and use. Linguistics is the central discipline in this area of study, and it is combined with parts of anthropology, sociology and psychology.

**Mass communications.** Communication has been fundamentally altered by the invention of instruments for the mass distribution of pictorial and linguistic forms and their subsequent control and exploitation by certain social institutions. The influence of this new force on advanced societies is the subject of the school's courses on mass communications theory and research. Methods are drawn from the social sciences, including sociology, psychology, and economics. The school also offers applied courses in journalism and television production.

<b>DIVISION I</b>	
PHILOSOPHY AND AFFIRMATIVE ACTION LC 102	Garfield
SOCIAL CONSEQUENCES OF MASS COMMUNICATION LC 104	J. Miller and staff
CHILDREN'S DRAWINGS LC 105	Knapp
UNDERSTANDING TELEVISION (proseminar)* LC 108	Muller Epstein
SEMINAR IN LINGUISTICS+ LC 111	TBA
CONVERSATION ANALYSIS, PART I LC 147	Tallean
CULTURE AND THOUGHT: A PSYCHOLOGICAL PERSPECTIVE (proseminar)* LC 152	Gearhart
RESEARCH METHODS FOR REPORTERS LC 174	Kerr
LANGUAGE AND LITERATURE (proseminar)* LC 177	Oce Berkman
THE PSYCHOLOGY OF HUMAN INTELLIGENCE (proseminar)* LC 187	Stellings
PERCEPTION AND KNOWLEDGE: SOME PHILOSOPHICAL PROBLEMS LC 191	Witherspoon
COMPUTER PROGRAMMING LC 193	Hanson
AMERICAN SIGN LANGUAGE AND ITS STRUCTURE LC 195	Shepard-Kegl
<b>DIVISION II</b>	
COMPUTATIONAL MODELS OF VISUAL PERCEPTION LC 202	Hanson
LANGUAGE, MYTH, AND THE FEMININE CONSCIOUSNESS LC 204	Tallean
STRINGS, TREES, AND LANGUAGES LC 206	Morah

PHILOSOPHY OF PSYCHOLOGY LC 208	Garfield
SCPTICISM LC 210	Witherspoon
SEMINAR IN MASS COMMUNICATIONS+ LC 211	TBA
SEMINAR IN LINGUISTICS+ LC 213	TBA
THEORY OF LANGUAGE: LINGUISTIC AND PSYCHOLOGICAL PERSPECTIVES LC 226	Gea Shepard-Kegl Stellings
CHILD LANGUAGE DEVELOPMENT LC 240	Knapp
COMPUTERS IN THE LAB: HARDWARE, SOFTWARE, INTERFACE LC 243 (NS 243)	Al Woodhull Hanson
WORKSHOP: THE MEDIA AND ENERGY CONSERVATION LC 253	Muller Meyers
OBJECTIVITY AND THE NEWS: FACT, INTERPRETATION AND FICTION LC 257	Lyon
SOCIAL INTERACTION IN THE CLASSROOM: THEORY AND OBSERVATION LC 264	Gearhart
<b>FOREIGN LANGUAGES</b>	
FRENCH I FL 101	Leete
SPANISH I FL 102	Nieto

\*Course description will be published in Course Guide Supplement

\* For course description see PROSEMINAR section in this Course Guide. Division I proseminars are intended primarily for new students; however, enrollment spaces also may be available for more experienced students.  
\*\* Two sections of this course are proseminars. See the descriptions under SCHOOL OF NATURAL SCIENCE.

# & COURSE LISTINGS

## SCHOOL OF NATURAL SCIENCE

Natural Science courses come in a variety of forms: lecture series; field and laboratory projects; and seminars. There are courses for students who are excited by science and ready to plunge into their subject and for students who are skeptical about the value of science. It is especially important for students to be clear about the distinction between Division I and Division II courses.

Division I courses are intended to help students to develop the skills necessary to pursue Division I projects. Instructors will introduce you to the problems and excitement in their fields and will help you acquire the methodology of exploration in science. Since these courses are geared to developing the critical skills necessary to test scientific thought, they usually involve a significant amount of written work. Division I courses also involve laboratory work, field projects, and/or reading of the primary literature with the close supervision and support of the instructors.

Division II courses may be divided into two categories. The first includes broad survey courses designed to introduce students to the traditional scientific disciplines. The second includes more advanced topical courses designed to allow students the flexibility to pursue their particular concentrations. Division II courses are a response to student needs, and many of the courses are student initiated.

It should be noted that many courses—physics, biology, calculus, chemistry, etc.—which are standard introductory courses at other colleges, are Division II courses. These courses are intended to give Division II students the skills they need to pursue their work. These courses are usually not well suited to introducing students to the strategy and tactics of science, and thus do not readily lead to Division I exams. Division I students with strong backgrounds may, with the instructor's permission, enroll in a Division II course. However, this should generally be with the understanding that s/he is already prepared to do a Division I Natural Science exam and will complete it during the semester.

Students are strongly urged to take one or more Natural Science courses to develop an examination. This is usually the most effective way for students to acquire the skills necessary to successfully pursue a Division I project. Students who arrive at Hampshire with a strong interest and background in science are especially encouraged to begin Division I projects as soon as possible.

Students from the other four colleges are welcome in our courses. We would like to encourage those students who have difficulty with science to try a Division I course.

### DIVISION I

SPACE SCIENCE: TOPICS OF CURRENT ASTRONOMICAL RESEARCH  
ASTFC 31

Irvine+

ASTRONOMICAL OBSERVATION  
ASTFC 37

Denni

EXTRATERRESTRIAL INTELLIGENCE  
NS 101

K. Gordon

ASTROPHYSICS I: STELLAR STRUCTURE  
ASTFC 43

Harrison+

EVOLUTION OF THE EARTH  
NS 107

Reid

HOLOGRAPHY AND OPTICS II  
NS 207

Van Blercke

ACID RAIN (proseminar)\*  
NS 116

William

ORGANIC CHEMISTRY  
NS 211

Leovy

TROPICAL MARINE ECOLOGY  
NS 117 (min1)

Van Raalte  
N. Goddard  
G. Goddard

AMERICAN ENVIRONMENTAL HISTORY  
NS 215 (1N 333)

Lutts

HUMAN BIOLOGY: TOPICS IN PHYSIOLOGY, MEDICINE, AND PUBLIC HEALTH  
NS 121\*\*

Foster  
Bruno  
N. Goddard  
Ann Woodhull

INTERPRETIVE NATURAL HISTORY  
NS 222 (OP 222)

Lutts

BIOPOLITICS  
NS 137

Gross

THE EVOLUTION AND BEHAVIOR OF DOMESTIC ANIMALS  
NS 230

Coppinger

NATURAL HABITATS OF NEW ENGLAND (proseminar)\*  
NS 147

Van Raalte  
N. Goddard  
Ann Woodhull

COMPUTERS IN THE LAB: HARDWARE, SOFTWARE AND INTERFACE  
NS 243 (LC 243)

Al Woodhull  
Hanson

TOPICS IN AGRICULTURE  
NS 149

F. Slater

CELL BIOLOGY  
NS 247

L. Miller

PHYSIOLOGICAL BASIS OF AGRICULTURE  
NS 150 (min1)

Coldhor  
Van Raalte  
F. Slater

PHYSIOLOGY IN STRENUOUS EXERCISE  
NS 248

Melichonda

WORLD FOOD CRISIS  
NS 151 (SS 122)

Coppinger  
Holquist

THE CALCULUS  
NS 260

Kelly

TOPICS IN EXPERIMENTAL DESIGN AND QUANTITATIVE THINKING  
NS 162 (SS 162)

Sutherland

MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS  
NS 261 (SS 265)

Hoffman

ENERGY CONSERVATION IN THE HOME  
NS 167

Bruno  
Williams

MODERN ALGEBRA  
NS 269

Hoffman

CONSERVATION OF NATURAL RESOURCES  
NS 182

Westing

BOOK SEMINAR IN PHYSICS  
NS 281

Bernstein

DIVISION II

STARS  
ASTFC 21

Greenstein+

BASIC PHYSICS II  
NS 283

Van Blercke  
Bernstein  
K. Gordon

THE ENTERPRISE OF SCIENCE: CASE STUDIES IN THE HISTORICAL DEVELOPMENT AND THE SOCIAL AND ETHICAL RELATIONSHIPS OF THE INSTITUTION OF SCIENCE TO OTHER INSTITUTIONS IN WESTERN CULTURE  
NS 286

Goldberg  
Lutts  
Rinard

\* Five College Astronomy Department Faculty

## SCHOOL OF SOCIAL SCIENCE

The faculty of the School of Social Science have worked to create a curriculum based on critical inquiry in a variety of problem areas which reflect their interest in social institutions and social change. The aim of such inquiry is not simply to describe society, but to understand the historical and philosophical bases as well as current values and structures. Accordingly, we have focused on overlapping interdisciplinary areas such as: political economy and history; psychology and individual development; social institutions; and women's studies. Although we also provide much of what is considered a traditional disciplinary curriculum, the clear direction of the School is to reach beyond the disciplines to a concept of social science that is a broader analytic approach to understanding societies and social change than any one discipline can offer.

Our faculty come from a variety of disciplinary backgrounds—anthropology, economics, history, law, political science, psychology, and sociology. However, the School's identity is shaped much more by emerging constellations of thematic interests and cooperative teaching than by traditional academic patterns. Most of us teach with faculty of different disciplinary backgrounds within the School of Social Science, from other schools in the College, and from outside the College, as well as with students. As a result, faculty and students can bring a variety of perspectives to bear on issues which are not common in academic structures limited by the disciplinary allegiance of their members. We have begun to understand the limits of the single discipline, and can claim success in interdisciplinary teaching. We are not yet able to present all the various disciplines in a meaningful synthesis, but that is an ideal that is reflected in our efforts to develop a broad and interesting range of courses.

### DIVISION I

HUMANITY: UNITY AND DIVERSITY  
SS 105

Click

CHANGE IN THE LEGAL PROFESSION: PERSPECTIVES IN LAWYERING  
SS 109

Fowlkes

PROBLEMS IN URBAN POLITICAL ECONOMY  
SS 113

Koga

POLITICAL JUSTICE (proseminar)\*  
SS 115

Mazor

PEASANT REVOLUTION AND VILLAGE SOCIETY IN MODERN CHINA  
SS 116

Johnson

SOCIAL CONTROL AND DISPUTE SETTLEMENT  
SS 122

Yngvesson

THE WORLD FOOD CRISIS  
SS 129 (NS 151)

Coppinger  
Cerullo  
Holquist

PSYCHOTHERAPY: DOES IT WORK? HOW DO WE KNOW?  
SS 132

Farnham

SOCIAL ORDER HERE AND THERE (proseminar)\*  
SS 140

van der Lippe

ATTITUDE CHANGE AND SOCIAL INFLUENCE  
SS 150

Poe

AMERICAN GOVERNMENT AND PUBLIC POLICY  
SS 212

Rakoff

ECONOMIC DEMOCRACY: ITS NATURE AND PRACTISE; WHAT A FULLY DEMOCRATIC SOCIETY MIGHT LOOK LIKE.  
SS 152

Benello

CAPITALISM AND EMPIRE: NEW ENGLAND AND AMERICA IN A GLOBAL PERSPECTIVE  
SS 214

Fitch  
Nisonoff  
H. Slater

CHICAGO AND NEW YORK: EXPERIENCING THE BIG CITY  
SS 159

Breitbart  
Rakoff

PROBLEMS IN THE PHILOSOPHY OF LAW AND JUSTICE  
SS 217

Mazor

TOPICS IN EXPERIMENTAL DESIGN  
SS 162 (NS 162)

Sutherland

THROUGH THE "LOOKING GLASS": A STUDY OF LAW AND SOCIAL PSYCHOLOGY  
SS 218

Fowlkes  
Poe

THE HISTORY OF THE FAMILY  
SS 165

Nahoney  
H. Slater

LABOR AND COMMUNITY  
SS 233

Breitbart  
Nisonoff

AMERICAN CAPITALISM (proseminar)\*  
SS 184

Warner

PHILOSOPHIES OF AMERICAN EDUCATION  
SS 234

Rose

DIVISION II

ADULT DEVELOPMENT  
SS 202

Farnham

AFRICAN DEVELOPMENT  
SS 257

Ford  
Holquist

RELIGION: A CROSS-CULTURAL PERSPECTIVE  
SS 206

Click

MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS  
SS 265 (NS 261)

Hoffman

OBSERVER AND OBSERVED IN LITERATURE AND ANTHROPOLOGY  
SS 208 (HA 209)

D. Smith  
Yngvesson

STATE AND SOCIETY  
SS 275

Bengelsdorf  
Cerullo  
Landes  
Mazor

INTRODUCTORY ECONOMICS  
SS 210

Weaver

WOMEN IN SOCIALIST SOCIETIES: THEORY AND PRACTICE  
SS 280

Bengelsdorf  
Landes

\* For course description see special PROSEMINAR section in this Course Guide. Division I proseminars are intended primarily for new students; however, enrollment spaces also may be available for more experienced students.  
\*\* Two sections of this course are proseminars. See the descriptions under SCHOOL OF NATURAL SCIENCE.

## 1980 FALL TERM COURSE DESCRIPTIONS

### SCHOOL OF HUMANITIES AND ARTS

- HA 101 DRAWING ONE-ON-ONE**  
Roy Superior
- An introductory, basic, elementary, beginning, primary, and initial investigation of fundamental, preliminary, rudimentary, amplified, maybe even remedial studies of the art of drawing, as investigated via exercises both timeless and innovative.
- Starting with the question of what is a pencil, we will rapidly move to what is a piece of paper and then face the complex issue of what is a line. Through exercises (diligently performed) we will explore aspects of: line quality, contour, modelling of form, illusions of space, pictorial organization, and elements of simple perspective.
- In addition to motor control coordination betwixt hand and eye, drawing involves the brain. Therefore, some exercises will deal with processes of thought and imagination. Emphasis will be given to perceiving whether or not the visual intent coincides with the graphic result.
- Many exercises must be approached more than once to be effective, so the students will be expected to have faith and energy to work hard outside of the class meetings which, incidentally, will be twice a week for two hours. Of course, you must provide your own materials and initiative.
- Although intended mainly for the novice, some advanced students should not rule out the possibility of having their batteries recharged. There is always a group critique and portfolio review for evaluation. Class limited to 10; first come, first served.
- HA 106 INTRODUCTION TO DIRECTING**  
TBA
- In this course we will begin to examine the directorial process. The main concentration will be on techniques and tools of direction, text analysis, working process with actors, identification of dramatic action, counterpoint, etc. We will spend time on identifying and understanding the role of the director and his/her responsibilities.
- The class will be structured as a "hands on" experience with the bulk of the work concentrating on scenework. Enrollment is limited to 10. Preference will be given to those students who have experience with acting. The permission of the instructor is necessary.
- This class will meet twice weekly for two-hour sessions.
- HA 110 FILM WORKSHOP I**  
Abraham Ravert
- This course is concerned with the film as personal vision; the film as collaborative effort; the meaning of thinking visually and kinesthetically; and film as personal expression, communication, witness, fantasy, truth, dream, responsibility, and self-discovery.
- The workshop will be concerned with production and seminar discussions, field problems, and research. Topics will include history and development, theories of film construction, camera, directing, editing, sound, narrative, documentary, experimental films, use and preparation, and Super-8 and 16mm production.
- The past seventy-five years have seen the motion picture rise to the position of an international language. It has transcended the bounds of entertainment to provide everlasting documentation of the world, its people and events. It has added scope and inclusiveness to every area of human activity. Our image and understanding of the world more often are gained through film and photographs than personal experience. The aesthetics and techniques of a medium so broad in implication should be understood by all.
- A \$20.00 laboratory fee is charged for this course. The College supplies equipment, special materials, and general laboratory supplies. The student provides his/her own film.
- The class will meet once a week for four hours. Enrollment is limited to 12; personal interview.
- HA 111 THE DESIGN RESPONSE**  
Wayne Kramer
- A study of theatrical design modes and concepts, the course will emphasize the creative response of the major design areas (scenery, lights, costumes, etc.). We shall also try to discover how the artist reacts to the script and translates that reaction into communication modes for other theatre artists and audience. We will look at color, texture, and line in theatrical design as well as the vocabulary of the designers.
- The class will meet twice a week for 1 1/2-hour sessions. Enrollment is open.
- HA 122 BEGINNING VOICE PRODUCTION**  
Donna Aronson\*
- This course in training the speaking voice deals with problems of breathing, production of tone, resonance, and articulation. Selections of prose, poetry, and dramatic literature will be covered in the course.
- The class will meet twice weekly for two-hour sessions. Enrollment is limited to 14, and permission of the instructor is required.
- \*Donna Aronson is Five College professor in theatre voice.

- HA 134a COLLEGE WRITING / UPDIKE: AN ALWAYS INDIGNANT JOY**  
Francis Smith
- We will read as many of John Updike's prose works as possible—short stories, critical essays, and perhaps a novel. We will also read criticism of Updike written by his contemporaries. His reputation is not yet sure; we will try to assess his achievements so far.
- Please understand that this is primarily a course in writing. The elements of style and other traditional rhetorical concerns will be fundamental matters in this course.
- Enrollment is limited to 25. The class will meet twice weekly for one-hour sessions plus tutorials to be arranged. First come, first served.
- HA 140 WAYS OF SEEING**  
Joan Murray
- Ways of Seeing will be based on slide presentations focusing on the works of artists from Delacroix to the present. The object will be to foster an ongoing dialogue between participants in the class regarding the ways artists see, how their work develops, and how understanding the formal visual elements in a work can bring the viewer to a fuller awareness of the aesthetic content and intention of the artist.
- There will also be an emphasis on the historical development of visual thinking in order to understand both what a given period meant artistically in its own time as well as how it is viewed today and its effects on artists today.
- The class will meet twice weekly. On Tuesdays there will be a lecture session which will be open to the public, and on Thursdays we will concentrate on the preparation and presentation of oral slide talks. The topics for the presentations will be chosen by students from a list of possibilities which the instructor will have available. Enrollment is limited to twelve.
- HA 145 THE MAKING AND UNDERSTANDING OF HUMAN ENVIRONMENT: APPROACHES TO DESIGN**  
Norton Juster and Earl Pope
- This course deals with the analysis and design of human environment—the ways in which human activities and needs find expression in forms and patterns that reflect and shape their lives. We will be concerned with a developed sensitivity to surroundings, an understanding of place, and the sense of the individual as an effective force in creating or altering his own environment.
- This is primarily a workshop course, using direct investigation, research, and design projects of a non-technical nature to confront and expose environmental problems and to understand the approaches and creative processes through which environment is made. The subject of these investigations includes: the identification of human needs, the functional and emotional concerns of environmental design—problem seeking and problem definition; the scale of human environment; creative synthesis—the leap to form; the translation of ideas, analysis, program and technical parameters into environment.
- Much of the work will require visual presentations and analysis; however, no prior technical knowledge or drawing skills will be necessary. The student must provide his own drawing tools. Projects and papers will be due throughout the term. This course demands both time and commitment.
- There will be two 2 1/2-hour meetings per week plus odd day sessions for special problems (to be mutually determined). Enrollment is limited to 12 to be selected by lottery.
- HA 150 STILL PHOTOGRAPHY WORKSHOP**  
Jerry Liebman and Elaine Mayes
- The photograph as art and communication—its production and implications.
- Photography has become one of the primary means of visual experience today. The directness and impact of the photograph makes an understanding of its techniques indispensable to the artist, teacher, and student. So varied is the use of photography in all areas of human endeavor that the need of a "visual literacy" becomes of basic importance.
- The course is designed to develop a personal photographic perception in the student through workshop experiments, discussions of history and contemporary trends in photography, and field problems to encourage awareness of the visual environment.
- A \$20.00 laboratory fee is charged for this course. The College will supply chemicals, laboratory supplies, and special materials and equipment. The student will provide his/her own film and paper.
- The class will meet once a week for four hours plus lab time to be arranged. Enrollment is limited to 15 students per section. (There will be two sections.) Personal interview.
- HA 161 THE PSYCHOLOGY OF THE BLACK EXPERIENCE: A JUNGIAN APPROACH**  
Charles Frye
- For the ancients, psychology was the central philosophical concern. Psychology was the Science of the Soul. Soul, with all its implications, is similarly the point of departure and arrival for this course. We will explore epistemology, aesthetics, and therapy—with "primitivist" psychology as its focus. Readings will be drawn from the works of Jung, Eliade, Neumann, Campbell, Yonon, Castaneda, Tutuola, and Harding.
- Class will meet twice weekly for two-hour sessions in the Enfield master's house. Class will be limited to 18 on a first come, first served basis.

- HA 178 BEGINNING SCENE STUDY**  
TBA
- This course is an introduction to the art and craft of acting. We will be working with techniques of relaxation, vocal production, physicalization and theatre games. The major emphasis on the scene work done in class will be on personalization—how to make a scene grounded in reality using the actors own feelings and experiences as a base.
- The class will meet twice weekly for two-hour sessions. Enrollment is limited to 12, and permission of the instructor is required.
- HA 180 THE WORLD OF FEDOR DOSTOEVSKY**  
Joanna Hubbs
- "Gentlemen, I am tormented by questions; answer them for me."  
—Notes From Underground
- The purpose of this seminar will be to determine what those questions are, how Dostoevsky formulated them, and why they tormented him so. Since I am a cultural historian rather than a literary critic, I will tend to focus on ideas—the philosophical and psychological aspects of the works and how they relate to the culture into which Dostoevsky was born—rather than questions of structure or style, which will be considered only in so far as they relate to the ideas themselves. I will begin with a series of lectures intended to introduce the author and to "place" him into the context of Russian mythic, cultural, psychological and historic currents. We will then read and discuss the novels (*Poor Folk*, *The Double*, *The Dream of a Ridiculous Man*, *White Nights*, *Crime and Punishment*, *The Possessed*, and *Brothers Karamazov*). Discussions will be supplemented by occasional lectures given by student participants on chosen topics, both historical and literary; for example, discussions of some aspects of Dostoevsky's work as it relates to other Russian or European writers of the period, or a presentation on the history and nature of Russian Orthodoxy, or on the life of the peasant.
- This course has a heavy reading load to which is added the burden of three short papers and/or a short lecture as described above. Those who feel some hesitation in committing themselves to so much reading (the longer novels, *Crime and Punishment*, *The Possessed*, and *Brothers Karamazov* average 600 pages) are encouraged to stay clear!
- The class will meet three times a week: twice with me and once with a student discussion leader. Enrollment is limited to 16 students; first come, first served.
- HA 114/214 WRITING**  
Nina Payne
- By means of exercises that draw on personal history, family anecdotes, life experience in general, students will spend class time in the process of writing. The work will be intense in quality and varied in form. Emphasis will be on stretching one's resources as a writer and deepening them at the same time. There will be readings from a variety of sources including the work of poets, writers, visual artists, performing artists, and when they choose, members of the class. Tutorials will be available to all participants.
- The class will meet once a week for three hours. Enrollment is limited to 15, and the instructor's permission is required.
- HA 115/215 STUDIO EXPERIENCE IN DANCE**  
TBA
- This course in dance technique will deal primarily with the physical discipline behind dance and movement and the physicality of relaxation and release within movement.
- There will be two sections—a beginning class and a class combining intermediate and advanced. Each section will meet twice weekly for 1 1/2-hour sessions. Enrollment is limited to 20 in each section.
- HA 123/223 EXPLORING SEXUALITY**  
Linda and Graham Gordon
- Many of us live with assumptions and fears about our sexuality as we have not had the opportunity to share and explore our feelings with others. In this course we will take the time to do some exploration and also to seek reference points from those who have gone before. We will particularly utilize the insights of Gestalt therapy, Jung and Erik Erikson to inform our exploration. Through reading, discussion, film, fantasy, self-reflection, and work in a group, we will attempt to clarify our values, thoughts and feelings on this topic which has such profound effect on all of us.
- Entrance to this class is by interview with one of the instructors. Enrollment is limited to 16. We will meet twice weekly for two-hour sessions. Enrollment by instructor selection.
- HA 126/226 BODYMINDWORK: MORNING PRACTICE**  
Francis McClellan
- This class in movement fundamentals (focusing primarily on finding and using breath, ki, and connectedness in motion) is derived from the work of Ingrid Isakowitz, integrating principles from Laban, martial arts, energy awareness, and dance.
- Through movement, observation and partner work, concepts of dynamic alignment, kinesthetic awareness, use of breath, support, movement initiation, lower body support, upper body freedom, differentiation of body units, weight shift and the relationship of body and spatial configurations will be explored. We will relate this work to various bodymind and dance practices as student interest indicates and to efficient energy use in daily life.
- In order to facilitate integrations of the material on a physical level, the class will include journals, short papers and readings. Enrollment is open to all levels of experience. The class will meet twice weekly for 1 1/2-hour sessions.

# COURSE DESCRIPTIONS

HA 127/227 **SONDHEIM AND COMPANY: A MUSICAL THEATRE SEMINAR**  
David Cohen

An exploration of the musical theatre artistry of Stephen Sondheim. After an apprenticeship as lyricist for *West Side Story*, *Coppy*, and *I Hear a Waltz*, Sondheim has emerged as one of the most original, exciting, and influential composer/lyricists of contemporary American musicals. From *Form to Sweeney Todd*, he and his collaborators have consistently experimented with both form and content to produce a theatre of dazzling vision and unsurpassed artistic quality.

Through recordings, readings, and seminar reports, we will focus on dramaturgical and production techniques, as well as historical and thematic concerns. Through exploration of one artist's approach, it is hoped that we may develop a greater understanding of the craft of musical theatre.

Student projects for the seminar will also include performance of songs and scenes, designs for sets and costumes, and critical evaluations of musical and literary content. A workshop production of Sondheim material is planned for December as a direct outgrowth of the seminar.

Enrollment is limited to 16. Permission of the instructor is required. We will meet twice weekly for 1 1/2 hours.

HA 131/231a **POETRY WRITING WORKSHOP**  
Andrew Salkey

This course will emphasize the principle that all our workshop poetry writing should be done primarily for the reception and delight of our own workshop members and with them uppermost in mind, for after all we are our very first audience and group approval is vitally important as a source of confidence. Our poets should be reminded that being attentive readers and listeners to the work of other poets in the group is essential practice; and, of course, our readership and audience will grow and move outwardly as we grow and move along as poets.

The workshop will be a forum for the relaxed reading of poems produced by its members. We will pay the closest possible critical attention to the prosody and meaning of class manuscripts, and that ought to be done informally but without loss of tutorial effect. We will emphasize the evidence of latent strengths in the work of the poets and attempt sensitively to analyze their more obvious weaknesses, more often privately than in group sessions.

We will strive to respect the talents of the poets and resist all inducements to make them write like their mentor (that is, either like the external model of their choice or like their instructor or like the outstanding class poet).

Suggested parallel readings will come from the full range of contemporary writing in verse.

The class will meet once a week for 1 1/2-hour sessions. Enrollment is limited to 16, and permission of the instructor is required.

HA 163/263 **FICTION WRITING WORKSHOP**  
Andrew Salkey

This workshop will emphasize as its guiding principle that all our workshop fiction writing should be done primarily for the reception and delight of our workshop members and with them uppermost in mind, for after all we are our very first audience and group approval is vitally important as a source of confidence. Our writers should be reminded that being attentive readers and listeners to the work of other writers in the group is essential practice; and, of course, our readership and audience will grow and move outwardly as we grow and move along as writers.

The workshop will be a forum for the relaxed reading, however extended, of short stories, novels-in-progress, plays, and other expressions of fiction produced by its members.

We will introduce and develop the necessary skills with which our writers will learn to regard, examine, and write fiction as a display of the imagination in terms of narrative, characterization, intention, and meaning; and those elements will be studied closely, not so much from approved external models as from the written work of our own class.

We will try to demonstrate that the practice of fiction ought to be manifestly about the creative description of human relationships in society, in spite of our quicksilver flights of imagination.

We will encourage both on-the-spot oral critical analysis and considered manuscript-reviewing. We will, at all times, allow the writing and lively analytical discussion of all forms of literary composition within the genre of fiction, however experimental, however idiosyncratic; our fiction writers will be encouraged to take any literary risk they may feel to be important to their development.

The class will meet once a week for 1 1/2 hours. Enrollment is limited to 16, and permission of the instructor is required.

HA 207 **ADVANCED STUDIO FORUM**  
Joan Murray

This course is intended for students with a highly developed level of visual understanding which can be clearly exemplified in their own work. The continued growth of critical understanding will be one of the major purposes of the course. There will be brief slide presentations on relevant art movements. The students' own work will presumably continue in conjunction with whatever is assigned as part of the class, neither replacing the other.

Guest critics may be invited to critique student work or to lecture, depending on the amount and quality of work as well as the level of student interest.

The class will meet once a week for 2 1/2 hours. Enrollment is limited to 15 students, and an interview with the instructor is required.

HA 210 **FILM WORKSHOP II**  
Jerry Liebling

A workshop to help the student continue to develop his/her use of film toward the development of a personal vision. Specific areas of concern are: (1) the film as a tool for environmental and social change; (2) aspects of the experimental film, its aesthetic energy, and personal vision; and (3) expanded cinema—new movements in film aesthetics.

The course will involve lectures, field work, seminars, and extensive production opportunity. It is for students who have completed film, photography, or TV classes in Basic Studies, or their equivalent—or permission of the instructor.

There will be a lab fee of \$20.00. The class will meet once a week for four hours. Enrollment is limited to 12. Personal interview required.

HA 213 **EFFORT/SHAPE: LANGUAGE OF MOVEMENT AND OBSERVATION**  
Francis R. McLellan

This course will be based on Rudolph Laban's research in movement analysis, Effort/Shape:

"Movement is a reciprocal link between man's mental, spiritual, and physical life... (It) is more than a component of the chain that links man's inner activity and the world around him, for it is the medium through which he actualizes his responses. It is through the movement of other people and objects that man refines and expands his knowledge of the world... Thus the study of movement is essentially concerned with a person in relation to the world and the people around him."—Thornton on Laban

Effort/Shape analysis:  
• is a technique for describing, measuring, and classifying human movement;  
• describes patterns of movement which are constant for an individual and which distinguish him from others;  
• delineates a behavioral dimension related to neurophysiological and psychological processes.

The work in this course will allow students to begin to work with the elements of movement and will also provide the class with basic tools of movement analysis, observation, and notation. In addition to becoming familiar with basic Effort/Shape parameters of movement, efforts and shapes, students will be able to discover and examine their personal movement preferences with the potential for expanding their own repertoire and understanding how their movement serves them (alone and with others).

The course will hopefully bring together students from varied disciplines. We will combine theoretical research and experimental work with the application of this knowledge (during the last month) in an area of relevance (for example, movement in education, non-verbal communication, movement therapy) to the students participating in this course.

Throughout the term, readings and observation projects will be assigned.

The class will meet twice weekly for two-hour sessions. Limited to 15 students, and discussion with the instructor is required.

HA 219 **THE FICTION OF HISTORY: HISTORICAL TRUTH AND IMAGINATIVE INVENTION IN THE NOVEL**  
Robert Marquez

"In its earliest uses," writes Raymond Williams in *Keywords*, "history was a narrative account of events... the sense, ranged from a story of events to a narrative of past events." In early English use, *history* and *story*... were both applied to an account either of imaginary events or events supposed to be true. "Fiction," the same author tells us, "has the interesting double sense of a kind of IMAGINATIVE LITERATURE and of pure (sometimes deliberately deceptive) invention."

There is a sense in which the original protean quality of these two concepts, fiction and history, is still with us. Indeed, the contemporary significance of a concept such as *ideology*, one could argue, has even given the range of connotation to which Williams refers a new currency and vogue. Nowhere is this more apparent than in the growing popularity, throughout the world, of the historical or historical/political novel. More than any other genre, the historical novel relies on this connective fluidity of meaning to beguile the reader and achieve its intended effect. Its success—as novel and convincing ideological statement—depends largely on the writer's ability to make persuasive use of the gray area between "events supposed to be true" and "pure (sometimes deliberately deceptive) invention."

This course, turning precisely to the relationship between the extremes, will explore the specific nature of the historical novel. Through close analysis of representative examples of the genre, we will examine some of the issues implicit in the definitions quoted above. We will also seek to identify the range of devices and techniques the writer of historical fiction uses to effectively recreate the dynamic in which, as Georg Lukacs argues, "certain crises in the personal destinies of a number of human beings coincide and interweave with the determining context of an historical crisis." The relationship of the devices themselves to an author's subjective vision of his own historical period will, of course, be an integral part of our more general concerns.

Our texts, which will include both "classic" and contemporary works, will be drawn from the literary canon of Europe, Africa, and the Americas, and will include, among others, Dickens' *Tale of Two Cities*, LeMauvais' *The Legend*, V. S. Reid's *How Day*, Cervantes' *Explosion in a Cathedral*, and Achebe's *Things Fall Apart*.

The class will meet twice weekly for 1 1/2-hour sessions. Enrollment is open.

HA 225 **PHOTOGRAPHY WORKSHOP II**  
Elaine Mayes

A workshop to help students continue to develop their creative potential and extend the scope of their conceptions in dealing

(continued)

with photography as personal confrontation, aesthetic impressions, and social awareness.

Through lectures, field work, and seminars, students will attempt to integrate their own humanistic concerns with a heightened aesthetic sensitivity. Through the study of a wide variety of photographic experiences and the creation of personal images, the students can share a concern for the possibility of expression and the positive influence photography can have upon the aesthetic and social environment.

This course is for students who have completed photography, film, or TV classes in Basic Studies or their equivalent—or by permission of the instructor.

There will be a lab fee of \$20.00. The class will meet once a week for four hours. Enrollment is limited to 12 students. Personal interview required.

HA 230 **THE ANCIENTS AND THE MODERNS**  
Mary Russo

The idea of Modernity is not new. Modernity has a history and its history has been shaped, in part, by the ideology of "modernism" itself from the Renaissance onward. The idea of Humanism, similarly, has a past that has little to do with sensitivity and much to do with the consolidation of wealth and cultural influence. At one level, this course is about the historical conceptions and misconceptions around being "modern" and "human."

It is also intended as an introduction to the study of history and literature as they are both embroiled in the wars between the Ancients and the Moderns (sometimes called the battles of the books). These cultural "battles" and "wars" were not waged exclusively in libraries, of course, and a part of this course is dedicated to understanding the nexus between social and cultural struggles.

The course will be organized into three sections corresponding to three historical conjunctures: the Italian Renaissance; the eighteenth century in England and France; and the first decades of the "avant-garde" in twentieth-century Europe and America. Each student will be encouraged to "major" in one area or to integrate divisional work into class discussions. Since the questions of modernity and humanism are hotly debated in recent feminist and radical (marxist and post-structuralist) writings, theoretical direction will be given individually and in class, although the focus of the course is on reading literary and some historical texts.

Enrollment is open, but students should discuss their experience with the instructor. Summer readings lists are available. Class will meet for 1-1/2 hour sessions twice a week.

HA 231b **POETRY WRITING WORKSHOP**  
Barry Goldensohn

This course will be a group independent study with a double commitment—to both writing and criticism. In practice this means that workshop members have as profound a commitment to reading one another's works as to their own. The goal of this is to develop a self-critical attitude toward one's own writing since we are notorious for seeing faults and occasionally strengths in others before we see them in ourselves. We learn indirectly, but we do learn.

Poems will appear on worksheets that will be available a few days before each class. Work is due each week. Readings will be assigned. A critical essay on a subject of the student's choice is required.

The class will meet twice weekly for 1 1/2 hours. Enrollment is limited to 12 and instructor approval is required. Students wishing to enroll should submit a manuscript to the instructor during the course interview period. Division I students may be admitted with the instructor's permission.

HA 234 **CAMUS**  
Robert Meagher

Several years after his death, Susan Sontag wrote of Camus: "He has aroused pity and terror, joy and admiration, Proust and Gide respect, but no writer that I can think of, except Camus, has aroused love."

This course will address itself not to this remarkable man but to his works, which offer not only a pitiless perception of the evil genius of our times but a vision of rare compassion and integrity. We will read and consider all of Camus' major works, ranging from philosophy to fiction to drama.

Enrollment is open. The class will meet twice weekly for 1 1/2-hour sessions.

HA 236 **AMERICAN LITERARY REALISM: MARK TWAIN, HENRY JAMES, STEPHEN CRANE, THEODORE DREISER**  
Richard C. Lyon

Following the Civil War, writers of fiction in the United States mounted a rebellion against the sentimental, protean, and optimistic genres of literature. The Realists sought not only to capture in their works the look and feel, the sounds and atmosphere of everyday American life. They wished also to record their dismay (in various ways—angry, satiric, despairing) in the face of the injustice, inequality, and violence which the new democracy and economic exploitation brought with them. Realist fiction thus manifests a double intention: a renewal of the imagination which will also be a renewal of social vision.

We will read several works of short fiction and novels by each of these writers, noting the different ways in which each of them reaches with the public and private crises of their lives and their times.

The class will meet three times a week for one-hour sessions. Enrollment is open.

SCHOOL OF LANGUAGE AND COMMUNICATION

HA 246 AUTOBIOGRAPHY AS AN AMERICAN GENRE  
James Natlack

Autobiography and personal narrative have had a central role both in shaping and expressing American culture from the beginning. In the earliest generations such narratives customarily documented God's dealings with an individual soul and His Providence toward the colonists on the American frontier (e.g., Bradford's *Plymouth Plantation*). By the eighteenth century, a new nation and people believed (or said we did) that each person had the opportunity to develop free from the rigid social, political, and religious constraints of old Europe. In such an era written accounts of prominent lives were important evidence of the success of the American experiment (e.g., Ben Franklin). The "biography" of the person embodied the development and values of the whole people.

Against this tradition of the "self-made" success story in the nineteenth century (e.g., Andrew Carnegie) appear remarkable autobiographies of artistic and philosophical revolt (Thoreau's *Walden*; Whitman's "Song of Myself"); of noble "failures" (Henry Adams); and of the counter experience of women, blacks, and others (Frederick Douglass, Charlotte Perkins Gilman, Booker T. Washington, W.E.B. DuBois, Black Elk). In the twentieth century come a profusion of private lives and public "failures"—some a profusion of private lives and public "failures"—each delineating aspects of the American culture in which they lived.

This course will attempt an overview of this rich, important genre as well as an examination of the nature of autobiography, the process of telling one's own story or creating it, and history. There will be some choice in reading assignments and in written work/projects. Some prior acquaintance with American literature and/or history is recommended.

Enrollment is limited to 20. There will be two class meetings per week, 1 1/2 hours each. The class will rely on a discussion format with heavy reading load and consistent class participation is expected of enrolled students. Enrollment is on a first come, first served basis.

HA 248 INTERMEDIATE SCENE STUDY  
TBA

In this course we will continue to examine the art and craft of acting. The major emphasis will be placed on identifying objectives and learning to pursue them in an active and exciting way. We will work mainly on realistic and naturalistic scenes. Another component of the class will be work on Shakespearean scenes to further the actors' mastery of language.

This class will meet twice weekly for two-hour sessions. Enrollment is limited to 12 and permission of the instructor is required. Students interested should have already taken a beginning scene study course or the equivalent of the college level.

HA 250 MODERN DRAMA AND "REALITY"  
Clay Hubbs

Drama is a direct imitation of the actions we find in life, thus it is realistic. But drama is also art, a constructed and conventionalized imitation of life. In the late nineteenth century there was a movement, of which Ibsen was one of the leaders, to rid the theatre of historicism and transparent artifice and replace them with an acting style that seemed more natural and with plays which, while still carefully constructed, depended less on mechanical contrivance. Realism was the basis of Stanislavsky's practice and greatly influenced American practitioners of the Method.

Realism has carried the day. We are accustomed to relating a scene or a play to some broader social context. The slice of life, after all, comes from a whole loaf, and our awareness of that whole loaf lends a sense of "reality" to the stage event. But there is a second source of "reality" in the act of presence itself. In the structure of the action scene by action—a reality which the actor projects by the expenditure of energy in an organized manner, recurrent activities. In *Commedia dell'Arte* each character type had a repertoire of speeches and routines into which they were put together. These set pieces in themselves strike a chord of "reality," a theatricalized "reality." That's why they still survive.

