

# 29 good Courses

SPRING TERM 1978 HAMPSHIRE COLLEGE AMHERST, MASSACHUSETTS



## REGISTRATION AND COURSE SELECTION

1. Check the Course Description Guide thoroughly for enrollment methods. Some courses will hold lotteries the first day of classes, others will either have sign-up sheets or interviews. Monday, January 30, 1978, 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.
2. 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 back to Central Records, and they will do the rest of the work. **\*PLEASE - Clearly Print your full name, first/middle/last, no nicknames.\***
3. Students taking ASSE courses at the other schools, and Division III students taking no courses, should sign the appropriate lists at Central Records.

### NOTES:

- A. 3-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 filing Interchange Applications is Tuesday, February 7. **No Five College courses may be added after this date.** Familiarize yourself with all the rules, regulations and penalties associated with 3-College interchange. They are all listed in the Student Handbook, and it is your responsibility to be aware of them.
- B. Independent Study for non-availability of Central Records and the Advising Center. They should be completed during the first two weeks of Spring Term 1978.
- C. Although 3-College students should sign Hampshire class lists (clearly indicating their home institution), they are still responsible for filing Interchange Applications at their own school.

If you have any questions regarding this procedure, please contact Central Records, Extension 420.

## REGISTRATION DATES AND CALENDAR

1978

January Term	Wednesday, January 4 - Tuesday, January 24
Recess between terms	Wednesday, January 25 - Sunday, January 29
New students arrive, matriculate	Saturday, January 28
New student program	Saturday, January 28 - Monday, January 30
Returning students arrive, matriculate	Monday, January 30
Course interview day	Monday, January 30
Classes begin	Wednesday, February 1
Course selection period	Tuesday, January 31 - Monday, February 13
Five College registration	Wednesday, February 1 - Tuesday, February 7
Examination days; no classes	Wednesday, February 22 Wednesday, March 15 Friday, April 14 Tuesday, May 2
Spring recess; no classes	Saturday, March 18 - Sunday, March 26
Leave advising; no classes	Thursday, March 30
Leave notification deadline	Friday, March 31
5-College 3-C Interchange registration	Monday, April 24 - Friday, April 28
Last day of classes	Wednesday, May 10
Evaluation period	Thursday, May 11 - Wednesday, May 17
Examination period	Thursday, May 18 - Wednesday, May 24
Commencement	Saturday, May 27

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## HAMPSHIRE COLLEGE ACADEMIC PROGRAM

### DIVISIONS:

Students at Hampshire College progress through three sequential Divisions: Basic Studies, the Concentration, and Advanced Studies, 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 the student chooses for study and each of them 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 courses, but through class examination of particular topics of study in courses or seminars addressing the method of inquiry. Students in the first division learn how best to inquire into subject matters, 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.

**Division II:** In the Concentration the student develops a concentration 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 concentration 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 in which they encounter a broad and complex topic requiring the application of several disciplines, and in some other activity in which they share their increasingly sophisticated knowledge and skills with other members of the Hampshire community or the broader community.

### ADVISING:

New students at Hampshire are assigned to an Adviser from one of the Schools for initial advice on choice of courses and other academic matters. After the first month, students may choose a new Adviser. Changing of Advisers is a relatively simple process done in consultation with the Associate Dean for Advising. The Associate Dean for Advising (Courtney Washington, Prescott House) also assist students who are having problems with progress through examinations, working with both students and their Advisers.

The Options Office (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.

### 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 except where noted otherwise in the course description. Interchange students should discuss this with the instructor during the first week of classes.

Although Five College students may participate in lotteries and sign class lists, they are still responsible for filing the 5-C Interchange Form with their home institution.

NOTE: PLEASE DO NOT DISCARD THIS COURSE GUIDE. RECYCLE IT, OR SAVE IT FOR FUTURE USE.

## SCHOOL OF HUMANITIES AND ARTS CURRICULUM STATEMENT

In these course listings you will find a quite astonishing range of offerings for the Spring Term. Remember that the courses in which 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, express them, and that is the main matter of concern in any Division I course.

If you take a course with a literary scholar, for example, or with a philosopher, you will learn how a specific kind of humanist, who has mastered one great body of materials in the humanities, illustrates the general modes of inquiry employed by humanists in a variety of circumstances. It might come down to library methods—the mechanics of analysis, the selection and validation of documentary data or the techniques of argument, but the overriding concern will be to show you a working humanist in action up close. The idea there is a much greater emphasis necessary on perception and expressive form, but the model should operate the same way.

When you come to take your Division I comprehensive examination in Humanities and Arts, you will work on some problems that represent the next order of complexity beyond what you have already studied. No recap of the course, with spot passages or memorized list of names—none of that. The purpose of that examination will be to determine diagnostically if you are ready to go on to work in more complex problems, so it will be much more like an entrance exam to Division II than any exam you've had previously.

We have kept the course descriptions as simple and honest as possible. Where it says "seminar" it means regular discussion group meetings in a class no larger than twenty students. Where it says "workshop" the size of the group should be the same, but the style of work will involve more moving away from the discussion table to some hands-on experience in the studio or out with field problems.

This semester we have designed this course Vision and Revision (HA 140) as a framework for Division I exams. The course will have two components: large meetings gathering all of the faculty and students and smaller branch courses in the particular disciplines of the individual faculty members. It is in the latter courses that Division I exams will be designed and carried out. The large meetings will focus more generally on problems of inquiry.

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.

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

## SCHOOL OF HUMANITIES AND ARTS

### CONTACT IMPROVISATION

HA 107

COLOR

HA 108

FILM WORKSHOP I

HA 110

THE PRINT

HA 113

MODERN VISIONARY WRITING

HA 116

MYTH AND HISTORY

HA 118

VISION AND REVISION - MOVEMENT WORKSHOP

HA 119

GODS, BEASTS AND MORTALS: THE BEGINNINGS

AND THE END OF POLITICAL THEORY

HA 121

PAINTING

HA 122

BLACK WOMEN, WHITE WOMEN: LITERATURE,

POLITICS, AND OUR LIVES

HA 124

COLLEGE WRITING

HA 134

THE MAN-MADE ENVIRONMENT: THE PHYSICAL

DETERMINANTS OF FORM

HA 136

VISION AND REVISION

HA 140

STILL PHOTOGRAPHY WORKSHOP

HA 150

REHEARSAL AND PERFORMANCE

HA 162

THE LIGHT AND COLOR CIRCUS

HA 190 (HS 110, LC 161)

DIVISIONS I AND II

AMERICAN BLACK AUTOGRAPHY

HA 112/212

STUDIO EXPERIENCE IN DANCE

HA 115/215

THE ART IN GRAPT

HA 117/217

EXPLORING SEXUALITY

HA 123/223

SEMINAR IN MODERN LITERATURE

HA 129/229

Huston

Hoener

Joelin

Stokes

C. Hubbs

J. Hubbs

F. McClellan

Neagher

Murray

Lewis

Terry

Juster, Pope

Arnold, C. Hubbs, J. Hubbs,

Joelin, Lewis, F. McClellan,

J. Murray

Arnold

Abady, Kramer

Hoener, Goldsberg,

Moodhall, Witherspoon

Terry

F. McClellan,

Wetmer, Schol

Superior

L. Gordon, C. Gordon

C. Hubbs

### POETRY WRITING WORKSHOP

HA 131/231

### DANCES/PROCESSES/TRANSFORMATIONS: PART TWO

HA 151/251

### FILM IMAGE - GAY

HA 152/252

### AFRO-AMERICAN CHAMBER ENSEMBLE

HA 153/253

### HAMPSHIRE COLLEGE CHORUS

HA 159/259

### FICTION WRITING WORKSHOP

HA 163/263

### THE WAY OF PHILOSOPHY

HA 167/267

### A HISTORICAL PERSPECTIVE OF AFRO-AMERICAN MUSIC

HA 172/272

### BEGINNING SCENE STUDY

HA 178/278

### AN INTRODUCTION TO CHILDREN'S THEATRE

HA 182/282

### WOMEN AND LEADERSHIP

HA 183/283

### PROSE WRITING WORKSHOP

HA 194/294

### THE ART OF BIOGRAPHY

HA 199/299

### DIVISION II

### AMERICAN LANDSCAPES

HA 201

### FRANCE: LITERATURE OF A GREAT EUROPEAN POWER OR

FRANCE: CULTURAL MANIFESTATIONS OF CAPITALISM,

IMPERIALISM, AND THEIR FORMS OF PATRIARCHY

HA 207

### FILM WORKSHOP II

HA 210

### WAYS OF SEEING

HA 219

### FILM/PHOTOGRAPHY STUDIES: INDIVIDUAL PROBLEMS IN

FILM MAKING, PHOTOGRAPHY, AND RELATED MEDIA

HA 220

### ADVANCED TUTORIAL ON SHAKESPEARE

HA 224

### PHOTOGRAPHY WORKSHOP

HA 225

### YVON SEMINAR: THE JOURNALISM OF SOCIAL

CONSCIOUSNESS

HA 226 (LC 286)

### GROUP INDEPENDENT STUDY IN ELECTRONIC MUSIC

COMPOSITION

HA 232

### DESIGN TECHNIQUES FOR THEATRE

HA 235

### SEMINAR IN EDITORIAL WRITING

HA 237 (LC 237)

### ART AND SOCIETY, IN RENAISSANCE ITALY

HA 243

### THE HEALING FORCE OF MUSIC

HA 245

### LAMINATION (ELEMENTARY LEVEL)

HA 255

### THE PHILOSOPHY OF SANTAYANA

HA 257

### HEIDEGGER AND THE TRADITION II

HA 260

### ADVANCED APPROACHES FOR ACTORS, DIRECTORS,

AND DESIGNERS

HA 261

### MOTHERS, FATHERS, DAUGHTERS, SONS

HA 264

### ORIGINS OF ROMANTICISM

HA 269

### HUMANITIES SEMINAR II

HA 273

### SOUND AND MEANING IN POETRY

HA 277 (LC 277)

### STUDIO ART CRITIQUE

HA 280

### DANCE WORKS

HA 284

### HOW BACH DID IT!

HA 285

### READING GROUP: THE BACKGROUNDS OF MODERN

LITERATURE

HA 288

### SHAKESPEARE AND WOOL

HA 289

### GROUP INDEPENDENT STUDY IN SCORE ANALYSIS

HA 293

### HA 107 CONTACT IMPROVISATION

Eleanor Huston

Contact Improvisation is an evolving system of movement based on the communication between two moving bodies in contact and their relationship to the physical laws which govern their motion: gravity, mass, momentum, and inertia. A duct form, the dance is actual, arising out of the point of contact between two bodies. Each becomes a fulcrum for the other's movement. The dance relies on mutual trust and the variables of give and take, governed not by established rules for each dancer but by the understanding of the moment and responding at the moment to the myriad kinetic pathways open to the dancers, each person learns to know what her/his partner is doing as he/she does it, rather than notice what the partner has done after the action has been completed.

The course will meet twice weekly, and it will be offered at the introductory level. No previous dance experience is required, although experienced dancers are welcome. Attendance at each class meeting is required. We will be doing some background reading about, and related to, contact improvisation.

Enrollment is limited to 27. In the event of over-enrollment, class membership will be decided by lottery.