The tension between these two main sources of "reality" in the drama will be at the back (and sometimes at the front) of our study of modern and contemporary plays, ranging from Ibsen and Chekhov to Genet and Pinter. We will study the "theatricalism" of Chekhov as well as that of Strindberg and Artaud in an attempt to avoid or at least question labels and, by finding our own best methods of analysis, obtain reading performances of individual plays.

Students will be asked to write on each play and present some of their work to the class. Meetings will be for one and a half hours twice a week. Enrollment is limited to 16 Division II concentrators on a first come, first served basis.

HA 251 HEGEL I  
R. Kenyon Bradt

This course will be the first half of a year-long study of Hegel's logical system, including his *Phenomenology of Spirit*, *Science of Logic*, and *Encyclopedia of the Philosophical Sciences*. The design of the study is to provide an introductory conception of the full embrace of the movement of the logical system and the opportunity to read in depth selected portions of its development from the *Phenomenology* through the *Encyclopedia*.

The class will meet once a week for 3 hours. Enrollment is open.

HA 258 HEIDEGGER'S BEING AND TIME  
R. Kenyon Bradt

This course is to be a study of Martin Heidegger's *Being and Time*. Its work simply is to be as thorough a reading of *Being and Time* as the time of a term will allow.

The course is to meet twice a week for 1 1/2 hour sessions. Enrollment is open.

HA 269 ORIGINS OF ROMANTICISM  
Joanna Hubbs

The counter culture of the 1960's popularized the challenge of the irrational—the intuitive—and emotional aspects of human nature—to the autocratic hegemony of rationality, of "law and order." In many of its manifestations—the search for esoteric wisdom, the turn toward Oriental religions, magical practices, and the general exultation of creative faculties—this rebellion against established order took many of its guiding precepts and expressed aspirations from an earlier revolution which had also recoiled from the constraints of reason.

Our concern in this seminar will be to look at the relationship of eighteenth-century (Enlightenment) thought, rooted in a quest for certainties arrived at through reason alone, to the Romantic movement with its stress on the creative, the individual, and the transcendental, which succeeded the Enlightenment. Our approach to a study of the relationship of these two movements will be through an examination of the philosophical thought of the eighteenth century as reflected in the French and German novel. We will consider this then-emerging literary genre first as a vehicle for the ideas of Enlightenment thinkers and then which attempts at building a world view on the basis of rationalism and empiricism alone led to the "irrational" conclusions of the Romantic rebellion.

Reading list: Montesquieu, *Persian Letters*; Voltaire, *Candide*; Rousseau, *Nouvelle Heloise*; Laclot, *Liaisons Dangereuses*; Sade, *Justine*; Goethe, *Sorrows of the Young Werther*; Faust; Chateaubriand, *Rene*; Coleridge, *The Pantismonist*; Beckler, *The Heavenly City of the Eighteenth-Century Philosophers*; Hampson, *A Cultural History of the Enlightenment*; Cassirer, *Rousseau, Kant and Goethe*.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 20. First come, first served.

HA 280 STUDIO ART CRITIQUE  
Roy Superior

This class will focus on faculty-student discussion of Division II studio art work. The level of competence will be that of Division II concentrators. Outside critics will be invited to participate if the quality and quantity of work warrants it.

The class will meet once a week for three hours. Enrollment is limited to 15 Division II concentrators on a first come, first served basis.

HA 289 SHAKESPEARE AND WOOLF  
L. Brown Kennedy

Lovers and mad men have such searching brains, Such shaping phantasies, that apprehend more Than cool reason ever comprehends. The Lunatick, the Lover and the Poet. Are of imagination all compact. — *A Midsummer Night's Dream*

In the first part of the course we will read Shakespeare (*Twelfth Night*, *As You Like It*, *Love's Labour's Lost*, and possibly *Hamlet*) and in the latter part Virginia Woolf (*Mrs. Dalloway*, *To the Lighthouse*, *Orlando*, *A Room of One's Own*, and selected essays).

Our main focus will be on the texts, reading them from several perspectives and with close attention to their widely different literary and cultural assumptions. However, one thread tying together our work on these two authors will be their common interest in the ways human beings lose their frame of reference and their sense of themselves in madness, love and find their selves in love or in sexuality, and find or make both self and world in the shaping act of the imagination—in writing, in poetry, or in art.

Students will be asked, accordingly, to themselves give shape to three or four short papers.

The method of the course will be directed close reading, discussion, and periodic lecture. The class will meet twice weekly for 1 1/2-hour sessions. Enrollment is limited to 25 on a first come, first served basis.

HA 297 HISTORY OF FILM/PHOTOGRAPHY  
Abraham Ravett

This is an introductory course in the history of film and photography. Through slide lectures, film showings, extensive readings, and class discussion, the course will relate film and photography to art, technology, philosophy and general cultural concerns. Emphasis will be given to selected work and history of individual photographers and filmmakers.

Enrollment is open. The class will meet once a week for three hours.

HA 299 PLAYWRIGHTS' WORKSHOP  
David Cohen

This course will focus on the craft and the process of writing for performance.

Functioning as a workshop, we will attempt to foster a supportive yet critical atmosphere for our writing. A large part of the learning will be a direct result of weekly readings of new script pages. Readings (plays, theory, etc.) will be assigned but the emphasis is on the actual writing. Plays by members of the workshop (as well as by former members) will receive primary consideration for production during the NEW PLAY FESTIVAL in April.

This course is appropriate for both beginning and experienced playwrights. Fiction writers and poets, as well as Five College students, are especially welcome.

The workshop will meet once a week for three hours. Enrollment is limited to 12 and instructor permission is required. Students wishing to enroll are requested to submit a manuscript (any creative writing) to the instructor during the course interview period. Division I students may be admitted with the instructor's permission.

LC 102 PHILOSOPHY AND AFFIRMATIVE ACTION  
Jay Garfield

Recent attempts to correct the injustices of sexism and racism through affirmative action or preferential hiring and admissions programs in corporations and universities have raised a storm of controversy, both legal and philosophical.

Supporters of such programs argue that they are necessary and justifiable means to rectify past wrongs; to bring about a fair distribution of society's goods; and to enhance the quality of our community through increased representation of minorities and women at all levels and in all sectors of society. Opponents, however, claim that the programs are unjust in that they discriminate against whites and males who have had no part in perpetrating the injustices the programs are meant to correct; that they allot equally qualified applicants unequal chances to secure society's goods; that they lead to the hiring and acceptance of inferior candidates over superior ones; and that these programs are contrary to the equal protection clause of the Constitution. Cases such as *Beber vs. United Steel Workers*, *DeFuria vs. Organoids* have focused on these issues, but have done little to resolve the controversy.

In this course we will consider this controversy both in the academic and the employment arenas. We will read two principal cases, *Beber* and *Leber*, and a number of relevant philosophical and legal essays. The class will be divided into teams to argue these cases. Students' briefs will serve as the written work for the course. The class will meet twice a week for 2 hours each session. Enrollment is limited to 20 by permission of the instructor.

LC 104 SOCIAL CONSEQUENCES OF MASS COMMUNICATION  
James Miller and Staff

Widespread use of the media of mass communication—newspapers, the cinema, radio, and television—is a common element in modern social life. This use has brought about a variety of changes in human behavior at the individual and collective levels. This seminar will address one example of the consequences of the use of mass communication. The second instructor will be a newly hired member of the Language and Communication faculty. His or her interests will determine the exact subject of the seminar, which will be announced later.

LC 105 CHILDREN'S DRAWINGS  
Deborah Knapp

Children's drawings mirror their knowledge of the world. We will use child art to gain insights into cognitive development. Among the topics to be covered are these:

- From scribbles to representation—when and why do children draw pictures "of something"?
- Units and sequence in children's drawings—why are stick figures a universal first stage? How do children conceive of the parts of the human figure?
- Geometric shapes—why do preschoolers draw circles for triangles?
- Spatial perspective—horizon lines; portraying objects behind or farther away than other objects; taking a constant point of view.
- Creativity—are children more creative than adults?

Students are urged to dig out the drawings they made as children and bring them to class. In addition, we will have some child visitors draw for us, and each student will complete a mini-research project which will involve collecting examples of child art.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20, to be determined by lottery at the first class meeting.

LC 167 CONVERSATION ANALYSIS, PART I  
Janet Tallman

In this class we will begin to examine the patterns that we use in everyday speech. Most of our work will consist of taping, transcribing, and analyzing conversations between ourselves and friends or family. In our analysis we will look at the influence of group size, gender composition, and relationships on the speech, by looking at specific features in the conversations. In addition to this close examination of our own conversations, we will begin to study theoretical and methodological factors involved in analyzing conversations, and do readings which apply to these issues.

Enrollment is open. Class meets for two hours twice a week.

LC 176 RESEARCH METHODS FOR REPORTERS  
David Kerr

This course will introduce students to the comparatively recent emphasis in the Journalism profession on the application of social science research methods to reporting. We will explore some of the criticisms of the press which led to this development, study a variety of research methods and discuss their application, and apply these methods in the field.

The primary texts for this course will be Philip Meyers' *Precision Journalism* and William L. Rivers' *Finding Facts*. That and other readings will introduce the student to survey research, economic analysis, unobtrusive measures, and other research methods which can add to the journalist's competence.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 15 spaces reserved for entering and Five College students, or others, by groups chosen by lottery at the first class meeting (if necessary).

# COURSE DESCRIPTIONS

**LC 191 PERCEPTION AND KNOWLEDGE: SOME PHILOSOPHICAL PROBLEMS**  
Christopher Witherspoon

In this seminar we will work on several classical philosophical issues. These concern the nature and possibility of perceptual knowledge; the nature of seeing, and more generally, of perception; what it is that we perceive, and what if anything we perceive without the mediation of inference, construction, etc. how we should understand sense-experience and its constituents.

We will begin by discussing sections from Bertrand Russell's classic *The Problems of Philosophy* and some dissenting views of later philosophers stated in articles in Swartz's anthology *Perceiving, Sensing and Knowing*. The central part of the seminar will consist of critical discussion of parts of two recent books which present some important contributions to the debates on the issues mentioned above, Jackson's *Perception and Chisholm's Theory of Knowledge* (2nd edition). The last part of the seminar will consist mainly of studies which should represent a fair share of the Division I examination work of many of the participants.

Each student will be expected to give a seminar presentation (perhaps jointly with other students) and to write two papers of 3-8 pages. The seminar will meet twice a week for 1 1/2 hours each time. Enrollment is limited to 12, by lottery.

**LC 193 COMPUTER PROGRAMMING**  
Allen Hanson

Computing has grown from virtually nothing just thirty short years ago to a position of one of the world's largest industries and this rapid expansion shows few signs of slowing down. The implication is that there can be few people, at least in the industrial countries, who will never have any contact with computers. It seems clear that everyone should have a basic understanding of what computers are, how they are programmed, and how they are used, if for no other reason than self-protection.

The focus of this course is in developing this basic understanding through the programming language PASCAL. We will examine the question of what constitutes a program and how programs are written, since any use of the computer requires at least a simple program. The ability to program provides a powerful intellectual tool which can be brought to bear on numerous other activities. If you want to experience the joys and frustrations of computer programming, if you have an intellectual curiosity about computers, or if you'd like to see what your next semester of computers is justified, then this course is for you. No previous programming experience is required, nor is any mathematical maturity assumed.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 30, with lottery if necessary.

**LC 195 AMERICAN SIGN LANGUAGE AND ITS STRUCTURE**  
Judith Shepard-Kegl

This course incorporates two subject areas: (1) a study of how one approaches American Sign Language (the language of the deaf community in the United States) from a linguistic point of view; and (2) an introductory course in American Sign Language (ASL).

In the linguistics of ASL we will examine how one would begin to write a grammar of ASL. This will include certain linguistic tasks such as determining what are nouns and verbs in ASL, how sentences are realized, how notions like subject and object are marked, and how grammatical processes in this language can be stated within various linguistic theories. We will discuss the previous linguistic research as well as learn to analyze the language ourselves. There will be practice solving problems in the phonology and syntax of ASL. We will examine the language through papers on ASL, textbooks, and videotapes of signing. Deaf informants will be available. Our major linguistic textbooks will be *Deafness and Deafness: An Introduction to Language* by R. Wilbur, *American Sign Language and Sign Systems*.

For those who have had no previous contact with ASL or who wish to study it from another perspective, an introductory course in ASL will be provided. This course will be designed to complement the linguistics course. It will consist of conversational practice with a grammar, vocabulary, and a gradual building up of one's receptive abilities in ASL through the use of videotapes. The textbooks to be used are *American Sign Language* by Harry Hoemann, and a series of handouts and exercises designed by the instructor.

No previous knowledge of ASL or linguistics is necessary. The course will meet twice a week for two hours each session, and materials will be provided for practice in the language lab. It will be organized such that those with previous knowledge of ASL can opt for only the linguistics if they choose to do so. However, everyone is encouraged to take the full course. Enrollment is limited to 25, chosen by instructor's interview.

**LC 202 COMPUTATIONAL MODELS OF VISUAL PERCEPTION**  
Allen Hanson

During the past decade an area of computer science now known as artificial intelligence has emerged as an intellectually important discipline. Artificial intelligence (AI) views the computer as a complex information processing device; the central goal of AI is to understand the principles of intelligence and, by doing so, to make computers more useful. In the cognitive sciences, many people are drawing on these general notions in order to understand human thought from an information-processing point of view. If computers and people depend on the same fundamentals of intelligence, then AI must be a rich source of metaphors and analogies relevant to studying natural intelligence. Thus, theories of perception, language, and the like developed in this joint context are likely to be more precise because of the detail with which they must be stated.

The purpose of this course is to develop a snapshot of how computers can provide an experimental environment in which theories can be constructed and tested, experiments performed, and results obtained. The area chosen to explore is visual perception. How is it that we can get a computer to see and what can we learn from such an exercise. We will examine the problems of machine cognition of visual patterns and the relationship of this approach to the perceptual abilities of people. The course will focus primarily on the computer aspect of perception; how

a computer can process visual information, what kind of knowledge is necessary in order to interpret this information, and what the information processing structures of these kind of models look like. Readings will be drawn from the current literature in artificial intelligence and cognitive psychology. Enrollment limited to 15, with permission of the instructor. Class will meet twice a week for 1 1/2 hours each session.

**LC 204 LANGUAGE, MYTH, AND THE FEMINE CONSCIOUSNESS**  
Janet Tallman

Do men and women think in separate ways? Can this be seen in the languages we use? Does language restrict us to certain ways of thinking that can be described and examined in the study of ordinary speech? Do men control women through the political control of speech? Can we use other symbol systems to break out of patterns imposed by language?

Each of these questions opens up many complex and intriguing pathways in the study of language, thought, and the social order, and each has been addressed in different ways by many writers and theorists. In this class we will begin to form answers to these questions through intensive reading and discussion.

At the beginning of the term we will study the nature of thought and the separation of the conscious mind from the unconscious. We will move to an examination of the place of language in the formation of thought, and of the importance of myth and other nonverbal symbol systems to the development of communications. We will then look at recent writings on male and female thought patterns, specifically examining how language is used in the formation of separate awareness. Finally, we will examine formal influences on language and thought, especially as they allow for or inhibit social change.

The emphasis in this course will be on extensive readings. Theorists and writers whose work we will examine include S. de Beauvoir, B. L. Moore, J. S. Vygotsky, Erich Neumann, K. Horney, E. Cassirer, G. Orwell, E. Sapir, B. Thorne and N. Henley, N. Ochorow, and D. Agre. Some of the readings will be drawn from the social sciences, some from literature, some from recent feminist theory. We will read 100 to 200 pages a week.

This class will be open only to 20 students who have completed Division I examinations in Language and Communication before Fall Term begins. No other requirements will be used in the selection by the instructor. Class meets for two hours twice a week.

**LC 206 STRINGS, TREES, AND LANGUAGES**  
William Marsh

This is a course in beginning mathematical logic which introduces the student to the abstract algebraic character of twentieth century mathematics. It deals with two classes of formal languages. Knowledge of which is usually presupposed in the formal areas of linguistics, computer science, cognitive psychology, and analytic philosophy.

Context-free languages were defined at mid-century and are probably the fundamental class of languages to consider when one wishes to study the syntax of natural and computer languages. First order languages were defined somewhat earlier and are the simplest class of languages with a semantics which begins to approximate that of natural languages. While neither class is adequate to the studies of the syntax or semantics of natural languages, they are of fundamental importance in the cognitive sciences.

The instructor hopes to have completed a second draft of a text in time for the course, and fragments of it will be supplemented by short articles in the fields mentioned above. The course has no prerequisites; it is intended to be completely accessible to beginning college students interested in mathematics and theoretical computer science, and to somewhat more advanced students in other fields. In order to accommodate both kinds of students, some meetings will be held exclusively for students interested in the other fields, while others will cover mathematical details probably of interest to only a few.

Enrollment is open. The course will meet twice a week for one hour and once a week for two hours to do mathematics together in class, and students are expected to think and talk together outside of class about what has been done or presented in class.

**LC 208 PHILOSOPHY OF PSYCHOLOGY**  
Jay Garfield

Psychology, from the standpoint of a philosopher, occupies a unique position among the sciences. Few sciences can claim to be as methodologically and substantively volatile as psychology. Few have been, in recent times, as much influenced by philosophers, and have had as much influence upon philosophers, as psychology. No science offers the range of problems, from meta-scientific to metaphysical, for the philosopher to worry about as does psychology.

In this course we will be primarily concerned with philosophical issues surrounding the two major research programs of twentieth century learning theory—behaviorism and cognitivism. We will attempt to extract the methodological and empirical commitments these two traditions embody, and ask what metaphysical theses they suggest regarding the ontology of psychology and the philosophy of mind, and attempt some philosophical assessment of these enterprises.

This course will hence be historical as well as philosophical. We shall be concerned to characterize the research programs we discuss as accurately as possible, through reading the work not only of philosophers, but of practicing psychologists as well. We will discuss the work of such philosophers as Tolman, Skinner, Newell and Simon, Minsky, Winograd, Schank and Abelson, and J. Anderson, as well as relevant philosophical discussions of these psychologists' work and research programs.

The course will be taught through a combination of lectures and discussions. Students' projects for the course will be determined in consultation with the instructor. These will generally involve one or two medium-length papers. Enrollment is limited to 20 on a first-come, first-served basis. The class will meet twice a week for 1 1/2 hours each session.

**LC 210 SCEPTICISM**  
Christopher Witherspoon

In this course we will work on some philosophical problems raised by scepticism and on others raised by attempts in recent and contemporary philosophy to answer or to refute the sceptic.

The course will have three parts. In the first we will deal with classical and historical material. We will discuss passages from the writings of Sextus Empiricus, Montaigne, Descartes, and Hume in which important sceptical arguments and challenges are presented, and we will spend some time setting these ideas in their historical contexts. For this purpose we will read parts of Popper's recently published revised edition of *The History of Scepticism from Erasmus to Spinoza*. We will also consider some work of certain twentieth century philosophers such as Bertrand Russell who find much truth in scepticism.

In the second part, we will study some of the writings of G. E. Moore (contained in *Philosophical Papers* and including "Proof of an External World"), Ludwig Wittgenstein (especially parts of *On Certainty* and relevant parts of the *Philosophical Investigations*), and J. L. Austin ("Other Minds"); all three are associated with a kind of philosophy practiced in the forties through the mid-sixties sometimes called "the philosophy of ordinary language."

The final part of the course will be given to consideration of some important contemporary work on scepticism. Among the philosophers we will read are Thompson Clarke ("The Legacy of scepticism"), Stanley Cavell (parts of *The Claim of Reason*), and Richard Rorty (parts of *Philosophy and the Mirror of Nature*).

Students interested in this course but lacking background in the history of philosophy are encouraged to work through the relevant chapters in two volumes of V. T. Jones' *A History of Western Philosophy*, III, Hobbes to Hume and V. *The Twentieth Century to Wittgenstein and Sartre*.

The conditions for evaluation in this course will be twenty student typewritten pages of finished work: this may constitute a single final term paper or a group of shorter papers done over the term. The class will meet once a week for 2 1/2 hours. Enrollment is open.

**LC 226 THEORY OF LANGUAGE: LINGUISTIC AND PSYCHOLOGICAL PERSPECTIVES**  
James Coe, Judy Shepard-Kegl, and Neil Stillings

Recent work in linguistics and psychology has led to some deep insights into the nature of human language. Linguists use the term "grammar" for a theory of the organization and structure of language. A grammar is the fundamental part of a theory of human communication (which explains how sound (the medium) is paired with meaning (the message)). Given the ease with which we put our thoughts into language and are understood by others, the pairing of sound and meaning must be mediated by a systematic and powerful set of principles, shared by all of the speakers of a language, that can accommodate the innumerable variety and novelty of the messages required in human life. We are no more intuitively aware of these principles than we are of the principles that underlie the digestion and metabolism of a variety of foods that we eat. They are one of our many biological capacities, and it takes scientific investigation to uncover them. In recent years linguists and psychologists have constructed some powerful hypotheses about these principles that explain such things as how sounds are linguistically digested. Three somewhat independent sets of principles have been studied: those that organize independent sounds, "phonology," those that organize the parts of sentences, "syntax," and those that organize meaning, "semantics." In spite of the seeming diversity of the world's languages, it now appears that these principles are much the same for every language, hence the cataloging of facts about single languages has been replaced by the search for a theory of "universal grammar" that captures the fundamental capacities of the human mind that make language possible.

The evidence for theories of language comes from a variety of sources. Linguists have come up with powerful hypotheses by asking the deceptively simple question, how can we describe which sequences of sounds form meaningful sentences and which do not. Further evidence for refinement of the hypotheses have resulted from using the experimental and metabelical methods of cognitive psychology and neuroscience. The attempts to gather such evidence led to the interdisciplinary areas of psycholinguistics and neurolinguistics. For example, in psycholinguistics a great deal has been learned by carefully analyzing people's errors and response times when comprehending language in controlled laboratory situations.

This course is a core course that is intended to give the student the competence in linguistic and psycholinguistic theories and research methods that is needed for further work in the field and in other fields concerned with language. There will be reading for every class and frequent short assignments. The instructors offer tutorials to students who wish to do extra work on any of the topics introduced in the course. The class will meet four times a week for 1 1/2 hours each time. Enrollment is limited to 20, first come, first served.

**LC 240 CHILD LANGUAGE DEVELOPMENT**  
Deborah Knapp

"Why the big bad wolf can't blow the house down!" Benjamin, age 3

No one teaches little children the rules of grammar, and yet somehow they learn to talk. And to talk they must master an incredibly complex system for putting words together to convey meaning. How do children say their first words at about a year of age, their language is not just a hodgepodge or a random assortment of adult phrases. Look at children of any age at all and you will find that they have their own consistent set of rules, rules which are constantly changing as new ones are added and old ones are modified.

In this course we will read the research literature on language acquisition. Among other topics we will cover are these: **Early concepts.** Why do children start talking about "mama" and "daddy" but not "tree" or "refrigerator"? Why might children call all men "daddy"? **Content and language.** When do children first start to communicate nonverbally? Are the structures of thought which are common to nonverbal thinking and to the rules of language? (continued)

**Order of acquisition.** How is the order of learning rules affected by the complexity of the rules themselves? How by the meaning that the rules express? Which devices are the same for many languages and which different?

**Theories of language acquisition.** What role does imitation play in language learning? What about "reinforcement"? Are some languages easier than others? What is the structure of "motherese," the special, simpler language that mothers seem to use when speaking to their babies? What is the biological basis of language in the brain? In what sense can language be said to be "innate"?

Several short papers will be required, in addition to a small research project which will involve recording the speech of at least one child. Some acquaintance with cognitive development and/or linguistics would be helpful, but it is not necessary. The class will meet twice a week for 1 1/2 hours each time. Enrollment limited to 20, to be determined by lottery at the first class meeting.

LC 253 WORKSHOP: THE MEDIA AND ENERGY CONSERVATION  
Richard Muller and Paul Meyers\*

This workshop has as its purpose the production of information- television materials whose general subject is energy conservation. These materials may take the form of public service announcements for commercial television, documentaries for public or cable television, instructional tapes, or short segments to be aired as parts of other programs. We will work in the media in which seems most appropriate to our needs: videotape (color and monochrome) and 16mm film. And we will make every effort to get our work used by broadcasters, teachers, government agencies, and anyone else with an interest in energy conservation.

Students should have strong preparation in one of two areas: media production or energy conservation. Appropriate background in the energy area should include, for example, completion or concurrent enrollment in NS 167, Energy Conservation in the Home, or a completed Division I exam in an aspect of energy conservation. Background in media work should include successful completion of at least one complex videotape or film project involving location sound and significant editing. Students need not have both kinds of preparation, but one or the other is required. Those who want to take the course should submit a sample of their prior work in media or energy study (a course or exam evaluation will suffice) as evidence of their preparation. (Students who intend to register for NS 167 concurrently need not submit such work.) There will be opportunity for "cross-over" learning: for people with media preparation to learn about energy issues and for energy students to pick up some basics of the production process. But this is not an introductory course in either area.

The course will emphasize the production planning process, and written proposals, scripts, and budgets will be required along with finished tapes and films. These, along with participation in class discussions and critiques, will form the basis for evaluation in the course.

We will meet twice a week. Friday mornings are the time for discussion, planning, and critiques of work in progress; Monday afternoons we will have a reserved block of TV studio and video editing time to facilitate work on projects. A lab fee may be required for students working in 16mm film. Enrollment is limited to 16, selected by interview with the instructor on the course interview day in the fall and based on review of prior work.

\*Paul Meyers is a Division III student in communications.

LC 257 OBJECTIVITY AND THE NEWS: FACT, INTERPRETATION, AND FICTION  
Richard Lyon

Newspapers, magazines, television, and radio try to entertain and to persuade. They also try to inform. As purveyors of "news" the mass media attempt to provide us with an accurate picture of the world as it is. They attempt to tell us what happened and why. They intend to tell the truth.

Through case studies drawn from news reports, articles, documentaries, and impadcasts, we will examine the success or failure of the truthfulness. Particular attention will be given to the concepts of objectivity, fairness, and of balance. Since every news organization is constrained by budgets, the availability of equipment and reporters, the profit motive, institutional demands, and deadlines, we will need to consider how these pressures shape the form and content of the news. And we must ask what assumptions and beliefs are at work in determining what is reported, what is judged to be salient, relevant, or significant. Are accuracy, inclusiveness, and balance possible? Ought they to be maintained as standards? Is bias another name for interpretation? When does a recital of the facts become a literary fiction? In addition to several articles and essays, the following books will be read in whole or in part:

- Between Fact and Fiction, Edward Jay Epstein
- News from Nowhere, Edward Jay Epstein
- The Tin Kazoo, Edwin Diamond
- The Press, A. J. Liebling
- Declining Value's News, Herbert J. Gans
- Making News, Gaye Tuchman
- Public Opinion, Walter Lippmann
- The Information Machine, Ben Bagdikian

The course is best suited for students in the habit of following the news through the media. Enrollment is open. The class will meet twice a week for 1 1/2 hours each session. Several short papers will be assigned.

LC 264 SOCIAL INTERACTION IN THE CLASSROOM: THEORY AND OBSERVATION  
Meryl Gearhart

Teaching is not an activity of teachers but a process of interaction between teachers and learners. This course is a critical examination of observational research on classroom interactions. We will consider first the wide range of purposes for classroom research. For some investigators are concerned with evaluating teacher performance or a particular curriculum, others with developing a theory of dialogue. We will consider next a number of research paradigms by examining research de-

(continued)

signs as well as critical research tools—especially schemes for observation. We will then consider in detail several studies of classrooms.

Class sessions will consist of lectures, discussions, and workshops. Readings will consist of Dunkin and Biddle's *The Study of Teaching* and supplementary research articles. Course assignments will include the completion of certain research exercises, including the practice of observational procedures in Amherst classrooms, the analysis of transcripts and videotapes of classrooms, and the summary and report of findings from these data. At the end of the term, students will present in class a detailed research proposal for classroom research and then submit a written version as the final paper.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 15, by interview with the instructor.

PORTION LANGUAGES

FL 101 FRENCH I  
Elisabeth Leete

This course is designed for those students with little or no previous training and/or experience in French who want to develop basic language skills. Practice in the four skills of language learning (speaking, understanding, reading, and writing) will be equally emphasized in class presentations. The last half hour of the class will be organized in such a way as to allow the student to focus on a particular skill. Thus, exercises and drills may be done orally by those students wishing to develop an ability to speak and understand, in writing by those wanting to learn to read and write, or both orally and in writing by those preferring to develop all four skills simultaneously.

The class will meet twice a week for two hours each time, organized around written and oral (French language tapes) assignments. Enrollment is limited to 15. First come, first served.

FL 102 SPANISH I  
Angel Nieto

This course is intended as a two-term sequence in the fundamentals of spoken and written Spanish. Listening and speaking will be stressed, especially in the first term. The text will be *Communication in Spanish*, a linguistically based approach to language learning. It provides a book with performance objective-type assignments to be done outside of class and a workbook for use on grammar. Record tapes which accompany the text will also be available for use on your own.

Class time will be used primarily to develop comprehension of the spoken language, pronunciation, and oral skills through exercises not given in the text. Therefore, although required preparation time outside of class is not great, class attendance is important.

The class will meet twice a week for 1 1/2 hours each time. Enrollment is limited to 20; first come, first served.

SCHOOL OF NATURAL SCIENCE

DIVISION I:

ASTFC 31 SPACE SCIENCE: TOPICS OF CURRENT ASTRONAUTICAL RESEARCH  
William Irvine (at Smith College)

We are living in an era unique in human history. The entire solar system is experiencing the first direct exploration by mankind. Each of the planets, and in fact each of the planets' moons, is gradually being revealed as a unique world both similar to and also vastly different from the earth. The course will describe our current knowledge of the planets and satellites, focusing on such questions as conditions on the surface of Venus, the nature of the Venus clouds, the possibility of extraterrestrial life, recent explorations of the planet Mars, and reconnaissance of the outer solar system. The emphasis will be placed on spacecraft investigations. Text: *Moons and Planets*, Hartman. Requirements: term paper and final exam. This is a Division I course.

Class will meet Tuesday and Thursday: 2:30 - 3:45.

NS 101 EXTRATERRESTRIAL INTELLIGENCE  
Kurtiss Gordon

Since the Copernican revolution, our concept of the size of the universe has continuously increased while our concept of the uniqueness of our place in the universe has been repeatedly diminished. The idea that intelligent beings may exist on other worlds has fascinated mankind for hundreds of years. We are at last close to the time when extraterrestrial communication may be possible. How can we communicate? Are there other worlds ready to receive our messages? Have other worlds already tried to communicate with us? Our search will lead us to consider:

- the astronomical evidence - What factors determine how many planets are suitable for life, and how close to earth the nearest one may be?
- the biological evidence - What constitutes life on earth? How did it evolve? What conditions and how much time are necessary for intelligence to emerge?
- the nature of communication - What kind of a message must we send to show we are intelligent? How successful have we been at deciphering the communications of bees, dolphins, or other nonhuman species?
- philosophical implications - Should we transmit? or just listen?

Readings will include selections from textbooks and articles (continued)

in current journals. The course will meet for 1-1/2 hours twice a week for the first 6 weeks and last 2 weeks of the term. In the intervening time, the students will be expected to complete individual or group projects, which will be presented to the class during the latter part of the term and which may be developed into Division I exams. In past terms, student projects have included: recreation of the classic experiment to produce amino acids from inorganic compounds under conditions believed to have existed on the primitive earth; examination of the evidence for detection of planets around nearby stars; discussion of the impact of the Orson Welles *War of the Worlds* radio broadcast; evaluation of physical, biological (and psychological?) impediments to human-dolphin communication, and attempts to overcome them.

NS 107 EVOLUTION OF THE EARTH  
John Reid

The course will deal with the earth's evolution from two points of view. At the outset, we will consider the earth's development from the early solar system, and look in detail at the processes by which the earth continues to evolve through volcanic and deep-seated igneous processes, as well as by the drifting of continents. Field work will involve localities in and around the Connecticut Valley which exemplify these processes, and will require that we develop in the laboratory a working knowledge of the fundamentals of mineralogy and petrology both in hand and under the microscope. The second aim of the course will be to develop an ability to interpret landscapes from the viewpoint of those processes which have shaped and continued to shape the land's surface. Naturally, field studies will emphasize western New England looking in detail at the effects of continental glaciation, and at the processes by which running water rearranges the surface today.

Assignments will include readings from both a text and the original literature. Students will be expected to complete an independent research project related to the coursework.

Enrollment limit: 20 students. Two 1-1/2 hour class meetings plus one 3 hour field trip/lab per week. Enrollment is on a first come, first served basis.

NS 117 TROPICAL MARINE ECOLOGY (minicourse)  
Van Kaalre, N. Goddard, G. Goddard (UMass)

This short, informal course will prepare students for our January term course in St. John's, Virgin Islands. We will discuss coral reef, mangrove, and tropical rain forest communities. All students who anticipate taking the January term course must enroll at this time. We will encourage the students must participate in the January term trip. All interested people are invited to the first meeting where they will receive further information about the course and trip.

Meeting date: October 1.  
See instructors for time.

NS 121 HUMAN BIOLOGY: TOPICS IN PHYSIOLOGY, MEDICINE, AND PUBLIC HEALTH  
Foster, Bruno, Goddard, Woodhull

Medicine is an applied science. It is a combination of keen observation, laboratory analysis, and knowledge of physiology, biochemistry and human behavior with the object of treating malfunctions of the body. This program will explore the scientific basis of medicine through the following three required activities:

**Seminars and Presentations** - Each student is asked to choose one of the following seminars: Learning to Live With It, Human Movement Physiology, Male & Female Reproductive Function, The Human Eye. Detailed descriptions of these seminars are included below. Each seminar will be taught by a different instructor and will deal with an aspect of medicine or public health. All of them will focus on the experimental basis of the topic through discussion of papers from the research literature. Each will encourage development of student projects and will provide class time for instructors to work with individual students on them. In addition to a seminar, all students will be expected to participate in both the laboratory and the CPC sections.

**Laboratory Experience** - There will be a weekly laboratory lecture/demonstration given by John Foster on some particular clinical laboratory procedure, followed by opportunity to try the procedure yourself. In the beginning these will be general procedures, such as blood pressure, urinalysis, etc. Later in the semester specialized techniques related to the subjects of the seminars will be introduced. All students are strongly encouraged to participate in the laboratory program. The laboratory will be staffed most of the time so students can work at times convenient to them, and so that help will be available for students wishing to undertake clinical projects of their own design. Lab will meet one afternoon a week.

**Clinicopathologic Conferences (CPC's)** - Practicing physicians will be invited to present case material, drawn from their own practices, illustrating the application of physical findings and laboratory data to diagnosis and treatment of disease. The CPC's and the laboratory program will be closely correlated so that our visitors can assume the class has some familiarity with the clinical methods they are using in dealing with the cases they present. They will attend a week for two hours.

**HUMAN BIOLOGY PROJECTS** - Learning to Live With It (NS 121a)  
John Foster  
When a severe and/or chronic illness strikes, the fabric of a family is often severely strained. Family members often do not fully understand what has happened to the victim, do not know what may happen next, do not know what adaptations the patient and the family may have to make and cannot come to terms with the long-term consequences of the illness. This seminar will deal with one or more of these illnesses, such as diabetes, cardiovascular disease or severe arthritis, during the first 3 or 6 weeks. We will learn the relevant physiology and biochemistry, examine some of the current research aimed at a better understanding of the disease and a more rational treatment of it, and look at the way our health care delivery system does or does not deal with the problem. The remainder (continued)



# COURSE DESCRIPTIONS

of the semester will be devoted to studies which the students will choose. Class time will then be devoted to individual conferences with the instructor, with time provided at the end for the students to present the results of their studies to the rest of the class. Class will meet for 1-1/2 hours twice a week. Enrollment limit: 16 (12 new students, 4 old students). Be sure to read general description of Human Biology program above.

**HUMAN BIOLOGY SEMINAR: Human Movement Physiology (NS 121b)**  
Ann Woodhull

This course is for dancers, athletes, and others who are interested in how their bodies move. We will not attempt to survey all of human anatomy or kinesiology (the study of movement). Rather, by reading scientific papers we will look closely at how scientists try to obtain information on muscle use and control.

I think it is both important and exciting to apply biologists' results and theories to our own bodies. In addition, we can extend our ideas about movement into the laboratory by measuring muscle activity with the electromyograph. No science background is needed. Class will meet for 1-1/2 hours twice a week. Enrollment limit: 16 (12 new students, 4 old students). Instructor permission based on a written statement on "Why I want to take this course." Be sure to read general description of Human Biology program above.

**HUMAN BIOLOGY SEMINAR: Male & Female Reproductive Function (NS 121c)**  
Nancy Goddard

What are the biological bases of sexuality? What factors influence one's sex drive, sexual behavior, ability to successfully reproduce (or to avoid it, for that matter)? Are there biological events that happen to a person even before birth that greatly affect one's sexuality as an adult? What determines "maleness" or "femaleness", anyway? Are there effective means of correcting nature's copy that is, how far can we surgically through transsexual operations? These are some of the questions that will be addressed in this course. The intent is mainly twofold: 1) to provide persons with basic working knowledge of those systems directly concerned with one's sexuality; 2) to introduce students to the mode of inquiry used in science and facilitate use of the tools needed to answer certain questions.

Class will meet 1-1/2 hours twice weekly for the first six weeks to discuss selected literature, view films, and meet with appropriate outside persons engaged in relevant fields. At the 7th week the class will break to work on projects, remaining for the presentation of these projects during the final two weeks of the semester. Be sure to read general description of Human Biology program above.

**HUMAN BIOLOGY SEMINAR: The Human Eye (NS 121d)**  
Merle Bruno

For the first six weeks of the semester the students in this study section will learn to read research articles, will study the anatomy, physiology, and optics of the eye, and will look into and out of their own eyes. The last part of the semester will center around projects that students chose to develop among the possible topics are: eye training to improve vision, visual illusions, and diseases of the eye. Class will meet for 1-1/2 hours twice a week. Enrollment is limited to 16. Instructor permission required. Be sure to read general description of Human Biology program above.

**NS 137 BIOPOLITICS**

Michael Gross

Participants in this course will become critics, editors, and researchers contributing to a book with the same title. Its subject is the application of various biological concepts and theories to social theory and public policy, in relation to such topics as population and food supply, race and intelligence, sociology, sex differences and homosexuality, hyperactivity. In each of these areas, scientific results have been applied or alleged to bear on, questions of social and political significance. The book has two purposes: to discuss the validity of the scientific conclusions, and to evaluate their relevance to the sociopolitical questions.

The course will run a full year: the topics covered each semester will be announced at the beginning of the semester. Students enrolled during the Fall semester may, after discussion with the instructor, wish to continue. Students may enroll in the Spring without having taken the first half of the course, the previous semester.

As to the format, I will distribute, periodically, drafts of portions of the manuscript. Since the intended audience is the educated layperson (rather than specialists), you will be ideal critical readers. As Division I students, you will be learning how to do research by helping to fill in the gaps—the areas where the manuscript needs expansion or clarification. You will help deal with needs ranging from tracking down a particular source, to developing a bibliography, to writing up summaries or critiques of particular materials. In this way, I anticipate that useful suitable for development into Division I projects will emerge from the questions which arise in the written drafts I present. Also, you will have the opportunity to see a piece of written work evolve—become reorganized, expanded or revised, and rephrased.

Most of the readings will be library materials or handouts, but I recommend strongly that you purchase and read Peter Elbow's *Writing Without Teachers*.

Written work will to some extent depend on how much you choose to undertake, but expect to produce some thirty pages during the semester. Evaluation will be based upon participation in various aspects of the course: involvement in critiquing materials, following through on tasks you agree to undertake, and development of your own research and writing skills.

Class will meet for 1-1/2 hours twice a week.

**NS 149 TOPICS IN AGRICULTURE**

Paul Slater

In this course we will review several selected topics which are important to the understanding of our modern agricultural

(continued)

system, its problems, and its potential. Some of the topics will be:

- 1) The New England Farm Center and its potential role in the revitalization of New England's agriculture.
  - 2) An overview of the history of land use in the US; important for an understanding of our present attitudes toward the land.
  - 3) Integrated Pest Management. What is IPM, how does it work, what does it replace?
  - 4) The preservation of agricultural land. Is this necessary? The instructor believes that it is, therefore we will review the various methods that have been devised to help accomplish this goal.
  - 5) Energy use in agriculture. As energy becomes more costly and perhaps less readily available, a closer look at our energy-intensive agricultural system appears to be indicated.
- There will be several field trips, weather and availability of transportation permitting.

A term paper on an agricultural topic of the student's choice (with instructor's approval) is required for an evaluation or, in the case of five College students, a grade.

Enrollment is open. The class will meet three times a week for 1-1/2 hours each.

**NS 150 PHYSIOLOGICAL BASIS OF AGRICULTURE**

(instructor)

S. Goldhor, C. Van Raalte, and P. Slater

Economists look at production as a function of dollars; agriculturalists look at it in terms of breeding and management systems. We look at it as the result of a series of complicated biological processes. This short, intensive course is for students who want to learn about the biological aspects of agriculture and who are seriously interested in working with us on the behavior, physiology and ecology of the animals with which we work. Research will be conducted on sheep, livestock guarding dogs, and alder. Classes will begin at the beginning of the semester and run for 4-6 weeks, depending on the interests of those involved in the course. We expect that the student projects will continue on through the term.

Class will meet twice a week. Once for 1-1/2 hours and once for 3-1/2 hours.

**NS 162 TOPICS IN EXPERIMENTAL DESIGN AND QUANTITATIVE THINKING**

(SS 162)

Michael Sutherland

This course is intended for students who might be interested in an experimental Division I project. We will explore the design and interpretation of experiments through lectures, reading assignments, computer and written work on topics such as:

- deterministic vs. probabilistic models
- the meaning of proof
- detecting pseudo-problems
- the value of indifference and reasonable doubt
- information is not knowledge, but it is a start
- experimentation without randomization is just bossing around
- the geometry of data
- optimization as a model for process development
- can beliefs be quantified?
- the frequency distribution of M&M candy colors
- surveys and what usually happens
- exploring tables of numbers, e.g. the windchill table
- bigger things, breaking records, and what to expect next
- quantitative measures of wars, plagues, and disasters
- expectancy effects (what, how, and so what?)
- measuring "bullshit"

Increasing and ultimately unbearable pressures will be brought to bear on students to go beyond simple attendance. Evaluations will be based entirely on class participation, assignment completion, and the personal whim of the instructor.

The class will meet for 1-1/2 hours twice a week.

**NS 167 ENERGY CONSERVATION IN THE HOME**

Merle Bruno and Lloyd Williams

The earth's store of fossil fuels is finite, and we are using these fuels at such a rapid rate that we may see them run out in the near future. Safe and practical alternative sources of energy have not yet been developed for large scale use. Some models of the future suggest that strict conservation of our present energy sources can greatly increase the number of years they will last and give us more time to develop alternatives.

In this course students will learn how to estimate the amount of heat lost from a home during the heating season, how to improve the energy efficiency of a home, and how to estimate the economic benefits of these improvements to the homeowner. They will learn this process by performing this "audit" service for as many homeowners (or renters) as we can schedule. Students will also prepare reports for the homeowners which summarize their findings and recommendations.

Each student will be expected to work on an individual or group project. Previous technical or mathematical training is not necessary for most of these projects. Examples of class activities and projects are: experiments to measure the insulating properties of materials; design of small solar or wind systems; design and construction of an inexpensive firewood efficiency tester; and testing of the safety of insulating materials. Students with significant prior experience in videotape production who are interested in doing projects integrating energy conservation into informational or instructional videotapes are encouraged to enroll in LC 253 taught by Rich Muller.

We will meet for two 1-1/2 hour classes and one afternoon lab each week. Classes will be devoted to lectures, demonstrations, and discussions. Laboratory time will be used to work on experiments, take field trips to homes, etc. Students should expect to spend additional time each week to visit homes, prepare homeowner reports, work on assignments, and work on projects.

**NS 182 CONSERVATION OF NATURAL RESOURCES**

Arthur Mesting

An examination of the ecological principles and social problems pertaining to the conservation of our air, water, soil, vegetation, wildlife, fishery, and non-renewable natural resources.

Conservation is here viewed as the wise use of our natural resources; in other words, as that field of applied ecology aimed at insuring a continuous yield of useful plants, animals, and materials by the establishment of a balanced cycle of harvest and renewal. Both the benefits and detriments of human tampering with nature will be stressed. The fundamental relationship between humans and nature, the aesthetic and other intangible qualities of our environment, and our responsibility to future generations will provide underlying themes.

Students are expected to attend class regularly and to participate in the discussions. Readings will consist of a number of books and articles. Two reports will be required.

Division I level; no prerequisite; enrollment limited to 20 (lottery, if necessary, at the first class meeting); grades available for five College students.

Class will meet for 1-1/2 hours twice a week.

**DIVISION II:**

**ASTFC 21 STARS**

George Greenstein (lectures) Amherst College  
(labs) Mount Holyoke College

Stars and stellar evolution for students interested in a quantitative introductory course. Observational data on stars: masses, radii, and the Hertzsprung-Russell diagram at basic equations of stellar structure. Nuclear energy generation in stars and the origin of the elements. The three possible ways a star can die: white dwarfs, pulsars, and black holes.

Prerequisites: One semester of calculus and one semester of some physical science. This is a Division II course.

This course will meet Mondays and Wednesdays 1:25 to 3:20 p.m. Labs are open five nights a week at Mount Holyoke College.

**ASTFC 37 ASTRONOMICAL OBSERVATION**

Tom Dennis (at Mount Holyoke College)

Basic astronomical techniques (photographic photometry, photoelectric photometry, spectral classification, and radial-velocity determination) and the use of astronomical catalogs and literature as applied to astronomical problems: physical and dynamical properties of stars, spectroscopic binaries, star clusters. Readings will include selected journal articles. Prerequisite: 1 semester astronomy, 1 semester physics. This is a Division II course.

Class will meet Mondays and Wednesdays 2:30 - 3:45 PM and evening labs, time to be announced.

**ASTFC 43 ASTROPHYSICS I: STELLAR STRUCTURE**

E. R. Harrison (at U. Mass, CRC 534)

The basic equations of stellar structure and their solution; polytropes; the virial theorem; energy transport in stars by radiation, conduction, and convection; atomic processes leading to stellar opacity; nuclear energy generation in stars; stellar evolution. Prerequisite: ASTFC 23 and the physics sequence, or permission of instructor. This is a Division II course.

Class will meet Mondays and Fridays 1:25 - 3:20 PM.

**NS 207 HOLOGRAPHY AND OPTICS II**

Janet Van Blerkom

This course is primarily a lab course which will allow students to experiment with holographic and optical systems involving the laser. It is intended for students who have taken two semesters of Basic Physics or the equivalent. Previous experience in holography is also desirable. An interest dictated, the students could form a discussion group for a detailed examination of topics in advanced optics.

Prerequisites: Two semesters of Basic Physics or the equivalent.

Class will meet once a week for 1-1/2 hours to arrange for and discuss each week's laboratory experiment.

**NS 211 ORGANIC CHEMISTRY (FALL)**

Nancy Lowry

The first semester of organic chemistry focuses on the structure of molecules and how the structure influences reaction pathways. Reference is made often to biological implications. Several problem sets are assigned and collected. Two hours a week of laboratory are scheduled but more time is needed to complete the experiments.

Text: Morrison and Boyd, *Organic Chemistry*, Third Edition. A high school introduction to chemistry is essential. Division I students may take the course if they check with the instructor.

Class will meet three mornings a week for 1-1/2 hours, plus one lab per week.

NS 215 AMERICAN ENVIRONMENTAL HISTORY  
(IN 333)  
Ralph Lutts

The history of the United States has also been a history of the use, misuse and stewardship of its environment. This course will examine this history in an effort to better understand the origins of our contemporary environmental attitudes and practices. In addition, we will spend time reviewing the development of the science of ecology and our ecological understanding of our world. Special attention will be given to two important periods: the first decade of this century, during which the conservation movement began and public interest in nature hit a peak; and the mid-twentieth century, during which the term "environmental" received its current meaning. In addition to issues of resource depletion and conservation, we will consider such topics as the rise of interest in outdoor recreation, nature study and environmental education, national parks, bird-watching, and other aspects of public involvement in our environment.

We will use Petulla's *American Environmental History* as a core text. The bulk of our reading, however, will be from a variety of books and papers, including a good deal of original source material. Division II students should expect to do a lot of library work and to write a major research paper in addition to a couple of short pieces.

Division III students who are doing work in history, ecology, public policy, etc., related to the general themes of this course are invited to consider using it as an integrative seminar. They should first speak with the instructor and receive permission for so doing. Division III seminar requirements will be negotiated with the instructor and should include sharing your Division III work with the class in a context appropriate to the course. This will not be arranged at the start of the semester.

Enrollment open (Division III), or by the instructor's permission (Division I/II). Class will meet for 1-1/2 hours twice a week. If the class gets large we may divide into smaller seminar groups once a week.

NS 222 INTERPRETIVE NATURAL HISTORY  
(OP 222)  
Ralph Lutts

A course for people who want to develop the skills to teach natural history in an outdoor setting. For details refer to the Outdoors Program course OP 222.

NS 230 THE EVOLUTION AND BEHAVIOR OF DOMESTIC ANIMALS  
Raymond Coppinger

Domestic cattle, swine and fowl continue their neolithic revolutionary impact on the cultural and ecological surface of the earth. All but one of the continents devote extensive tracts of land to these animals, animals which not only shaped the land but also affected the climate. Wars are fought over them; economics are based on them.

These animals are also fascinating to study from a behavior and evolutionary point of view. Selections for growth rate, reproductive rate, and docile behavior gave us a practical understanding of the evolutionary process and were a major factor in tipping Darwin off to natural selection. Many of these animals' ancestors still exist, and have been studied in detail. Their descendants exist locally and are available for study in their "natural environment."

This is a Division II course/seminar. We will explore processes of evolutionary change such as necrosis and allometry, plus we will study in detail the evolution of their behavior. A student with no training in genetics, anatomy, physiology, or basic behavior must expect to make up those deficiencies during the course. The course requires students to prepare discussion topics for class presentation, annotated bibliographies on various topics, and to submit a major review paper.

Class will meet twice a week for 1-1/2 hours each.

NS 243 COMPUTERS IN THE LAB: HARDWARE, SOFTWARE AND INTERFACE  
(LC 243)

Albert Woodhull and Allen Hanson

The recent availability of very inexpensive integrated circuit computer components means that now a computer is not just a machine with which you correspond by typewriter. Microcomputers are being built into household gadgets and laboratory instruments, and small general purpose computers now cost less than the terminals needed for communication with the larger machines.

For anyone planning to do laboratory work in science some understanding of how these small computers work and some familiarity with the basic electronic techniques for directly interfacing the small computer with an experiment are becoming ever more useful.

This course is an introduction to electronics and an introduction to those computer techniques necessary for controlling interface circuitry. No experience in either electronics or programming is necessary.

The course will be structured around one or two real experimental or data collection problems, and production of a working system in which hardware and software components work together properly will be the goal. Students who foresee a Division III project or other advanced work in which computer interfacing will play a role are urged to contact Al Woodhull before the course begins.

There will be two 1-1/2 hour class meetings a week, with both lecture and laboratory activities in these times. Some assignments will require lab work outside of class hours.

Enrollment limit 20 students, selection by interview if necessary.

NS 247 CELL BIOLOGY  
Lynn Miller

This course is part of the three course Biology sequence, including physiology and ecology and is an introduction to cell structure and function. Topics include genetics, cell division, nutritional requirements, and biochemistry.  
(continued)

Students will work with several faculty on research projects related to cell biology, e.g., photosynthesis, nitrogen fixation, microbial genetics.

The course is structured as two 1-1/2 hour lectures, an afternoon lab, and a discussion period each week.

NS 248 PHYSIOLOGY IN STRENUOUS EXERCISE

Anthony Melchionda

This course will be open to 10 (12 maximum) students who are, or expect to be, engaged in a serious training program of swimming, paddling, running, or cycling. It will "build" on the basic physiology course (a prerequisite), trying to understand the changes that occur in humans engaged in strenuous exercise of long duration. We will cover the cardiorespiratory, vascular, nutritional, musculoskeletal aspects of training as well as the psychological dimension and problems such as injuries. There is a vast current literature available which touches on many aspects of this subject and our hope is to make the reading/investigative part as relevant as possible to the training aspect.

I hope to use our exercise "lab" at the Health Services for some baseline and progress data on body composition, cardiac function and respiratory functions.

Participants must have had a basic physiology course.

Enrollment is limited to 12 students. Permission of instructor

Class will meet once weekly for 2-1/2 hours. "Lab" times will be flexible.

NS 260 THE CALCULUS  
David Kelly

The calculus provides the language and some powerful tools for the study of change. We'll avoid the paradoxes of infinity and still talk of instantaneous velocities, infinite sums, and ratios of infinitesimals. Differentiation and integration will be defined and applied to the study of tangent lines, slopes of curves, areas, volumes, free fall and other motion, periodicity, exponential growth and decay, carbon dating, the spread of rumors, and inflationary spirals.

This course introduces the basic concepts, techniques, examples, and applications of the standard two semester college treatment of differential and integral calculus, including the elementary transcendental functions, Taylor series, and differential equations. The pace will be brisk and a firm grasp of high school algebra is recommended. There will be daily drill work, lots of problems, a weekly (necessarily) evening problem session, and a little history and philosophy.

Class will meet three times a week for 1-1/2 hours each, and problem help time will be arranged. Participants are expected to attend, in addition, a weekly evening problem session.

NS 261 MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS  
(SS 265)

Kenneth Hoffman

Traditionally, the mathematical preparation for scientists and quantitatively-minded social scientists begins with a year or more of the calculus. Easy access to high speed computers has increased the usefulness of other tools. For almost all scientists and social scientists (with the possible exception of physicists and engineers) the content of this course is more appropriate than calculus. Topics will include:

- Functions and graphs
- Computer simulation, calculation, and plotting
- Elementary linear algebra (vectors and matrices)
- Linear Models (including input-output analysis, linear regression, and analysis of variance)
- Concepts of the calculus (including language and its interpretations)
- Difference methods (applied to approximating solutions to differential equations)
- Elementary probability and statistics (including the use of interactive statistical programs to save, modify and analyze data)

No previous programming experience is required; the computer will be used throughout the course.

Classes will meet three times a week for 1 hour each session; additional evening problem sessions will be scheduled using on-campus teaching assistants. Regular substantial problem sets will be assigned and will constitute the heart of the course work.

NS 269 MODERN ALGEBRA

Kenneth Hoffman

The language and tools of modern algebra—groups, rings, fields, vector spaces, etc.—have evolved in the 150 years since the death of Galois and Abel to the point where they now permeate nearly all branches of mathematics, as well as other fields as diverse as quantum mechanics, crystallography, coding theory, and some branches of linguistics. We will spend roughly two-thirds of the course developing the basic concepts and theorems, and one-third on applications to other areas inside and outside of mathematics.

The course will assume a fairly high level of mathematical sophistication. Those who have completed the Linear Analysis course or who have had a year of math above the level of introductory calculus should be adequately prepared; all others should check with the instructor. The course will meet for two 1-1/2 hour sections per week.

NS 281 BOOK SENIAR IN PHYSICS

Herbert Bernstein

This seminar is intended for students concentrating in physics and for those in other areas who wish to do advanced work in physics. The class will read, discuss, and solve problems from an upper level undergraduate physics text in one of the following subjects: mechanics, electrodynamics, thermal physics, quantum theory, optics, acoustics or fluid mechanics. The choice of book and subject matter will be made by the students themselves. Interested students should meet with Herbert Bernstein on Tuesday, April 27, 1980, after 11:00 a.m.

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Science School meeting (10:30 a.m. outside CSC 114) to make this choice. Students who have not taken one year of Basic Physics or the equivalent should not take this course.

Class will meet once a week for three hours or so.

NS 283 BASIC PHYSICS II

Van Blerkom, Bernstein, Gordon & Staff

This course is the second semester of an introductory physics course. It is designed to provide a rigorous introduction to the fundamentals of physics for those students who are concentrating in natural science. The first semester of this sequence was offered in the Spring of 1980. It is anticipated that students enrolling in Basic Physics II will have taken Basic Physics I or have an equivalent background.

The course is divided into several modules taught by different instructors, some of whom are not primarily physicists but are people whose work requires a knowledge of physics. These different perspectives are intended to make the course more relevant and meaningful to students who are not physics concentrators.

The topics covered in the Spring semester were concepts of measurement, classical mechanics, and thermodynamics. This second semester course (Fall 1980) will deal with electricity and magnetism, waves, optics, spectroscopy and the quantum theory.

Class will meet three times a week for 1-1/2 hours each. In addition, the course will include several laboratory experiments on alternate weeks, coordinated to the lecture material. Students must reserve an afternoon on alternate weeks for their laboratory attendance. Students will also meet weekly in small group sessions with individual faculty evaluators.

NS 286 THE ENTERPRISE OF SCIENCE: CASE STUDIES IN THE HISTORICAL DEVELOPMENT AND THE SOCIAL AND ETHICAL RELATIONSHIPS OF THE INSTITUTION OF SCIENCE TO OTHER INSTITUTIONS IN WESTERN CULTURE

Goldberg, Gross, Lutts, and Rinard

In recent years the scientific community has been held responsible for the creation of a number of crises within our culture. One example is the development of insecticides, fungicides, and herbicides of immense power and the subsequent contamination of the world's land and water resources. Many other examples could be cited in such diverse fields as agriculture, medicine, genetics, physics, chemistry, and a host of others. Thirty years ago, the picture was much different. At the end of World War II, science was seen as providing the solutions to problems which had never been solvable: it was through the application of science that the world would rid itself of all the cares of survival.

In this full year course, we seek to understand the niche that science occupies within the culture and how attitudes toward science from within and without the scientific community are formed and change. To this end we seek to understand the relationship between science and technology and the relationship between theory, evidence, values and ethics. In pursuing our goal we will examine the following topics:

Fall Term

1. The Sixteenth and Seventeenth Centuries
2. The Scientific Revolution and the Emergence of Scientific Organization.
3. The Relationship Between the Scientific Revolution and the Industrial Revolution.
4. The First Energy Crisis: The Denuding of European Forests.
5. The Eighteenth Century
6. The Notion of Progress: Science in the Enlightenment Era.
7. The Steam Engine and the Theory of Heat.

Spring Term

1. Case Studies from the Nineteenth and Twentieth Centuries
2. Evolutionary Theory and Social Darwinism.
3. Evolutionary Theory, Uniformitarianism & Velokovsky's Catastrophism.
4. The Theory of Relativity and Social Relativity.
5. Structural Chemistry, Chemical Technology and the Pharmaceutical Industry.
6. Structural Theory, Molecular Biology, and Recombinant DNA
7. Objectivity and the Social Sciences: The Case of Intelligence Testing.
8. Ecological Theory, Game Management and Social Responsibility.
9. Understanding the Human Body and Medical Technology.
10. Human Engineering and Medical Ethics.

With the permission of an instructor students may enroll in the Spring Term without having taken the first half of the course in the previous semester.

The course will meet 1-1/2 hours twice a week for lecture and discussion. Each student will be expected to write a major paper on a topic of his or her choice from within the framework of the focus of the course.

SCHOOL OF SOCIAL SCIENCE

SS 105 HUMANITY: UNITY AND DIVERSITY

Leonard B. Glick

To be human is to share in the evolutionary heritage of the entire human species; it is also to be an individual in a particular society with a unique history and culture. Anthropology, the study of humanity, calls attention, therefore, to our unity as members of a single species and to the diverse ways in which particular groups express their versions of what it means to be human.

This course is divided into several related parts aiming for progressive development of your ability to think about human behavior in cross-cultural perspective: 1) Becoming familiar with unfamiliar behavior in an obscure part of the world; a study of life in the mountainous interior of New Guinea, based primarily on my own field work. 2) Comparative analysis of two especially noteworthy aspects of New Guinea Highlands culture: (continued)

# COURSE DESCRIPTIONS

ethical standards and relations between the sexes. 3) Cross-cultural study of two universal phenomena in human life: a) beliefs in spirits, spirit possession, and the use of spiritual power by shamans and others; b) mental disorders: definitions, manifestations, and treatment methods. In connection with both topics we'll also discuss uses of alcohol and drugs in various cultures.

Two 1-1/2 hour meetings each week; the first will be primarily for a lecture introducing the week's topic, the second for discussion. Students will be expected to prepare a 1-2 page commentary each week, to serve as fo-ndation for participation in the discussion. Toward the end of the term each student will write a 6-8 page paper on an ethnographic or cross-cultural topic - preferably something already begun in your weekly commentary papers. Evaluations will be based on class participation and written work.

A Wednesday evening film series (7-9 P.M.) will be directly integrated with the course and should be considered in scheduling. Enrollment limited to 20; first come, first served.

**SS 109 CHANGE IN THE LEGAL PROFESSION: PERSPECTIVES IN LAWYERING**

Oliver Faulkles

The course will look at the emergence of lawyer power and status, examine the underpinnings of the legal profession and compare them with those underlying medicine and other professions. Emphasis will be placed on scrutinizing changing modes of practice such as solo practitioner private law firms, government and staff offices, high volume low cost legal clinics, group practice and law communes, attitudes toward service, remuneration, autonomy, prestige, poor people, specialization, parallelism and entry into the profession.

Among course readings the following books will be considered: Auerbach, *Unruly Justice*; Black (ed.), *The Radical Lawyers*; Curran, *Lawyers Ethics*; Rosenthal, *Lawyer-Client: Whose in Charge?*; and Snigal, *The Wall Street Lawyers*.

This Division I course will require a fair amount of reading and paper writing and is designed to raise issues which might be investigated and parlayed into Division I exam topics; the instructor will supervise course participants in a special workshop for developing and completing Division I exams. Enrollment in this course will be limited to 25 and students will be chosen by lot. Class will meet for 1-1/2 hours twice a week.

**SS 113 PROBLEMS IN URBAN POLITICAL ECONOMY**

Lloyd Hogan

The course is designed as an exercise in methods of inquiry by economists. Urban living in a highly developed technological society provides the setting in which the exercise takes place. And specific problems of urban living are used as mechanisms through which new knowledge is developed or in which old knowledge is given greater clarity and understanding. Some of the problems to be dealt with are poverty, unemployment, educational crises, crime, inadequate health care, housing blight, congested transportation, environmental pollution. Other problems of special interest to students in the course will also be accommodated through group study or by independent research. Great emphasis will be placed on (a) the manner in which economists formulate the problems to be solved, (b) the conceptual or theoretical equipment employed in arriving at solutions, (c) the data requirements exist, (d) the criteria for evaluating the solutions. Successful completion of the course will also require an independent research paper.

The course will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20. First come, first served.

**SS 116 PEASANT REVOLUTION AND VILLAGE SOCIETY IN MODERN CHINA**

Kay Johnson

This course will study the role of the peasantry in the Chinese revolution and the impact of socialist development on peasant village life.

The course will begin by considering general theories (Marx, Engels, Lenin, Hobsbawm, Mao) which look at the reasons peasant rebel, the nature of peasant political behavior and the strengths and weaknesses of peasant-based rebellion for bringing about permanent revolutionary change. We will then turn to the Chinese case, looking at the relationship between the Chinese Communist Party and the peasantry during the revolutionary period and the development of the Maoist approach to peasant revolution. Finally, the course will investigate the role of the peasant in the Maoist Strategy of post-revolutionary socialist development and the impact of Communist Party policies on village society. The general theme of the course will be to attempt to evaluate theory by tracing the major lines of continuity and change in Chinese peasant society, considering the potential and limits which peasant life and aspirations create for revolutionary change and socialist modernization.

The course will be organized into informal lectures (which will present general background, comparisons with other societies and some material gathered in a recent visit to a Chinese village) and student-led workshops based on course readings and related topics generated by the particular interests of the participants.

Enrollment is limited to 20. The course will meet twice a week for 1 1/2 hours each meeting. First come, first served.

**SS 122 SOCIAL CONTROL AND DISPUTE SETTLEMENT**

Barbara Yngvesson

Anthropologists are well-known for studying the exotic: ritual chest-pounding among Amazonian Indians, anthropomorphic revenge vengeance in the Balkans. These topics seem far removed from problems of conflict management in urban industrial settings: assault, homicide, theft - arrests, trials and negotiated

settlements. Yet the underlying issues, for the individuals involved and society at large, are similar: problems of keeping order, of containing violence, of achieving just redress of grievances. In this course we will explore these issues, using data from our own and other societies, with attention particularly to the social, political and cultural factors which shape the ways in which conflict is managed and disputes are dealt with. Problems of dispute handling in the contemporary U.S. will be of special concern, with attention to past (turn of the century) and present efforts to develop "innovative ways of handling so-called "minor" disputes which are presently processed in trial courts. While the perspective brought by anthropologists to these problems will be particularly emphasized, a range of literature - in political science, sociology, and law - as well as field observation, will be used in the course. The class will meet twice a week. Enrollment is first come, with a limit of 20.

**SS 129 THE WORLD FOOD CRISIS**

Ray Copinger and Frank Holmquist

The course combines natural and social science perspectives on the current world food situation with particular emphasis on New England, the United States, and third world agriculture. We begin with a discussion of the extent to which trends and the present situation justify the term "crisis", followed by an examination of the ancient origins of agriculture and selected food and ecological crises in antiquity. The historical evolution of New England agriculture will provide groundwork for the study of the rise of modern agriculture in the United States involving rapid technological change, a centralized food marketing and processing system, fossil fuel dependence, the precarious condition of the small farmer, and efforts to revive rural communities around a small farmer base. Field trips and a look at the New England sheep industry will provide concrete experience. The rise of European agriculture and the colonial impact on African agriculture will supply the conceptual background for a close look at several third world processes and issues: the population issue, the promise and pitfalls of Green Revolution technology, and the particular examples of the island of St. Kitts in the Caribbean and the Sahel region in Africa. China will be examined as a case of socialist agriculture and a possible alternative to dominant trends.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is unlimited.

**SS 132 PSYCHOTHERAPY: DOES IT WORK? HOW DO WE KNOW?**

Louise Farnham

By looking closely at some of the research evaluating the efficacy of psychotherapy, students will learn about the state of the art reflected in the literature as well as developing some proficiency in dealing with questions in areas where elegance is sacrificed to significance. Now is the judgment made that psychotherapy "works"? What are the criteria? How do qualities of the therapist and/or the patient/client influence outcomes?

There will be two brief writing assignments and one seminar paper. Students will be expected to participate in class discussions of assigned readings of their seminar papers. Twice a week, 1-1/2 hours each time. Limit: 20, lottery if necessary.

**SS 150 ATTITUDE CHANGE AND SOCIAL INFLUENCE**

Donald Poe

This course will use the investigation of intentional social influence as a theme for introducing students to the ways that social psychologists view the world, approach problems, and gather information. Students will learn about the assumptions and beliefs which underlie the social psychological approach to obtaining knowledge, as well as the design, methodology, and implementation of social psychological experiments.

The topics in social influence which will be used to illustrate the social psychological approach include advertising and persuasive communication, the techniques of con artists, brainwashing, the detection of deception, and the relationship between attitudes and behavior.

The class will evolve by degrees from a point where the instructor presents and solves research design problems, to one where students begin to critique designs as they gain experience. Students will write a series of very short papers and critiques, do a read original research reports, conduct a class experiment, and do a class project which can take many forms.

The class will meet twice a week for 1 1/2 hours per sessions. Enrollment is limited to 25 students. First come, first served.

**SS 152 ECONOMIC DEMOCRACY: ITS NATURE AND PRACTISE. WHAT A FULLY DEMOCRATIC SOCIETY MIGHT LOOK LIKE**

C. George Benello

This course will study economic democracy on two levels: a content level and a process level. Initial sessions will be spent on self-organizing. After a format is decided on, individual contracts will be written. There will be a focus on group performance and dynamics and process issues with the aim of combining process and content types of learning. Among possibilities to be decided on are field trips, simulation/gaming experiments, and subgroup projects.

Maximum enrollment: 25, by instructor permission. Mts. per week: two 3-hour meetings

**SS 159 CHICAGO AND NEW YORK EXPERIENCING THE BIG CITY**

Myrna Breitbart, Bob Rakoff

This is a course on understanding and appreciating the everyday experience of living in a big city. While we will pay special attention to the theoretical literature on urban life, our main concern will be to reconstruct, through many media, the feeling and special meaning of everyday life in the city. And while we may seek to generalize about urban life as such, our focus will be on an in-depth description and analysis of

life in two of the world's great cities, Chicago and New York. Through fiction, poetry, journalism, film, television, radio, music, and even social science (at least the good kind like ethnography and oral history) we will seek to plumb the depths of people's experience in and of these two characteristic, but unique and different cities. If possible, trips to one or both speakers. Topics will be chosen from among the following:  
 --the immigrant experience (turn-of-the century Europeans and contemporary Third World Peoples)  
 --the work experience (steel mills and sweat shop; hog butchers and capitalists)  
 --the play experience (the Cubs v. the Mets; Lincoln Park v. Central Park; Colcha)  
 --the sensual experience (sights, smells, tastes, sounds)  
 --the fear and power experience (crime, danger, and politics; Da Boss, Da Mob, fat cats and cops)  
 --the free experience (buns, bohemiens, beats, rads: life on the streets)

As a Div. I course, ample opportunities will be provided for interpretive and critically analytical writing. Papers of a project will be expected for evaluation. The course will meet twice a week, 90 minutes per session. Limit of 16. First Come.

**SS 165 THE HISTORY OF THE FAMILY**

Margaret Mahoney and Miriam Slater

This course will focus on the development of the family in the early modern period of Western Europe (17th and 18th centuries). Since changes in family structure, relationships, and values take place at different rates over time and have little respect for arbitrary chronological categories, these dates are meant to provide a starting point and emphasis for the work of the course rather than a time limit. Historical studies of Western European and Colonial American family life will be used as the substantive materials of the course. It will, however, be interdisciplinary in approach because we will employ the conceptual tools of the behavioral sciences in formulating questions and in analyzing the historical material. In keeping with the interdisciplinary nature of the course some literary sources may be utilized but these will be chosen on the basis of what they can contribute to our understanding of historical development. Collateral readings in the social sciences will be assigned according to the interests and levels of achievement of the students.

The course will examine the following problems: the structure of the family; the functions of the family; the patriarchal family; relationships; marriage; children; hypothetical model for the traditional family. Some texts to be used include: Aron, Philippe, *Centuries of Childhood*; Gordon, Michael, ed., *The American Family in Social Historical Perspective*; Hunt, David, *Marriage and Childbirth in History*; DeWoe, Lloyd, *The Evolution of Childhood*; in *History of Childhood Quarterly*; Loring, R. D., *Politics of the Family*; Firestone, Shulameth, *Politics of Sex*.

The course will meet twice a week for 1-1/2 hours each session. Enrollment is limited to 15 on a first come, first served basis.

**SS 202 ADULT DEVELOPMENT**

Louise Farnham

This course will deal with multiple facets of human development in the adult years. We will address such topics as the relationship of adult development to earlier development, the nature and extent of cultural influences on the development of adults, social and psychological processes as they relate to biological and physical aging. Psychological and social components of adult development processes will be emphasized. Although there will be textbook readings from primary sources will be extensive and will form the basis of three short papers. The short papers and a "classroom" term paper on a topic of each student's choice will provide the basis for the evaluation. Two classes per week, 1-1/2 hours each. Unlimited

**SS 206 RELIGION: A CROSS-CULTURAL PERSPECTIVE**

Leonard B. Glick

There are almost as many theories about religion as there are religions. Rather than talking about what religion "really is," we'll be studying particular religions and using theories eclectically to help us toward better understanding. The course will be grounded in accounts of particular religions around the world; the writings of theorists, particularly theorists with universal explanations, will not be our central concern.

We'll begin with a study of localized religions - that is, religions belonging to small groups living in relatively isolated circumstances and focused almost entirely on their own society and identity. Such people include hunters and gatherers, horticulturalists living in villages, and nomadic or semi-nomadic pastoralists. Their historical origins, organization are obvious considerations for understanding their religions. We'll turn next to people practicing versions of major religions - that is, historically established religions of widespread distribution and national acceptance, as variously interpreted and practiced by rural peasants in those nations. Our examples here will be the Buddhism of peasants in Thailand, the Catholicism of Native American peasants in Mexico and Guatemala, and possibly some versions of Islam. We'll conclude with a study of innovative religions, which develop as "movements" or "cults" in response to rapidly changing socioeconomic conditions. Our examples will be revitalization movements in the Pacific, known as "cargo cults"; the so-called "new religions" of Japan, particularly Soka Gakkai; and religious movements now attracting attention in the United States.

The first part of the course, on localized religions, will be primarily by responsibility, but students will be expected to assume more responsibility as we proceed and to lead some of our discussions on major and innovative religions. Everyone will be expected to write two papers (about 6-8 pages each): one on a localized religion, and one on a major innovative religion. Course evaluations will be based on contributions to class and written work.

A Wednesday evening film series (7-9 P.M.) will be integrated with parts of the course and should be considered in scheduling. Class will meet for 1-1/2 hours twice a week. Enrollment is open.

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SS 208 OBSERVER AND OBSERVED IN LITERATURE AND ANTHROPOLOGY

David Smith and Barbara Ingvesson

This course will combine the insights of cultural anthropology and literary criticism in examining works (including ethnography, poetry, drama, satire, essay) in which the relationship of an outsider (observer) to a community is an issue. We will consider the attempt of a narrator or author to understand a fictional community and the efforts of anthropologists to understand "real" communities. Beyond this however we will consider questions dealing with the reader or literary critic as "observer" of a text which is read, and of literary persons who may be observers of one another within a fictional narrative. We will be interested both in theory relevant to understanding issues of observation, and in literature which suggests different ways in which the relationship of observer and observed might be conceived. In particular we are interested in the notion that ethnography, literary criticism, and other forms of writing result from an encounter of observer and observed, and that it is this encounter, and its effects, which require attention.

Literary questions to be introduced include the nature of the literary person, the impact of literary genre (and/or movements) on point of view, connections between visual (i.e., photographic) and verbal representations of experience and the question of style as applied to anthropological writing. Anthropological questions include the nature of the anthropological person, the impact of personal background and scientific models derived from anthropology (functionalism, structuralism) on the way an "other" is portrayed, the nature of the relationship of observer to observed, the effect of this on both, and its impact on the resulting ethnographic report.

Texts include ethnographic work (with particular attention to the work of Levi-Strauss and other structuralists) as well as papers dealing with the relationship in the fieldwork process; theoretical discussions of approaches to anthropology and literary criticism; literary texts (ranging from *Walter's Travels* to the writings of James Agee and Robert Coles) in which the observer activities conduct in a semi- or fully fictitious small community.

The course should appeal to students of literature, writers, budding anthropologists, social historians and people interested in a general way in the problems of "observing" others with sensitivity and insight.

The class will meet twice a week for 1 1/2 hour sessions, open enrollment.

SS 210 INTRODUCTORY ECONOMICS

Frederick Weaver

An introduction to economic analysis, covering the principles of both major approaches to the study of economic behavior (i.e., micro and macro) serves as the needed prerequisite to virtually all advanced economic courses and itself contributes to a wide variety of concentrations.

Although the central aims of the course are identical to those of previous years, this differs in that the making and analytical principles will be introduced through interpretations of U.S. history, using R. K. Vedder, *The American Economy in Historical Perspective*. We will then go through P. Heyne, *The Economic Way of Thinking* and the accompanying workbook in order to review systematically the central concepts.

We will meet for two two-hour class sessions per week, and there will be an extensive take-home examination at the end of the term. Enrollment is unlimited. Five-College students will be graded PASS/FAIL only.

SS 212 AMERICAN GOVERNMENT AND PUBLIC POLICY

Robert Rakoff

The goal of this course is the development of an adequate theoretical framework for explaining and assessing the making and implementing of public policies at the national level. We shall try to do this not primarily by considering theories of state-society interactions but, rather, by investigating the institutions and processes -- both public and private -- that are able to act (or not act, as the case may be) in the name and with the authority of the state. In general, we shall be seeking answers to the following questions: given the system-maintaining and inequitable impacts of public policies, how is the federal government organized systematically to produce such impacts and why and how does such a government remain legitimate in the eyes of citizens?

This will involve several analytical and empirical tasks: describing and assessing the consequences of important federal actions and programs as their impact is felt by immediate beneficiaries and sufferers; assessing the impact on existing socio-economic structures; describing and evaluating the actual processes and structures for making and implementing decisions in various branches of the government, with special attention to the elitist and ideological biases inherent in those processes and structures; understanding the dialectical relationship between the *contents* (cultural, institutional, economic) of policy making, on the one hand, and the actual *contents* (material and symbolic, of policies on the other; and finally, trying to figure out just who, if anyone, has power at different stages in the policy process. Special attention will be paid to the ambiguous role of elections in all of this.

The class will meet twice a week for 90 minutes per session. Open enrollment.

SS 214 CAPITALISM AND EMPIRE: NEW ENGLAND AND AMERICA IN A GLOBAL PERSPECTIVE

Miriam Slater, Nancy Fitch and Laurie Nisonoff

New England as a geographic entity and as a period of scholarly focus has long enjoyed a distinguished historiography. This has come to include not only studies of historical events but also embraces the more recent problems generated by the "new social history" which shifts the historians gaze to those further down the social scale and includes, among others, those of mental, family and women's studies, as well as economic developments and class analysis. In addition to the historians, this kind of area study has attracted the attention

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of geographers, political theorists, sociologists, economists, literary exegetists, and others. While this course will concentrate on a particular geographic area, New England, the focus will be on the latter's connection to American history more broadly considered. As such the course will serve as a broad background in American history. Open Enrollment. Class will meet for 1-1/2 hours twice a week.

SS 217 PROBLEMS IN THE PHILOSOPHY OF LAW AND JUSTICE

Lester Mutor

What is the nature of law? What is the meaning of justice? These two questions have figured in the works of major philosophers from Plato to the present day and in the writings of legal scholars. This course will explore their ideas and seek to determine their significance for a number of topics of current concern.

A principal object of the course will be to examine the difference one's philosophic position makes to the resolution of practical problems. This emphasis will be reflected in the manner in which the course will be taught. After a brief introductory exploration of the history of legal philosophy, members of the class will be asked to select the work of a particular modern philosopher for intensive study. During most of the remainder of the term each student will speak on behalf of that philosopher in general class debates on a series of issues, including civil disobedience and the sanctity of life, the growth of the law, the capacities of international law to contribute to world order, the relationship of law and language, the impact of science and technology upon law, and the limits of the legal order.

No previous work in philosophy or law is presupposed.

Materials for the course will include Friedrich, *Philosophy of Law in Historical Perspective*; Hart, *The Concept of Law*; Fuller, *The Law in Quest of Itself*, and problem materials and problem materials prepared by the instructor.

The class will meet twice weekly for 1 1/2 hours. Enrollment is unlimited.

SS 218 THROUGH THE LOOKING GLASS: A STUDY OF LAW AND SOCIAL PSYCHOLOGY

Oliver Fowlkes and Don Poe

Recently, the validity of some basic assumptions about law and litigation have been challenged by controlled experiments of social psychologists. For example, the size and composition of juries will not affect the fairness or outcome of their decisions, that witnesses can remember and accurately testify about previous events, and that the moral role of lawyers in the judicial process is to argue cases before judges. This Division II course will examine selected theories and methods of social psychology, and application with specific attention to areas where law, judicial process and psychology intersect. Among other things we will look at memory and eyewitness testimony, biasing in information processing, predictability of conduct, culpability, decision making at all levels of the legal process, defendant demeanor in court, polarization in juries, and etiology of violent behavior.

In addition to examining these currently researched problems, we will attempt to target issues beyond those enumerated and break new ground in the law/psychology dialogue. What is the role of the social psychologist and experimentation in elucidating solutions to legal problems, court overuse, development of alternatives to the judicial process, revised roles for lawyers, opposition to movements for workers' control and decentralized conviction processes, and the use of psychology in dispute resolution.