Sniskey, Goldensohn

HA 108

Archer Hoener

Jagel

Joelin

Wood

Kearns

Salkey

Bradt

Wood

Abady

Kramer

Carew

Roberts

Roberts

Snick

Lewis

Joelin

Murray

Liebling

Kennedy

Liebling

Kerr

R. McClellan

Kramer

Kerr

Allen

R. McClellan

F. McClellan

Lyon

Abady, Kramer

Payne, Boettiger

J. Hubbs

Bradt

Geo

Hoener, Superior

E. McClellan

R. McClellan

Lyon

Kennedy

R. McClellan

HA 107

CONTACT IMPROVISATION

Eleanor Huston

HA 108

CONTACT IMPROVISATION

Eleanor Huston

HA 109

CONTACT IMPROVISATION

Eleanor Huston

HA 110

CONTACT IMPROVISATION

Eleanor Huston

HA 111

CONTACT IMPROVISATION

Eleanor Huston

HA 112

CONTACT IMPROVISATION

Eleanor Huston

HA 113

CONTACT IMPROVISATION

Eleanor Huston

HA 114

CONTACT IMPROVISATION

Eleanor Huston

HA 115

CONTACT IMPROVISATION

Eleanor Huston

HA 116

CONTACT IMPROVISATION

Eleanor Huston

HA 117

CONTACT IMPROVISATION

Eleanor Huston

HA 118

CONTACT IMPROVISATION

Eleanor Huston

HA 119

CONTACT IMPROVISATION

Eleanor Huston

HA 120

CONTACT IMPROVISATION

Eleanor Huston

HA 121

CONTACT IMPROVISATION

Eleanor Huston

HA 122

CONTACT IMPROVISATION

Eleanor Huston

HA 123



## HA 131/231 POETRY WRITING WORKSHOP

Barry Goldensohn (Section B)

This course has 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 work 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 once a week for three hours. Enrollment is limited to 15 and instructor approval is required. Students wishing to enroll should submit a manuscript to the instructor during the course interview period (January 30).

## HA 151/251 IMAGES/PROCESSES/TRANSFORMATIONS: PART TWO

John Jagel

This studio course will attempt to encourage student exploration and formulation of image-making processes through the combined use of some basic and related painting, photographic media, and hand processes. Discovering and applying an understanding of the interrelationships between concept and process will be one of our important concerns. Another will be a development of image and structure through derivative variations, thereby generating or modifying other possible images either as ends in themselves or as starting points for further development.

The class will meet once a week for two hours. Enrollment is limited to 10 students. Instructor approval is necessary.

## HA 152/252 FILM IMAGE - GAY

Tom Joslin

This course will examine the evolving media image of gay people. Through screening of films, discussion, lectures, and readings, the class will address such questions as: What is a gay person? How does society react to him or her? Why? How does the gay person feel about himself? Why? What role has media had in this process? Does the media have homosexuality been used in films for symbolic and narrative content? Are films made by gay people different from films made by straight people?

The course will move towards developing an understanding of the film medium as well as an understanding of the issues involved in their gay content. Films will range from historical to contemporary, documentary to pornographic, films made by gays to films made about gays. Although somewhat predicated by the programming of the films, the structure of the class itself will be determined by the needs and areas of concern as expressed by the participating students.

The class will meet three times weekly for two-hour sessions. Enrollment is open.

## HA 152/253 AFRO-AMERICAN CHAMBER ENSEMBLE

Vishnu Wood

The Chamber Ensemble will focus on the interpretation, articulation, and performance of the music of Thelonious Monk, John Coltrane, Miles Davis, Duke Ellington, Ramsey Lewis, and others. Some of the major focal points of the class will be concentrated listening, transcription from recordings, interpretation of musical scores, and contextual improvisation.

The Chamber Ensemble's repertoire will depend on the instrumentation of the students in the group. To develop group intention, there will be concentration on musical texture, timbre, and rhythmic qualities.

All students will be encouraged to enroll in the parallel lecture course, A Historical Perspective of Afro-American Music (see course description for HA 172/272) which will deal in depth with the above composers in a historical context.

The ensemble will meet twice weekly for two-hour sessions. Enrollment is limited to twenty. Some auditions will be necessary.

The class will be taught at three different levels: the first level will be presented for students who have some musical training and want to gain a first-hand knowledge of Afro-American music; theory, listening assignments, and performance will be the main focus of this class. Level II, the second level, is for students who have some training in this idiom and wish to gain a more in-depth knowledge of the music; the focus will be centered on music theory, ear training in relation to improvising, group performance, and practice techniques. Level III is designed for students who have achieved a more professional level of performance. This class will deal specifically with polishing techniques. Materials for this group will consist of "standard" material which will equip students with the tools to enter the professional arena.

## HA 159/259 HAMPSHIRE COLLEGE CHORUS

Ann Kearns

Thoreau wrote, "To affect the quality of the day, that is the highest of the arts." To affect the quality of your day, the Chorus offers the chance to sing works ranging in time from medieval through contemporary, in size from chamber a cappella through larger choral and orchestral, and in media from sung through spoken. Two concerts each term.

Admission will be by informal audition. (Call Ann Kearns at 253-2480.) Rehearsals will be held on Tuesdays and Thursdays, 7:00-9:00 p.m., in the Red Barn.



## 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 own workshop members and with them in mind; for after all we are our very first audience, and group approval is usually 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 onwards 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 inspired creativity, 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 realm of fiction. However, longational, however idiosyncratic, our fiction writers will be encouraged to take any literary risk they may feel to be important to their development.

Work in this course under certain conditions may be presented in fulfillment of Division I examination requirements in Humanities and Arts.

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 167/267 THE WAY OF PHILOSOPHY

Raymond Kenyon Brady

In conversation with a select group of figures from the classical tradition of Western philosophy, this course will attempt to follow the way of thought that tradition has followed from its emergence in the ancient Greek period through its development in the modern period of its thought. The select group of thinkers subject to the attention of the course will be the pre-Socratics, Plato, Aristotle, Augustine, Descartes, Kant, Hegel, and Heidegger. They will be attended to in that manner in which their way of thought has followed the very principles of thought itself. The central focus of the attention of the course will thus be upon the way or the method of thinking itself. It is as such meant to serve the purposes of the first division of study in the College, and students will be permitted to submit their work in the course for consideration for fulfillment of their first division study in the School of Humanities and Arts. The course's requirements will be one class meeting per week, extensive and intensive individual study of its material, and one major paper to be submitted at the time of the course's completion in May.

Enrollment is open.