The course is offered to Division II students in law, legal process, social psychology, clinical psychology, sociology and public policy. It will meet twice a week for one and one half hours each time. Enrollment is open.

SS 233 LABOR AND COMMUNITY

Myrna M. Breitbart and Laurie Nisonoff

This course will explore the relationship between historical changes in the labor process under capitalism and the experience of workers in the workplace and larger community. We will also discuss contemporary alternatives, paying particular attention to movements for workers' control and decentralized socialism. Using an interdisciplinary approach, we will consider a number of themes and questions which focus on the changing nature of conflict between capital and labor:

**Theme #1:** The relationship between the organization of the labor process and work environment in different stages of capitalism.

**Theme #2:** The relationship between the capitalist mode of production and spatial organization (what roles does the patterning of built environments play in sustaining a particular mode of production? How are divisions between and within classes reflected and reinforced by spatial segregation?)

**Theme #3:** The historical and contemporary responses of workers to changes in the labor process and the effects of work, alienation, and struggle upon community. Also, the major mechanisms (economics, political, legal, spatial, etc.) which capitalists have employed to defuse working class organization, both in the workplace and larger community.

Several issues and controversies facing labor today will also be addressed with special emphasis placed on the present economic situation in New England. Among the topics to be considered are: Runaway shops and plant closing; Worker participation, self-management and control; community/worker ownership; regional economic base analysis; dual labor market and labor market segmentation; human capital theory; and paid vs. unpaid labor.

Students will be encouraged to work on research and data gathering projects related to the topics of immediate relevance listed above. This course should therefore fit in well with other courses offered in the New England Studies and Economic Participation and Self-Management programs.

Tentative texts include: Swerzman, *Labor and Monopoly Capital*; Ben, *The Captains of Consciousness*; Case & Hummel, *Workers' Control: A Reader in Labor and Social Change*; Gutman, *Work and Culture in Industrializing America*; Montgomery, *Workers' Control in America*; Gordon, *Theory of Culture and Underemployment*; Connick & Cobb, *The Hidden Injuries of Class and Goodman, The*

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Last Entrepreneurs.

The course will meet twice a week for 1 1/2 hours. Evaluation will be based on class discussion and papers. Enrollment is open and Five College students are welcome.

SS 234 PHILOSOPHIES OF AMERICAN EDUCATION

Hedy Rose

An examination of the writings and ideas of certain major figures in the development of American education. We will consider the contributions of such figures as Horace Mann, Dewey, Whithead, Comant, Henry, Rogers, Goodman, Damon, MacLachan, Holt, and others to the mainstream of American educational philosophy. Our concern will be with the social and historical context as well as with the impact of these ideas on American education.

The format will be seminar-style. Students will prepare reports on various writers for group discussion and will write individual term papers demonstrating an understanding of the relationship between educational philosophy and social realities.

Enrollment is unlimited. The course will meet twice a week for 1 1/2 hours each session.

SS 257 AFRICAN DEVELOPMENT

Michael Ford and Frank Holmquist

The course is about African development both social and material. We begin with a review of pre-colonial contacts (including slavery) with representatives of International Capital illustrating how this contact conditioned African development even before the advent of formal colonial rule. The motives and nature of imperial struggle for territory and economic advantage will be reviewed, followed by an analysis of the nature of the colonial economy and the reasons why colonialism was overthrown. The class structure of post-colonial society will be examined in some detail with discussions of the state, ideology, multinational corporations, rural development, and the working class situation in post-colonial society. The nature of everyday politics and military coups d'etat will be discussed prior to a class look at Kenya and Tanzania as examples of capitalist and socialist economic development respectively.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is unlimited.

SS 275 STATE AND SOCIETY

Carol Bengelodorf, Margaret Cerullo, Joan Landes, and Lester Mutor

The course will examine past and present theories of the capitalist and socialist state (emphasis on the former) and their relation to society. Theories of Hegel, Marx, Lenin, Weber, as well as writers engaged in the current debate will be studied. Specific empirical topics will include a look at one or more socialist states, the cause and nature of the modern capitalist welfare state, American ideology and consciousness regarding the state, the nature of contemporary American class structure, the role and function of American political parties and elections, the current-fiscal crisis of the state, and scenarios for the future.

Enrollment is unlimited. The course will meet 1 1/2 hours each session twice weekly.

SS 280 WOMEN IN SOCIALIST SOCIETIES: THEORY AND PRACTICE

Carol Bengelodorf and Joan Landes

The emphasis in most feminist circles has been on historical and current aspects of women's situation in "western" capitalist societies. Yet feminist theory tends to point beyond such societies. The object of this course will be to explore these dimensions, to examine feminist thought in relation to socialist experience, and, in turn, to analyze socialist experience in the light of feminist thought.

We will begin the course by considering the theoretical frameworks within which our investigation will take place: feminist analysis and socialist theory. We will then proceed to examine the historical experience of women in those societies which have undergone socialist revolutions. In particular, we will look at the experience of women in Russia, China, Cuba. In each we will examine certain key questions centering around the degree to which a revolutionary reorganization of focus has involved or been paralleled by a revolutionary reorganization of the sexual hierarchy.

Many different issues are subsumed under this theme. Some examples include: the position of the family in socialist thought and in socialist societies; the many different views of production and reproduction, the sexual division of labor, what it is, has been, and could be; women's position as worker and housewife.

Our purpose in this exploration is to assess the degree to which the socialist revolutionary tradition and feminist thought converge and the degree to which they may contradict one another. Such an understanding, we believe, will give us vital perspective on our own society. For this reason, the concluding sessions of the course will return to the theoretical considerations with which we began, and reassess them in the light of the historical experience we have examined. Readings will focus on both the theoretical framework (to be looked thereafter) and the experience of women in each of the revolutionary situations examined. The class will meet for 1 1/2 hours, twice weekly. Enrollment is unlimited.

# COURSE DESCRIPTIONS

## DIVISION III INTEGRATIVE SEMINARS

BIOCHEMISTRY MAY BE GOOD FOR YOU IN 330	Foster
LANGUAGE IN CONTEXT IN 331	Shepard-Kegl
SEMINAR IN THE POLITICAL ECONOMY OF RACISM IN 332	Hogan
AMERICAN ENVIRONMENTAL HISTORY IN 333 (SS 215)	Lutts
NEW WAYS OF KNOWING (January term)* IN 344	Bernstein

IN 330	BIOCHEMISTRY MAY BE GOOD FOR YOU	John Foster
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Many students have expressed a need for biochemistry but do not want to suffer the rigors of my enzymes course. My response has been that there are many general biochemistry courses already available in the Valley, so why should I add another one? On the other hand there are many public issues, such as genetic engineering, tailor-made bacteria which make human hormones, new drugs designed from scratch and questions of carcinogens and other pollutants which have a strong biochemical element to them. Thus the question doesn't really go away—What should you really learn about biochemistry from someone like me so that the rest can be left up to you? What I would like to do is gather together a group of Natural Science and Non-Natural Science students to read about and discuss some of these biochemically oriented issues. The group can use me and those students with some biochemistry background to fill in the technical details and the expertise of others with more background in public policy and human behavior to sharpen our understanding of the impact of this technology on society. In the process I hope to get a better feeling for what I should put in a (popular?) biochemistry course. \*We'll teach in the future.

Class will meet one evening per week.

IN 331	LANGUAGE IN CONTEXT	Judy Shepard-Kegl
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This seminar will take a broadly based look at the nature of human language and its various interrelations with thought and other activities. We will also consider various practical applications of theoretical language models to such areas as education, second language learning, language disorders, etc.

This seminar should appeal to people in any area of language study as well as to students in education or the social sciences. Meeting times to be arranged.

IN 332	SEMINAR IN THE POLITICAL ECONOMY OF RACISM	Lloyd Hogan
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The course is designed to develop a critical understanding of the role of racism as a crucial economic agent. To achieve this goal the class concentrates on three or four sets of problems for intensive analysis in order to determine the necessary or sufficient conditions under which racism generates an optimal solution to the problem. Alternative non-racist solutions are compared to the racist solution for a proper assessment of the economic impact of the latter solution.

Some of the problems which are candidates for study are (a) the process by which wages are distributed in the labor market, (b) the mechanism for distribution of jobs in the work place, (c) the process of formation of specific job skills among members of the population, (d) the dynamics of wealth distribution, (e) the formation of economic class divisions, (f) black American slavery as a mode of capitalist primitive accumulation, (g) the process of transformation of slaves into sharecroppers following the American Civil War; (h) the great migration from the land as a transformation of sharecroppers into free wage laborers, (i) the persistence of black economic underdevelopment.

Each student will choose one of the problems for concentrated study and rigorous class presentations either singly or as a member of a study team.

Great stress will be given to conceptual formulation of the problems and much effort will be given to the organization of existing empirical knowledge.

The course will meet twice a week for two hours each session. The seminar will be taught on the Mt. Holyoke campus. Enrollment is limited to 20. Permission of instructor required.

## DIVISION I PROSEMINARS

Division I proseminars, designed especially for students new to Hampshire College, are offered in fall term 1980 by faculty in all four schools. The proseminars are of substantive, intellectual content, problem- or issue-focused, and share the purpose of introducing students to the larger academic life of the college, including its basic structure of divisional examinations. The proseminars are intended also to develop some general intellectual skills essential to the pursuit of further learning (for example: how to work through an analytical process, essay evidence and inference, and organize an argument; how to read thoughtfully, critically, and imaginatively; how to write with clarity, economy, and some measure of grace; how to make efficient use of resources and tools of research and documentation, including the Hampshire and Five College library systems).

Faculty teaching proseminars have agreed to grant preference in enrollment to entering students. Additional enrollment spaces may be available for more experienced students who are interested in the subject matter of the course or who believe their learning would be well served by the proseminar goals outlined above. Entering students will have an opportunity to preregister for a proseminar in the summer before their arrival.

AMERICAN FAMILIES, AMERICAN WOMEN HA 118	D. Smith Kindvall Hardie
GODS, BEASTS AND MORTALS: THE BEGINNINGS AND THE END OF POLITICAL THEORY HA 121	Meagher
COLLEGE WRITING/EUROPEAN WRITERS: SHORT STORIES HA 134b	F. Smith
IDEAS OF ORDER HA 169	Kennedy
UNDERSTANDING TELEVISION LC 108	Muller Epstein
CULTURE AND THOUGHT: A PSYCHOLOGICAL PERSPECTIVE LC 152	Gearhart
LANGUAGE AND LITERATURE LC 177	Gee Berkman
THE PSYCHOLOGY OF HUMAN INTELLIGENCE LC 187	Stillings
ACID RAIN SS 114	Williams
HUMAN BIOLOGY: LEARNING TO LIVE WITH IT NS 121a	Foster
HUMAN BIOLOGY: HUMAN MOVEMENT PHYSIOLOGY NS 121b	Ann Woodhull
NATURAL HABITATS OF NEW ENGLAND NS 147	Lutts Van Rantle
POLITICAL JUSTICE NS 115	Mazor
SOCIAL ORDER HERE AND THERE NS 140	von der Lippe
AMERICAN CAPITALISM SS 184	Warner

HA 118	AMERICAN FAMILIES, AMERICAN WOMEN	David Smith, Susan Kindvall, and Janet Hardie*
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This seminar will explore the changing and enduring character of American families through a careful focus. First, we'll attend to the characteristic relationships among a family's members, particularly those between wives and husbands and between parents and their children. Second, we'll be seeking awareness of a family's spaces, its intimate geography, its home—Each of us knows and remembers the individual rooms of a house and its surroundings (yard, street, barn, field) as possessed of a distinctive character—an atmosphere, an emotional tone, a vividness or emptiness, a clarity or mystery. Families and their homes change, often in these times with bewildering and distressing tumult and rapidity. But the same families also endure: the lives and homes of two and three generations, if we look with care, are recognizably kin, and more alike than we thought or perhaps wished to know.

Students will be working with three complementary modes of inquiry and expression, and gaining experience of imaginative and critical reading and writing in relation to each: (1) family history and biography, including the process of searching one's own heritage; (2) short fiction and novels portraying the character and evolution of American families and the homes that they shaped and that in turn gave shape to their lives; and (3) works of psychology and family therapy offering means of understanding a family's web of relationships and its patterns of growth, stasis, and decay.

The course will meet twice weekly for 1½ hours. Enrollment is limited to 16.

\*Susan Kindvall and Janet Hardie are Division III students.

HA 121	GODS, BEASTS AND MORTALS: THE BEGINNINGS AND THE END OF POLITICAL THEORY	Robert Meagher
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In order to situate ourselves politically in a thoughtful manner it is well to realize that, as historical mappings go, both the emergence and the demise of Western political theory lie behind us. Western political philosophy begins with the city, the Greek polis, a place for neither gods nor beasts but for men. According to Plato and Aristotle, one who is little more than an animal is unsuited for life in the city; whereas one who is little less than a god has no need for the life of the city. It is those whose lives fall with modesty and moderation between the madness of passion and the madness of thought who require the city as a place of light and speech to illuminate and to articulate their lives and to bring them into being. From there our political path leads eventually to the denial of the primacy of the possibility of thought, and it remains only to calculate power and one's own immediate benefit. We will follow the rough outline of this path from wisdom to power, the path from the fundamental incoherence of the human to the radical privacy of the human.

Our principal readings will be: Plato, *The Republic*; Thomas More, *Utopia*; Machiavelli, *The Prince*; Thomas Hobbes, *Leviathan*; Karl Marx, *Economic and Philosophical Manuscripts*; and *Capital*; Rousseau, *The Social Contract*; and Robert Nozick, *Anarchy, State, and Utopia*. Our final aim will be to question both in theory and in practice whether it is responsible to speak of the end of political theory, or to let others speak of it, or to live as if the only appropriate or possible objects of political thought and speech are privacy, calculated and fully practicable benefits. However, this aim, if reached, will be the fruit of an arduous course through rewarding but wearying works.

This course will meet twice weekly for two-hour sessions. Enrollment is open.

HA 134b	COLLEGE WRITING / EUROPEAN WRITERS: SHORT STORIES	Francis Smith
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We will read some modern short fiction from Europe—Chekhov, Joyce, Woolf, Thomas, et al.—and some criticism. Certain of these stories are acknowledged "classics." We will try to understand.

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stand what makes a piece of literature a "classic." That will involve our discovering how literary judgments are made and how literary conventions are established and subverted.

Please understand that this is primarily a course in writing. The elements of style and other traditional rhetorical concerns will be fundamental matters in this course.

Enrollment is limited to 25. The class will meet twice weekly for one-hour sessions plus tutorials to be arranged.

HA 169	IDEAS OF ORDER	L. Brown Kennedy
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Francis Bacon asserts that "the human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds." The group of texts proposed for discussion during this proseminar might allow us to examine Bacon's hypothesis as we consider the kinds of order that works of art create as well as the differing orders—personal, social, and philosophic—that they reflect.

Though the selection of texts from classical, renaissance and modern periods will provide possibilities for drawing comparison among them, the focus of the course will not be specifically historical, nor will it be narrowly thematic. Rather, since a book and its reader can be said in some definite ways "to order" or to shape each other, our primary purpose in this course will be to read and discuss a group of texts with close attention to methodology—to what it is we do when we read.

As part of this last purpose of developing a clearer sense of our own points of view as readers, members of the seminar will be asked to give shape to a group of short pieces of writing—periodic critical essays and an occasional imaginative or descriptive sketch.

Readings will be chosen from among the following works: Sophocles, *Antigone* or *Oedipus Rex*; The Second Shepherds' Play; W. Shakespeare, *A Midsummer Night's Dream*, *Lear*, *The Tempest*; Virginia Woolf, *Mrs. Dalloway*; William Faulkner, *As I Lay Dying*; Fitzgerald's *Connoisseur*, *Waste Land*; selected poetry of John Donne, George Herbert, Wallace Stevens, T. S. Eliot.

Enrollment is limited to 18. Class will meet twice weekly for 1-1/2 hours.

LC 108	UNDERSTANDING TELEVISION	Richard Muller and Daniel Epstein*
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Hate it or like it, television is one of the common experiences of people in this country. This has not always been true; as television has entered our lives, we have tried to understand what it can do to us and what we can do with it.

In this course two different types of understanding will be developed. One is experiential, the other is academic. The class will produce a live weekly television program to be shown on the campus cable system. We will also examine the history of television in this country, the impact of new technologies on the future of television, and some of the social and behavioral effects of watching television.

The course will have a strong emphasis on organizational as well as communication skills; students will be evaluated on written work based on library research, on class discussion, and on television production skills. We will meet three times a week: Monday and Wednesday mornings for discussion, Wednesday afternoons for studio production work as well as six Wednesday evenings on a biweekly basis. Enrollment is limited to 16.

\*Daniel Epstein is a Division III student in communications.

LC 152	CULTURE AND THOUGHT: A PSYCHOLOGICAL PERSPECTIVE	Maryl Gearhart
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Human cultural groups differ remarkably in their beliefs and in their artistic and technological products. But are there differences across cultures in basic thinking—or "cognitive" processes? Which aspects of cognition appear to be universal and which culturally specific?

This course is an examination of theory and research in cross-cultural cognitive psychology. We will first examine cross-cultural studies of adult memory, classification, and problem-solving abilities. We will then turn to investigations of cognition in childhood, with particular attention to the developmental theories of Piaget and of Vygotsky and to the research which has tested those theories across cultures. Piaget and Vygotsky share certain assumptions about cognitive development, but Piaget emphasizes the universal nature of human biology and of physical environments, while Vygotsky emphasizes culturally specific "tools" for thinking, especially language. Finally, we will reflect upon methodological problems in cross-cultural research. For example, experiments themselves are cultural inventions potentially at odds with the culture of the subject; researchers have discovered that, in any culture, it is critical to determine and not presume how a subject interprets the experimental task.

Class sessions will include both lectures and discussions. Course requirements will consist of several short papers and one longer paper. The class will meet twice a week for 1 1/2 hours each time. Enrollment limited to 20.

LC 177	LANGUAGE AND LITERATURE	Dorothy Berkman and James Paul Gee
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Literature demands an active, imaginative, and creative mind in the hearer or reader no less than in the artist. Each of us brings to English literature a complete mastery of the basic medium of that art, namely written language. Nonetheless, we must learn to exploit that mastery in order to appreciate the art of a literary work, just as the artist must exploit his or her mastery of the language to produce it.

Every aspect of the language of a literary work potentially can contribute to its aesthetic effects and to its overall meaning. Thus, to understand and appreciate literature fully we must have some appreciation for the resources and structures of our language, as well as for the ways these resources and structures can be put to use in literary art. This class will be based, then, on an understanding of the nature of language, close reading and analysis of literary texts, and a broader view of lit-

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ecture in the context of art and aesthetics generally.

Integrated into this course will be an emphasis on the development of critical and analytical skills in writing. This emphasis on "learning to write" will be related to the classroom consideration of close reading of texts and literary criticism, but attention will also be paid to the generalization of these writing skills to papers in other areas as well.

The course, then, has two basic goals: (1) to help the students grow as readers of literary art (poetry, short stories, and novels will be our primary concerns as texts) and to appreciate the resources of English (or any human language) as a medium of literary art, and (2) to help students develop their writing and critical skills, both within the context of class work and as an introduction to "college writing."

This class will meet two hours twice a week, with these sessions given over to a balance of lectures, discussion, and writing workshops. The class will require a substantive commitment in time and energy. Enrollment is limited to 20.

LC 187 THE PSYCHOLOGY OF HUMAN INTELLIGENCE  
Neil Stillings

This course is devoted to comparing and criticizing the two main approaches to studying human intelligence that have developed within psychology. The first approach is differential psychology, or "intelligence testing," which attempts to characterize individual differences in intelligence using methods of statistical measurement. The second approach is experimental, or cognitive, psychology, which emphasizes the measurement of individual differences in favor of more fundamental investigations of the nature of intelligent thought using the experimental method. The study of the differences between verbal and visual thought will be throughout the course to illustrate the research methods of differential and cognitive psychology. The class will collect and analyze data on several aspects of this question, such as the nature of spatial visualization ability, and right hemisphere advantage in certain visual skills. The several written assignments in the course will concern these these experiments.

The course will meet twice a week for two hours each time. Enrollment is limited to 20.

NS 114 ACID RAIN  
Lloyd Williams

Rain and snow in the United States and Scandinavia have become more and more acidic as air pollution from sulfur and nitrogen oxides has increased. In the United States, this problem was once thought to be confined to the Northeast. However, "acid rain" has also been found recently in areas of the Midwest and in Colorado. This "acid rain" may have adverse effects on a wide variety of natural processes such as the availability of nutrients to plants; the formation of soil; and the composition of plant communities. Acid rain has also been linked to the disappearance of fish in high altitude Adirondack lakes.

We will explore the nature and scope of the acid rain phenomenon by reading and discussing significant research papers. Relevant chemical principles will be introduced and discussed when appropriate. Students will have the opportunity to develop their understanding of chemistry through the application of these principles to the acid rain problem. In addition, students will work on field or laboratory projects individually or in small groups. These projects may address questions such as: how acidic is the rain in this area; what is the source of the acidity; and what happens to the acidity as the water moves through the ground. No special background is necessary to participate in this course.

Class will meet 1-1/2 hours twice a week, plus a 3 hour lab. Enrollment is limited to 15.

NS 121a HUMAN BIOLOGY: LEARNING TO LIVE WITH IT  
John Foster

When a severe and/or chronic illness strikes, the fabric of a family is often torn. Family members often do not fully understand what has happened to the victim, do not know what may happen next, do not know what adaptations the patient and the family may have to make and cannot come to terms with the long-term consequences of the illness. This seminar will deal with one or more of these illnesses, such as diabetes, cardiovascular disease or severe arthritis, during the first 5 or 6 weeks. We will learn the relevant physiology and biochemistry, examine some of the current research aimed at a better understanding of the disease and a more rational treatment of it, and look at the way our health care delivery system does or does not deal with the problem. The remainder of the semester will be devoted to studies which the students will choose. Class time will then be devoted to individual conferences with the instructor, with time provided at the end for the students to present the results of their studies to the rest of the class.

Class will meet for 1-1/2 hours twice a week. Enrollment limited to 16 (12 new students, 4 old students). Be sure to read the general description of the Human Biology program under NS 121 in the School of Natural Science section.

NS 121b HUMAN BIOLOGY: HUMAN MOVEMENT PHYSIOLOGY  
Ann Woodhull

This course is for dancers, athletes, and others who are interested in how their bodies move. We will not attempt to survey all of human anatomy or kinesiology (the study of movement). Rather, by reading scientific papers, we will look closely at how scientists try to obtain information on muscle use and control.

I think it is both important and exciting to apply biologists' results and theories to our own bodies. In addition, we can extend our ideas about movement into the laboratory by measuring muscle activity with the electromyograph. No science background is needed.

Class will meet for 1-1/2 hours twice a week. Enrollment limited to 16 (12 new students, 4 old students). Instructor permission based on a written statement on "Why I want to take this

course." Be sure to read the general description of the Human Biology program under NS 121 in the School of Natural Science section.

NS 147 NATURAL HABITATS OF NEW ENGLAND  
C. Van Kaaite and R. Luttis

Aquatic and terrestrial plant ecology will be emphasized. As an introduction to marine ecology, the course will begin with a weekend field trip to Cape Cod. Other field trips include: a day-long trip to a New Hampshire forest, an unusual botanical site in southwest Massachusetts, several habitats along the Connecticut River. For evaluation students will be required to complete a self-designed class project and write two short, assigned papers. Five College students will be graded.

Class will meet for 3-1/2 hours twice a week for lecture, lab, and field trips.

Enrollment is limited to 15 students, first come first served.

SS 115 POLITICAL JUSTICE  
Lester Mazor

Politics is an activity basic to all human interactions; law is the principal instrument of government in modern societies. Justice is one of the highest ideals of human existence. This seminar will examine the ways politics, law, and justice intersect in dramatic political events. The goals of the seminar are to establish some familiarity with the characteristics of a trial in a court of law, to examine the functions and limits of the trial process, and to explore theories of the relation of law to politics and of both to justice.

We will begin by examining the roles of the parties, attorneys, witnesses, judge and jurors in a conventional trial on a matter which is not highly charged with political consequences or emotion. The bulk of the course will consist of class study of a number of notable political trials and of the myths which arise from them. Examples of the kinds of trials I have in mind are the Sacco and Vanzetti case, the Rosenberg case, and the case of the Chicago eight. What political ends were sought and obtained and whether justice was done will be persistent questions.

The material for discussion will include transcripts of the trials and contemporary news accounts wherever possible; Kafka, *The Trial*, and other works of poetry and fiction; Kirchheimer, *Political Justice*, and other works of political and legal theory.

During the last third of the course students will work in small groups to develop presentations on particular cases. Several Hampshire students who are doing advanced work in this field will assist in leading these groups and also will work closely with the students in the course during its earlier phases.

The course will meet twice a week for an hour and a half each meeting. Enrollment is limited to 20. A lecture if necessary.

SS 140 SOCIAL ORDER HERE AND THERE  
Robert von der Lippe

This seminar will combine two general objectives: the introduction of sociology as a field of study and the exposure of Division I students to the social research methodology. For the accomplishment of the first objective, the first few lectures and seminars will focus upon the concepts of social organization and the specific elements of norms, roles, statuses, groups, associations, organizations and stratification. There are some of the elements that make for social order. After this early introduction the seminar will be devoted to the conduct of a group independent study program. The object of these independent studies will be to look for the fact of social order or disorder and to try to understand the factors which make for that state. Each student will select, with the instructor's help and advice, a project for the semester which will entail the empirical study of some aspect of social order or disorder. Discussion during seminar periods will be focused upon the integration of individual projects, the sharing of individual problems and, hopefully, sharing solutions to those problems and finally, the group's discussion of methodologies for the analysis of social order or its absence.

Enrollment limited to 16; first come, first served. Course will meet for two hours twice a week.

SS 184 AMERICAN CAPITALISM  
Stanley Warner

The primary focus of this course is the current structure and performance of American capitalism. We'll begin by developing the theory of alternative market structures: monopoly, competition, oligopoly. A dominant theme of this theory is that capitalism requires competitive markets if it is to function optimally. Because the concentration of economic power in the U.S. is so clearly at odds with this traditional belief in free markets, a number of new theories have emerged which attempt to rationalize -- even to the point of making a virtue of -- the dominance of a few hundred multinational firms. A second aspect of this course will be to critically evaluate these theories.

In a number of fundamental questions, however, the performance of an economic system involves questions that transcend the issue of whether markets are competitive or monopolized. Work alienation, class structure and consciousness, and the relationship of economic power to political power are three such areas of concern. These issues warrant full courses of their own. A third aspect of the course, however, will be to at least broach these questions with the hope that it will keep us from slipping into too narrow a frame of reference.

Throughout the course there will be a strong emphasis on direct applications to specific issues (steel, oil, motor, drugs), specific controversies (conglomerates and ITT, militarism, energy "crisis") and specific proposals (from the New Populism of Rader, Fred Hartia, and others to the approaches of the "old" and "new" Left).

The reading will include:

F. M. Scheerer, *Industrial Market Structure and Economic Performance*  
J. K. Galbraith, *Economics and the Public Purpose*  
Milton Friedman, *Capitalism and Freedom*  
Paul Baran and Paul Sweezy, *Monopoly Capital*

This is a Division I course which assumes no prior work in economics. A person completing the course would be prepared for an intermediate course in the area known as microeconomic theory.

The course will meet twice a week for an hour and a half each meeting. Enrollment is limited to 16.

OUTDOORS PROGRAM

The Outdoors Program is a voluntary, coed alternative to compulsory physical education and intercollegiate team sports. In the past, it has offered students extensive opportunities to learn mountaineering, rock climbing, and other outdoor skills, with an orientation toward student and staff initiated expeditions and trips. Equipment and arrangements for cross-country skiing, snowshoeing and orienteering have been made continuously available.

The Hampshire Outdoors Program tries to give special emphasis to integrating outdoor and physical learning experiences with the rest of college and life. Programatically that means the Outdoors Program collaborating with Hampshire faculty, staff, and students in ongoing courses (a possible example: a canoe trip down the Connecticut River as a part of "The American Literary Landscape").

"Fusion of body and intellect" has long been a goal of the O.P. This year the Program will continue to offer body potential work and body awareness alongside of outdoor skills courses.

A third goal, to facilitate a personal experiencing of nature will terminate in opportunities for local natural history explorations, as well as continuing to make hiking, biking, camping, cross-country skiing, snowshoeing, caving and expeditioning available to interested students.

During January Term and vacations, the Outdoors Program's major trips and expeditions occur. They have included climbing in Alaska, Yosemite, and Colorado, canoeing and backpacking in Utah, women's trips in New Mexico, and kayaking in Texas.

The Outdoors Program emerges as not a physical education department, not an athletic program, not an outing club, not an Outward Bound model, not a nature study program, not intramurals, and not a School of the College. What is it? It is an attempt to open up possibilities for integrated learning of body and psyche, to promote an awareness and understanding of nature, to support students in creating their own physical and outdoor experiences, and to join physical ways of learning about oneself and the world with other ways of acquiring knowledge.

Robert Carmichael, Director of the Outdoors Program, is an experienced mountaineer who has climbed in Alaska, the West and in New England. He is interested in outdoor leadership, as well as in teaching rock and ice climbing.

Judy Greenberg is a full-time instructor with the Outdoors Program and a faculty associate in Human Development with H & A. She has a Masters in counseling psychology, with a focus on feminist studies and group dynamics. Judy teaches outdoor leadership training, specifically working with group process/development and examining personal styles of leadership. She is committed to working with women in the outdoors and to using the wilderness as a safe and supportive environment for growth. She also coordinates the pre-college trips for incoming students.

Becky Judd, Director of the Kayak Program, is a gold medal winner in the Whitewater World Championships. Her other interests are in the areas of physical fitness, nutrition, environmental awareness and women in sports.

Ralph Luttis, naturalist in the Outdoors Program, and Assistant Professor of Environmental Studies in the School of Natural Science, received his B.A. in biology from Trinity University and his Ed.D. from UMass, where he studied the theoretical foundations of environmental studies. Before coming to Hampshire, he was a curator at the Museum of Science, Boston. He is currently on the Board of the Hitchcock Center for the Environment. His interests include natural history, environmental education, and nature literature. He is particularly interested in exploring ways on joining the sciences and humanities in our attempt to understand our environment and our relationships with it.

Greg Newth, climbing instructor, has had mountaineering and extensive rock climbing experience throughout the United States. Among Greg's interests within the Outdoors Program are leadership training, design of technical equipment as well as developing an educational process through a co-teaching environment.

In addition to the following courses, the O.P. offers a great variety of trips and other activities. These range from slide shoes to three week-long wilderness trips. These are announced through the O.P. Notice boards, house newsletters, and the O.P. calendar (available at the O.P. office).

# HAMPSHIRE COLLEGE

## • 1980 FALL TERM • SCHEDULE OF CLASSES

### CODES

ARB	Arts Building	DH	Dakin House	PAC	Performing Arts Center
CSC	Coie Science Center	EH	Enfield House	Donut	Greenwich House - Center Room
EDH	Emily Dickinson Hall	GH	Greenwich House		
FPH	Franklin Patterson Hall	MH	Merrill House	BKSEM	Book Seminar
FPB	Film/Photo Building	PH	Prescott House	GIS	Group Independent Study
MDB	Music and Dance Building	ELH	East Lecture Hall	ProSem	ProSeminar - Division I Enrollment
RCC	Robert Crown Center	MLH	Main Lecture Hall		
LIB	Harold F. Patterson Library	WLH	West Lecture Hall	TBA	To Be Announced or Arranged
		*	Course is not term-long, see description		

### SCHOOL OF HUMANITIES AND ARTS

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
HA 101	Drawing 101	R. Superior	10	TBA	
HA 106	Intro to Directing	TBA	10	TBA	
HA 110	Film Workshop I	A. Ravett	15	W 9-1230	PFB
HA 111	Design Response	W. Kramer	15	TTh 1030-1230	EDH 16
HA 1/214	Writing	N. Payne	15	T 9-12	Kiva
HA 1/215	Studio Exp-Dance	TBA	20	TBA	
HA 118	Amer Families/Homes	D. Smith, etal	16	MW 830-10	FPH 105
HA 121	Gods/Beasts/Mortals	R. Meagher	None	TBA	
HA 122	Beg-Voice Production	D. Aronson	14	TBA	
HA 1/223	Exploring Sexuality	L./G. Gordon	16	TTh 1030-1230	DH Masters
HA 1/226	Bodymindwork	F. McClellan	None	MW 9-1030	MDB Dance
HA 1/227	Sondheim & Company	D. Cohen	16	WF 1030-12	Div IV
HA 1/231a	Poetry Writing Workshop	A. Salkey	16	T 130-3	EDH 15
HA 134a	College Writing-Updike	F. Smith	25	MWF 830-930	FPH 108
HA 134b	College Writing-Europe	F. Smith	25	TTh 830-930	FPH 108
HA 140	Ways of Seeing	J. Murray	12	TBA	
HA 145	Human Env-Design	N. Juster/E. Pope	12	MTh 930-12	CSC 3rd Fl
HA 150a	Still Photo Workshop	J. Liebling	15	MW 1030-1230	PFB
HA 150b	Still Photo Workshop	E. Mayes	15	MW 1-3	PFB
HA 161	Psych/Black Exp-Jung	C. Frye	18	TBA	
HA 1/263	Fiction Writing Workshop	A. Salkey	16	Th 130-3	EDH 15
HA 169	Ideas of Order	L.B. Kennedy	18	T9-1030,Th815-1030	CSC 126
HA 177	Language & Literature	J. Gee/D. Bacal-	20	TTh 1-3	FPH 104
HA 178	Beg Scene Study	TBA	12	TBA	
HA 180	Dostoevsky	J. Hubbs	16	TTh 1030-12	Blair
HA 207	Adv Studio Forum	J. Murray	15	TBA	
HA 209	The Observers	D. Smith/B. Yngvesson	None	TTh 9-1030	FPH 106
HA 210	Film Workshop II	J. Liebling	15	T 1-5	PFB
HA 213	Effort/Shape	F. McClellan	15	TTh 1-3	MDB Dance
HA 219	Fiction of History	R. Marquez	None	TTh 1030-12	CSC 126
HA 225	Photo Workshop II	E. Mayes	15	TBA	
HA 230	Ancients & Moderns	M. Russo	None	TBA	
HA 231b	Poetry Writing Workshop	B. Goldensohn	12	MW 1030-12	PH A-1
HA 234	Camus	R. Meagher	None	TBA	
HA 236	Amer Lit Realism	R. Lyon	None	TTh 1030-12	FPH 108
HA 246	Autobio-Amer Genre	J. Matlack	20	TTh 1030-12	EDH 15
HA 248	Int Scene Study	TBA	12	TBA	
HA 250	Modern Drama/Reality	C. Hubbs	16-DivII	TTh 1030-12	PH A-1
HA 251	Hegel I	R.K. Bradt	None	TTh 12-130	PH B-1
HA 256	Women in Nature	J. Greenberg	11	Th 1-4	PH C-1
HA 258	Heidegger	R.K. Bradt	None	TTh 130-3	PH B-1
HA 269	Origins-Romanticism	J. Hubbs	20	TTh 1-3	Blair
HA 280	Studio Art Critique	R. Superior	15-DivII	TBA	
HA 289	Shakespeare & Woolf	L.B. Kennedy	25	TTh 1-230	FPH 103
HA 297	Hist-Film/Photo	A. Ravett	None	T 9-1230	PFB
HA 299	Playwrights' Workshop	D. Cohen	12	W 1-4	Kiva

20 Schedule of Classes

**SCHOOL OF LANGUAGE AND COMMUNICATION**

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
LC 102 Philo-Affirmative Action	J. Garfield	InstrPer	20	MW 1-3	FPH 102
LC 104 Social Cons-Mass Comm	J. Miller, etal	1st Come	15	TTh 1030-12	FPH 106
LC 105 Children's Drawings	D. Knapp	Lottery	20	TTh 1-230	EDH 16
LC 108 Understanding TV	R. Muller/D. Epstein	ProSem	16	MW 1030-12, W 1-5	TV Studio
LC 111 Seminar-Linguistics I	TBA	1st Come	20	TTh 1030-12	PH D-1
LC 147 Conversation Analysis	J. Tallman	Open	None	TTh 830-1030	EDH 17
LC 152 Culture & Thought	M. Gearhart	ProSem	20	MW 3-5	FPH 107
LC 174 Research-Reporters	D. Kerr	Lottery	16	MW 9-1030	FPH 107
LC 177 Language & Literature	J. Gee/D. Bacal	ProSem	20	TTh 1-3	FPH 104
LC 191 Perception & Knowledge	C. Witherspoon	Lottery	12	WF 1030-12	CSC 126
LC 193 Computer Programming	A. Hanson	1st Come	30	TTh 1-3	FPH MLH
LC 195 ASL & Structure	J. Shepard-Kegl	InstrPer	25	MW 1030-12	FPH 104
LC 202 Computational Models	A. Hanson	InstrPer	15	TTh 1030-12	FPH 102
LC 204 Lang/Myth/Feminine Cons	J. Tallman	InstrPer	20	MW 1-3	EDH 17
LC 206 Strings/Trees/Langs	W. Marsh	Open	None	MW1030-1130, F1030-1230	FPH 105
LC 208 Philo of Psychology	J. Garfield	1st Come	20	TTh 130-3	FPH 102
LC 210 Scepticism	C. Witherspoon	Open	None	W 1-4	CSC 126
LC 211 Seminar-Mass Comm	TBA	1st Come	20	MW 1030-12	PH D-1
LC 213 Seminar-Linguistics II	TBA	1st Come	20	MW 130-3	PH D-1
LC 226 Theory of Language	J. Gee, etal	1st Come	20	MTWTh 9-1030	FPH 104
LC 240 Child Language Devel	D. Knapp	Lottery	20	MW 3-430	FPH 104
LC 243 Computers in Lab	Al Woodhull/A. Hanson	1st Come	20	TTh 1-3	CSC 3rd Fl
LC 253 Media & Energy Conserv	R. Muller/P. Meyers	InstrPer	16	M 1-5, F 1030-12	TV Studio
LC 257 Objectivity & News	R. Lyon	Open	None	MWF 12-1	FPH 108
LC 264 Social Interaction-Class	M. Gearhart	InstrPer	15	TTh 1-3	FPH 107

**FOREIGN LANGUAGES**

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
FL 101 French I	E. Leete	1st Come	15	TTh 1030-12	EDH 17
FL 102 Spanish I	A. Nieto	1st Come	15	TTh 1-230	PH A-1