## HA 172/272 A HISTORICAL PERSPECTIVE OF AFRO-AMERICAN MUSIC

Vishnu Wood

As this course is yearlong in scope, the second semester will begin with a brief overview of the early history covered in the first semester. Students new to the course will be asked to read excerpts from the text *Black, White and Blue*, by Orville Wilson.

This lecture class will consist of a historical study of African-American music. The areas of concentration will be:

African tribal music - Pygmies, Ashanti, Yoruba, etc.  
Caribbean music - Mighty Sparrow  
Ragtime - 1890's, New Orleans, Buddy Bolden, Louis Armstrong  
Spirituals - Mahalia Jackson  
Blues - Field hollers, worksongs, spirituals  
Big Bands - 1930's, Swing era, Duke Ellington  
Bo-ops - Dizzy Gillespie, Charlie Parker, 1950's  
Jazz - 1920's, Thelonious Monk  
Avant-garde - 1960's, John Coltrane  
Jazz-rock - 1970's, Herbie Hancock, Chick Corea

This class will consist of an in-depth study of these music and will climax with a live performance of top professional artists. Students of the class will present by way of narration the different historical periods in performance.

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

## HA 178/278 BEGINNING SCENE STUDY

Josephine Abady

An introduction to the art and craft of acting through the study of scripted material. Through some work, emphasis will be placed on learning how to internalize and create environments and characters set up by playwrights.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 12, and permission of the instructor is required.

## HA 182/282 AN INTRODUCTION TO CHILDREN'S THEATRE

Wayne Kramor

This course will explore the uniqueness of theatre designed and produced specifically for the child audience. We will look both at scripts and production techniques. Emphasis will be placed on evolving a definition for "children's theatre."

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 12 on a first come/first serve basis.

## HA 183/283 WOMEN AND LEADERSHIP

Rene Carow

In this course we will examine the lives of historical and contemporary women in order to gain an understanding of (1) the main themes that permeated their lives; (2) the values that they upheld; (3) the styles of leadership that they developed; and (4) the ways in which these themes, values and leadership styles relate to our own lives as women.

Our exploration and understanding of the lives of women will take the form of discussing the autobiographies and biographies of women (such as Elizabeth Cady Stanton, Harriet Tubman, Simone de Beauvoir, and Shirley Chisholm) as well as through personal discussions with women in the Valley who will share their own themes, values and leadership styles with us. Along with these discussions, we will also be engaged in writing and exploring our own autobiographies in terms of our predominant themes, values, and emerging styles of leadership.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 12.

## HA 194/294 PROSE WRITING WORKSHOP

David Roberts

This workshop has as its premise the notion that short fiction is not *just* generic, an artistic mode unto itself, but that it emerges from a broader competence in prose which can be trained and cultivated. The short story is not automatic writing; prose is neither speech nor paraphrased poetry.

Through introductory experiments in other forms of prose, the course hopes to lead students to the crafting of original short stories. Each student will be expected to (a) write an 800-word book review (roughly in the manner of the *New York Times Sunday Book Review*); (b) edit another student's review down to 600 words; (c) write an autobiographical essay, together with an informal account of its genesis; (d) write three short stories; and (e) take seriously the responsibility of articulate criticism of other students' writing.

The first month will be devoted to the book review and the autobiographical essay; the rest of the term to the short story.

The class will meet once a week for three hours. Enrollment is limited to 20, and an interview with the instructor is required.

## HA 199/299 THE ART OF BIOGRAPHY

David Roberts

The act of setting down on paper an account of another person's life is fraught with philosophical, political, artistic, and ethical implications. How does one determine what "really" happened? To what extent is biography fiction? Whose lives deserve chronicling? How, and to what ends, should the biographer interpret his materials? How can the vital shape of a life be extracted from its quotidian details? Can we know things about a biographer that he was himself unaware of? What is the ideal relationship of biographer to subject?

This course is intended as an eclectic survey of biography from Roman times to the present. The reading list is long and at times difficult. Students taking the course must be willing to commit a major intellectual effort to engaging its materials. Each student will be expected to write a biographical essay (which may constitute a Division I essay) about one of the following: (a) a public figure of relatively obscure renown; (b) a notable person with whom the student can make personal contact; or (c) a personal acquaintance or relative.

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

## Tentative reading list:

Introductory: Questions of access and interpretation:  
Thurber, *The Years with Ross*  
Frost, *Love's Labor's Lost: A Study in Psychosexuality*  
Sweeney, *Enlightenment*

## Origins:

Suetonius, *The Twelve Caesars*  
Selections from Foxe's *Book of Martyrs*, Walton's *Lives*, and Aubrey's *Brief Lives*

## Specific biographical issues:

The problem of truth: Emily Dickinson's love poems (Blanchi, Bishop, Johnson, Lowell)  
Life vs. art: Renaissance Italian painters (Vasari, Browning, modern biographers)

## Models of biography:

Boswell, *Life of Johnson*  
Jesi, *Livingstone*

## Obscure lives:

Gertrude Stein, *Three Lives*

## The personal relation:

Nicolson, *Portrait of a Marriage*

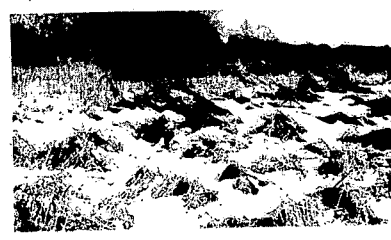
## HA 201 AMERICAN LANDSCAPES

David Smith

"The land was ours before we were the land's," wrote Robert Frost, who also spoke of our history as "unquenchably westward." This course examines the function of the specifically American setting in the work of broad variety of American writers and artists from the Puritans through Faulkner, Frost, Edvard Munch, Miller, John McPhee.

Neither a "survey" nor a "genre" course, we will instead concentrate on four related themes for which examples are plentiful: wilderness, virgin land, the garden, property. Around each of these ideas cluster a number of assumptions, attitudes, myths, and a lot of good writing. A sample syllabus would include: wilderness and the American Mind; Puritans and the New England Wilderness; William Byrd surveys America: Gardens and garden literature of the eighteenth century; the New American Farmer; the Transcendental Landscape; Cole, Cooper and the Romantic Landscape; the Poetic Landscape of mid-century; Mark Twain and the "moving panorama" of the Mississippi; the Country of the Pointed Firs; "Nature Writing"; "Front Country"; the Contemporary Southern Landscape; Miller, McPhee and the new image of Alaska.

Format of the course will be weekly lectures, some discussion. The class will meet twice weekly for two-hour sessions. Some writing will be expected and encouraged. Enrollment is limited to 25 students. Method of enrollment will be instructor selection plus lottery. This is not a Division I course.



HA 297 FRANCE: LITERATURE OF A GREAT EUROPEAN POWER OR FRANCE: CULTURAL MANIFESTATIONS OF CAPITALISM, IMPERIALISM, AND THEIR FORMS OF PATRIARCHY

Jill Lewis

This class will begin by discussing in general the relationship of art to society, of the creative imagination and critical analysis to political, historical, and economic developments.

We will then briefly study the history of France around the period of the French Revolution, examining the impact of industrialism and the consolidation of capitalism in the nineteenth century. We will read novels and poetry written in France in the context of these changes. Next we will examine France's involvement, dating from this period, in Third World areas colonized by military and economic domination: Vietnam, Algeria, the Caribbean. From this historical perspective we will read the literature of revolt emerging from these victim countries in their liberation struggles rejecting the domination and cultural distortions imposed by French imperialism. From historical accounts, novels, and newspaper articles, we will develop an awareness of the conditions of women implied by their economic and political realities—from the misery of the slavery of marriage under the laws and societal norms of France (George Sand's novels) to the physical and emotional brutalities of colonialism and imperialism.

The course will therefore aim to raise questions about theoretical approaches to literature and history, changing the class's racist and sexist assumptions in the cultural categories established in our education. While doing this, it will also examine specific works of literature from the French cultural field of control, considering the aspects of capitalism, imperialism, and patriarchal oppression which they reflect.

Students wanting to take this course are recommended to read a substantial number of the texts before the semester begins—the course involves reading a lot for the connections its analysis necessitates to become clear. Copies of the reading list are available in the Humanities and Arts office (BMC-12).

The class will meet twice weekly for one two-hour meeting and one 1.5-hour meeting. Enrollment is limited to twenty, and is by interview with the instructor.

HA 210 FILM WORKSHOP II

Tom Joslin

A workshop to help the student continue to develop his 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 movements in film aesthetics.

The course will involve lectures, field work, seminars, and extensive production opportunities. 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 \$15.00. The class will meet once a week for four hours. Enrollment is limited to 12. Selection will be by lottery; sign-up anytime from September 7th through the 10th.

HA 219 WAYS OF SEEING

Joan Hartley Murray

Ways of Seeing will be based on slides presentations focusing on the work of artists from Diderot 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.

Students will be responsible for making presentations and leading and participating in class discussions. It is hoped that all co-concentrators will be members of this class.

The class will meet once a week for three hours. Enrollment is limited to 25.



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

Jerry Liebling

This course is open to film and photography concentrators in Divisions II and III only.

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 forum for meaningful criticism, exchange, and exposure to each other. In addition, various specific kinds of group experiences 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 concentration contract must be written prior to enrollment. Enrollment is unlimited in Division II and III concentrators whose contracts have been filed. All others must have permission of the instructor.

There will be a lab fee of \$15.00. The class will meet once a week for five hours.

HA 226 ADVANCED TUTORIAL ON SHAKESPEARE

L. Brown Kennedy

This will be a group of upper division students who, in addition to working individually with the instructor, will meet together twice a week to study a selection of plays spaced across Shakespeare's career and including at least one play from each of the major genres: history, tragedy, comedy, romance. We will expect to work on about eight or nine plays during the term; the final choice of texts will be made by the group. We'll begin by spending several sessions discussing one of the major tragedies (*Hamlet* or *Macbeth*) in order to establish common terms and raise questions of critical method.

My notion of a tutorial includes steady writing (with a short working paper every two or three weeks); it promises that all members take responsibility for formulating their ideas into hypotheses or interpretive approaches on which the entire group can then base its discussions. We will also plan to do some scene reading and to discuss at least a few of the plays as dramas to be staged, as well as texts to be interpreted.

Though there are no special course prerequisites, I will be assuming that participants have certain basic skills at the outset. As one way of assuring genuinely "advanced" work for all of us, I'd like people interested in participating in this term to have had a substantial amount of work at the Division II level in either literature, history, political theory, philosophy, or a related area.

Admission is by permission of the instructor. Enrollment will be limited to ten. Those interested are requested to see the instructor before the end of the fall semester.

HA 225 PHOTOGRAPHY WORKSHOP

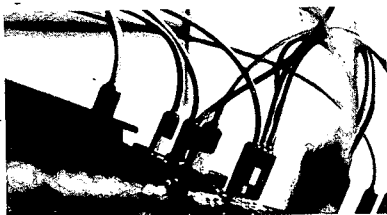
Jerry Liebling

A workshop to help students continue to develop their creative potential and extend the scope of their conceptions 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 experience 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 \$15.00. The class will meet once a week for four hours. Enrollment is limited to 12 students.



HA 232 GROUP INDEPENDENT STUDY IN ELECTRONIC MUSIC COMPOSITION

Randall McClellan

This course is intended as meeting time for those students who are already qualified users of the electronic music studio and who are actively involved in studio composition. It is a time to share our work with each other as well as our problems and frustrations, and to celebrate the completion of each new piece.

We will meet every second Friday afternoon in the electronic studio for 2 1/2 hours. Enrollment by permission of the instructor.

HA 235 DESIGN TECHNIQUES FOR THEATRE

Wayne Kramer

A series of design projects established for specific plays. These plays will be used as departure points for production work in costume, lights, and scenery. Emphasis will be on externalizing a designer's internal response.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 10, and permission of the instructor is required.