**SCHOOL OF NATURAL SCIENCE**

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
NS 101 Extraterr Intell	K. Gordon	Open	None	MW 130-3	FPH 103
NS 107 Evolution of Earth	J. Reid	1st Come	20	TTh 1030-12	EDH 4
NS 114 Acid Rain	L. Williams	ProSem	15	MW 9-1030	CSC 126
*NS 117 Tropic Marine Bio	C. Van Raalte, etal	Open	None	TBA	
<b>HUMAN BIOLOGY (*All Sections Include CPC/Lab)</b>					
NS 121a HB-Learn to Live	J. Foster	ProSem	16	TTh 1303-3	FPH 106
NS 121b HB-Human Move Physio	Ann Woodhull	ProSem	16	TTh 130-3	PH D-1
NS 121c HB-Male/Female Repro	N. Goddard	Open	None	TTh 130-3	CSC 2nd Fl
NS 121d HB-Human Eye	M. Bruno	InstrPer	16	TTh 130-3	EDH 17
*CPC	-	-	-	W 3-5	FPH WLH
*Lab	-	-	-	M 1-5	Lab
NS 137 Biopolitics	M. Gross	Open	None	TTh 1030-12	PH B-1
NS 147 Natural Habitats-N.E.	C. Van Raalte/R. Lutts	1st Come	15	WF 130-5	CSC 2nd Fl
NS 149 Topics in Agriculture	P. Slater	Open	None	MWF 1030-12	FPH 103
*NS 150 Physiological-Agriculture	S. Goldhor, etal	Open	None	T 130-3, Th 130-3	Farm Center
NS 151 World Food Crisis	R. Coppinger/F. Holmquist	Open	None	MW 130-3	FPH WLH
NS 162 Exp Design/Quant Think	M. Sutherland	Open	None	WF 130-3	FPH 107
NS 167 Energy Conserv-Home	M. Bruno/L. Williams	1st Come	30	MW 1030-12, F 1030-430	EDH 4
NS 182 Conserv-Natural Resource	A. Westing	1st Come	20	MW 9-1030	CSC 114
NS 207 Holography & Optics II	J. Van Blerkom	Prereq	None	M 1-230	CSC 3rd Fl
NS 211 Organic Chemistry	N. Lowry	Open	None	MWF 1030-12/MF 1-3	EDH 15/Lab
NS 215 Amer Env History	R. Lutts	Open	None	TBA	
NS 222 Interp Natural History	R. Lutts	1st Come	15	Th 9-1230	PH C-1
NS 230 Domestic Animals	R. Coppinger	Open	None	MW 9-1030	FPH 102
NS 243 Computers in Lab	Al Woodhull/A. Hanson	1st Come	20	TTh 1-3	CSC 3rd Fl
NS 247 Cell Biology	L. Miller	Open	None	TTh 1030-3/1-3	CSC 114/Lab
NS 248 Physiology-Exercise	A. Melchionda	InstrPer	12	TBA	
NS 260 The Calculus	D. Kelly	Open	None	MWF 4-530+	FPH 103
NS 261 Math-Scntsts/Sci Scntsts	K. Hoffman	Open	None	MWF 930-1030	FPH 103
NS 269 Modern Algebra	K. Hoffman	Open	None	TTh 1030-12	FPH 103
NS 281 BKSEM-Physics	H. Bernstein	Prereq	None	M 3-4	CSC 3rd Fl
NS 283 Basic Physics II	J. Van Blerkom, etal	Prereq	None	MWF 9-1030/MW 1-4	CSC 2Fl/Lab
NS 286 Enterprise of Science	S. Goldberg, etal	Open	None	TBA	
ASTFC 021 Stars	G. Greenstein	Prereq	None	MW 125-320	AC/MHC
ASTFC 031 Space Science	W. Irvine	Open	None	TTh 230-345	Smith
ASTFC 037 Astronomical Obs	T. Dennis	Prereq	None	MW 230-345+	MHC
ASTFC 043 Astrophysics I	E.R. Harrison	Prereq	None	MF 125-320	UM GRC 534



## SCHOOL OF SOCIAL SCIENCE

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
SS 105 → Humanity	L. Glick	1st Come	20	MF 9-1030	FPH ELH
SS 109 Perspectives-Lawyerling	O. Fowlkes	Lottery	25	MW 1030-12	FPH 107
SS 113 Urban Political Econ	L. Hogan	1st Come	20	TTh 1-230	EDH 4
SS 115 Political Justice	L. Mazor	ProSem	20	TBA	
SS 116 Modern China	K. Johnson	1st Come	20	TTh 9-1030	FPH 107
SS 122 Social Control-Dispute	B. Yngvesson	1st Come	20	MW 9-1030	FPH 106
SS 129 World Food Crisis	R. Coppinger/F. Holmquist	Open	None	MW 130-3	FPH WLH
SS 132 Psychotherapy	L. Farnham	1st Come	20	WF 1030-12	FPH 106
SS 140 Social Order-Here/There	R. von der Lippe	ProSem	16	MW 1030-12	PH B-1
SS 150 Attitude Change	D. Poe	1st Come	25	WF 130-3	PH B-1
SS 152 Economic Democracy	C.G. Benello	InstrPer	25	TTh 1030-12	FPH 107
SS 159 Chicago/New York	M. Breitbart/R. Rakoff	1st Come	16	TTh 1030-12	FPH 104
SS 162 Exp Design/Quant Think	M. Sutherland	Open	None	WF 130-3	FPH 107
SS 165 History of Family	M. Slater/M. Mahoney	1st Come	20	TTh 1-3	CSC 126
SS 184 American Capitalism	S. Warner	ProSem	16	TBA	
SS 202 Adult Development	L. Farnham	Open	None	WF 130-3	FPH 108
SS 206 Religion	L. Glick	Open	None	TTh 9-1030	FPH 105
SS 208 The Observers	D. Smith/B. Yngvesson	Open	None	TTh 9-1030	FPH 106
SS 210 Intro Economics	F. Weaver	Open	None	WF 9-1030	PH A-1
SS 212 Amer Govt/Public Policy	R. Rakoff	Open	None	MW 130-3	FPH 104
SS 214 Capitalism & Empire	M. Slater, etal	Open	None	TTh 1030-12	FPH WLH
SS 217 Philo-Law & Justice	L. Mazor	Open	None	TBA	
SS 218 Law & Social Psych	O. Fowlkes/D. Poe	Open	None	TTh 1030-12	FPH 105
SS 233 Labor & Community	M. Breitbart/L. Nisonoff	Open	None	TTh 130-3	FPH WLH
SS 234 Philo-Amer Education	H. Rose	Open	None	MW 1030-12	FPH 102
SS 257 African Development	M. Ford/F. Holmquist	Open	None	TTh 130-3	FPH 108
SS 275 State & Society	C. Bengelsdorf, etal	Open	None	TTh 130-3	FPH ELH
SS 280 Women-Socialist Soc	C. Bengelsdorf/J. Landes	Open	None	TTh 1030-12	FPH ELH

## INTEGRATIVE SEMINARS

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
IN 330 Biochemistry	J. Foster			T 7pm	CSC 202
IN 331 Language in Context	J. Shepard-Kegl	InstrPer	12	M 2-5	FPH 108
IN 332 Political Economy-Racism	L. Hogan	InstrPer	20	TBA	
IN 344 Amer Env History	R. Lutts	Open	None	TBA	

## OUTDOORS PROGRAM

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
OP 106 Beg Top Rope Climb	R. Garmirian	Sign-Up	12	TH 1230-5	RCC
OP 130 Cont Top Rope Climb	G. Newth	InstrPer	10	TH 1230-5	RCC
OP 136 You: Creator	G. Newth	InstrPer	6	T 12-3	KIVA
OP 141 Peddle/Paddle/Climb	R. Lutts, etal	Sign-Up	12	W 1230-5	RCC
OP 218 Outdoor Ed & Leadership	R. Garmirian, etal	InstrPer	12	T 1030-1	PH C-1
OP 222 Interp Natural History	R. Lutts	1st Come	15	TH 930-12	PH C-1
OP 256 Women & Nature	J. Greenberg/J. Murphy	Lottery	11	TH 1-4	PH C-1
OP 257 Peru Trip	J. Greenberg	InstrPer	8	W 3-5	PH C-1

40 Schedule of Classes

RECREATIONAL ATHLETICS

<u>COURSE</u>	<u>INSTRUCTOR</u>	<u>ENROLLMENT</u> <u>METHOD</u>	<u>LIMIT</u>	<u>TIME</u>	<u>PLACE</u>
RA 101 Beg Shotokan Karate	M. Taylor	Open	None	MWF 3-430	So Lounge
RA 103 Int Shotokan Karate	M. Taylor	Prereq	None	TTHSun 7-9pm	So Lounge
RA 104 Adv Shotokan Karate	M. Taylor	Prereq	None	Sun 3-5	So Lounge
RA 105 Aikido	P. Sylvain	Open	None	TTH 10-12	So Lounge
RA 106 Beg Hatha Yoga	S. Morley	Open	None	M 2-315	Donut 4
RA 107 Cont Hatha Yoga	S. Morley	Open	None	M 330-445	Donut 4
RA 108 T'ai Chi	P. Gallagher	Open	None	M 630-745pm	So Lounge
RA 109 Cont T'ai Chi	P. Gallagher	InstrPer	None	M 8-930pm	So Lounge
RA 110 Physical Fitness Class	R. Ridders	Open	None	TF 12-1	RCC
RA 111 Fencing	W. Weber	Open	None	TBA	RCC
RA 112 Badminton	J. Evans	1st Come	10	TBA	RCC
RA 113 Women's Field Hockey	K. Stanne	Open	None	MW 4-6pm	RCC
RA 114 Women's Soccer	K. Stanne	Open	None	TTH 4-6pm	RCC
RA 115 Kayak Rolling/Pool	B. Judd	Open	None	W 6-730pm	Pool
RA 116 Beg Whitewater Kayak	B. Judd	Open	None	T 1030-12, TH 1-6	Pool
RA 117 Int Whitewater Kayak	B. Judd	Prereq	None	TH 1-6	Pool
RA 118 Iyengar Yoga	J. Hansa		20	T 1-3	So Lounge
RA 119 Basic Scuba Cert	S. Kuhr	InstrPer			
RA 120 Improv Body Movement	M. Cajolet	Open	None	MWF 10-12	TBA

# COURSE DESCRIPTIONS

BEGINNING TOP ROPE CLIMBING OP 106	Garnirion
CONTINUING TOP ROPE CLIMBING OP 130	Newth
YOU: THE CREATOR OP 136	Newth
PEDDLE, PADDLE, CLIMB OP 141	Judd Newth Lutts
OUTDOOR EDUCATION AND LEADERSHIP: AN OVERVIEW OP 218	Greenberg Garnirion Lutts
INTERPRETIVE NATURAL HISTORY OP 222 (NS 222)	Lutts
WOMEN AND NATURE SEMINAR OP 236 (HA 236)	Greenberg
PERU TRIP STUDY GROUP OP 257	Greenberg

**OP 106 BEGINNING TOP ROPE CLIMBING**  
Bob Garnirion

This course is designed for people with little or no experience. It will cover basic safety techniques, belaying, knots and climbing techniques. Each week the class will travel to one of the many local climbing areas and on wet days we will use the indoor climbing wall. For beginners only.

Class meets Thursdays from 12:30 to 5:00 P.M. and is limited to 12. Sign-up at the O.P. office.

**OP 130 CONTINUING TOP ROPE CLIMBING**  
Greg Newth

This class is designed for people experienced in top rope or lead climbing who wish to concentrate on expanding their awareness on the rock. We will attempt to work on concentration, balance, the ability to evaluate a climb before climbing it, how to pick out a route and on widening one's vision while climbing. This will be done through a series of exercises in the field and on the climbing wall, as well as sharing our experiences and awareness with each other during the class and through the use of a class journal. This class is not designed for people who are just beginning or who have only been climbing a few times. It is preferred that you have climbed regularly for at least one semester.

Class meets Thursdays from 12:30 to 5:00 P.M. and is limited to 10. Permission of the instructor is necessary. Sign-up at the O.P. office.

**OP 136 YOU: THE CREATOR**  
Greg Newth

This course will introduce three major areas necessary in the development and completion of a basic construction project. The chosen project is an alternative work space for the purpose of fabricating and repairing outdoor equipment. The three areas of study will be: (1) application of design theory, (2) learning the proper use of hand tools, (3) building the proposed project. This course is designed and geared for beginners.

Class meets Tuesdays from 12:00 noon to 3:00 P.M. and is limited to 6. Permission of the instructor is necessary. Sign-up at the O.P. office.

**OP 141 PEDDLE, PADDLE, CLIMB**  
Becky Judd, Ralph Lutts, Greg Newth

This is an introductory class designed to give the beginner a fundamental background and understanding of four major areas within the Outdoors Program. In the first two segments we will work on the basic skills of both kayaking and rock climbing. In the third segment we will explore a number of interesting natural areas in the valley by various modes of transportation (foot, bike, etc.). Lastly, we will venture on an overnight down one of the New England rivers by canoe.

Class meets Wednesdays from 12:30 to 5:00 P.M. and is limited to 12. Sign-up at the O.P. office.

**OP 218 OUTDOOR EDUCATION AND LEADERSHIP: AN OVERVIEW**  
Bob Garnirion, Judy Greenberg, Ralph Lutts

This course will deal with the many topics important to people with an interest in the broad field of outdoor education. We will examine and discuss a variety of topics of interest to environmentalists, outdoors/high risk leaders and educators. Topics will include the history of outdoor education, teaching skills, group leadership, ethical and legal considerations, the administrative nightmare, natural history, and program evaluation. Students will be expected to participate in discussions and activities, maintain a journal and co-lead a trip that is appropriate to their interests and skills. A series of skills modules will be offered in addition to the weekly meeting.

Class meets Tuesdays from 10:30 A.M. to 1:00 P.M. Enrollment is limited to 12 and first preference will be given to students already enrolled in Outdoor Education and Leadership. Others will be admitted on a first come, first served basis. Sign-up at the O.P. office. Permissions of the instructors necessary.

**OP 222 INTERPRETIVE NATURAL HISTORY**  
Ralph Lutts

"Interpretation" in the sense used here means education based upon the first hand experience of an object or environment. What distinguished interpretive natural history is not that it

(continued)

is about nature, but that it is in nature - it is based upon the experience of the real thing. Nature interpretation is done in many settings, including residential camps, nature centers, parks and on the trail.

This course will explore a variety of methods of interpreting natural history and ecology in the outdoors. It will emphasize techniques that require a minimum of materials, making them ideal for use on the trail. In addition, we will examine other methods that are appropriate in summer camps or nature centers. An emphasis will be placed upon gaining the skills necessary to "read" the landscape and to help others to do the same. We will also examine leadership techniques in the context of interpretive field trips and the general considerations that are involved in planning and conducting such trips.

Many of the techniques do not require that the students in this class have a very extensive background in natural history or ecology, although such a background would be helpful. This course will cover the basic natural history content necessary to employ these interpretive methods, including plant and animal identification, ecological succession and transition, basic geological principles, observational astronomy and some field techniques.

We will meet once a week. The course will be a combination of classwork and a lot of time outside. Students will be expected to design some interpretive exercises that they will share with the class. They should plan to attend at least a day of the Association of Interpretive Naturalists Conference that will be held on Cape Cod, October 6 - 11, 1980. Class meets on Thursdays, 9:30 - Noon and is limited to 15. Sign-up at the O.P.

**OP 236 WOMEN AND NATURE SEMINAR**  
(HA 236)  
Judy Greenberg and Jane Murphy\*

This will be an opportunity for women to explore their personal relationship to nature/wilderness and to read literature describing other women's experiences. We will use our own writing and a week-long outdoors trip together as means to approach this relationship. Some of our readings will include *Women and Nature* by Susan Griffin, *Sunsetting* by Margaret Atwood, *The Wadsworth* by Sally Gearhart and some readings on native American women. We will also examine the image of land-as-woman in literature describing the westward settling of North America.

We will meet once a week, on Thursdays, from 1:00 to 4:00 P.M. Enrollment is limited to 11. Come to the first class, where a lottery will be held if necessary.

\* Jane Murphy is a Hampshire student who did much of her Division II work in the study of ecology and feminism. This course gives her the opportunity to share her experience of the outdoors as refuge and source of creativity.

**OP 257 Peru Trip Study Group**  
Judy Greenberg

Next January, the Hampshire College Outdoors Program will be leading a women's trip to Peru. We will be hiking the Inca trail to Machupicchu (the classic Inca ruins high in the Andes) and backpacking in Peru's newest national park, also in the Andes. A visit to Lake Titicaca and to a coastal village will be possible. The final itinerary and trip plans will be made by trip participants. All women interested in finding out more about this should come to an informational/planning meeting at the O.P. on Tuesday, May 6, 7:00 p.m.

During the Fall semester, all members of the trip will meet the first and third Wednesdays each month from 3:00 - 5:00 p.m. Together we will study the Inca culture, Peruvian history, politics, society, literature and other topics according to group interest. Each student will be expected to design, carry out and present to the class a project dealing with a specific area/issue of interest relevant to Peru.

The trip will cost between \$700 and \$900 (for 4 - 6 weeks). As a group we will raise money so that the cost is not an undue burden to any particular trip member. Instead, fundraising, if necessary, will be a group effort/challenge.

Enrollment is limited to 8. Students will be selected by permission of the instructor following the planning meeting on May 6.

## RECREATIONAL ATHLETICS

**RA 191 SHOTOKAN KARATE (BEGINNING)**  
Marion Taylor

Shotokan Karate is an unarmed form of self-defense developed in Japan. It stresses the use of balance, timing and coordination to avoid an attack and effective means of counterattack to be used only if necessary. The beginning course will cover: basic methods of blocking, punching, kicking and combinations thereof; basic sparring and basic kata, a prearranged sequence of techniques simulating defense against multiple opponents.

Classes will meet during fall term on Monday, Wednesday and Friday from 3:00 to 4:30 P.M. in the South Lounge, RCC. Five College students will be graded on a pass/fail basis and must negotiate credits with their registrars.

**RA 103 INTERMEDIATE SHOTOKAN KARATE II**  
Marion Taylor

This course is for students who have completed RA 101 and RA 102. The class will meet Tuesday, Thursday, and Sunday from 7:00 to 9:00 P.M. in the South Lounge, RCC.

**RA 104 ADVANCED SHOTOKAN KARATE**  
Marion Taylor

This course is for students who have attained the rank of brown belt or black belt. Class will meet Sundays from 3:00 to 5:00 P.M. in the South Lounge, RCC.

SHOTOKAN KARATE (BEGINNING) RA 101	Taylor
INTERMEDIATE SHOTOKAN KARATE II RA 103	Taylor
ADVANCED SHOTOKAN KARATE RA 104	Taylor
AIKIDO RA 105	Sylvain
BEGINNING HATHA YOGA RA 106	Morley
CONTINUING HATHA YOGA RA 107	Morley
T'AI CHI: 108 FORM YANG STYLE RA 108	Gallagher
CONTINUING T'AI CHI RA 109	Gallagher
PHYSICAL FITNESS CLASS (THE EXERCISITS) RA 110	Rikkers
FENCING RA 111	Weber
BADMINTON RA 112	Evans
WOMEN'S FIELD HOCKEY RA 113	Stanne
WOMEN'S SOCCER RA 114	Stanne
KAYAK ROLLING AND POOL KAYAKING RA 115	Judd
BEGINNING WHITEWATER KAYAKING RA 116	Judd
INTERMEDIATE WHITEWATER KAYAKING RA 117	Judd
IYENGAR YOGA RA 118	Hansa
BASIC SCUBA CERTIFICATION RA 119	Kuhr
IMPROVISATIONAL BODY MOVEMENT RA 120	Cajolek

**RA 105 AIKIDO**  
Paul Sylvain

Aikido is a relatively modern Japanese martial art which is non-offensive and non-competitive. Its self-defensive movements are designed to off-balance and control the attacker by harmonizing (Aji), rather than conflicting with the offensive force and redirecting it to a harmless outlet by means of (Ki) total body awareness. Though modern, Aikido has its roots in ancient Japanese sword, spear, and jujitsu. Because of this the movements are large and circular, appearing rather dance-like and graceful. In the beginning class we will deal with basic beginning techniques designed to build "Ki" awareness, increase body flexibility and balance, and learn self-defensive falling. Also we will begin to explore the power of Aiki with some of its self-defensive techniques.

The class will meet Tuesday and Thursday from 10 to 12, in the South Lounge, RCC.

**RA 106 BEGINNING HATHA YOGA**  
Susan Morley

Hatha Yoga is the ancient science of postures and movements designed to relax, cleanse and stretch the body. We will focus on postures, breathing exercises, relaxation and inner well-being.

The class will meet on Mondays from 2:00 to 3:15 in donut 4, center room.

**RA 107 CONTINUING HATHA YOGA**  
Susan Morley

This class builds on the work of the first class, deepening experience with the postures and introducing meditation. The class will meet on Mondays from 3:30 to 4:45 in donut 4, center room.

**RA 108 T'AI CHI: 108 FORM YANG STYLE**  
Paul Gallagher

T'ai Chi is a form of moving meditation devised by ancient Chinese Taoist monks to promote perfect harmony of vital energies; a dance like passing clouds and flowing waters to celebrate our oneness with nature. Emphasis will be on precise understanding of form and balance, stressing the health, philosophical, and aesthetic benefits of practice.

The class meets on Monday evenings from 6:30 to 7:45 in the South Lounge, RCC.

**RA 109 CONTINUING T'AI CHI**  
Paul Gallagher

Continuing T'ai Chi will meet on Monday evenings from 8:00 to 9:30 in the South Lounge of the RCC. Permission of the instructor is required. Five College students will be graded on a pass/fail basis, and credits must be arranged with their registrars.

**RA 110 PHYSICAL FITNESS CLASS (THE EXERCISTIS)**  
 Renato Mikkers  
 This course is designed to promote good health, flexibility, cardiovascular efficiency, and a sense of well-being. Exercise programs and appropriate diet are considered on an individual basis.  
 Class will meet on Tuesdays and Fridays from 12:00 to 1:00 P.M. in the Robert Cron Center. This course is free to Hampshire students but fee funded for staff and faculty.

**RA 111 FENCING**  
 Will Weber  
 Classes for both beginners and experienced fencers. No experience necessary; beginners are especially welcome. Basic equipment is provided.  
 This course meets two evenings per week in the Robert Cron Center. Time to be announced.

**RA 112 BADMINTON**  
 Jay Evans  
 Individual instruction. No experience necessary; beginners welcome and opportunities for advanced players as well. Basic equipment provided. Prerequisites: an interest in mastering an excellent, health-promoting, inexpensive, carry-over-to-life physical activity.  
 This course meets in the Robert Cron Center by appointment with the instructor. Individual instruction offered. Enrollment limited to 10.

**RA 113 WOMEN'S FIELD HOCKEY**  
 Kate Stanne  
 The purpose of this class will be to get women involved in playing and improving their field hockey. Beginners to experienced players are welcome. We will work on drills, playing the game (with some conditioning built in). For those people interested, we will also be scheduling games with other schools.  
 Classes will meet on Mondays and Wednesdays from 4:00 to 6:00 P.M. The first meeting will take place in the gym, RCC.

**RA 114 WOMEN'S SOCCER**  
 Kate Stanne  
 The purpose of this class will be to get women involved in playing and improving their soccer. Beginners to experienced players are welcome. We will work on drills, playing the game (with some conditioning built in). For those people interested, we will also be scheduling games with other schools.  
 Classes will meet on Tuesdays and Thursdays from 4:00 to 6:00 P.M. The first meeting will take place in the gym, RCC.

**RA 115 KAYAK ROLLING AND POOL KAYAKING**  
 Becky Judd  
 No experience required. Main emphasis will be on how to learn to eskimo roll (tip a kayak right side up after capsizing). For those unfamiliar with kayaking, strokes, maneuvering on slalom gates, and paddling on the soy paddal board will be covered.  
 Classes will meet on Wednesdays from 6:00 to 7:30 P.M. Enrollment is unlimited.

**RA 116 BEGINNING WHITEWATER KAYAKING**  
 Becky Judd  
 No experience required except swimming ability. Learn the fundamentals of kayaking—strokes, rescue maneuvering—as well as the basic whitewater skills—eddy turns, ferrying, bracing, river reading, surfing, safety, equipment, and eskimo roll.  
 Class will meet in the pool Tuesdays from 10:30 A.M. to 12:00 noon and Thursdays from 1:00 to 6:00 P.M.

**RA 117 INTERMEDIATE WHITEWATER KAYAKING**  
 Becky Judd  
 This class is for people with some whitewater and eskimo rolling experience. You will learn and perfect advanced whitewater techniques on class III water.  
 Class will meet on Thursdays from 1:00 P.M. to 6:00 P.M. (The first class meets in the Robert Cron Center). After November 15 classes will be held in the pool.

**RA 118 IYENGAR YOGA**  
 Jyoti Hanna  
 Iyengar Yoga was developed by B. K. S. Iyengar in India over forty years ago. It is described as "a technique ideally suited to prevent physical and mental imbalances and to protect the body generally developing an inevitable sense of self-reliance and assurance. By its very nature it is inextricably associated with universal love: for respect for life, truth, and patience are all indispensable factors in the drawing of a quiet breath in calmness and firmness of will." (Light on Yoga by B. K. S. Iyengar). Iyengar Yoga is an active variation of Hatha Yoga and is known for the qualities of focused concentration and stillness it allows within oneself.  
 Class meets Tuesday from 1 to 3 in South Lounge. Enrollment limited to 20. Fee funded.

**RA 119 BASIC SCUBA CERTIFICATION**  
 Saul Kuhr  
 This is a N.A.U.I. sanctioned course leading to basic Scuba certification. Beginners welcome. One and one-half hours of classroom instruction and one-and-one-half hours pool time per week. Class meets at the Robert Cron Center. Students supply mask, fins, and snorkel; all-over equipment provided. Prerequisite: adequate swimming skills. This is a fee funded course; arrangements made with the instructor.

**RA 120 IMPROVISATIONAL BODY MOVEMENT**  
 Marilyn Cajolec  
 This is a course designed to encourage creative expression. It will be an experience in which participants are stimulated to explore movement possibilities guided by a leader who will suggest themes to be explored. At first, participants will work individually; later, in pairs, trios, and small groups; and finally in a large group. The purpose is for participants to enjoy creating their own movements—movements suited to their own bodies, their own temperaments, their own moods. There will not be pre-set patterns of movement to be copied. This is a method designed to get in touch with those people who yearn to dance but feel that they cannot or simply do not want to imitate a teacher. It is nontraditional nonperformance oriented approach to dance for all, established and described by Barbara Mettler of Tucson, Arizona. The experience of creative movement involves care and attention to physically, mentally, emotionally, creatively and socially, because it has a learning, healing, and nurturing value to the expansion.

No dance experience is necessary to join the class. Wear comfortable clothing. Class meets Mondays, Wednesdays, and Fridays, from 10:00 A.M. to 12:00 noon in the South Lounge, RCC. Enrollment is unlimited.

**SPECIAL PROGRAMS**

**BUSINESS STUDIES**  
 If you are interested in pursuing a business career or attending graduate school in business, be sure to talk to Lloyd Hogan, Laurie Nisouff, Stan Warner, or Fred Weaver in designing your program of studies. Many students have used their liberal arts education and special resources at Hampshire successfully to prepare for business careers and for attending such business schools as Chicago, Columbia, Wharton, and others.

**EDUCATION AND CHILD STUDIES**  
 The Education and Child Studies Program at Hampshire College strives to meet the many diverse concerns of students interested in this area. Central to the study of educational issues is an understanding of children—how they grow, develop, learn, and how they relate to family, friends, school, and the larger community. Closely connected is the need to understand the interrelation of the school and the larger society—what are the values, goals, and aspirations of the individuals and groups of which we children are a part; what is the impact of different philosophies, politics, cultural norms, and political pressures on the structure and character of education.

Students desiring a concentration in this program are encouraged to use these inquiries as a guide and to use both approaches in their search for understanding. Following a broad liberal arts base, students are urged to select relevant courses from among those offered in each of the four schools, as well as the Five Colleges. In this way, students will be able to gain breadth and enough depth to develop firm grounding for more specific topics of their own choice.

- Among this fall term's offerings are:
- LC 105 Children's Drawings
  - LC 152 Culture and Thought: A Psychological Perspective (proseminar)
  - LC 187 The Psychology of Human Intelligence (proseminar)
  - LC 260 Child Language Development
  - LC 264 Social Interaction in the Classroom: Theory and Observation
  - SS 234 Philosophies of American Education (meets one of the state certification requirements)

Other relevant offerings will vary with each student's special needs and/or interests. Students planning to enter the teaching field should be concerned with a sound preparation for teaching, which should include special courses in philosophy and psychology of education, some of the theoretical core courses of the program, general knowledge, speaking and writing skills, and sufficient background to understand and teach a general school curriculum. Students preparing to teach in secondary schools must also be proficient in a specific field. See Heidi Rose, coordinator of the program, for assistance in planning a program.

**ENVIRONMENTAL STUDIES AND PUBLIC POLICY**  
 Allan Krass, Faculty Coordinator  
 ESAPP is a College-wide program with a four-School coordinating committee headed by Allan Krass, of the School of Natural Science. Other members of the committee are David Smith (Humanities and Arts), Richard Muller (Language and Communication), and Robert Rohoff (Social Science).  
 The objectives of the ESAPP program are to encourage student interest in environmental and public policy issues and to provide support for individual and group research activities in these areas. In past years the program has sponsored such projects as a study of the ecology of the Holyoke Range, research into the accident risks associated with the proposed Montague Nuclear Power Station, and a study of community design and en-

vironmental issues in the context of a farm adjacent to the campus. The program operates out of the ESAPP reading room and advising center in Cole 313. In this room is a well supplied and growing library of research materials such as journals, books, and government reports. The office is staffed by students who double as advisers for people who would like to become involved in environmental issues either in academic or activist roles. ESAPP has maintained close contacts with such local consumer and environmental organizations as MassPIRG and the Alternate Energy Coalition. The program also sponsors lectures and colloquia by outside speakers as well as Hampshire faculty and students.

In the past ESAPP has had a strong identification with the School of Natural Science. In recent years, however, substantial progress has been made in broadening the scope of the program's interests. ESAPP has encouraged projects in the social, political, and economic aspects of environmental issues and is equally interested in the ethical and aesthetic dimensions of these questions.

ESAPP also sponsors the Student Environmental Series. These weekly seminars are a forum in which students present work and ideas related to the environment. The usual format is one in which a student or group of students presents work done at Hampshire or while on leave. Often this work is part of discussion or film views. The series has been especially valuable in bringing together students with interests in all aspects of our environment.

All are welcome to the seminars, which take place Monday evenings, at 7:30 P.M., in the KIVA. People interested in evening work should contact ESAPP.

- Related courses are:**
- NS 115 The Making and Understanding of Human Environment
  - LC 104 Social Consequences of Mass Communication
  - LC 253 Workshop: The Media and Energy Conservation
  - NS 107 Evolution of the Earth
  - NS 114 Acid Rain (proseminar)
  - NS 117 Tropical Marine Ecology
  - NS 137 Biopolitics
  - NS 147 Natural Habitats of New England
  - NS 149 Topics in Agriculture
  - NS 150 Physiological Basis of Agriculture
  - NS 151 World Food Crisis
  - NS 161 Energy Conservation in the Home
  - NS 182 Conservation of Natural Resources
  - NS 215 American Environmental History
  - NS 222 Interceptive Natural History
  - NS 286 The Enterprise of Science
  - SS 105 Humanity: Unity and Diversity
  - SS 113 Problems in Political Economy
  - SS 116 Russian Revolution and Village Society in Modern China
  - SS 212 American Government and Public Policy
  - SS 214 Capitalism and Empire: New England and America in a Global Perspective
  - SS 233 Labor and Community

**FEMINIST STUDIES**  
 Although Hampshire does not presently have a formal feminist studies program, a number of faculty members have a deep interest in this field and are willing to work with students in their academic programs.

- |                                   |                       |
|-----------------------------------|-----------------------|
| <b>Humanities and Arts</b>        | <b>Social Science</b> |
| L. Brown Kennedy                  | Carol Souveladorf     |
| Jill Lewis                        | Margaret Cerullo      |
| Mary Russo                        | Nancy Fitch           |
| <b>Language and Communication</b> | Penina Glaser         |
| Janet Tallman                     | Gloria I. Joseph      |
| <b>Natural Science</b>            | Joan Landes           |
| Nancy Goddard                     | Maureen Mahoney       |
| Sandra Dymovle                    | Leuter Knorr          |
| Janice Raymond                    | Laurie Nisouff        |
| Ann Woodhull                      | Miriam Slater         |

- Related courses are:**
- HA 118 American Families, American Homes (proseminar)
  - HA 230 The Ancients and the Moderns
  - OP 256 Women in Nature Seminar
  - LC 706 Language, Myth, and the Feminine Consciousness
  - NS 121 Human Biology: Male and Female Reproductive Function
  - SS 165 The History of the Family
  - SS 280 Women in Socialist Societies: Theory and Practice

**FOREIGN LANGUAGES/ LANGUAGE STUDIES**  
 Hampshire College has no special foreign language departments, although instruction in French and Spanish is offered at the introductory and intermediate levels through intensive courses. Proficiency in a foreign language alone cannot be presented to fulfill a divisional requirement in any of the Schools. But students with an interest in language will find that a deeper knowledge of foreign languages can enhance their work in many areas of language research: linguistic theory, sociolinguistics, literary stylistics, and anthropology. In addition to the regular foreign language instruction, the School of Language and Communication occasionally offers courses in the study of a foreign language; for example, a course in Spanish on the speech of Puerto Ricans in the United States; or a course in French on the linguistic conflict in Quebec.

Courses in other languages and foreign language literature courses are available through Five College cooperation. Some examples: Chinese and Japanese, as part of the Five College Asian Studies Program; Greek and Latin; Germanic languages, including Danish, Dutch, and Swedish; Slavic languages, including Russian and Polish; and Romance languages, including Italian and Portuguese.

The main emphasis of faculty at Hampshire, however, is on human language in general as a social, cultural and cognitive phenomenon. In addition to linguistic theory—the investigation of language as a component of the human mind—Hampshire offers courses where language is studied in its relation to social organization and culture. Within the field of sociolinguistics, courses deal with such phenomena as bilingualism; language variation, ethnicity and social status; and the analysis of conversation and interpersonal linguistic interaction. From another perspective, Hampshire offers courses in the field of stylistics, dealing with the ways in which language is used in the creation of art forms like poetry and prose.

## COURSE DESCRIPTIONS

Although much exciting current work in these fields is done in English, students of foreign languages will have ample opportunity to pursue their language studies in these broader contexts. The student of French, for example, may find the question of bilingualism in Quebec, or the nature of non-standard Canadian French, of special interest. The student of Spanish might focus on bilingualism in the Puerto Rican or Chicano communities, or the influence of English on the speech of Spanish speakers in New York City. The stylistic analysis of French and Spanish poetry and prose provides another means of incorporating foreign language study.

In addition, courses often provide a close examination of a wide variety of other languages, and students with no previous training in those languages will become acquainted with their general structure. Examples include Navaho and Klamath (American Indian languages of the Southwest and Northwest, respectively); Sinhalese (a language of Sri Lanka, or Ceylon); and the American Sign Language of the deaf. The stress, however, is on what a language may reveal about the people who speak it, and about the social, cultural, political and linguistic forces which shape the development of the language.

Students can design concentrations on the social implications of bilingualism among Portuguese-American children; anthropological, linguistic, and philosophical problems of translation; the maintenance of the French language in Maine; among others. Many good fieldwork opportunities exist in bilingual communities throughout the country and in the teaching of second languages.

Students interested in exam work, concentrations, or general information about the program should see Mark Peinstein, Assistant Professor of Language Studies.

### Courses relevant to the program include:

- LC 111 Seminar in Linguistics
- LC 147 Conversation Analysis
- LC 152 Culture and Thought: A Psychological Perspective
- LC 177 Language and Literature
- LC 195 American Sign Language and Its Structure
- LC 204 Language, Myth, and the Feminine Consciousness
- LC 206 Strings, Trees and Languages
- LC 226 Theory of Language: Linguistic and Psychological Perspectives
- LC 240 Child Language Development
- FL 10 French I
- FL 102 Spanish I
- IN 331 Language in Context

### LAW PROGRAM

The Law Program examines issues in law and society from a variety of perspectives. We seek to organize and support activity across school, divisional, and other boundaries within the college. The activity of the program includes courses, independent studies, concentration, Division III projects, public events, field study support and supervision, and development of library and other resources.

Law is a phenomenon which touches every aspect of our existence. The study of law, legal processes, legal ideas and events, provides a focus for many kinds of inquiry. The range of activities possible within the scope of our Law Program is as broad as the interests of those participating in it. The Law Program is not designed as preparation for law school. Although there is some overlap between the interests of students who want eventually to go to law school and those who want only to include the study of law in their undergraduate education, the Law Program as such is concerned only with the latter. (Pre-law counselling is done by Lester J. Mazor and E. Oliver Fowlkes.)

The Division II courses are the core of the Law Program's content. Students who plan a concentration in law, or, as is often the case, a concentration which includes some aspect of law in it, should look to the Division II courses as the foundation and entry point for their work. The Law Program also offers courses in Hampshire's Division I, Basic Studies. Like all Hampshire Division I courses, the primary objective of these courses is to develop the student's understanding of the mode of inquiry of the school or schools in which they are taught and generally to contribute to the student's growth as a learner.

Independent study related to law may be done under the supervision of any of the faculty working in the Law Program. In particular, E. Oliver Fowlkes is especially interested in mental health, the legal profession, representation for the poor, and welfare law, and can provide assistance in arranging field work placement. Lester J. Mazor is especially interested in legal history, philosophy of law, the legal profession, criminal law, labor law and family law. Students interested in dispute resolution, social control in cross cultural contexts should contact Barbara Yngvesson. Those interested in government policy and its implications, politics and law should contact Robert Rakoff. Students have designed concentrations which draw very largely upon Law Program courses or which include some contribution of the Law Program to their plan of study. These have included concentration in law and education, prisons, law and inequality, juvenile courts, and relevant portions of concentrations in politics, history, economics, sociology, environmental studies, women's studies, urban studies, and a number of other fields. The Law Program regularly sponsors speakers, films, and other social events. Members of the Hampshire community who have in mind some event which would be appropriate for sponsorship by the Law Program are encouraged to request support from the steering committee.

No formality of admission or membership is required for participation in the Law Program. The way to indicate your affiliation and to keep informed is by placing your name on the Law Program mailing list so that you will receive notices of Law Program events and activities. This list is maintained by Barbara Talenda, Franklin Patterson Hall room 218. There is a Law Program Center where students working in the program may organize and conduct their activities.

### Relevant courses for fall are:

- SS 109 Change in the Legal Profession: Perspectives in Lawyering
- SS 122 Social Control and Dispute Settlement
- SS 217 Problems in the Philosophy of Law and Justice
- SS 218 Through the Looking Glass: A Study of Law and Social Psychology

### WRITING AND READING PROGRAM/ WRITING AND READING LABORATORY

Offers assistance in the areas of writing, reading and study skills. Help may be either individualized or group, short- or long-term, and is based entirely on the needs of the individual student. Some students come once for help with some specific aspect of paper writing; others come several times for work on a specific project, while still others come on a regular basis for assistance in basic skills, etc. Similarly, work with reading (comprehension, retention, speed) and study skills may be short- or long-term, and a program is constructed according to the needs of the individual student.

Contact Deborah Berkman, director of the program, for appointments and additional information. Her office is located in Dakin House (D-104) and her extension is 531.

**Laboratory:** The materials in the lab provide students the opportunity to work at their own pace on self-guided materials in the areas of grammar, spelling, composition, reading comprehension and retention, study skills, etc. For students who do not wish to work on a long-term basis, there are also resource materials available to answer specific questions in these areas. For students who wish to work on their reading speed, there are reading pacing machines and varied exercises available. The lab is also equipped with a small paperback and magazine library. It functions as a drop-in center so that students may freely browse through materials or use a given program on a routine basis.

**Workshops:** Workshops dealing with specific problems in writing are offered several times each semester. The workshops are run through the houses and are open to the whole community.

For additional information about the laboratory and workshops, contact Debby.

**Library Work:** The reference librarians and other members of the Library Center staff give assistance to individual students and work with the faculty to develop special instructional units on such typical research problems as location of sources and note taking. Contact Susan Dayall, media resources adviser, extension 541.

## FACULTY

### SCHOOL OF HUMANITIES AND ARTS

**John R. Boettlinger**, professor of human development, joined the Hampshire planning staff in 1967. In those first years of the College's life he contributed to the early design of educational policy and academic programs. He is particularly interested in personal history, biography, family studies, psychoanalytic psychology, and psychotherapy. He taught at Amherst College from which he received a B.A. in 1960, conducted research for the Rand Corporation in California, and completed his Ph.D. in human development and psychotherapy. His publications include *Victim and American Foreign Policy* and a recent study in biography and family history, *A Love in Shadow*. Professor Boettlinger will be on leave from the 1980-81 academic year.

**Raymond Kenyon Bradt**, assistant professor of philosophy, although mainly a scholar of the western philosophical tradition, is also outstanding in eastern studies scholarship. He holds a B.A. in philosophy and an M.A. in theology from Notre Dame as well as an M.A. in philosophical theology from Yale University where he is currently a candidate for a Ph.D.

**David Cohen**, assistant professor of theater, holds a B.A. in theater honors from the University of Massachusetts and M.F.A. in playwrighting from Brandeis University. He has written for Broadway, television and film and has taught playwrighting and theater arts at the universities of Montana, South Carolina, and George Mason in Virginia. In addition to teaching, David has produced several festivals of new playwrights' works.

**Charles Frye**, associate professor of education, holds B.A. and M.A. degrees from Howard University and a Ph.D. from the University of Pittsburgh. Charles' interests include social and political philosophy with an emphasis on Africa, Black Studies administrative and curricular development, and Jungian psychology. His degrees are in higher education, African studies, and political science. He has done consulting work in the humanities and directed an interdisciplinary studies program.

**Barry Goldensohn**, dean of Humanities and Arts and professor of literature, holds a B.A. in philosophy from Oberlin College and an M.A. in English from the University of Wisconsin. His poetry has been widely published in periodicals and anthologies and in two collections: *St. Venus Eve* and *Unravelling the Black*. He has taught at several colleges and universities, most recently at Goddard College and the Writer's Workshop at the University of Iowa.

**Graham Gordon**, assistant professor of human development, earned his A.B. in Mathematics at Southwestern College in Memphis and an M.Div. at the Louisville Presbyterian Seminary. He was awarded a Fulbright Walker Fellowship in dramatic theater and studied at the New College of the University of Edinburgh, Scotland. He is also co-master of Dakin House.

**Linda Gordon**, assistant professor of human development, holds an A.B. in psychology from Adelphi University. Prior to coming to Hampshire, she was associated with South Hampton College on Long Island, where she worked with exceptional educational groups. She shares the mastership of Dakin House with Graham Gordon.

**Van B. Halsey, Jr.**, associate professor of American Studies, was associate director of admissions at Amherst College from 1956 to 1969 and came to Hampshire as director and later as dean of admissions. His special interests include teacher training and the production of new history materials for secondary schools. His B.S. is from Rutgers University and his Ph.D. from the University of Pennsylvania. Professor Halsey will be on leave during the 1980-81 academic year.

**Arthur Hoeser**, professor of design, was formerly chairman of the design department of the Massachusetts College of Art. He holds a B.F.A. and M.F.A. from Yale University and a certificate from Cooper Union in New York City. His sculpture and design work have been widely exhibited, and he has served as graphic design consultant for the Boston Society of Architects and the Center for Architectural Center. Professor Hoeser will be on leave during the Fall 1980 term.

**Clayton Hubbs**, assistant professor of literature, is interested in modern drama, twentieth-century Anglo-American literature, and eighteenth-century English literature. He received a B.S. in Journalism from the University of Missouri at Columbia and a Ph.D. from the University of Washington.

**Joanne Hubbs**, associate professor of history, received a B.A. from the University of Missouri and a Ph.D. in Russian history from the University of Washington. She is fluent in French, German, Polish, Russian, and Italian.

**Thomas Joslin**, assistant professor of film, holds a B.A. in photography from the University of New Hampshire and an M.F.A. in filmmaking from the Rhode Island School of Design. He has twice won awards from the National Endowment for the Arts for his work in film education. Professor Joslin will be on leave for the 1980-81 academic year.

**Norton Juster**, professor of design, is a practicing architect, designer, and writer whose books include *The Phantom Tollbooth*, a children's fantasy; *The Dot and the Line*, a mathematical fable made into an Academy Award-winning animated film; and *So Sweet to Labor*, a book on the lives of women in the late nineteenth century. Norton's *March*, is from the University of Pennsylvania, and he studied at the University of Liverpool on a Fulbright scholarship.

**L. Brown Kennedy**, assistant professor of literature, is interested mainly in the Renaissance and the seventeenth century with particular emphasis on Elizabethan and Jacobean drama, Shakespeare, the metaphysical poets, and Milton. She received a B.A. from Duke University and an M.A. from Cornell where she is a candidate for a Ph.D.

**Marvin Krieger**, assistant professor of theatre arts, holds both the B.F.A. and M.F.A. with emphasis in design work for the theatre. He has eleven years experience in black theatre, children's theatre and the production of original scripts. He has directed for the stage and television. His design work has been seen both in this country and in Europe. Most recently he was a guest artist with the Smith College theatre and designed the New York production of *Salford Road* which later performed in Scotland.

**Frank Lennox**, faculty associate in H&A and director of the options office, holds a Ph.D. in European history from the University of Wisconsin and a Master's in counseling from the University of Massachusetts. His interests include higher education and society, European cultural history, and foreign study. He has taught at St. Lawrence University and studied in England and Germany.

**Jill Lewis**, assistant professor of humanities, holds a B.A. from Norwich College, Cambridge, England, and is presently pursuing a Ph.D. at Cambridge University. She has been very active in the Women's Liberation Movement in Britain and France. Ms. Lewis teaches courses in literature and cultural history at Hampshire. She will be on leave for the 1980-81 academic year.

**Jared Hittinger**, professor of film studies, has produced several award-winning films and has exhibited at the Museum of Modern Art, George Eastman House, and other museums. He has taught at the University of Minnesota and State University College at New Paltz, New York.

**Richard C. Lyon**, professor of English and American Studies, holds B.A. degrees from Texas and Cambridge, an M.A. from Connecticut, and a Ph.D. in American Studies from Minnesota. He was formerly chairman of the American Studies curriculum at the University of North Carolina at Chapel Hill, and was Hampshire's first Dean of Language and Communication. Professor Lyon will be on leave during the Spring term 1981.

**Robert Marquez**, professor of Hispanic-American literature, has worked for the World University Service in Peru and Venezuela, served as area coordinator of the migrant education program at Middlesex County in Massachusetts, and published translations of Latin American poetry. He holds a B.A. from Brandeis and a Ph.D. from Harvard.

**Flaine Maves**, associate professor of film studies, has a B.A. in art from Stanford. She did graduate study in painting and photography at the University of Minnesota; her photographs have appeared in many exhibitions and publications.

**Francis McLellan**, associate professor of dance, received a B.S. in dance from the School of Music and an M.Ed. from the University of Massachusetts. She was a member of the Joan Kerr Dance Company and the Anna Sokolow Dance Company; she has also assisted Jose Limon. She is certified as a teacher of Labanotation and as an Effort Shape Movement analyst. In addition to being a dancer and choreographer, she has reconstructed several works from Labanotation scores. Francis's current work is in observing the bodymind in motion—in everyday behavior and in symbolic expression. She will be chair of the Five College Dance Department for 1980-81.

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**Hendell McLellan**, associate professor of music, received his B.S. and M.M. from the University of Cincinnati and his Ph.D. from the Eastman School of Music. He has taught music theory and composition at West Chester State College, Pa., where he was also director of the music department. An active composer, he also enjoys singing in the style of North India. He is an originator of "sound awareness training" about which he has written a book, *The Sounders Sound*. His current studies include sensory awareness with Charlotte Selver and the music of non-Western cultures. Professor McLellan will be on leave for the 1980-81 academic year.

**Robert Messinger**, associate professor of philosophy of religion, has a B.A. from the University of Notre Dame and an M.A. from Chicago. His publications include *Religion and Power*, *Beckoning*, *Teaching Socrates: Rethinking the Political Cave*, *Notes*, and *An Introduction to Augustine*. He has taught at the University of Notre Dame and at Indiana University.

**Joan Hartley Murray**, assistant professor of art, holds a B.A. from Hampshire College and an M.A. in painting and color theory from Goddard College. Her work has been exhibited in group shows at Hampshire and the University of Connecticut and in a one-person showing at Goddard. She has also served as guest critic and lecturer at a number of New England colleges.

**Hina Payne**, visiting assistant professor of human development, attended Connecticut College for Women and graduated from Sarah Lawrence College. She is author of *All the Way Long*, a collection of nursery rhymes from the United States, published by Atheneum, and has conducted writing workshops for all age groups.

**Earl Papp**, professor of design, holds a B.Arch. degree from North Carolina State College at Raleigh and has a design and construction critic for the Pratt Institute in New York City. He has been engaged in private practice since 1962.

**Abraham Ravetz**, visiting assistant professor of film and photography, holds a B.A. in psychology from Brooklyn College, a B.F.A. in filmmaking and photography from the Massachusetts College of Art, and an M.F.A. in filmmaking from Syracuse University. Complementing a career in filmmaking and photography, Ravetz has also worked as video tape specialist and media consultant.

**Mary Russo**, assistant professor of literature and critical theory, earned a B.A. in English from Michigan State University, an M.A. in comparative literature from the University of Michigan, and a Ph.D. in Romance studies from Cornell. She has taught at the University of Massachusetts, Trinity College in Hartford, and New York University.

**Andrew Salkey**, professor of writing, has published widely in the fields of fiction, non-fiction, and poetry. A Jamaican national, Mr. Salkey has also worked as a broadcaster, journalist, teacher, and lecturer. He received his education at St. George's College and Munro College in Jamaica and the University of London.

**David F. Smith**, professor of English and American Studies, holds a B.A. from Middlebury College and M.A. and Ph.D. from the University of Minnesota. He has been at Hampshire since it opened, and before that was director of Indiana University's graduate program in American Studies. His writing and teaching reflect an interest in American social and intellectual attitudes toward land and landscape.

**Francis D. Smith**, professor of humanities and arts; a Harvard graduate, he has taught in high schools and colleges, directed federal community relations programs for Massachusetts, and has published as a sociologist, playwright, and novelist.

**Roy Superior**, associate professor of art, earned his B.F.A. at the Pratt Institute in New York and his M.F.A. at Yale University. He was also studied at the Instituto Allende in Mexico. He has had several years of experience in teaching drawing, painting, and printmaking, and has exhibited his work at a number of north-eastern colleges and museums.

**SCHOOL OF LANGUAGE AND COMMUNICATION**

**Ellen Ward Cooney**, assistant professor of psychology, holds a B.A. from Radcliffe College and an Ed.D. in developmental psychology from the Harvard Graduate School of Education. She has worked as a pre-doctoral intern in child psychology at the Judge Baker Guidance Center in Boston. Her interests are in cognitive-developmental theory, social and ego development, and applications of social-cognitive-developmental theory to clinical and educational practice. Ms. Cooney is on leave for the academic year 1980-81.

**Mark Feinstein**, assistant professor of language studies, has a Ph.D. in linguistics from the City University of New York. Among his special interests are phonological theory, bilingualism, implications of sociolinguistic research for a general theory of language, and neurolinguistics (aphasiology). Mr. Feinstein will be on leave Fall Term 1980.

**Jay Garfield**, assistant professor of philosophy, received his B.A. from Oberlin College and his Ph.D. in philosophy from the University of Pittsburgh. His main teaching interests are in philosophy of psychology, philosophy of mind, and ethics. His recent research compares the model of explanation used by behaviorists with that of contemporary cognitive psychologists.

**Maryl Gearhart**, visiting assistant professor of psychology, has an M.A. in remedial reading from New York University and an M.Phil. in developmental psychology from the City University of New York where she is currently completing her Ph.D. Her interests include social interaction among young children and its relation to social development and classroom interaction and its relation to cognitive development.

**James Paul Gee**, assistant professor of linguistics, holds a B.A. (philosophy) from the University of California, Santa Barbara, and an M.A. and Ph.D. (linguistics) from Stanford University. Within linguistics his interests include syntactic semantics, theory, pragmatics, theories of grammar, linguistics and literature, and the structure of English, as well as sociolinguistics and variation theory. Within philosophy, his interests include epistemology, the theory of perception, intentionality, philosophical logic, and the philosophy of language, as well as the history of analytic philosophy. Mr. Gee will be on leave Spring Term 1981.

**Allen Hanson**, associate professor of computer science, has a B.S. from Clarkson College of Technology and an M.S. and Ph.D. in electrical engineering from Cornell University. His main research interests are in computer programming, artificial intelligence, and pattern recognition. At the University of Minnesota he developed courses in computing fundamentals, artificial intelligence, and Higher level languages.

**David Kerr**, assistant professor of mass communications and Master of Merrill House, has a B.A. from Miami University in Ohio, an M.A. from Vanderbilt University, and is completing his Ph.D. at Indiana University. His teaching experience includes courses in communication research and journalism history. His educational interests include the radical press in America, how television affects the public, and communications law. He is currently researching the history of the Liberation News Service.

**Deborah Knapp**, assistant professor of psychology, earned her B.A. in philosophy and psychology at Bernard College and has completed her Ph.D. at the University of California, San Diego. She does research on child language and the development of introspective and problem-solving abilities. Her teaching interests include cognitive psychology, theory of education, and philosophical problems in psychology.

**Elizabeth Leeds**, faculty associate in French, has a B.A. from the University of Massachusetts and a diploma in translation from the University of Geneva. Most recently she has taught with the Experiment in International Living in Brattleboro, Vermont.

**Richard Lyon** holds a joint appointment with the School of Humanities and Arts.

**William Marsh**, associate professor of mathematics, holds his B.A., M.A., and Ph.D. from Dartmouth, and his special interests include the foundations of mathematics and linguistics. Mr. Marsh is Dean of the School of Language and Communication.

**James Miller**, assistant professor of communications, holds an M.A. in mass communications from the University of Denver and is completing his Ph.D. at the Annenberg School of Communications, University of Pennsylvania. He previously taught at Drexel University. His twin research and teaching interests are interdisciplinary approaches to human symbolic interaction and the social control of the media of mass communication. Mr. Miller will be on leave Spring Term 1981.

**Richard Muller**, associate professor of communication, has been director of instructional communications at the State University of New York Upstate Medical Center at Syracuse. He holds a B.A. from Amherst College and a Ph.D. from Syracuse University.

**Angel Nieto**, faculty associate in Spanish, was educated in Spain and in the United States, holding a B.A. in anthropology from Brooklyn College. He has been the director of the Spanish department of the Berlitz School of Languages and coordinator of admissions at the University Without Walls at the University of Massachusetts.

**Judy Shepard-Kegl**, assistant professor of linguistics, has a B.A. in anthropology and an M.A. in linguistics from Brown University. She is currently a Ph.D. candidate in linguistics at MIT. Her research interests include the linguistics of American Sign Language, Slovenian phonology and bilingualism, other sign languages (Vaidiri, Plains Indian, sign languages in India), and anthropological linguistics.

**Neil Stillings**, associate professor of psychology, has a B.A. from Amherst College and a Ph.D. in psychology from Stanford University. Much of his research and teaching concerns the psychology of language. He also has a substantial interest in other areas of cognition, such as memory, attention, visual and auditory perception, intelligence, and mental representation.

**Innocent Tallman**, assistant professor of anthropology, received a B.A. from the University of Wisconsin and a Ph.D. from the University of California, Berkeley. She conducted field work in Yugoslavia on social interaction patterns in rural and urban Serbia and worked in an editorial capacity for the *Kroeber Anthropological Society Papers*.

**Christopher Witherspoon**, associate professor of philosophy, is completing his Ph.D. at the University of California, Berkeley, where he was a Danforth Graduate Fellow and a teaching associate. Both his thesis and a book in progress are in the philosophy of perception. His other research areas include philosophical psychology, the philosophy of language, and the philosophy of art. He has a B.A. from Arkansas Tech where most of his work was in music and literature. He taught at Knoxville College as a Woodrow Wilson Teaching Intern. Most of his current interdisciplinary work is in cognitive psychology and artificial intelligence. Mr. Witherspoon will be on leave Spring Term 1981.

**SCHOOL OF NATURAL SCIENCE**

**Herbert J. Bernstein**, associate professor of physics, received his B.A. from Columbia, his M.S. and Ph.D. from the University of California, San Diego, and did post-doctoral work at the Institute for Advanced Study at Princeton. He has taught at Technion in Haifa, Israel, and the Institut voor Theoretische Fysica in Belgium. He has consulted for numerous organizations including the World Bank, AAAS, NSF, and the Hudson Institute. He was recently Technical Director for Volunteers in Technical Assistance in Washington. His teaching and research interests include reconstructive knowledge, science and technology policy, appropriate technology, science development, and theoretical, practical, and applied physics.

**Merle S. Bruno**, associate professor of biology, holds a B.A. from Syracuse University and a Ph.D. from Harvard. She has done research in sensory neurophysiology (especially vision) and elementary school science teaching. Recently she has been teaching how to do energy conservation analysis of human and she has done that since Hampshire students will develop those techniques into curriculum materials for high school students. Her work in neurophysiology has been supported by grants from N.I.H. and the Grass Foundation, and she is the author of several teacher's guides for elementary science studies. She is also the co-author (together with Susan Goldhor) of a book on dieting.

**Lorna L. Coppingler**, faculty associate in biology and outreach specialist in agriculture, holds an A.B. from Boston University and an M.A. from the University of Massachusetts. In addition to expertise in wildlife, dogs, Slavic languages, and writing, Lorna is also interested in photography. Lorna is involved primarily with the Farm Center.

**Raymond P. Coppingler**, professor of biology, has worked at the Woods Hole Oceanographic Institute, the Smithsonian Astro-physical Observatory in Cambridge, the U.S. Fish and Wildlife Service, and the Beebe Tropical Research Station in the West Indies. He holds a 4-College Ph.D. (Amherst, Smith, Mount Holyoke, UMass.). Various interests include philosophy, forest management, animal behavior, New England ornithology in the Caribbean, African ecology, bioethical human adaptation (anthropology/ecology), and nontoxicity theory (book in progress). Ray has been a pilot of a glider, a pilot of a racing glider, and has originated his own brand of sled dog, and is currently active in the Farm Center.

**John M. Foster**, professor of biology, previously taught biochemistry at the Boston University School of Medicine and was a director of the Science Curriculum Improvement Program at Harvard. He holds a Ph.D. in biochemistry from Harvard. In addition to his involvement in biochemistry and in human biology, he is interested in ecology and field biology, amateur electronics, baroque music, and white water canoeing.

**Nancy L. Gaddorf**, associate professor of biology, was previously chairperson of the department of natural science and mathematics at West Virginia State College. She obtained her Ph.D. from Ohio State University. Involved in teaching courses on human reproduction, health, sex, women, and endocrinology, she is also interested in field biology, human and comparative anatomy, parasitology, marine biology, and tropical (Caribbean) ecology.

**Stanley Goldberg**, associate professor of the history of science, taught at Antioch College, was a senior lecturer at the Smithsonian City of Washington, and a post-doctoral fellow at the Smithsonian Institution. His Ph.D. is from Harvard. His teaching and research interests include physics, history of science (particularly early 20th century physics), science and public policy, and photography.

**Susan Goldhor**, adjunct associate professor of biology and director of the Farm Center, received her A.B. from Barnard College, Columbia University, and her M.A. and Ph.D. from Yale. She taught in the biology department of Haeccetop University in Turkey for two years and spent two years at Stanford University as a cancer researcher. In addition to co-authoring a book with Merle Bruno on dieting, she is interested in science fiction, and agriculture, particularly sheep behavior and physiology.

**Courtney P. Gordon**, associate professor of astronomy and Associate Dean for Advising, holds a Ph.D. from the University of Michigan. Her work includes studies at the Royal Greenwich Observatory in England, the Harvard College Observatory, the Arecibo Observatory, the Kitt Peak National Observatory, and the National Radio Astronomy Observatory. In addition to research interests include galactic structure, interstellar matter, and pulsars. He is a member of the Five College Astronomy Department.

**Kurtis J. Gordon**, associate professor of astronomy, received his B.S. in physics at Antioch College, and his M.A. and Ph.D. from the University of Michigan. His interests include time (including the philosophy of time and space), relativity, extraterrestrial and animal communication, and cosmology. His research interests include galactic structure, interstellar matter, and pulsars. He is a member of the Five College Astronomy Department.

**Michael Gross**, assistant professor of the history of science, received his B.S. in chemistry from Brooklyn College and his Ph.D. in the history of science from Princeton University. His interests include the history of biology, especially physiology and evolution, embryology, and molecular biology. In addition, he teaches courses in the social structure of science, and the roles of scientific theory in political and social questions such as race and intelligence, population control and sexuality.

**Kenneth R. Hoffman**, associate professor of mathematics, has an M.A. from Harvard, where he also served as a teaching fellow. He taught mathematics at Talladega College during 1965-70. In addition to algebraic number theory and mathematical modeling, Ken's interests include education, American Indians, natural history, and farming.

**David C. Kelly**, associate professor of mathematics, has taught at New College, Oberlin, and Talladega College. He holds an S.M. from M.I.T. and an A.N. from Dartmouth. He has, since 1971, directed the NSF-supported Hampshire College Summer Studies in Mathematics for high ability high school students. His interests are analysis, the history of mathematics, recreational mathematics, and seventeen. David will be away for the entire year.

**Allan S. Krass**, associate professor of physics and science policy assessment, was educated at Cornell and Stanford, where he received his Ph.D. in theoretical physics. He has taught at Princeton University, the University of California at Santa Barbara, and the University of Iowa, as well as the Open University in England. His interests include physics, science and public policy (particularly dealing with environmental control), and the environment, where he has worked on flood control and nuclear energy. He coordinates the Environmental Studies and Public Policy Program at Hampshire. Allan will be away for the entire year.

**Nancy Lowry**, associate professor of chemistry, holds a Ph.D. from M.I.T. She has worked as a research associate at M.I.T. and Johns Hopkins College and has taught at Smith College and the Cooley Dickinson School of Nursing. She has also coordinated a chemical analysis lab as part of the Mill River project in Northampton. Her interests include atmospheric and organic molecules, environmental chemistry, science for non-scientists, toxic substances, the bassoon, and nature study.

**Ralph H. Lutes**, visiting assistant professor of environmental studies and natural resources in the Outdoors Program, received his B.A. in biology from Trinity University and his Ed.D. from UMass, where he studied the theoretical foundations of environmental studies. Before coming to Hampshire, he was a curator at the Museum of Science, Boston. He is currently President of the New England Environmental Education Alliance. His interests include natural history, environmental ethics, environmental education, and nature literature. He is particularly interested in the ways of joining the sciences and humanities in our attempt to understand our environment and our relationships with it.

**Anthony Melchionda**, adjunct associate professor of health sciences, holds a B.S. from King's College and an M.D. from The George Washington University. Tony has experience in family practice and in nutrition and is currently President of the American College of Sports Medicine. He is the Director of Health Services at Hampshire College and an adjunct faculty member in the Department of Exercise Science at UMass, where he is engaged in muscle fibre typing research.

**Lynn Miller**, professor of biology, has taught at the American University of Beirut, Adelphi University, and The Evergreen State College. His Ph.D. is from Stanford in fish genetics. His principal interests are in genetics (human and microbial), general microbiology, and in nutrition and he is especially interested in working with small groups of students in laboratory projects and tutorials.

**Sandra M. Owsolo**, associate professor of microbiology, received her Ph.D. from the University of Massachusetts. Her research involves membrane development, structure, and function. In addition, she is interested in public health in developing countries, research in the microbial contribution to energy production, and cancer. Sandra will be on sabbatical during the Fall term 1980.

**Janice C. Raymond**, assistant professor of women's studies and medical ethics, received her Ph.D. from Boston College in religion and society. Before coming to Hampshire she taught at Boston College and the New School for Social Research. She is interested in the history of psychoanalysis, and issues connected with women's health care. Her recent book, *The Transsexual Empire*, was well reviewed. Jan will be away for the entire year.

**John B. Reid, Jr.**, associate professor of geology, has pursued his research with lunar surface and earth's interior at the Smithsonian Astrophysical Observatory, the Geochronology Laboratory at M.I.T., Rensselaer Polytechnic Institute, and the Los Alamos Scientific Laboratory. He received his Ph.D. from M.I.T. His professional interests center around volcanology as a means of understanding the chemical evolution of the earth and the use of volcanoes as a source of geothermal power. He is also interested in the geology of subterranean nuclear waste disposal, fiber-frame house construction, cabinet-making, home-stending, and canoes.

**Ruth C. Rinaud**, associate professor of the history of science and master of Prescott House, received her B.A., summa cum laude, from Milwaukee-Dominic College, and her M.A. and Ph.D. from Cornell, where she concentrated in the history of science. She taught at Kirkland College, where she also held the position of assistant dean of academic affairs. Her interests include nineteenth century science and religion, technology and society, and nineteenth century intellectual history.

**Paul Slater**, adjunct assistant professor of agriculture and manager of the Park Center, received his B.S. and Master of Regional Planning from the University of Massachusetts. He is currently a member of the Land Use Task Force and the Environmental Advisory Committee of the Lower Pioneer Valley Regional Planning Commission, a member of the Association of Landscape Architects, a member of the board of the New England Small Farms Institute, a member of Women in Agriculture, and a director and chair of the Program Committee of the Sunny Valley Foundation, Inc. (New Milford, CT). Paul's interests cover the broad issues of land and resource use, particularly in New England.

**Michael B. Sutherland**, associate professor of statistics, holds an interdisciplinary appointment in Social Science and Risk Science. Besides teaching a variety of courses (ranging from statistical theory to an active consultant in computer assisted statistical analysis to members of the Five Colleges), his primary interests are his family, mathematics, computers, and the Five Colleges.

**Janet D. Van Blerkom**, assistant professor of physics, received her B.S. from M.I.T. (winning the Arthur Compton Prize), and her Ph.D. from the University of Colorado. She has taught at the University of Massachusetts, Smith College, and most recently at the Joint Institute for Laboratory Astrophysics Atomic Collision Data Center at the University of Colorado, Boulder. Janet's interests include theoretical low energy particle physics, astrophysics, waves, optics, acoustics, and holography.

**Charlene D. Van Raalte**, assistant professor of ecology, received her B.A. from Skidmore and her Ph.D. from Boston University Marine Program, Marine Biology Lab, Woods Hole. She has taught at DePaul University in Nova Scotia. Her research has been in the area of salt marsh and estuarine ecology, nitrogen fixation, and the ecology of riverine wetlands.

**Arthur H. Westing**, professor of ecology and Dean of the School of Natural Science, received his A.B. from Columbia and his M.P. and Ph.D. degrees from Yale. He has been a forester with the U.S. Forest Service, and has taught at Purdue, the University of Massachusetts, Middlebury, and Windham, where he was also chairman of the biology department and head of the science division. He has been a trustee of the Vermont Wild Land Foundation, the Vermont Academy of Arts and Sciences, the Society for Social Responsibility in Science, and the Rachel Carson Council. He has been a Senior Research Fellow at the Stockholm International Peace Research Institute and does research primarily on the environmental effects of war.

**Lloyd C. Williams**, assistant professor of chemistry, received his B.A. from Colgate University and his Ph.D. from the University of Wisconsin. He has taught at the University of Wisconsin and worked for Wico Chemical Company, International Paper Company, and E. I. DuPont Company. Lloyd's interests include development of instructional materials and strategies for teaching chemistry; water and air pollution chemistry; and energy conservation. He also enjoys whitewater kayaking, rock climbing, and nature photography.

**Albert S. Woodhull**, assistant professor of biology, received his Ph.D. from the University of Washington. He has taught in the Peace Corps in Nigeria and has lectured at the University of Washington. His research interests are centered on the physiological bases of behavior and on the visual system in humans and animals. He also has a strong interest in electronics which finds an outlet in a homebuilt computer and industrial consulting.

**Ann M. Woodhull**, associate professor of biology, received her B.A. from Swarthmore and her Ph.D. from the University of Washington (physiology and biophysical). Her interests include human biology, physiology, neurobiology, and biological systems. For the last few years, Ann has been increasingly fascinated by the connections between science and human movement, and she has written two articles for *Contact Quarterly* about the biology and physics of movement.

**Five College Astronomy Department Faculty:**

**Courtney and Kurtis Gordon** (see above).

**Thomas Army** - Chairman of Five College Astronomy Department and associate professor of astronomy at the University of Massachusetts.

**Tom Dennis** - associate professor of astronomy at Mount Holyoke College.

**William Dent** - professor of astronomy at the University of Massachusetts.

**George Greenstein** - associate professor of astronomy at Amherst College.

**Edward Harrison** - professor of astronomy at the University of Massachusetts.

**G. Richard Huguenin** - chairman of the astronomy program at the University of Massachusetts and professor of astronomy and physics at the University of Massachusetts.

**William Irvine** - professor of astronomy and physics at the University of Massachusetts.

**Kristyna Jaworowska** - instructor of astronomy at Smith College.

**Nicholas Scoville** - associate professor of astronomy at the University of Massachusetts.

**Walter Seitzer** - professor of astronomy at Smith College.

**Eugene Tademaru** - associate professor of astronomy at the University of Massachusetts.

**Joseph Taylor** - professor of astronomy at the University of Massachusetts.

**David Van Blerkom** - associate professor of astronomy at the University of Massachusetts.

**Richard White** - assistant professor of astronomy at Smith College.

**SCHOOL OF SOCIAL SCIENCE**

**Richard H. Albert**, associate dean of the faculty and assistant professor of political science, has served on the research staff of the Urban Institute in Washington, D.C. His B.A. is from Hobart College and his Ph.D. from Harvard.

**Caroline Bengtsson**, assistant professor of political science, holds an A.B. from Cornell, studied Russian history at Harvard, and is working on a doctorate in political science from M.I.T. She is interested in political development in Southern Africa and other Third World areas. She has conducted research in Algeria, Cuba, and Peru, and has been a school teacher in Kenya and Honduras.

**Hvyna Bretzlere**, assistant professor of geography, has an A.B. from Clark University, an M.A. from Rutgers, and a Ph.D. in geography from Clark University. Her teaching and research interests include the social geography of work; economic, social and political values as determinants of the built environment; social and spatial implications of alternative

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strategies for community development; and problems in providing urban housing, employment and social services.

**Margaret Corullo**, assistant professor of sociology, has a B.A. from the University of Pennsylvania, a B. Phil. from Oxford University, and is presently a Ph.D. candidate at Brandeis University. Her particular areas of interest are the sociology of women and the family in America; political sociology; stratification; sociology of work and leisure; and European social theory.

**Louise Farnham**, associate professor of psychology, has worked in child guidance and mental hygiene clinics in Minnesota and California, and has taught psychology at Yale, Stanford, and San Francisco State College. She holds a B.A. and Ph.D. from the University of Minnesota.

**Nancy Fitch**, assistant professor of history, has a B.A. and M.A. from San Diego State University. She is completing her Ph.D. dissertation at the University of California, Los Angeles. Her teaching interests include European Social and Political History, 1500-1940 with emphasis on Early Modern European History, The Old Regime and the French Revolution, and Europe in the 19th Century; Women's History in a Comparative Perspective; Agrarian and Demographic History; and Quantitative History.

**Michael D. Ford**, Dean of Student Affairs and assistant professor of political science, earned a B.A. from Knox College and a M.A. in political science from Northwestern University, where he is completing his doctoral work. He has taught at the University of Massachusetts, Brown University, and Chicago City College in the areas of politics of East Africa, Sub-Saharan African governments, Black politics, and neo-colonialism and underdevelopment.

**E. Oliver Fowlkes**, associate professor of law, received a B.A. from Southern College, Memphis, and a J.D. from Memphis State University School of Law. He has been engaged in a variety of legal projects involving civil liberties, welfare recipients, housing legislation, and mental hospitals.

**Penina M. Glazer**, Dean of Faculty, and associate professor of history, has a B.A. from Douglass College and a Ph.D. from Rutgers University where she held the Louis Reverter Fellowship. Her special interests include American intellectual history, with emphasis on radical left wing movements in the '60s and '70s during the 1940's. Professor Glazer will be on leave academic year 1979-80.

**Leohard B. Clink**, professor of anthropology, holds an M.D. from the University of Maryland School of Medicine and a Ph.D. from the University of Pennsylvania. Formerly an associate professor at the University of Wisconsin, he has done anthropological studies at St. Lucia, West Indies, for a public health program and a study of ethno-medicine and social organization in the New Guinea Highlands.

**Lloyd Hogan**, associate professor of economics, has an M.A. from the University of Chicago and has done graduate work in public affairs at the State University of New York, Albany. He is editor of the *Review of Black Economy* and Assistant Director for Research and Social Economist at the Black Economic Research Center. He is author of numerous articles and has taught at Amherst College and Harvard University. Professor Hogan will be on leave Spring Term 1980.

**Frank Holmquist**, assistant professor of political science, received his B.A. from Lawrence University, and his M.A. and Ph.D. from Indiana University. His interests are in the area of comparative politics, political and administrative development, and American politics.

**Kay Johnson**, assistant professor of Asian Studies, has her B.A., M.A., and Ph.D. from the University of Wisconsin. Her teaching and research interests are Chinese politics; comparative politics of underdeveloped areas; women and development; international relations including American foreign policy, Chinese foreign policy and policy-making processes.

**Gloria L. Joseph**, professor of education, has a B.S. from New York University and a Ph.D. from the University of Massachusetts. At the University of Massachusetts where she was associate professor of education, she served as co-chairperson of the School's Committee to Combat Racism, and at Cornell she was assistant dean of students, director of the Committee on Special Educational Projects' counseling service, and associate professor in the African Studies and Research Center.

**James Koplin**, associate professor of psychology, received his B.A., M.A., and Ph.D. degrees from the University of Minnesota, and taught at Vanderbilt University. His special interests are psycholinguistics and cognitive psychology.

**Joan B. Landes**, associate professor of political science, holds a B.A. from Cornell University and an M.A. and Ph.D. in political science from New York University. She taught at Bucknell University before coming to Hampshire. Her research interests include the theoretical foundations of the women's liberation movement. Her teaching interests are in the areas of political and social theory, American politics and women's studies. On leave 1979-80.

**Barbara Harrison Linden**, associate professor of sociology, has a B.A. from Syracuse University and a Ph.D. from Columbia, where she also taught and served as architect consultant for problems in college housing at the University. Her academic interests include urban blight and the sociology of education. Professor Linden will be on leave academic year 1979-80.

**Lester Mazor**, professor of law, has a B.A. and LL. B. from Stanford, served as law clerk to the Honorable Warren F. Burger, and has taught at various law schools. His special concerns include the limits of the legal process and the role and status of women in society. Professor Mazor will be on leave Spring Term 1980.

**Naureen Mahoney**, assistant professor of psychology, received her B.A. from the University of California, Santa Cruz and her Ph.D. from Cornell University. Her special interests include social and personality development, sociology of the family and history of childhood and the family. Professor Mahoney will be on leave academic year 1979-80.

**Alan Nassar**, visiting associate professor of philosophy and political economy, is at Hampshire for a year on a Fulbright exchange basis from The Evergreen State College. He has a B.A. from St. Peter's College and a Ph.D. in philosophy from Indiana University.

**1981 SPRING TERM  
PRELIMINARY  
COURSE DESCRIPTIONS**

**SCHOOL OF HUMANITIES AND ARTS**

<b>DIVISION I</b>	
SENSE AND SPIRIT HA 108	R. Meagher
FILM WORKSHOP I HA 110	TBA
STILL PHOTOGRAPHY WORKSHOP HA 150	TBA
<b>DIVISIONS I AND II</b>	
POETRY WRITING WORKSHOP HA 131/231a	A. Salky
FICTION WRITING WORKSHOP HA 163/263	A. Salky
HERE AND NOW: AN EXPERIENTIAL AND THEORETICAL INTRODUCTION TO CESTALT THERAPY HA 161/261	G. Gordon L. Gordon
<b>DIVISION II</b>	
FILM WORKSHOP II HA 210	TBA
FILM/PHOTOGRAPHY STUDIES: INDIVIDUAL PROBLEMS IN FILM MAKING, PHOTOGRAPHY, AND RELATED MEDIA HA 220	TBA
PHOTOGRAPHY WORKSHOP II HA 225	TBA
HANNAH ARENDT HA 239	R. Meagher
HEGEL II HA 252	K. Bradt

**FIVE COLLEGE COURSE OFFERINGS  
BY FIVE COLLEGE FACULTY**

**DONNA B. ARONSON, Assistant Professor of Theatre-Voice/Speech for the Stage (at Mount Holyoke College under the Five College Program)**

Theatre 202a. BEGINNING VOICE PRODUCTION. A course in training the speaking voice, dealing with problems of breathing, production of tone, resonance, and articulation. Selections of prose, poetry, and dramatic literature will be covered. Permission of instructor required. Limited enrollment. First semester. Smith College.

HA 122. BEGINNING VOICE PRODUCTION. A course in training the speaking voice, dealing with problems of breathing, production of tone, resonance, and articulation. Selections of prose, poetry, and dramatic literature will be covered. Permission of instructor required. Limited enrollment. First semester. Hampshire College.

**JOHN J. CONWAY, Professor of Canadian History (at the University of Massachusetts/Amherst under the Five College Program)**

History 297C. CANADIAN POLITICAL THEORY IN HISTORICAL PERSPECTIVE. The development of Canadian political theory since 1763. Particular emphasis on contrasting the corporate and Burkean views of politics and society which prevail in Canada with the individualist Lockean views that have prevailed in the United States since the American Revolution and before. Focus on four topics: (1) contemporary Canada and its problems, (2) the emergence of two differing political philosophies and systems: the American and the Canadian, (3) the origins of Quebec separatism and (4) a case study in Canadian corporatist political culture. University of Massachusetts.

**THOMAS F. KELLY, Assistant Professor of Music (at Smith College under the Five College Program) and Director of Early Music at the Five Colleges**

The Five College Early Music Program, founded in 1979, seeks to provide educational and musical experience for those interested in the music of the Middle Ages, the Renaissance, and the Baroque eras. A faculty of distinguished performers and scholars provides practical and theoretical experience in the performance of early music. An extensive collection of Medieval, Renaissance, and Baroque instruments is available to students for study and performance; and there are extensive holdings in the music libraries of the five colleges. Students interested

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**Miriam Slater, associate professor of history and Master of Dakin House until 1974, received a Ph.D. from Princeton University, where she held the first Woodrow Wilson Fellowship designed to allow a woman with children to attend graduate school half-time. Her undergraduate work was completed at Douglass College.**

**Michael Sutherland holds a joint appointment with the School of Natural Science.**

**Robert von der Lippe, associate professor of sociology and Acting Dean of the Faculty, was director of the National Institute of Mental Health Graduate Training Program in the Sociology of Medicine and Mental Health at Brown University. He has also taught at Columbia University and Amherst College. His B.A., M.A., and Ph.D. degrees are from Stanford University.**

**Stanley Warner, associate professor of economics and Master of Greenwich House, holds a B.A. from Albion College, an M.A. from Michigan State, and a Ph.D. from Harvard. His research and teaching interests include American economic history, economic development, and industrial organization. He has taught previously at Santa Cruz and Bucknell.**

**Frederick Weaver, professor of economics and history, and Dean of the School of Social Science, has a B.A. from the University of California at Berkeley and a Ph.D. from Cornell University. He has done research in Chile as a Foreign Area Fellow and has taught economics at Cornell and the University of Santa Cruz. His special interest is the historical study of economic development and underdevelopment.**

**Barbara Yngvesson, associate professor of anthropology, received her B.A. from Barnard College and her Ph.D. at the University of California at Berkeley. She specializes in the anthropology of law and social organization, and has done field work in Peru and Sweden. She has also worked for the Department of Native Affairs in Papua, New Guinea.**

In early music are encouraged to participate actively in one or more of the performing groups which meet regularly with a coach. Ensembles are organized at all levels of ability, from beginner to expert, to accommodate student progress throughout a four-year academic program. Concerts throughout the year by visiting artists and by faculty and student groups are presented by the Music Departments and the Early Music Program. For further information on the Early Music Program, please contact the Early Music Office, Smith College.

Music 403a. TOPICS IN HISTORICAL PERFORMANCE PRACTICE. Instrumental practice before 1600. Medieval and Renaissance instruments and their music: written and unwritten tradition in performance; stylistic and social aspects of instrumental music in church, court and theatre. Performance experience on historical instruments is desirable but not required. Open to graduate students and to undergraduate students with permission of instructor. First semester. Smith College.

**J. MICHAEL RHODES, Five College Associate Professor of Analytic Geochemistry (at the University of Massachusetts)**

Geology 590B. ANALYTICAL GEOCHEMISTRY. An in-depth review of the application of various analytical techniques to geological problems, sources of error associated with each technique, and methods of data presentation. Prerequisites: mineralogy, or petrology, or permission of the instructor. Class meets Tuesday and Thursday, 4:00-5:15.