HA 243 ART AND SOCIETY IN RENAISSANCE ITALY

Sally Allen

The central theme of this course is the investigation of how art reflects the values, tensions, and beliefs of its society. Throughout the semester we will study the interrelationships of art and culture through an in-depth study of Renaissance Italy. Although our investigation will center heavily on the visual arts, we will do some reading in the philosophy and literature of the period.

Particular areas of concentration will be: the influence of, plagues on art, patronage and the social status of the artist, the influence of humanism on all forms of culture, the relationship of magic, art, and society, and the impact of religious tensions upon art. The course will combine slide lectures and discussion groups. There will be a small amount of reading each week that students will be expected to complete.

Enrollment is limited to 20 students. The class will meet twice weekly for 1.5-hour sessions.

HA 245 THE HEALING FORCE OF MUSIC

Randall McClellan

The value of music as a therapeutic activity has long been understood and utilized in all musical cultures throughout our evolutionary history. In this course we will examine the use of music as a healing force beginning with pre-civilization myths and legends through ancient Babylonian, Egyptian, Persian, Hindu, Chinese, Hebrew, and Tibetan cultures to the modern day. We shall draw readings from occult literature, ancient history, anthropology, modern scientific research and music therapy practice.

We will experience the healing ability of music on ourselves as we learn to use power of our own voices as a force for health. The course will be supplemented by additional recordings, films, guest speakers and an occasional field trip.

Finally, we will as a class devise and perform a group healing ritual based on the results of our readings and experience.

We shall meet twice weekly for two hours with occasional evening and weekend sessions. Enrollment is limited to 20, and permission of the instructor is required.



HA 255 LABANOTATION (ELEMENTARY LEVEL)

Francis R. McClellan

This course is designed for persons who are interested in the structural analysis and recording of movement. Labanotation is a system for recording movement of all kinds and is useful, therefore, not only in dance but also in sports, scientific research, and many other areas. However, since the greatest use of the notation thus far has been in the field of dance, and since dance explores a wide range of basic movement which can be applied to other areas, this course will take most of its examples from that field. (Close to 100 works from the repertoires of modern dance and ballet companies have been recorded in this system.)

In studying Labanotation, it is impossible not to study movement also. Before an action can be written down, it must be understood; and this means analyzing, breaking down what is contained in the movement. If one is to be faithful in the recording of movement, it is necessary to understand it; to understand it fully, one must go into all the aspects of that movement.

Students in this course will cover the basic components of the system, enabling them to read and write dance movement. In addition, a brief introduction to motif writing and Effort/Shape will be included as part of the class work. Readings will be taken from Modern Dance Repertory whenever possible.

The class will meet twice weekly for two-hour sessions.

HA 257 THE PHILOSOPHY OF SANTAYANA

Richard Lyon

The work of the Spanish-American philosopher, essayist, literary critic, and poet, George Santayana, has only lately begun to receive the close attention it requires. As a systematic acceptor of materialism, and Platonist in the philosophy of locality of terms for some twenty years (1886-1911), he found himself at odds with the philosophical idealism and the mandatory optimism of official American thinking. His major works, written in the 1920's, 30's, and 40's, continued his articulation in English of "no many un-English things as possible" (as he said, half-seriously, of his philosophic program) and were little understood.

We will try to understand him through reading and discussing many of his essays, and two or more of his books, to be chosen from *Dialogues in Limbo*, *Reason in Human Sense*, *Soliloquies in England*, *Scepticism and Animal Faith*, *The Last Partisan* (a novel).

The class will meet twice weekly. Enrollment is open. Those who wish to enroll should talk with the instructor sometime before the end of Fall Term 1977.

HA 260 HEIDEGGER AND THE TRADITION II

Raymond Kenyon Bradt

This course is a continuation of the "Heidegger and the Tradition" course offered in the Fall Term 1977.

This course will consist of a systematic study of the philosophy of Martin Heidegger, from *Being and Time* on through the major body of his later work. In addition, it will treat Heidegger's relationship to the philosophical tradition of the West, both by attending to his interpretation of that tradition and by evaluating that interpretation through a study of a select body of philosophical texts from Parmenides and Heraclitus through Nietzsche and Husserl. It will consider as well Heidegger's relationship to the philosophy of the East. The study of Heidegger will thereby serve as, a focal point opening on to the horizon of the history of philosophy as metaphysics, one whose study the course is meant to serve and provide.

The course will meet once a week. Enrollment is limited to students who were enrolled in the Fall Term class.

HA 261 ADVANCED APPROACHES FOR ACTORS, DIRECTORS, AND DESIGNERS

Josephine Abady and Wayne Kramer

An integrated approach to the collaborative process. Actors and directors will explore the problems of language, style, and period through scene work. Designers will parallel this study in visual terms. Emphasis will be placed on formulating stylistic approaches through group interaction in a workshop setting.

The class will meet twice weekly for two-hour sessions. Enrollment is open. Permission of the instructors is needed for admission to the course; actors and directors should see Josie Abady; designers see Wayne Kramer.

HA 264 MOTHERS, FATHERS, DAUGHTERS, SONS

Nina Payne and John Böttiger

This is a writing and reading workshop, intended for those who enjoy doing both. Its purpose is to explore the formative and enduring relationships between parents and their children, not only early in the family they share but throughout the life cycles of both generations. We shall read selected works of literature and pay concentrated attention to the writing of participants. Our intention is not to read widely but to read carefully a few works—fiction, drama, poetry—and to give our principal time and energy to students' own writing, as their experiences as sons and daughters are evoked, clarified, and placed in a new perspective.

The workshop will meet twice weekly for two-hour sessions. Admission with instructors' permission. Enrollment is limited to 16 students.



LC 129 NEWSPAPERS AND HOW TO READ THEM

David Kerr

The average person's ability to read a newspaper is a composite of incidental learning picked up "on the street," so to speak, by the time one reaches college one has spent countless hours being instructed in how to read fiction, poetry, and essays. Formally or informally one has been taught how to play tennis or poker, drive a car, choose a wine, fill out a form, cook a meal, and a myriad other skills thought by many necessary to get along in our culture. It is the rare person who has had someone say, "Let me help you learn how to read a newspaper intelligently." This course has that aim.