**MARGARET SKRINAR, Assistant Professor of Anatomy and Kinesiology in Dance (at Mount Holyoke under the Five College Program)**

Dance 206F. SCIENTIFIC FOUNDATIONS OF DANCE. A lecture-laboratory course of selected anatomy, physiology, and kinesiology materials. Emphasis is placed on those aspects most relevant to dancers. Attention is paid to the scientific principles contributing to injury prevention, health maintenance, and efficient training of dancers. No prerequisite. First semester. Mount Holyoke College.

Dance 497. MOTOR LEARNING AND MOVEMENT ANALYSIS FOR DANCE. A lecture-laboratory course in selected motor learning principles as related to the learning and teaching of dance skills; followed by the development of skill analysis abilities. Prerequisite: Scientific Foundations of Dance (Anatomy/Kinesiology for Dance). First Semester. University of Massachusetts.

HA 108 SENSE AND SPIRIT

Robert Meagher

Rivers, we know, often dive deeply under or into the earth, out of sight and lost to our ears and touch. And yet we may dig madly anywhere and feel the moisture of rivers that flow and overflow beneath our every step. Then, all of a sudden, a river, hidden underground, springs from a crack in the soil or rock and we stand again in that flux where we know we stand each time only once. We have here an image of the actuality of spirit and of the spirituality of sense. If we trace the paths and movements of spirit to their source, we follow them into the sensual; and if we attend to the leadings of our senses, we are gathered and lifted into the movements of spirit. Spirit and sense, sacred and profane, mind and body are both many and one, yet sharing a common life. Each sense ascends to spirit along a path of its own and we shall explore and share such ascents with our own native artistry, the painter, the musician, the dancer in each of us, to serve as our guides.

This course is designed as an introduction to philosophy particularly for those who have a special involvement or interest in the arts. The class will involve both a seminar and a workshop, each meeting as a rule once each week. Seminar readings will include: Jonas, *The Phenomenon of Life*; Kandinsky, *Concerning the Spiritual in Art*; and Juckerandl, *Sound and Symbol*. The workshop will engage us in our own experiments with sensory and artistic experience. The exact scope and focus of these experiments will depend largely on the particular talents and interests of the class which forms. The distinction between seminar and workshop corresponds to the concern of this class to be both experiential and reflective, both experimental and critical.

Enrollment is open. The class will meet twice weekly for 1½-hour sessions.

HA 110 FILM WORKSHOP I

TBA

This course is concerned with the film as personal vision; the film as collaborative effort; the meaning of thinking visually and kinaesthetically; and film as personal expression, communication, witness, fantasy, truth, dream, responsibility, and self-discovery.

The workshop will be concerned with production and similar discussions, field problems, and research. Topics will include history and development, theories of film construction, camera, directing, editing, sound, narrative, documentary, experimental films, use and preparation, and Super-8 and 16mm production.

The past seventy-five years have seen the motion picture rise to the position of an international language. It has transcended the bounds of entertainment to provide riveting documentation of the world, its people and events. It has given added scope and incisiveness to every area of human activity. Our image and understanding of the world more often are gained through film and photographs than personal experience. The aesthetics and techniques of a medium so broad in implication should be understood by all.

A \$25.00 laboratory fee is charged for this course. The College supplies equipment, special materials, and general laboratory supplies. The student provides his/her own film.

The class will meet once a week for four hours. Enrollment is limited to 12.



# PRELIMINARY COURSE DESCRIPTIONS

**HA 150 STILL PHOTOGRAPHY WORKSHOP**  
TBA

The photograph as art and communication--its production and implications.

Photography has become one of the primary means of visual experience today. The directness and impact of the photography makes an understanding of its techniques indispensable to the artist, teacher, and student. So varied is the use of photography in all areas of human endeavor that the need of a "visual literacy" becomes of basic importance.

The course is designed to develop a personal photographic perception in the student through workshop experiments, discussions of history and contemporary trends in photography, and field problems to encourage awareness of the visual environment.

A \$20.00 laboratory fee is charged for this course. The College will supply chemicals, laboratory supplies, and special materials and equipment. The student will provide his/her own film and paper.

The class will meet once a week for four hours plus lab time to be arranged. Enrollment is limited to 15 students.

**HA 131/231a POETRY WRITING WORKSHOP**  
Andrew Salkey

This course will emphasize the principle that all our workshop poetry writing should be done privately for the reception and delight of our own workshop members and with them uppermost in mind, for after all we are our very first audience and group approval is vitally important as a source of confidence. Our poets should be reminded that being attentive readers and listeners to the work of other poets in the group is essential practice; and, of course, our readership and audience will grow and move outwards as we grow and move along as poets.

The workshop will be a forum for the relaxed reading of poems produced by its members. We will pay the closest possible critical attention to the prosody and meaning of class manuscripts, and that ought to be done informally but without loss of tutorial effect. We will emphasize the evidence of latent strengths in the work of the poets, and attempt sensitively to analyze their more obvious weaknesses, more often privately than in group sessions.

We will strive to respect the talents of the poets and resist all inducements to make them write like their mentor (that is, either like the external model of their choice or like their instructor or like the outstanding class poet).

Suggested parallel readings will come from the full range of contemporary writing in verse.

The class will meet once a week for 1 1/2-hour sessions. Enrollment is limited to 16, and permission of the instructor is required.

**HA 163/263 FICTION WRITING WORKSHOP**  
Andrew Salkey

This workshop will emphasize as its guiding principle that all our workshop fiction writing should be done privately for the reception and delight of our workshop members and with them uppermost in mind, for after all we are our very first audience and group approval is vitally important as a source of confidence. Our writers should be reminded that being attentive readers and listeners to the work of other writers in the group is essential practice; and, of course, our readership and audience will grow and move outwards as we grow and move along as writers.

The workshop will be a forum for the relaxed reading, however extended, of short stories, novella-programs, plays, and other expressions of fiction produced by its members.

We will introduce and develop the necessary skills with which our writers will learn to regard, examine, and write fiction as a display of the imagination in terms of narrative, characterization, intention, and meaning; and those elements will be studied closely, not so much from approved external models as from the written work of our own class.

We will try to demonstrate that the practice of fiction ought to be manifestly about the creative description of human relationships in society, in spite of our quicksilver flights of imagination.

We will encourage both on-the-spot oral critical analysis and considered manuscript-revising. We will, at all times, allow the writing and lively analytical discussion of all forms of literary composition within the genre of fiction, however tangential, however idiosyncratic; our fiction writers will be encouraged to take any literary risk they may feel to be important to their development.

The class will meet once a week for 1 1/2 hours. Enrollment is limited to 16, and permission of the instructor is required.

**HA 181/281 HERE AND NOW: AN EXPERIMENTAL AND THEORETICAL INTRODUCTION TO GESTALT THERAPY**  
Linda and Graham Gordon

In this course, we will explore together the theoretical concepts that underlie the exciting and innovative approaches that have come to be known as Gestalt Therapy. Since it is a contradiction in terms to "talk about" Gestalt work, we will do this in the framework of an experiential group in which we will live out those concepts that we discuss. There is no one way to do Gestalt work, but rather members of the class will have the opportunity to learn more about themselves and to integrate the conceptual work in a way that will leave them free to use their own creativity in their interactions with others. We expect this class to be a vehicle for both personal and intellectual growth.

We will meet twice a week for two-hour sessions, and the group will be limited to 16 members. Entrance to the class will be by interview with one of the instructors.

**HA 210 FILM WORKSHOP II**  
TBA

A workshop to help the student continue to develop his/her use of film toward the development of a personal vision. Specific areas of concern are: (1) the film as a tool for environmental and social change; (2) aspects of the experimental film, its aesthetics, energy, and personal vision; and (3) expanded cinema--new movement in film aesthetics.

The course will involve lectures, field work, seminars, and extensive production opportunity. It is for students who have completed film, photography, or TV classes in Basic Studies, or their equivalent--or permission of the instructor.

There will be a lab fee of \$20.00. The class will meet once a week for four hours. Enrollment is limited to 12.

**HA 220 FILM/PHOTOGRAPHY STUDIES: INDIVIDUAL PROBLEMS IN FILM MAKING, PHOTOGRAPHY, AND RELATED MEDIA**  
TBA

This course is open to film and photography concentrators in Division III and others by consent of the instructor.

The class will attempt to integrate the procedural and formal concentration requirements of the College with the creative work produced by each student. It will offer form for meaningful criticism, exchange, and exposure to each other. In addition, various specific kinds of group experience will be offered: field trips to museums, galleries, and other environments; a guest lecture and workshop series; and encounters with student concentrators, teachers, and professionals who are in the other visual arts or related endeavors.

Each student's contract must be written prior to enrollment. Enrollment is limited to Division III concentrators. These contracts have been filed. All others must have permission of the instructor.

There will be a lab fee of \$20.00. The class will meet once a week for five hours.

**HA 225 PHOTOGRAPHY WORKSHOP II**  
TBA

A workshop to help students continue to develop their creative potential and extend the scope of their work in dealing with photography as personal confrontation, aesthetic impressions, and social awareness.

Through lectures, field work, and seminars, students will attempt to integrate their own humanistic concerns with a heightened aesthetic sensitivity. Through the study of a wide variety of photographic experiments and the creation of personal images, the students can share a concern for the possibility of expression and the positive influence photography can have upon the aesthetic and social environment.

This course is for students who have completed photography, film, or TV classes in Basic Studies or their equivalent--or by permission of the instructor.

There will be a lab fee of \$20.00. The class will meet once a week for four hours. Enrollment is limited to 12 students.

**HA 239 HANNAH ARENDT**  
Robert Hoagher

The two central philosophical works of Hannah Arendt are *The Human Condition* (which she had first wished to entitle *The Active Life*) and *The Life of the Mind*. The first book, on the active life, considers the demands and the prospects of labor, work, and action, while the latter considers the discipline and the proper objects of thinking, willing, and judging. Together they endeavor to interpret to us our essential possibilities, living as we do an "inner" and an "outer" life. In this course we will read and discuss in depth these two most imaginative and insightful works.

The class will meet twice weekly for 1 1/2-hour sessions. Enrollment is open.

**HA 252 HEGEL II**  
R. Kenyon Bradt

This course is to be the second half of a year-long study of Hegel's logical system, including his *Phenomenology of Spirit*, *Science of Logic*, and *Encyclopedia of the Philosophical Sciences*. The design of the study is to provide an introductory conception of the full embrace of the movement of the logical system and the opportunity to read in depth select portions of its development from the *Phenomenology* through the *Encyclopaedia*.

The class will meet once a week for three hours. Enrollment is open.

## SCHOOL OF LANGUAGE AND COMMUNICATION

**LC 101 BOOLE'S ALGEBRAS AND THE LOGIC OF COMPUTERS**  
William Marsh

The publication in 1854 of George Boole's *An Investigation of the Laws of Thought* began the first advances in formal logic since Aristotle and the Stoics. We will read it, then look at a little of the modern theory of Boolean algebras and their use in logic and set theory. This part of the course will culminate in the Stone Representation Theorem. The bulk of the course will be spent on the use of Boolean algebras in the design of computer circuitry. We will work a little with wires, switches, and other things in the "real" world. We will end the course by taking a sympathetically critical look at G. Spenser Brown's *The Laws of Form*.

While most of the work in this seminar will be in mathematics, each student will write a short term paper on some topic in the history of the material done in class. The class will meet three times a week, twice for one hour and once for two. Preference will be given to first-year students. Enrollment limited to 16, by lottery if necessary.

DIVISION I		
BOOLE'S ALGEBRAS AND THE LOGIC OF COMPUTERS LC 101		W. Marsh
PLAY LC 103		M. Gearhart
SEMINAR IN PHILOSOPHY+ LC 107		J. Garfield
SEMINAR IN MASS COMMUNICATIONS+ LC 110		TBA
SEMINAR IN LINGUISTICS+ LC 112		TBA
PROBLEM SOLVING LC 143		D. Knapp
COMPUTER PROGRAMMING LC 193		A. Hanson
DIVISION II		
A HISTORY OF THE PRESS IN THE UNITED STATES LC 201 (SS 201)		D. Kerr
SOCIAL DEVELOPMENT LC 204		M. Gearhart
WORKSHOP: COMPUTER APPLICATIONS IN VIDEO PRODUCTION LC 205		A. Hanson R. Muller
SEMINAR IN PHILOSOPHY+ LC 209		J. Garfield
SEMINAR IN MASS COMMUNICATIONS+ LC 212		TBA
SEMINAR IN LINGUISTICS+ LC 214		TBA
COGNITIVE DEVELOPMENT: THE EVOLUTION OF MIND LC 229		D. Knapp
LANGUAGE, CULTURE, AND POLITICS LC 231 (SS 231)		M. Feinstein L. Gitca
CONVERSATION ANALYSIS. PART II LC 247		J. Tallman J. Meister
EXPERIMENTAL DESIGN AND DATA ANALYSIS LC 272 (NS 272, SS 272)		D. Poe N. Stillings L. Williams
FOREIGN LANGUAGES		
FRENCH I FL 103		E. Leete
SPANISH II FL 104		A. Nieto
FRENCH III FL 105		E. Leete
SPANISH III FL 106		A. Nieto

\* Course description will be published in Course Guide Supplement

**LC 103 PLAY**  
Meryl Gearhart

What is play? What is its function in animal and human development? This course explores play from the perspectives of ethology (comparative), psychoanalysis, and cognitive development, with a considerable emphasis on the last. Course work will include observations, readings, and several papers, including critiques of existing theory and research, and proposals for further investigation.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20; first come, first served.

**LC 143 PROBLEM SOLVING**  
Deborah Knapp

Efficient thinking can be learned--that is the premise of this course. It is a course, not about a body of factual material, but about methods--how to set goals, how to gather information, how to organize and master new fields of study, and how to reason through difficult problems. We will focus on a number of subskills involved in efficient thinking, to include: building concentration power; recognizing fallacies (informal logic); memory, introspection, overcoming emotional blocks, and getting new ideas.

Students are asked to come to the first class with a statement of what they consider to be their greatest difficulties in thinking. Each student, in consultation with the professor, will set an individual goal for improvement, and choose from the available sets of exercises for practice in particular skills. To help in setting this goal, diagnostic tests of problem-solving skills will be available. The only requirement for the course is to work toward one's goal, doing the appropriate exercises and adding any of one's own design which seem helpful, and at the end of the term to write an evaluation of one's progress. In addition, there will be class lectures focusing on general principles, optional reading assignments involving autobiographical accounts by successful artists and scientists, and books such as *Conceptual Blockbusting: The Act of Creating*, *The Art of Memory: How to Solve It*, *Fallacy: The Counterfeit of Argument*, and *Intelligence Can Be Taught*.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20, to be determined by lottery at the first class meeting.

**LC 193 COMPUTER PROGRAMMING**  
Allen Hanson

Computing has grown from virtually nothing just thirty short years ago to a position of one of the world's largest industries, and this rapid expansion shows few signs of slowing down. The

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implication is that there can be few people, at least in the industrial countries, who will never have any contact with computers. It seems clear that everyone should have a basic understanding of what computers are, how they are programmed, and how they are used, if for no other reason than self-protection.

The focus of this course is on developing this basic understanding through the programming language PASCAL. We will examine the question of what constitutes a program and how programs are written, since any use of the computer requires at least a simple program. The ability to program provides a powerful intellectual tool which can be brought to bear on numerous other activities. If you want to experience the joys and frustrations of computer programming, if you have an intellectual curiosity about computers, or if you'd like to see whether your distrust of computers is justified, then this course is for you. No previous programming experience is required, nor is any mathematical maturity assumed.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 30, with lottery if necessary.

LC 201 A HISTORY OF THE PRESS IN THE UNITED STATES  
SS 201

David Kerr

In this course we will explore the role of the United States press in communicating events, values, and patterns of behavior to the American public. This will not be a strict "chronology" course. Rather, through topic development, we will try to achieve some synthesis between the history of the press as a social institution and the social fabric of which it is a part. For this reason American history concentrators are particularly encouraged to consider this course as a means of understanding the role of the press in a developing America.

Some concerns have characterized the American press since its inception. We propose to study a few of them in accordance with the topic orientation to the course. We will trace such subjects as press freedom and the law, ethics and professionalism, the press and labor, foreign correspondents and war reporting, sensationalism, the business of news, muckraking and the press, and the Presidents. We will also spend some time looking at the continuing struggle of the alternative press movement in the United States.

There will be two research papers required in the course. The first will be an analytic paper analyzing examples of 19th century newspapers. For the second each student will be expected to design and execute a research project dealing with some aspect of the history of the press. To these ends we will study the modes of inquiry available for testing the historical authenticity of press reports.

The study of history is in large measure an effort to provide an understanding of contemporary problems. The need for such an understanding is the underlying reason for this course. The course will meet twice a week for 1 1/2 hours each session. Enrollment is open.

LC 204 SOCIAL DEVELOPMENT

Maryl Gearhart

This course is a survey of current research in social development. Topics include the development of sex role identities, (friendships, popularity) social interactions (with peers, with adults). Course work will include child observations, pilot research projects, extensive reading, and several papers, including proposals for further research.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20.

LC 205 WORKSHOP: COMPUTER APPLICATIONS IN VIDEO PRODUCTION

Allen Hanson and Richard Miller

By the spring of 1981, the microcomputer laboratory at Hampshire should have capabilities for generating and manipulating video images in interesting ways. We would like to form a working group of people with interests in either computer science or video production—hopefully, both—to begin to explore projects which merge both technologies in creative ways.

People with little background working with computers might wish to prepare by taking LC 193, Computer Programming, or its equivalent, in the Fall Term. People without video experience can take the series of technical minicourses offered in the library during the fall. Students interested in the course should contact either of us during the early fall to suggest particular interests and projects; we will try to keep such suggestions in mind, along with the limitations of our equipment, as we plan the course.

Enrollment is open, permission of instructor.

LC 229 COGNITIVE DEVELOPMENT: THE EVOLUTION OF MIND

Deborah Knapp

This is a course about how children think. We will not only become familiar with the stage theory of Piaget, but will also read recent research articles and materials on educational programs. We will stress the implications of cognitive development for education, for understanding adult cognition, and for studying anthropology and social and personality development. Among the topics to be covered are:

- Infant perception.** To what extent is the world of the infant a "bubbling, buzzing confusion" and to what extent does it have structure? When do babies first recognize a human face? What does an infant's smile mean? How do babies learn to reach for and grasp objects? Do infants think the world goes away when they close their eyes?
- Children's problem solving.** How do children come to recognize contradictions in their own thinking? How does a child's memory differ from an adult's? We will include special topics such as imagery and spatial representation, classification, conservation, and inferences and transitive reasoning.
- Meta-awareness.** When and how do children introspect about their own thinking? How much of their own memory limitations do they realize? How do they learn to plan out an activity strategically, several steps in advance?

**Stage theories and critical periods.** How can stage theories account for learning and progress from one stage to another? Is it true that children can learn certain things only at certain ages?

**Educational implications.** What methods are currently used to teach reading? To teach arithmetic? What can theoretical research tell us about the effectiveness of these methods? **Motivation, moral development, and the roots of social interaction in cognitive abilities.** When are children first able to take account of another's point of view? When can they cooperate in group activities? Do children in other cultures pass through the same Piagetian stages?

There will be several short papers, including one on an interview with a child. Division I students may take this course with the instructor's permission. The class will meet twice a week for 1 1/2 hours each time. Enrollment is limited to 20, by lottery at the first class meeting.

LC 231 LANGUAGE, CULTURE, AND POLITICS

Mark Feinstein and Leonard Glick

Diversity in language and culture is a pivotal factor in the political life of many contemporary nations. People who differ in language, values, and historical identity must come to terms with one another, as interacting parts of a single political whole. In some cases they cooperate; in many more, they engage in serious conflict over national goals and priorities. We will approach this question from the interrelated perspectives of anthropology and sociology. Basically we will discuss three major topics, each illustrated with case studies:

- The politics of diversity in post-colonial nations (Malaysia, India, Nigeria)
- Marxism and the national question (Soviet Union and China)
- Language and social inequality (Canada, Mexico, United States, the Caribbean, Sri Lanka)

We will pay special attention to strategies and conflicts relating to choice of national language; language and social status; language planning; and the impact of political change on language change.

The class will meet twice a week for 1 1/2-hour meetings. Enrollment is open.

LC 247 CONVERSATION ANALYSIS, PART II

Janet Tallman and Joel Meister\*

This course will be an extension of the beginning course in conversation analysis. All who participate will have had previous experience taping and analyzing conversations, so at this level we will begin to examine in depth theoretical questions underlying and resulting from close examination of everyday speech. We will study writings about thought and language, about patterns of social interaction, and about the relationship of ideology and political persuasion to speech. We will also examine approaches to the study of language which begin from sociological and linguistic perspectives rather than anthropological. We will look carefully at topic development and function, at the differences between dyadic groups and those of three or more, at the unconscious motives behind everyday speech, and at the influence of gender on speech and thought patterns. Our readings will be drawn from a variety of sources, including not only conventional social scientific theory but also feminist and radical critiques of that theory. We may use transcripts for illustration purposes, but the majority of our work will be in reading and discussing theory. A prerequisite for the course will be previous experience in doing conversation analysis, either through course work or through independent study before Spring Term.

Enrollment limited to 20, with permission of instructors. Meeting times to be announced.

\*Mr. Meister is an Assistant Professor of Sociology and Anthropology at Amherst College.

FOREIGN LANGUAGES

FL 103 FRENCH II

Elisabeth Leece

This course is designed for students who have completed an elementary French course (including FL 101 or its equivalent). Class time will focus on conversation, using current events, literary works, magazines, newspaper articles, and films as points of departure. Language structure and usage will also be dealt with directly in class, keyed to texts and other instructional material. Active class participation is required.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20, by interview with the instructor at first class meeting.

FL 104 SPANISH II

Angel Nieto

The second term of Spanish will continue to stress listening and speaking skills, with increased grammatical content, including all the tenses and moods. In the second half of the term we will begin readings from prose and poetry, with discussion and written exercises in Spanish. Students who are not sure if this level is appropriate should consult with the instructor at the first meeting of the class.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 20, by interview with the instructor at first class meeting.

FL 105 FRENCH III

Elisabeth Leece

This course is aimed at students with at least one full year of college-level instruction in French, or its equivalent. Students will concentrate on reading and writing skills in the language, focusing on selected topics in linguistic structure, language-society questions, issues in language and literature,

or other areas of interest to the class. Students will be expected to participate in class discussions and write one short paper a week.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 15, by permission of the instructor.

FL 106 SPANISH III

Angel Nieto

This course is aimed at students with at least one full year of college-level instruction in Spanish, or its equivalent. Students will concentrate on reading and writing skills in the language, focusing on selected topics in linguistic structure, language-society questions, issues in language and literature, or other areas of interest to the class. Students will be expected to participate in class discussions and write one short paper a week.

The class will meet twice a week for 1 1/2 hours each session. Enrollment is limited to 15, by permission of the instructor.

SCHOOL OF NATURAL SCIENCE

<b>DIVISION I:</b>	
HISTORY OF ASTRONOMY ASTPC 34	K. Gordon
BLACK HOLES AND THE UNIVERSE NS 103	C. Gordon, K. Gordon
THE SCIENCE AND ART OF HOLOGRAPHY NS 104	J. Van Blerkom
THE CLIMATE OF THE CONNECTICUT RIVER VALLEY NS 116	J. Reid, J. Foster
NEUROBIOLOGY NS 132	Al Woodhull
BIOPHYSICS NS 138	M. Gross
USABLE MATHEMATICS NS 139	K. Hoffman
THE BIOLOGY OF WOMEN NS 142	N. Goddard
TOPICS IN CANCER RESEARCH NS 175	S. Oyewole
QUANTUM MECHANICS FOR THE MTRIAD NS 183	H. Bernstein
THE ECOLOGY OF CENTRAL NEW ENGLAND NS 193	J. Reid, R. Goppinger
FAST OR FEAST: LEAN OR FAT NS 196	M. Bruno
<b>DIVISION II:</b>	
COSMOLOGY ASTPC 20	To be announced
INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS II ASTPC 22	To be announced
OBSERVATIONAL RADIO ASTRONOMY ASTPC 38	To be announced
ASTROPHYSICS II--RELATIVISTIC ASTROPHYSICS ASTPC 44	To be announced
ECOLOGY NS 204	C. Van Ralte A. Wessing
ORGANIC CHEMISTRY NS 212	N. Lowry
CURRENT ISSUES IN CONTRACEPTIVE TECHNOLOGY NS 218	N. Goddard
ENZYMES: LABORATORY EXPERIENCE IN BASIC BIOCHEMISTRY NS 227	J. Foster
DIVISION II BIOLOGY SEMINAR NS 230	Ann Woodhull
ENERGY TECHNOLOGY SEMINAR NS 235	L. Williams
THE NATURE WRITERS NS 254 (OF 254)	R. Lutte, K. Hoffman
MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS NS 261 (SS 265)	N. Sutherland
LINEAR ANALYSIS AND DIFFERENTIAL EQUATIONS NS 267	K. Hoffman
THE NATURAL HISTORY GATHERING NS 271 (IN 323)	K. Hoffman, R. Lutte
EXPERIMENTAL DESIGN AND DATA ANALYSIS NS 272 (SS 272, LC 272)	D. Poe, L. Williams, H. Stillings
BOOK SEMINAR IN PHYSICS NS 281	J. Van Blerkom
THE ENTERPRISE OF SCIENCE: CASE STUDIES IN THE HISTORICAL DEVELOPMENT AND THE SOCIAL AND ETHICAL RELATIONSHIPS OF THE INSTITUTION OF SCIENCE TO OTHER INSTITUTIONS IN WESTERN CULTURE NS 287	S. Goldberg, M. Gross, R. Lutte, R. Rinear

# PRELIMINARY COURSE DESCRIPTIONS

## ENERGY INTEREST GROUP

Bruno, et al.

A growing number of faculty, students, and administrators at Hampshire College are becoming involved in projects relating to the world's energy crisis and to Hampshire's rapidly increasing energy costs. The Energy Interest Group will provide a forum for those people. The following description is actually a proposal of some of the options open to us. If you are interested in any of them, or if you want to add some, contact me. The revised catalogue that comes out in the Fall will contain more details. The sky is the limit!

1. Examine energy use at Hampshire College and investigate ways to cut that use. We can look into funding sources for conservation improvements, for appropriate technology changes, or for public education. We ought to be able to write one or more proposals if we find or invent some good money sources. We may also identify low cost/no cost improvements and develop ideas about how to implement them.
2. Design a strong Division I course in the physics of solar and other alternative energy sources. (See Education Technology Seminar NS 235)
3. Postpouri of energy/environmental education activities. These will be short (1-2 week) workshops in which students will learn and will help develop activities for teaching elementary and high school students problem solving skills in science and also in other disciplines. There may be opportunities to work with elementary school children and with high school students.
4. Examine Hampshire's human and material resources and decide whether we should try to develop an "energy program" at Hampshire (or in the West Coast). If we develop a good plan, we'll write and submit proposals.
5. Regular brainstorming and sharing sessions for people working on Division I exams.
6. Lecture or forum ideas?

Scheduling: Right now scheduling for this interest group is not defined. Not everyone will participate in everything, so several things may happen at once or some may not happen at all. Some activities may go on for the whole semester, others will last only a week or so.

This is open to students in Division I, II and III

Enrollment limit: none, upper Division students will be expected to take more responsibility for organizing certain parts of the subgroups than will Division I students. (Div. III students who plan to teach something about energy this Spring and would like to include their projects in this interest group should speak to me.)

## DIVISION I:

### ASTFC 34 HISTORY OF ASTRONOMY

Kurtiss Gordon

Astronomy and cosmology are traced from prehistoric relics through the beginnings of Egyptian and Babylonian astronomy to a dual continuation in Babylon and Greece in the last pre-Christian centuries. The influence of the achievements of antiquity on Arabic astronomy and the Latin middle ages is followed through the Copernican revolution to the beginning of modern science in the 17th century. The history of gravitational astronomy and astrophysics in the 18th and 19th centuries leads to our present understanding of the universe. Emphasis is placed on ideas and the relation of astronomy to other cultural trends. Reading is largely from original sources and translations.

Class will meet for 1-1/2 hours twice a week.

### NS 103 BLACK HOLES AND THE UNIVERSE

Courtney and Kurtiss Gordon

Questions about the origin and structure of the universe have puzzled humanity for ages. Life in the universe, nature performs experiments under extreme conditions which we can never hope to duplicate on earth—but which we can and may try to understand. From the smallest and densest black holes to the enormity of the universe itself, the theory of relativity finds application. A qualitative understanding of the theory is accessible to students with very little scientific background or facility with equations—which is required is a willingness to explore and to think rigorously.

Expected student input: short paper during first 6 weeks, major paper or other project during second half of term, report to class on the project during final two weeks.

Class meetings: Two 1-1/2 hour meetings per week for first 6 and last 2 weeks of the term, with intervening time to be spent on projects.

### NS 104 THE SCIENCE AND ART OF HOLOGRAPHY

Janet Van Blerkom

The ability of holograms to create an extremely realistic three dimensional illusion has prompted both artists and scientists to learn more about their production and use. We will study the physics involved in holography including topics on light waves, lasers, wave diffraction, zone plates and geometrical optics. The course will also include sessions in the lab where the class will learn how to set up the necessary optical equipment for the production of holograms.

Class will meet twice a week for 1-1/2 hours.

### NS 116 THE CLIMATE OF THE CONNECTICUT RIVER VALLEY

John Reid and John Forter

New England is a battleground for the weather, where cold air from the Arctic, warm moist air from the Gulf of Mexico, and the chilly raw air from the Atlantic all collide. In addition the hills along the valley produce atmospheric inversions and other local phenomena peculiar to the region. The unique properties of water, and the way it interacts with the ground and with the air, have a lot to do with the local climate.

Many weather phenomena are reproduced on a small scale in various parts of the valley, so that by poking around in kettleholes, hilltops, sheltered spots, ponds and open fields with simple tools like a thermometer it is possible to study

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"micro-climates", whose behavior can then be used to understand larger weather systems. This course will be a combination of field and laboratory study of the details of the local climate. We can measure temperature inversions on a windless night, photograph ice crystals on a frosty windowpane, look for frost heaves on a back road, make micro-climates of our own in the lab, and watch a thunderstorm sweep across the valley. Opportunities for student projects abound.

Class will meet for 1-1/2 hours twice a week plus an afternoon lab.

### NS 132 NEUROBIOLOGY

Albert S. Woodhull

We will study the nervous system by reading reports of scientific research and by attempting some of the techniques ourselves in the laboratory. The class will meet for 3 hours each week with the time divided flexibly between laboratories and lecture-discussion. Students should expect to spend additional time on laboratory projects. Several short written reports based on library work and a longer report on a project will be required.

The instructor is especially interested in vision and prefers to do experimental work on animals with simple nervous systems. These factors will influence the choice of laboratory and reading assignments.

Enrollment limit is 12, first come first served.

### NS 138 BIOPHYSICS

Michael Gross

Participants in this course will become critics, editors, and researchers contributing to a book with the same title. Its subject is the application of various biological concepts and theories to social theory and public policy, in relation to such topics as population and food supply, race and intelligence, sociology, sex differences and homosexuality, hyperactivity. In each of these areas, scientific results have been applied to, or alleged to bear on, questions of social and political significance. The book has two purposes: to discuss the validity of the scientific conclusions, and to evaluate their relevance to the sociopolitical questions.

The course will run for a full year; the topics covered each semester will be announced at the beginning of the semester. Students enrolled during the fall semester may, after discussion with the instructor, wish to continue. The book has two purposes: the Spring without having taken the first half of the course; the previous semester.

As format, I will distribute, periodically, drafts of portions of the manuscript. Since the intended audience is the educated layperson (rather than specialists), you will be the ideal critical readers. As Division I students, you will be learning how to do research by helping to fill in the gaps—the areas where the manuscript needs expansion or tracking down a particular source, to developing a bibliography, to writing up summaries or critiques of particular materials. In this way, I anticipate that topics suitable for development into Division I projects will emerge from the questions which arise in the written drafts I present. Also, you will have the opportunity to see a piece of written work develop—become reorganized, expanded or revised, and rephrased. Most of the readings will be library materials or handouts, but I recommend strongly that you purchase and read Peter Elbow's *Writing Without Teachers*.

Written work will to some extent depend on how much you choose to undertake, but expect to produce some thirty pages during the semester. Evaluation will be based upon participation in various aspects of the course: involvement in critiquing sessions, following through on tasks you agree to undertake, and development of your own research and writing skills.

Class will meet for 1-1/2 hours twice a week.

### NS 139 USABLE MATHEMATICS

Kenneth Hoffman

In this course we will work on developing the student's proficiency in and fondness for mathematics by working through a selection of topics in elementary applied mathematics. This course is designed primarily for those who are unsure of their mathematical background and ability and want to do something about it; better prepared students are advised to consider one of the other Division I math courses. Some of the topics we will cover are:
 

- Surveying and mapping
- Celestial navigation
- Mathematics of carpentry
- Introductory computer programming
- Tips to read and use graphs

The heart of the course will be the weekly problem sets. Students will be encouraged to work on the problems in groups of two or three, and there will be many support mechanisms for helping students through trouble spots—regular weekly problem sessions, optional review sessions on some of the basics, Division II or III students available to help individuals.

Class will meet three times a week for one hour each.

### NS 142 THE BIOLOGY OF WOMEN

Nancy Goddard

Daily pressures by our society encourage women to be consumers of services and products claimed to make them feel healthier, look and feel young longer. A better understanding of one's anatomy and physiology will enable a woman to sort out the myths, be more aware of ways that health can be enhanced, and thus be a more "enlightened" consumer. In this course we will study relevant systems of the body and learn ways in which women can play an active role in maintaining their own health.

Students will be expected to read from text materials and primary research reports, to come to class prepared to discuss these readings, and to complete a project on a question related to the course content. Evaluations will be based upon the quantity and quality of these activities.

Class will meet for 1-1/2 hours twice a week.

## NS 175 TOPICS IN CANCER RESEARCH

Sandra Oyevele

Volumes of publications on cancer-related research give us an opportunity to examine the approaches that are being used to tackle the problem of cancer, the number two killer in the United States. We will discuss the epidemiology of cancer and mechanisms of carcinogenesis, as well as some relevant cellular biology. Some emphasis will be placed on viral agents which have been implicated in cancer. The format will be a combination of lectures and discussions of scientific articles.

For evaluation, in addition to doing the assigned reading, students will be required to write a research paper and make an oral presentation before the class based on published research articles.

Class will meet twice a week for 1-1/2 hours each.

## NS 183 QUANTUM MECHANICS FOR THE MYRIAD

Herbert Bernstein

This course will investigate the structure of a powerful intellectual influence of our times: theoretical physics. We describe observation systems including electron spin and photon polarization, we develop the actual quantum theory in its matrix mechanics form. This theory underlies our current understanding of atoms, particles and virtually all physical processes; it has important philosophical consequences as well.

The course has three themes: quantitative approximations to interesting physical phenomena; formal use of mathematics to describe observations; the philosophical and cultural significance of interpretations of physical theory. Accordingly, the ideal composition of the class might be five or more students with a general interest in science, five with potential interest to specialize in science, and five with potential interest to specialize in philosophy.

Class will meet for 1-1/2 hours three times a week.

## NS 193 THE ECOGEOLOGY OF CENTRAL NEW ENGLAND

John Reid and Raymond Coppinger

This course is designed to investigate the relationship between the surficial geology of the Connecticut Valley area and its ecology. Specifically, we will study the nature of the ground created by continental glaciers, and by rivers and lakes. We will then examine the controls placed on the distribution of plants—trees in particular—by the type of land they grow in. A central theme through the course will be the effects of a new geologic force—human agricultural activity—on the face of New England over the last 500 years.

Class will meet twice a week for one 1-1/2 hour lecture/discussion and one afternoon field trip.

## NS 196 fast or FEAST: lean or FAT

Merle Brunn

The students in this seminar will learn to read and evaluate some of the research done on how the body handles excess calories and on how it survives when it gets too few calories. For the first six weeks we will read research papers, learn some background material about digestion and metabolism, analyze our own dietary intakes, and measure our metabolic rates.

During the last six weeks we will meet less formally; students will work on individual or group projects. At the end of this period, students will report the results of their work to the rest of the class.

Enrollment is limited to 16.

Class meets for 1-1/2 hours three times each week.

## DIVISION II:

### ASTFC 20 COSMOLOGY

To be announced

Cosmological models and the relationship between models and observable parameters. Topics in current astronomy which bear upon cosmological problems, including background electromagnetic radiation, nucleosynthesis, dating methods, determinations of the mean density of the universe and the Hubble constant, and concerning the foundations of cosmology and its future as a science. Prerequisite: one semester of calculus and one physical science course.

### ASTFC 22 INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS II

To be announced

Variable and exploding stars, pulsars, x-ray and radio astronomy, the interstellar medium, galactic structure, external galaxies, quasars, and cosmology. Requisites: introductory calculus and physics. Students who have not taken ASTFC 21, will need to do extra reading near the beginning of the term to orient themselves, and should consult the instructor at the start of the course.

### ASTFC 38 OBSERVATIONAL RADIO ASTRONOMY

To be announced

An introduction to methods of astronomical radio observation and data reduction. Specific techniques of radio astronomy will be discussed and analyzed. Laboratory experiments and field observations will be performed by students during the semester. Prerequisite: physics through electromagnetism.

### ASTFC 44 ASTROPHYSICS II—RELATIVISTIC ASTROPHYSICS

To be announced

Continuation of ASTFC 43. Stellar explosions and supernovae, degenerate matter in highly evolved stars, neutrino astrophysics, emission of radiation by accelerated charges in dynamos, neutron star structure/hydrodynamics of differential rotation in stars, black holes, and gravitational radiation. Requisite: ASTFC 43 or permission of instructor.

PHYSICS AT HAMPSHIRE

The study of "real physics" at Hampshire will be structured around an introductory two-term sequence, Basic Physics (with its attendant laboratory experiences) and advanced follow-up courses. Basic Physics is team taught by all the faculty who have interest in physics. The next Basic Physics sequence will begin in the fall of 1981. Physics requires a strong mathematical background including algebra, trigonometry, and some calculus. It is not essential to have taken the calculus before starting physics, but it is essential that the calculus be taken at least concurrently with the first semester of Basic Physics. Therefore, students who have not had the calculus should plan on taking both Physics and the Calculus in the Fall of 1981.

NS 204 ECOLOGY

Charlene Van Raalte and Arthur Westing

A study of the relationship of plants and animals with their living and non-living environment, with major emphasis on temperate-zone aquatic and terrestrial ecosystems. The curriculum includes succession, nutrient cycling, population interactions, biogeography, soils, microbial ecology, and evolution. The laboratory work consists of field trips as well as indoor and outdoor exercises, meant primarily to acquaint the student with some of the concepts, techniques, and tools of ecological research.

Students are expected to attend class (both lecture and lab) regularly and to participate fully in the discussions and exercises. Readings will be largely from a basic textbook (Oudin's "Fundamentals of Ecology"), but these will be supplemented by others from the scientific literature. Two reports will be required, one based on laboratory work.

Division II level; prerequisites: one semester each of biology and chemistry; no enrollment limit; grades available for Five College students.

The class will meet for two 1-1/2 hour lectures and one four hour lab per week.

NS 212 ORGANIC CHEMISTRY (SPRING)

Nancy Lowry

This course is a continuation of the first semester; emphasis is on the functional groups and spectroscopic identification of organic compounds.

Class will meet for 1-1/2 hours three times a week, plus one two hour lab per week.

NS 218 CURRENT ISSUES IN CONTRACEPTIVE TECHNOLOGY

Nancy L. Goddard

This group will meet weekly to explore current research on contraceptive technology. Students are expected to have a basic knowledge of reproductive biology and the ability to read and discuss scientific literature. Emphasis will be placed on discussion of the most recent technological developments. Evaluation will be based upon extent and quality of input into these discussions.

Limited to 15 Division II students. Interview with instructor required.

Class will meet once a week for two hours.