During the course we will study a number of topics relating to newspapers: the evolution of the newspaper, the newspaper industry, the variety of American newspapers, day-to-day newspaper operations, the different newspaper departments, how political and cultural events affect the news and vice versa, newspapers and the law, ethics, the role of advertising, the interaction between newspapers and the electronic media, criticism of American newspapers, and methods of news analysis.

There will be two brief critical papers and one longer research paper required. In addition everyone will try writing and editing a news story and an editorial.

It is expected that Hampshire students will find in the subject matter and in the modes of inquiry studied the inspiration for some interesting Division I examinations.

The class will meet Tuesday and Thursday, 10:30-12:00.

Enrollment limit: 25, on a first come basis, with some places reserved for Five-College students.

LC 139 INTERNATIONAL COMMUNICATIONS: CULTURAL DOMINATION OR GLOBAL VILLAGE?

James Miller

Are the media of mass communications around the world tools of superpower imperialism? Or do they transcend empire and nationalism, instead promoting a harmonious "global village"?

In this course we will become familiar with the mass communications systems of industrial countries in the East and West, and some developing nations of the Third World. Our first goal will be a good descriptive knowledge of how (and why) broadcasting, the cinema, and print media often change character radically as one crosses national boundaries. A second goal will be to analyze critically the contention that the superpowers, especially the United States, dominate mass communications technology and software (e.g. television programming), and use this dominance as a means of empire building and maintenance to influence the cultural and political life of other nations.

Students will be expected to become specialists in the media of a nation or region and to take a debater's position on the "cultural domination-global village" question.

People who have had direct personal experience with other countries' mass media—such as foreign students, people fluent in other languages, or those who have lived abroad—are especially welcome.

The class will meet Tuesday and Thursday, 9:00-10:30.

Enrollment limit: 15, with permission of the instructor after first class meeting.

LC 141 PHILOSOPHY OF PERCEPTION: AN INTRODUCTION

Christopher Witherspoon and Joanne Brumbaugh

In the third part of this four-part course we will try to build up a philosophically interesting version of an information-processing account of visual perception and its objects. We will pay special attention to problems of perceptual belief and perceptual experience and of concepts of information; we will draw on the work of psychologists and workers in artificial intelligence as well as philosophers.

Initially we will consider some of the problems about perception, what we really perceive, and how our empirical knowledge is based on our perceptions which were of central philosophical concern from the time of Hobbes and Descartes through the early part of this century; the main kinds of theories, for example, representationalism and phenomenalism, proposed to solve these problems will be critically discussed. In the second part of the course we will consider more contemporary issues and approaches largely criticized by traditional theories, and where possible we will read relevant excerpts from the major philosophers responsible for the transitions, for example, Peirce, Frazer, and Moore.

After confronting our constructed information-processing account with a variety of objections and problems (and assessing the damage) we will, in the final part of the course, take up problems involved in coordinating and combining different kinds of accounts of perception. This will involve some questions concerning reduction, e.g. of psychological to physiological theories; of how epistemological principles might constrain cognitive-psychological theories; and of resolving conflicts between various scientific and common-sense (and other non-scientific) views.

Two short papers and one long paper will be required.

The class will meet Monday, Wednesday, and Friday, 10:30-12:00.

Enrollment limit: 20, by instructor selection on basis of essay.

Joanne Brumbaugh is a Division I student concentrating in philosophy.

LC 142 LINEAR PERSPECTIVE

William Marsh

Linear perspective is one of the primary ways in which paintings and drawings can be made realistic; this seminar will consider what it is, how and when it was used, and why it works.

After some history of the discovery of linear perspective and its influence on Western art and mathematics, we will spend several weeks on a gently paced mathematical development of the concepts involved. After the spring break we will look at some of the philosophical questions surrounding the problem of how much of linear perspective is conventional and how much is a fact of the world. Finally, as time permits, we will look at the introduction of linear perspective into Chinese and Japanese art and at uses of projective geometry in artificial intelligence and computer graphics.

High school geometry is the only prerequisite for the course.

The seminar will meet on Monday, Wednesday, and Friday, 1:00-2:00.

Enrollment limit: 20, chosen by lottery at the first meeting of the class.

LC 143 PROBLEM SOLVING

Deborah Knapp

This is a course about what cognitive psychology is good for. It has two purposes: (1) to introduce some key issues and experimental techniques of cognitive and cognitive developmental psychology and (2) to help you think more clearly, efficiently, and creatively.

We will begin by reading introspective selections by mathematicians (e.g. Poincaré, Hadamard), chess players, and others, describing what they do to solve problems and what it feels like to have new insights.

These will introduce us to two seemingly different types of problem solution: conscious deductive inferences, and sudden insights in which the answer seems to "pop into mind" when the mind is occupied with something totally different, or even asleep.

To investigate further, we'll read research books and journal articles, including recent work and also selections from psychological classics (e.g. James, deGroot's *Thought and Choice in Chess*, Bartlett). We'll address questions such as:

1. How do people actually use logic in their conscious thinking? Are syllogisms psychologically real? Are some sorts of inferences more difficult than others? What sorts of logical errors do people commonly make?
2. How does "nondeductive" work? To examine this question we'll have to look at a number of related issues at the core of contemporary cognitive research:
  - What are the differences between conscious and nonconscious processes?
  - What is a skill, and what's involved in learning one?
  - What are concepts (sometimes called "chunks" or "schemas")?
3. Heuristics: What are they, and how do they work?

Next we will look at another body of research, this time on children. We'll see how problem-solving skills are acquired in the first place and how children's abilities at different ages differ from those of adults. We'll read some Piaget and some more recent researchers.

Then we'll consider specific suggestions on how to enhance creativity. The readings will include Polya's *How to Solve It*, Gordon's *Synectics*, de Bono, and Aronson. We'll give special attention to the role of visual images in creative thinking.