NS 227 ENZYMES: LABORATORY EXPERIENCE IN BASIC BIOCHEMISTRY

John Foster

Almost all chemical changes in living cells involve the action of enzymes. What is an enzyme? How does it function? What does one look like and how do you measure it? This course will take a look at various aspects of enzymes and enzymology. It will be divided into two distinct units: Enzymes as catalysts: An enzyme reveals itself to the nosy biochemist by the reaction it catalyzes. Thus the starting point in any enzyme study is a good assay. This unit will focus on techniques of enzyme assay and the nature of enzyme catalysts. Having learned the assay you can then use it to look at some of the properties of an enzyme (its kinetics, binding constants, response to environmental factors, etc.) without actually seeing the enzyme itself.

Enzymes as proteins: An opportunity to purify your favorite enzyme from some suitable source, so that with a little luck you can actually see what it looks like. Since enzymes are proteins, purifying one means getting into some protein chemistry and into methods of separating large molecules from one another (salt fractionation, gel filtration, affinity chromatography, electrophoresis, etc.).

Both units will emphasize careful and quantitative laboratory work, as we will use your own data to develop the theoretical basis of enzyme behavior. Getting good data will require a substantial commitment of time. The weekly laboratory period will begin after lunch and continue as far into the evening as necessary. The class will work in groups so that unavoidable time conflicts can be accommodated by sharing the work to be done.

While the primary emphasis will be on the laboratory work there will also be a weekly 90-minute seminar to discuss biochemical principles to be derived from the laboratory results and, as the semester progresses, to discuss papers from the research literature which apply enzymological principles to some interesting biological problems. Prerequisites: None mandatory, but some background in chemistry will make life easier.

Division I students must secure the permission of the instructor.

NS 230 DIVISION II BIOLOGY SEMINAR

Ann Woodhull

The first purpose of this seminar is to read and discuss recent papers in many areas of biology: zoology, biochemistry, botany, agriculture, human physiology, ecology, and so forth. Each week we will read one such research paper. A panel of students will be responsible for the discussion of the paper, including ferreting out background information and presenting it clearly. Sometimes we will invite other faculty or students (continued)

who are expert in an area to aid the discussion of a particular paper.

A second aim of the seminar is to provide a place for Division II students to discuss their own work. Part of each meeting will be devoted to discussion of Division II work and Division II planning. We will try to find means whereby students can collaborate on their concentrations.

Class will meet once a week for 2-1/2 hours.

NS 235 ENERGY TECHNOLOGY SEMINAR

Lloyd Williams

This seminar will focus on the technical aspects of generation, collection, and storage for both conventional and alternative sources of energy. We will also explore the physics of heat transfer and energy conversion. Our goals will be to learn about various energy technologies and develop an energy technology bibliography. Students will be expected to take major responsibility for literature searches on each technology and will be expected to write critiques of research papers, monographs, and texts. Each participant will prepare a class presentation and lead a discussion on an aspect of energy production or conversion.

Students enrolled in this seminar should have had both the Calculus and Basic Physics. Limit of 15 students by permission of instructor.

Class will meet once a week for two hours.

NS 254

(OP 254)

THE NATURE WRITERS

Ralph Luts and Kenneth Hoffman

A course in nature literature. For details refer to the Outdoors Program course OP 254.

NS 261 MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS

(SS 265)

Michael Sutherland

Traditionally, the mathematical preparation for scientists and quantitatively-minded social scientists begins with a year or more of the calculus. Easy access to high speed computers has increased the usefulness of other tools. For almost all scientists and social scientists (with the possible exception of physicists and engineers) the content of this course is more appropriate than calculus. Topics will include:

- Functions and graphs
- Computer simulation, calculation, and plotting
- Elementary linear algebra (vectors and matrices)
- Linear Models (including input-output analysis, linear regression, and analysis of variance)
- Concepts of the calculus (the language and its interpretations)
- Difference methods (applied to approximating solutions to differential equations)
- Elementary probability and statistics (including the use of interactive statistical programs to save, modify and analyze data)

No previous programming experience is required; the computer will be used throughout the course.

Classes will meet three times a week for 1 hour each session; additional evening problem sessions will be scheduled using on-campus teaching assistants. Regular substantial problem sets will be assigned and will constitute the heart of the course work.

NS 267 LINEAR ANALYSIS AND DIFFERENTIAL EQUATIONS

Kenneth Hoffman

Real vector spaces will be studied algebraically and geometrically and applied to the solution of differential equations. Participants can expect to acquire a working knowledge of matrices, linear transformations, dimension, determinants, and power series, and the basic techniques for setting up and solving ordinary linear differential equations. The basic notion of linearity will be extended to infinite dimensional spaces so that we can study the convergence of functions, Fourier series (harmonic analysis), and the solutions to some of the classical partial differential equations of mathematical physics (the heat and wave equations).

Freshman calculus and the willingness to do lots of problems are prerequisites; mathematical maturity is a byproduct. The text will be *An Introduction to Linear Analysis* by Kreider, Kuller, Osberg and Perkins.

Class will meet twice weekly for 1-1/2 hours, and an additional problem session will be scheduled.

NS 271 THE NATURAL HISTORY GATHERING

(IS 325)

Kenneth Hoffman and Ralph Luts

This course is designed to bring together those who are actively involved in field biology or ecology, natural history writing, outdoor education, teaching nature studies, natural resource management, etc., to share their work, ideas, and experiences.

We will meet one evening every other week for dinner followed by a discussion. Responsibility for providing the focus for each meeting will rotate among the members of the group. We will also go on two or three weekend trips together.

Participation in this course could fulfill the integrative requirement for Division III students.

Enrollment is by permission of the instructor.

NS 281 BOOK SEMINAR IN PHYSICS

Janet Van Blarcom

This seminar is intended for students concentrating in physics and for those in other areas who wish to do advanced work in physics. The class will read, discuss, and solve problems from an upper level undergraduate physics text in one of the following subjects: mechanics, electrodynamics, thermal physics, quantum theory, optics, acoustics or fluid mechanics. (continued)

The choice of the book and subject matter will be made by the students themselves. Students who have not taken one year of Basic Physics or the equivalent should not take this course.

Class will meet twice a week for two hours or so. Admission by interview with instructor.

NS 287

THE ENTERPRISE OF SCIENCE: CASE STUDIES IN THE HISTORICAL DEVELOPMENT AND THE SOCIAL AND ETHICAL RELATIONSHIPS OF THE INSTITUTION OF SCIENCE TO OTHER INSTITUTIONS IN WESTERN CULTURE

Goldberg, Gross, Luts, and Rinsard

In recent years the scientific community has been held responsible for the creation of a number of crises within our culture. One example is the development of insecticides, fungicides, and herbicides of immense power and the subsequent contamination of the world's land and water resources. Many other examples could be cited in such diverse fields as agriculture, medicine, geology, genetics, physics, chemistry, and a host of others.

Thirty years ago, the picture was much different. At the end of World War II, science was seen as providing the solutions to problems which had never been solvable: it was through the application of science that the world would rid itself of all the cares of survival.

In this full year course, we seek to understand the niche that science occupies within the culture and how attitudes toward science from within and without the scientific community are formed and change. To this end we seek to understand the relationship between science and technology and the relationship between theory, evidence, values and ethics. In pursuing our goal we will examine the following topics:

Fall Term:

1. The Sixteenth and Seventeenth Centuries
2. The Scientific Revolution and the Emergence of Scientific Organizations
3. The Relationship Between the Scientific Revolution and the Industrial Revolution
4. The First Energy Crisis: The Denuding of European Forests
5. The Eighteenth Century
6. The Notion of Progress: Science in the Enlightenment Era
7. The Steam Engine and the Theory of Heat

Spring Term:

1. Case Studies from the Nineteenth and Twentieth Centuries
2. Evolutionary Theory and Social Darwinism
3. Evolutionary Theory, Uniformitarianism & Velokowky's Catastrophism
4. The Theory of Relativity and Social Relativity
5. Structural Chemistry, Chemical Technology and the Pharmaceutical Industry
6. Structural Theory, Molecular Biology, and Recombinant DNA
7. Theories of Personality and the Technology of Therapy
8. Objectivity and the Social Sciences: The Case of Intelligence Testing
9. Ecological Theory, Game Management and Social Responsibility
10. Understanding the Human Body and Medical Technology
11. Human Engineering and Medical Ethics

With the permission of an instructor students may enroll in the Spring Term without having taken the first half of the course in the previous semester.

The course will meet 1-1/2 hours twice a week for lecture and discussion. Each student will be expected to write a major paper on a topic of his or her choice from within the framework of the focus of the course.

SCHOOL OF SOCIAL SCIENCE

SS 102 POVERTY AND WEALTH

Laurie Misonoff

"God and Nature have ordained the chances and conditions of life on earth once and for all. The case cannot be reopened. We cannot get a revision of the laws of human life." W. Graham Sumner

"Contrary to what many believe, poor people are not poor because they are naturally lazy and stupid or because they have too many children. Nor is it because there aren't enough jobs to go around or because poverty is a "natural" condition of society.

"(There is in America) a business elite that has historically kept certain elements of society poor for the benefit of the rich and powerful." P. Roby

Who gets the money in America and who doesn't? Why is there poverty in the richest country in history? Although often sanctified by economic theorists in oblique formulas, the state of poverty and the character of wealth go to the heart of what it is to live in America. In this spirit then, what are the human factors of the economic activity known coolly as "income distribution" of this contemporary social and economic reality. That a problem even exists is often noted by the dominant ethos of American industrialism's childhood, that (as expressed by W. G. Sumner) "it is not wicker to be rich; nay, even... it is not wicker to be richer than one's neighbor."

There will be thematic units such as: Federal income measurement--its facts and its fictions, the business elite, taxation, family and sexual inequality and race, health care and genetic endowment, aging, education and the history of social welfare programs and charity. With the goal of fostering an understanding of the way income inequality is perceived and measured, we will also examine three paradigms in economic inquiry: the radical, the liberal, and the conservative.

Readings will include: David Gordon (ed.), *Problems in Political Economy*; Herman P. Miller, Rich Hart, Peter Hall, Pamela Roby (ed.), *The Poverty Establishment*; James G. Scoville (ed.), *Perspectives on Poverty and Income Distribution*; Helen Ginsburg (ed.), *Poverty, Economics and Society*.

The course will meet for 1-1/2 hours twice a week and is limited to 18 students on a first-come first-served basis. Evaluation will be based on class participation and several problem sets and themes assigned throughout the semester.

# PRELIMINARY COURSE DESCRIPTIONS

<b>DIVISION I</b>	
POVERTY AND WEALTH SS 102	Nisonoff
MEN, WOMEN AND WORK: A HISTORICAL AND CONTEMPORARY PERSPECTIVE SS 104	Glazer M. Slater
IS THE MEXICAN REVOLUTION DEAD? SS 107	Weaver
ECONOMIC PERSPECTIVES ON WOMEN SS 114	Nisonoff
THE HOLOCAUST SS 118	Glick
MODELS OF HEALTH CARE DELIVERY SS 121	von der Lippe
INTRODUCTION TO THE CLASSICS OF POLITICAL ECONOMY SS 126	Hogan
GREEK POLITICAL THOUGHT SS 134	Landes
HUMAN AGGRESSION SS 157	Poe
<b>DIVISION II</b>	
A HISTORY OF THE PRESS IN THE UNITED STATES SS 201 (LC 201)	Kerr
FAMILY IN CROSS CULTURAL PERSPECTIVE SS 207	Cerullo Johnson
BLACK AMERICANS IN A CAPITALIST SOCIETY SS 223	Hogan
LANGUAGE, CULTURE AND POLITICS SS 231 (LC 231)	Feinstein Glick
IMPERIALISM AND UNDERDEVELOPMENT IN THE THIRD WORLD SS 232	Holmquist Johnson Hartford
NEW ENGLAND WORKSHOP: NEW ENGLAND PAST, PRESENT AND FUTURE SS 246	Breibart Pitich Holmquist
FEMINIST AND OTHER SOCIAL MOVEMENTS IN EUROPE AND AMERICA SS 251	Breibart Pitich Landes
AMERICAN LABOR HISTORY AND LAW SS 258	Mazur Warner
EXPERIMENTAL DESIGN AND DATA ANALYSIS SS 272 (LC 272, NS 272)	Poo Stilling Williams
INTERPRETIVE AND CRITICAL APPROACHES TO KNOWLEDGE IN THE SOCIAL SCIENCES SS 273	Rakoff
ABNORMAL PSYCHOLOGY SS 286	Farnham
LAW, JUSTICE AND EDUCATION: CONVERGENCE AND CONFLICT SS 291	Fowlkes Rose
AUTONOMY AND COMMUNITY: THE DEVELOPMENT OF THE SELF AND SOCIAL INTERACTION SS 292	Mahoney

SS 104 MEN, WOMEN AND WORK: A HISTORICAL AND CONTEMPORARY PERSPECTIVE  
Penina Glazer and Miriam Slater

This course will examine work and the workplace in modern society. We will look at a range of occupations from unskilled and poorly paid labor to highly trained and rewarded professions. In addition to studying the nature of work, we will analyze the relationship between work and career, career and profession. The course will address questions concerning psychological and social effects of various kinds of work from both a historical and contemporary perspective.

Class will meet on Wednesdays and Fridays from 10:30-12:00

SS 107 IS THE MEXICAN REVOLUTION DEAD?  
Frederick Weaver

This question continues to spark active debate inside and outside Mexico, but the manner in which it is posed, much less answered, depends on a particular assessment about both the Mexican Revolution (which began in 1910) and Mexican society in the last two or three decades. After some background reading, we will explore both the Revolution and its legacies in order to achieve some systematic understanding on rural-urban and inter-regional relationships, class forces, patterns of political change and economic welfare, and the influence of the United States. This should help us to refine the question in productive ways and allow us to begin thinking about whether the Mexican experience is or could be representative of other Third World nations.

The seminar will meet twice each week for two hours sessions and will involve several short pieces of writing and active participation.

SS 114 ECONOMIC PERSPECTIVES ON WOMEN  
Laurie Nisonoff

This course will analyze the economic position of women in American society and the process by which economists examine society. We will begin with a brief historical perspective on women's economic role in society, paying particular attention to the sexual division of labor in non-market work and in the

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labor market, and the development of the distinction between non-paid and paid labor. We will compare and contrast the ideas of the various paradigms of economics concerning these issues.

We will analyze the experiences of women with varying socio-economic backgrounds, including a unit on the black family, and examine the economics of discrimination and hierarchy. We will discuss the strategies that are most effective for organizing women on their two jobs, in order to develop a perspective on the relationship between women's status in the society at large and their economic position. Hopefully, this will lead to a strategy for social change.

Individual presentations in class on the current topic will be expected, and participation in a project (either individual or collective) that is of some use to others outside the course (but pertaining to the course) will be encouraged. For instance, one might write a paper, a series of newspaper articles, or a script for presentation during Women's Week.

The class will meet twice a week for a total of three hours. Enrollment is limited to 25, is open to men and women, and five College students are welcome. First come, first served basis.

SS 118 THE HOLOCAUST  
Leonard S. Glick

The Holocaust was not only one of the most awesomely wicked undertakings in human history, it was unique in the annals of genocide in that the entire process was bureaucratically managed and engineered. This course is based on the conviction that, difficult though it may be beyond comprehension, why this happened, these events are not beyond understanding. We will be reading contributions from many kinds of writers - historians, political scientists, psychologists, sociologists, and others - in an effort to begin to understand the fate of the Jews of Europe.

The course does not begin with Hitler. It begins in early medieval Europe and moves gradually forward as we consider, first, the conditions of life for the Jews of Europe over some fifteen hundred years; next, the evolution of German nationalist ideology in the nineteenth and twentieth centuries, and the place of Jews in that ideology; and then, reasons why the Holocaust happened when, where, and as it did. Other essential topics to be discussed include the nature of fascism and its relation to antisemitism, the psychology of perpetrators and victims, responses by other nations, trials and the problem of guilt and punishment, and attempts to prove that none of this ever really happened.

Students will be expected regularly to write short commentary papers (1-2 pages) to be used as a basis for discussions. Two papers (1-2 pages) to be used as a basis for lectures, the 1 1/2 hour meetings each week; one primarily for lecture, the other primarily for discussion. Enrollment limited to 25; first come, first served.

SS 121 MODELS OF HEALTH CARE DELIVERY  
Robert von der Lippe

In this seminar we will read about, discuss, and visit various examples of the way health care is, has been, and can be delivered. Our approach will be sociological but we will consider political and economic issues as they apply and as we can find resources to study them. Possible examples of models of care are: solo-fee-for-service care; emergency care; Health Maintenance Organizations; and socialized medical care. We will concentrate on American medical practice and history but will also look for comparative examples to foreign models of health care systems.

Enrollment is limited to 20. First come, first served. The course will meet twice weekly for 1 1/2 hours each.

SS 126 INTRODUCTION TO THE CLASSICS OF POLITICAL ECONOMY  
Lloyd Hogan

The course is designed to familiarize the student with some of the great contributions to the science of political economy. The choice of material will be restricted to those authors whose works are considered by their peers to be "significant dynamic" or "enlightened vision" of the origin, functions, and final purposes of the general economic system under investigation.

An intensive study will be done of the works of at most two authors. Special emphasis will be placed on (a) the nature of the intellectual crisis confronting scholars in the understanding of contemporary economic process, (b) the special way in which the author formulated the problems to be studied, (c) his peculiar or unique mode of inquiry, (d) his fundamental conclusions, (e) the impact of his works on contemporary understanding and future development of the science of political economy.

Some of the candidates for study are Adam Smith, David Ricardo, Karl Marx, Alfred Marshall, John Maynard Keynes, Joseph Schumpeter, etc.

The course will meet twice a week for 1 1/2 hours each session. The basis for evaluation will be a series of short papers which demonstrate an understanding of the main ideas and analytic methods as well as the interrelationship between the authors. Enrollment is limited to 15.

SS 134 GREEK POLITICAL THOUGHT  
Joan Landes

This course is an introduction to the Greek origins of Western political theory. We will closely examine three major texts: Plato's *Republic*, Aristotle's *Politics*, and Thucydides' history of the *Peloponnesian Wars*. We will supplement our study of these sources with the Ancient Greeks: An Introduction to *Their Life and Thought*, by M. I. Finley.

Among the themes to be considered are the Ancient conception of the *polis* and the way it is transformed in the writings of Plato and Aristotle; the relationship between the individual and the state; the status in life and theory of such institutions as the family and household; and the philosophical setting of the Greek theory of the city-state.

We will also attempt to situate the theory of the city-state in the totality of political theories and their writings in the totality of Ancient social institutions and practices as these historically evolved down to the waning of urban life. To this end, we will

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be especially sensitive to problems of class structure, the status of women and children, the role of slavery in the economy, and the rise of mercantile empire as a foundation of Athenian democracy. In turn, we will attempt to account for the anti-democratic strains in Greek political thought in light of these social and historical developments. The course will be organized as a seminar and is limited to an enrollment of 20.

SS 157 HUMAN AGGRESSION  
Donald Poe

This course will examine a number of approaches to the study of human aggression as a theme for introducing students to the ways in which social psychologists view the world, approach problems, and gather information. Students will be exposed to the assumptions which underlie the social psychological approach to obtaining knowledge, and will develop critical reading abilities as the course progresses.

The topics in aggression which will be used to illustrate the psychological "mode of inquiry" include innate theories of aggressive instincts (e.g., Lorenz, Ardrey, Morris), learning theories (e.g., Bandura), anthropological approaches (e.g., Yoda, Harris), and human experimental approaches (e.g., Berkowitz). Special topics will include the relationship between aggression and obedience, effects of television on aggression, aggression and out-groups (especially ethnic groups), and crowd/mob behavior.

Students will be expected to write a number of short critiques of assigned readings, and to complete a number of take-home assignments dealing with research designs. Students will also do an individual project which can take the form of a research paper on a pertinent topic of interest, or can actually involve the designing of a data collection effort to test a hypothesis related to course content.

The course will meet twice a week for 1 1/2 hours each meeting. Enrollment is first come, and is limited to 20.

SS 207 FAMILY IN CROSS CULTURAL PERSPECTIVE  
Margaret Cerullo and Kay Johnson

This course will examine family structure, practices and values in a cross-cultural comparison of European, Chinese and North American cultures from the 17th to the 20th centuries. The advantage of the comparative approach is twofold: it widens the scope of available information in a way which permits more imaginative and perhaps more accurate assessment and organization of available material; it makes possible the testing of explanatory models of causation, because it allows us to distinguish with greater accuracy between the merely idiosyncratic event or practice and those which have more universal application.

We intend to examine the following themes across these three family systems with special attention to defining and understanding the mechanisms of social change: (1) the extent and nature of power distribution within the family; (2) consumption patterns (especially dress and deportment); (3) sexual practices, attitudes, and ideology; (4) child rearing practices and attitudes; and (5) the family unit under capitalism and socialism. At the same time, we will critically examine conventional historical categories such as industrialization, modernization, bureaucratization, etc.

The class will meet for two 1 1/2 hour sessions each week.

SS 223 BLACK AMERICANS IN A CAPITALIST SOCIETY  
Lloyd Hogan

The basic objectives of the course are to examine critically the nature of the forces governing the interrelationships among Blacks, and between Blacks and whites, in the processes of production, distribution, consumption, and accumulation of wealth in the United States. Alternative approaches to modifying these forces to bring about permanent improvements in the economic well-being of the Black population are explored and analyzed.

As a means of achieving the objectives, a general conceptual framework of the U.S. economy is developed. This framework is then specialized to the Black population as a central focus. Current as well as historical Black economic activity, way of illuminating the dynamics of Black economic activity. Gaps in empirical data and in theoretical understanding are identified and subjected to critical speculations. Finally, the framework is used as a basis for analyzing both short and long run policies designed to enhance the relative economic position of Blacks.

An important section of the course examines the economics of slavery, the post-civil war economic reconstruction of the cotton south, and the impacts of these phenomena on the subsequent development of American capitalism.

A systematic theme throughout the course is the fundamental nature of black population dynamics during the various economic formations of the last 350 years in the United States.

A wide selection of readings are done from standard economic texts, from Marx and the modern radical economists, from the "cliometricians", and from recent contributions in the *Review of Black Political Economy*.

Classes meet twice a week for two hours each session. An independent research project, approved by the instructor during the first two weeks of classes, is a significant requisite for successful completion of the course.

Enrollment is unlimited.  
SS 231 LANGUAGE, CULTURE AND POLITICS  
LC 231  
Leonard Glick and Mark Feinstein

Diversity in language and culture is a pivotal factor in the political life of many contemporary nations. People who differ in language, values and historical identity must come to terms with one another, as interacting parts of a single political whole. In some cases they cooperate; in many more, they engage in serious conflict over national goals and priorities. We will approach this question from the interrelated perspectives of anthropology and sociolinguistics. Basically we will discuss

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three major topics, each illustrated with case studies:

- 1) The politics of diversity in post-colonial nations (Malaysia, India, Nigeria)
- 2) Marxism and the national question (Soviet Union and China)
- 3) Language and social inequality (Canada, Mexico, United States, the Caribbean, Sri Lanka)

We will pay special attention to strategies and conflicts relating to choice of national language; language and social status; language planning; and the impact of political change on language change.

The class will meet twice a week for 1-1/2 hour meetings. Enrollment is open.

**SS 232 IMPERIALISM AND UNDERDEVELOPMENT IN THE THIRD WORLD**

Kathy Hartford (Amherst College), Frank Holquist, and Kay Johnson

The course examines the evolving relationship between Western powers (particularly the U.S.) and the Third World from a historical and political-economy perspective. It begins with a survey of the historical bases of European and American mercantile and colonial imperialism, and their impact upon colonized societies. The bulk of the course will then focus in depth on three country case studies (chosen from among Indochina, Iran, Brazil, and sub-Saharan Africa, depending upon student interests). In concentrating on these areas, the course will explore the changing roles of international and multi-national aid, foreign investment, foreign trade, and indigenous development policies as these shape paths of development, relations of dependency, and the formation of Third World class structures. Special attention will be paid to the question of whether and under what conditions Third World countries may break out of a dependent relationship. We will also be exploring the question of how American power has been affected by recent changes in the world economy and by the rise of primary producer organizations such as OPEC.

The class will meet twice a week for 1-1/2 hours each session. Enrollment is unlimited.

**SS 246 NEW ENGLAND WORKSHOP: NEW ENGLAND PAST, PRESENT, AND FUTURE**

Myrna Breitbart, Nancy Fitch, and Frank Holquist

Based on the assumption that American politics, economic problems, and history can best be caught through the experiences of people in local communities, this course will make use of classroom and fieldwork exercises that draw on empirical evidence gathered in or on local communities in New England. Rather than doing simple antiquarian history, we aim at using the information as a basis for understanding some of the key problems facing New Englanders today.

In particular we will attempt to analyze the historical roots and implications of three main problems: (1) the crisis in New England agriculture, (2) the crisis in New England history, and (3) the rise of professions and the centralization of government in the United States, especially insofar as these phenomena are related to contemporary New England.

The class will frequently meet twice a week for 1-1/2 hours each meeting; however, much of the course work will be conducted in the field. Open enrollment.

**SS 251 FEMINIST AND OTHER SOCIAL MOVEMENTS IN EUROPE AND AMERICA**

Myrna Breitbart, Nancy Fitch, and Joan Landes

This course will compare the women's movement and its relationship to socialist and anarchist politics in capitalist societies. In particular, we will consider the United States, France, Germany, and Britain, and treat more briefly Italy, Spain, and Spain. We intend to trace women's movements historically and then turn to examining their place in contemporary Europe and the United States.

The purpose of this course is to address three themes: the place of women's movements in related struggles vs. capitalism and in socialist revolution; the relationship between socialist women and non-socialist women; and the impact of class and racial divisions between women on the politics of the respective movements. The following topics will be considered within these themes: women's suffrage and equal rights; the rights of women workers; personal relationships and sexual reform; class struggle; and the connections between urbanization and feminism and women-initiated struggles for social change. We will conclude our course with a view of the relationship between left politics and the women's liberation movement in the present period. This will include a focus on the important roles which women are currently playing in movements against nuclear power, militarism, and exploitation of the physical, social, and working environment. We will use original documents, historical materials, and autobiographical accounts.

The class will meet twice a week for 1 1/2 hours each meeting. Open enrollment.

**SS 258 AMERICAN LABOR HISTORY AND LAW**

Lester Mazor and Stanley Warner

How can we account for the present—and in comparative terms—peculiar position of American labor both as a class and as a movement? To explore that question we will focus on the historical development of American labor law as an axis for understanding issues of social change. We will be addressing a number of connected themes encompassing such topics as legal composition, the legal "protection" of women and children, state right-to-work laws, issues of federalism and federal intervention from Pullman to Truman, and changes in occupational structure and working class. The organization of topics will proceed historically, tracing the economic transition out of agriculture into successive stages of industrial development with particular attention to textiles, apparel, railroads, steel and auto. The post World War II expansion of the government and service.

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sectors and a full circle return to agriculture and the struggles of farm workers will complete the historical framework.

This is a new course, with its organization and reading materials still in the planning stage. It is intended to help meet the needs of students who are in the beginning or middle stages of their Division II work and who seek a stronger grounding in American history. The formal organization of the course will include films, invited speakers, New England field trips, and a longer expedition to Detroit, Lordstown, and Youngstown.

The class will meet twice weekly for 1-1/2 hours. Enrollment is unlimited.

**LC 272 EXPERIMENTAL DESIGN AND DATA ANALYSIS**  
**NS 272**  
**SS 272**

Donald Poe, Neil Skillings, Lloyd Williams

This course is an intensive introduction to research methods for students in all areas of natural science and psychology who intend to collect and analyze empirical data during Division II or III. There will be separate sets of laboratory experiments for students in natural science and psychology, and the course will be split into two sections for running the experiments. The methods of data analysis and statistics that are common to natural science and psychology. The major assignments in the course will involve applying the methods of data analysis to the laboratory experiments and writing up the results in a professional form.

The following topics will be covered in the course: demystifying statistics; the appropriate use of experimental and non-experimental methods; properties of physical and psychological measurement; principles of experimental design and their relation to statistical analysis; basic techniques of descriptive and inferential statistics; guidelines for responsible and clear reporting of research results.

**SS 273 INTERPRETIVE AND CRITICAL APPROACHES TO KNOWLEDGE IN THE SOCIAL SCIENCES**

Robert Rakoff

Social science was long dominated by a materialist, positivist methodology that was derived from an over-simplified and "objective, value-free" knowledge of the social world—knowledge that could be used for prediction and control of social phenomena (and, of course, of people). As the political and philosophical inadequacies of such "mainstream" social science have become more apparent, critics not only have designed better methods of investigating and affecting the social world but also have rediscovered and elaborated the philosophical traditions critical of materialist and positivist epistemology.

In this course, we will examine both of these intellectual trends—the theory for epistemology, perhaps of social and science knowledge as well as the practice of interpretive and critical social science. In particular, we will focus on the philosophical and cultural foundations of hermeneutic, phenomenological, and symbolic anthropology, in search of an answer to the question, "Can a social science which assumes the human action is intentional and subjectively meaningful also be genuinely critical?"

Among the people we will read are Weber, Schutz, Berger and Luckmann, Marx, Lukacs, Habermas, Bernstein (whose *The Restructuring of Social and Political Theory* will be our text), Fay, Sahlin, Geertz, Winch, and Ungers.

The class will meet twice a week, 90 minutes per session, and will be run as a seminar. Limit of 12. First come. Lottery if needed.

**SS 286 ABNORMAL PSYCHOLOGY**

Louise Farnham

This course will deal with the diagnosis, treatment, and prevention of various categories of disordered behavior. Attention will be paid to personality theories and "schools" of psychotherapy as that is appropriate and relevant to the major focus. Techniques of assessment will be discussed and the role(s) of the clinical psychologist will be explored. In addition to a textbook, students will read extensively in primary sources. Three brief writing assignments will be supplemented by a term paper on a topic of each student's choosing.

Twice a week, 1-1/2 hours each time. Unlimited

**SS 291 LAW, JUSTICE AND EDUCATION: CONVERGENCE AND CONFLICT**

Hedy Rose and Oliver Fowlkes

By a Massachusetts superior court Decree in Fall, 1978, Mr. and Mrs. Perchembani won the right to educate their child at home instead of in the Amherst Public School system as previously required by state law.

There are clearly many issues which could serve as the focus for a course such as this, but the fact that school attendance is the compulsory frontlines each of us with an instance example of the interweaving of law and education. How pervasive is this relationship? And what are some of the direct effects of it? Is it educational policy based on educational theory, or at least on philosophy? What role does the law play in enabling the portion of the socialization process? Does the law express our values; the methods of the nation? Are practices in school consistent with these values?

In this course we will examine some of the current topics confronting American education with any eye toward understanding the historical context in which the role of law emerged, the rights of teachers and students; compulsory schooling; the separation of Church and State; equal educational opportunity as concept and law; and finally, we will analyze the function of the law and the school in a democratic society and the function of the law in educational policy.

Students are expected to attend classes twice a week for one and one half hours each and prepare readings, short and long papers/projects, and participate fully in the inquiry. Where possible, students are encouraged to do field work and we will accommodate them. Format will insure seminar-style participation, but this

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will be facilitated with lectures by faculty as well as invited guests. Because of the number and variety of readings, all required assignments as well as most of the suggested materials will be available on Reserve at the library. A bibliography containing these and other titles will accompany this syllabus. Open enrollment.

**SS 292 AUTONOMY AND COMMUNITY: THE DEVELOPMENT OF THE SELF AND SOCIAL INTERACTION**

Maureen Mahoney

One of the most important milestones in personality development is the emergence of a sense of self as independent from others. At the same time, social life depends on cooperation and a sense of self as part of a larger community. In this course we will examine development in the first years of life with the goal of understanding the origins of the paradox that independence emerges from dependence and that community presupposes autonomy. How does the infant, wholly dependent on her caretaker for sustenance, grow to have a sense of herself as independent and separate from others? Is this separation forced on the infant by external events? Or is the infant an active participant in seeking autonomy? To what extent is the infant's sense of autonomy shaped by her caretaker's behavior, her immediate environment, and the culture in which she lives? Are there sex differences in the development of autonomy and the resulting sense of self as either merged with or separate from others? Readings will include research in developmental psychology, especially infant development, as well as an introduction to theoretical accounts of the development of the self, including Freud and critiques of the Freudian model. Special emphasis will be placed on learning to read and criticize research in psychology.

The course will be limited to 20 students. If necessary, they will be chosen by lottery during the first week of classes. Meets twice a week 1-1/2 hours each session.

**DIVISION III INTEGRATIVE SEMINARS**

THE ETHICS, POLITICS AND BIOLOGY OF GENETIC ENGINEERING IN 345	S. Oyewole
THE CONNECTICUT RIVER IN 346	R. Lutsa C. Van Raalte
THE TECHNOLOGY PROBLEM IN 347	R. Muller
LAW AND LITERATURE IN 348	L. Mazor D. Smith
LOGIC OF SOCIAL SCIENCE ANALYSIS IN 349	R. von der Lippe
INEQUALITY IN AMERICA: COMPARING JUDICIAL, LEGISLATIVE, AND BUREAUCRATIC REMEDIES IN 350	O. Fowlkes R. Rakoff
PSYCHOANALYTIC THEORY AND LITERATURE IN 301	L. Farnham

**IN 345 THE ETHICS, POLITICS AND BIOLOGY OF GENETIC ENGINEERING**

Sandra H. Oyewole

This seminar will provide a forum for discussion of a very exciting area of research and the implications of that research for our society. Recent advances in molecular biology and genetics have raised serious questions about our genetic future. The specter of clones of a master race and the release of dangerous synthetic genetic combinations into the environment have led some to question the advisability of allowing certain kinds of genetic research to be done. Many questions have been raised. Who will decide what genes are worthy of being cloned and on the basis of what value system will these decisions be made? How will this new technology in genetics be managed and applied? What, if any, kinds of laws need to be formulated, passed, and policed? Biomedical research has engineering lends itself particularly well to an integrative approach of study.

Limited to 15 students by instructor's permission.

The seminar will meet once a week for 2-1/2 hours.

**IN 346 THE CONNECTICUT RIVER**

Ralph Lutsa and Cheriene Van Raalte

The Connecticut River may well be the most neglected natural beauty in Western Massachusetts. The river and its floodplain drew people to this valley, leading to the growth of the towns and cultural life of our region. This 300 mile long river provides many rich and diverse aquatic and lowland habitats. In addition to its cultural and natural values, the river is of economic value; many demands are made and will continue to be placed upon it. One projected demand is the diversion of its flood waters into the Quabbin Reservoir, Boston's major source of drinking water.

This course will examine the Connecticut River and its role in the life (both human and non-human) of the Connecticut Valley. Class meetings will include field trips and guest speakers. Students will be expected to write a couple of short informal papers, and share responsibility for teaching one of the classes. In the latter part of the semester students will be expected to make a presentation to the class, perhaps on their Division III work as it relates to the content of the course.

We hope to attract a variety of people to this seminar, including people interested in ecology, water policy, history, and geography.

# PRELIMINARY COURSE DESCRIPTIONS

Hampshire College Course Guide # 27

## IN 347 THE TECHNOLOGY PROBLEM

Richard Miller

Many of the ills of our society are ascribed to technology: sometimes to the thoughtless use of technology, sometimes to machinery itself, sometimes to a cast of thought. In this seminar we will bring our individual perspectives to bear on questions about the place of technology in our society. We will read from the critical writings of people like Snow, Mumford, Ellul, Rossini, Schumacher, Lovins, and Abbey. We will examine specific applications of technology in fields as diverse as art, education, and agriculture. And we will attempt to discern what technological applications the future holds in our own areas of special interest, and how we expect to deal with them.

Specific readings and topics will be chosen in the late fall of 1980, so that students planning to participate in the seminar can help shape our syllabus. The course will meet once a week for two or three hours, preferably in our homes; evaluations will be based on seminar presentations and discussion. Enrollment is limited to 20 on a first-come, first-served basis.

## IN 348 LAW AND LITERATURE

Lester Masor and David Smith

This course will bring students of literature and law together twice weekly for lectures and discussion of works selected not only for their excellence as pieces of writing but also for the insight they offer in the study of three major themes: (1) the trial as metaphor, (2) the idea of property, and (3) the nature of justice.

Our aim is to question critically and discuss in depth three or four works on each of these themes and to draw on secondary sources for a deepening of perspective. Throughout the course the interdisciplinary emphasis, reflected in the backgrounds of the two teachers -- humanities, literary criticism, law, cultural studies, history -- will be used to illuminate the study of individual works. We will expect that students enrolling in the course will bring to bear the viewpoints they are developing in their own work.

Active student participation will be cultivated through discussion, paper writing, acting, etc.

Works to be examined may include *Alice in Wonderland*, Gilbert and Sullivan's *Trial by Jury*, Arthur Miller's *The Crucible*, Shirley Jackson's *The Lottery*, Kafka's *The Trial*, the *Uggs* by Carle, John Locke, and other eighteenth-century philosophers on

the subject of property, Defoe's *Robinson Crusoe*, Melville's *Ulysses*, Solzgan's *Brother* by George Jackson, the *Oresteia* of Aeschylus, Marge Piercy's *Woman on the Edge of Time*, as well as other plays, poetry, and legal documents when appropriate. Booklists, syllabus, study questions, will be furnished. You should expect to participate fully, including the leading of some discussions and considerable writing, if you join us.

The course will meet twice a week for two hours each meeting on a first-come basis. Enrollment is limited to 30 students.

## IN 349 LOGIC OF SOCIAL SCIENCE ANALYSIS

Robert von der Lippe

Participants in this seminar will be responsible for presenting an extensive and detailed summary of their Division III work in progress. We will be focusing specifically on questions relating to the logic of analysis, use of empirical data, and the organization of evidence. Background readings will emphasize the use of evidence and interpretation in the social science disciplines. All participants will be expected to familiarize themselves with the other students' work and with the necessary theoretical and empirical background for critical commentary following the presentations. The course will be limited to students in the advanced stages of their Division III projects.

## IN 350 INEQUALITY IN AMERICA: COMPARING JUDICIAL, LEGISLATIVE, AND BUREAUCRATIC REMEDIES

Robert Rakoff, Oliver Fowlkes

The last 25 years of American politics has been dominated by struggles over the identification and amelioration of inequality--economic, racial, sexual, generational. Central to those struggles has been a continuing debate over the most appropriate and effective public means of defining the issues, seeking redress of grievances, designing policies, and implementing programs for change. In particular, this debate has focused on the relative virtues of adjudication through the courts (usually on first, fifth or fourteenth Amendment grounds) as opposed to legislative policy making and bureaucratic implementation.

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In this integrative seminar, we hope to direct the efforts of students who are assessing such policies and programs toward consideration of these structural issues. The kinds of questions we might raise are:

- what determines the effectiveness of different change-seeking governmental organizations?
- how can that effectiveness be measured in the first place?
- what are the advantages and disadvantages (political, moral, utilitarian, strategic) of judicial and bureaucratic efforts?
- does increasing "judicialization" of such policy making threaten legislative prerogative and representative democracy?
- what uses of governmental authority are most conducive to the fight for fundamental political change?

The substantive content of the seminar will, of course, be determined by the particular interests and research endeavors of the participants. Students working on issues like the following, however, should find the seminar of particular value:

- inequality in access to, quality and funding of public education
- disparities in economic and welfare policies
- affirmative action in employment and graduate education
- residential segregation and housing subsidies
- treatment of physically and mentally handicapped persons
- control of crime and prisoner rights
- sex discrimination
- inequities in the draft
- differential treatment of press, other media, and private citizens
- protection of the environment

This class will meet for 3 hours 1 evening a week. Limit of 12 students a lottery will be held if necessary.

## IN 301 PSYCHOANALYTIC THEORY AND LITERATURE

Louise Farnham

This seminar is intended for students with a wide range of interests which extends to the attempt to combine a close reading of literary works with a good understanding of psychoanalytic theory. Specific readings will be chosen by members of the seminar after initial selections by the instructor, e.g., Freud's *Crews' study of Hawthorne*.

Class will meet for three hours once a week. Enrollment is limited to 10.

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● THE TEN YEAR REVIEW 1980 ●