Finally, we'll take a couple of tests in common use to assess spatial reasoning, logical reasoning, and possibly general intelligence, and we'll conclude with a discussion of individual and sex differences and with a critical evaluation of these tests. (For instance, we'll read Bane's Hoffman on what's wrong with SAT's.)

The course will be run like a graduate seminar—that is, there will be some lectures, but the emphasis will be on reading original sources and discussing them. Throughout the course there will be take-home "exercises" on: taking superior class notes, reading creatively, increasing concentration, and introspecting about thought processes and emotions. There will also be a final paper.

The class will meet Tuesday and Thursday, 10:30-12:00.

Enrollment limit: 20, to be chosen by lottery at first class meeting. Some spaces will be reserved for Five-College students.

LC 145 SIMPLICITY AND COMPLEXITY: PIDGIN AND CREOLE LANGUAGES, NONSTANDARD DIALECTS AND CHILDREN

Mark Feinstein

In the popular view, some languages are relatively complicated, others relatively simple; some are hard to learn, others are not. In this course we will examine the notions of "simplicity" and "complexity" in language from a number of perspectives.

We find, for example, that when children learn a standard natural language like English, Chinese, or Swahili, they tend to simplify its structure. These children typically take the past tense of the English verb *go* to be *goed* rather than the irregular form *went* (which is a complication of English by virtue of its irregularity). Similarly, the complex initial consonant cluster *str* in words like *street* is commonly reduced by children to *tr* or even *f*. It has been argued that simplifications of this sort follow from properties of the language learning mechanism common to all human children. Since the task of contemporary linguistic theory is largely to determine the universal properties of language—hence to explain the ability of any human child to learn any natural language—the facts of simplification during the learning process are of great importance.

There are a variety of other facets of human linguistic behavior in which strikingly similar kinds of simplification occur. For example, in nonstandard varieties of English (which are stigmatized socially, but are otherwise the linguistic "equals" of the accepted standard dialects) we find speakers eliminating a complication of an otherwise simple pattern in English, namely the third person singular ending of verbs; thus *he don't* replaces *he doesn't*. Another interesting case involves the so-called "pidgin languages." These are sometimes described as "no one's native language." They are systems invented by adults when two groups speaking two distinct languages must communicate with one another. These "creole languages" are somewhat paradoxical: they arise from pidgins, the simplified creations of adults, and they are learned and developed by children, who normally simplify the language during acquisition. Yet the evidence suggests that the creolization process, in which children make the pidgin a viable native language, involves an increase in complexity.

We will confront these and a number of other problems in the course, emphasizing pidgin and creole languages; we will be looking at the structure of Tok Pisin, a New Guinea pidgin; Jamaican Creole; West African Pidgin English; Papiaamentu, a Spanish-based creole from Aruba and Curaçao; and others. In addition we will look at various theories of language acquisition by children, and at linguistic and sociolinguistic aspects of nonstandard dialects.

The class will meet Tuesday and Thursday, 10:30-12:00.

Enrollment limit: 20



LC 152 ADOLESCENCE AND THE SEARCH FOR IDENTITY

Ellen Conroy

Adolescence is widely recognized as a period of turmoil and development resulting both from significant physical and psychological change as well as from changing social roles and expectations. This course will consider both the psychological and the social influences on adolescent development. It is designed to be of interest and value both to those planning on working with adolescents in educational and other settings and to those hoping more generally to gain an understanding of the various empirical and psychological perspectives that can be brought to bear on one period of development.

The course will first view adolescence from a variety of psychological perspectives, and we will examine relevant aspects of psychosexual, psychosocial, ego, and intellectual development. We will then study this period in terms of the changing demands of society, and from an historical and a cross-cultural perspective. Throughout, central issues such as separation from the family, search for a stable personal identity and sense of meaning, and the establishment of adult social roles will be emphasized.

Course meetings will consist mainly of lectures and discussions. Readings will include selections from Freud, Erikson, Sullivan, Piaget, Kohlberg, and others. In addition to examining these theories and related research, we will also apply them to various perspectives on descriptions of adolescence in literature as well as to aspects of class members' own development. Students will be expected to complete readings prior to class meetings and to contribute actively to class discussion as well as to prepare two papers.

The class will meet Tuesday and Thursday, 9:00-10:30.

Enrollment limit: 25

FALLACIES OF PRESUMPTION



"Boy, have I got this guy cowed! Every time I press the bar down, he drops in a pile of lead."

LC 154 WINNING ARGUMENTS

Michael Radetsky

This will not be a course in debate strategies or dramatic persuasiveness, but an introduction to informal Logic and Philosophy of Logic. We will investigate and learn to avoid the pitfalls and fallacies of ordinary arguments, looking, for example, at the attempts people make to support and defend their ethical views. We will also consider some more general questions about the nature and usefulness of logic: Why and in what sense do conclusions follow from premises? What sort of rules are the rules of logic? What sorts of things (like terms, propositions, assertions) is logic about? Finally, we will consider some of the philosophical problems that arise from the use of logic in philosophy—like, why are philosophers surprised to find a difference between "Jane got married and had a baby" and "Jane had a baby and got married."

The course will be quite nontechnical and not mathematical, although it will provide an opportunity for those who want to learn the basics of symbolic logic. Participation in class readings and preparation of short arguments and argument critiques will form the bulk of the course work. Students should come out of the course better able to recognize bad arguments and to construct good ones, in addition to gaining an understanding of basic logic and its relation to philosophy.

The class will meet Monday and Wednesday, 10:30-11:30.

Enrollment limit: 20, by instructor selection after first class meeting.

LC 155 CULTURE, LANGUAGE, AND PERSONALITY: A TWENTIETH CENTURY READ GAME

Janet Tollman

"It sometimes hold it half a sin To put in words the grief I feel For words like nature half reveal And half conceal the soul within."

Anonymous Anarchist prisoner

Language is multifaceted, involved in many paradoxes, creatively and destructively used, full of beauty and power. This course is intended to get people thinking about that.

The ideas we have of language, of culture, of personality interactive and become entangled. I want to tease out some of the questions which come up when we start to study these ideas, and apply some readings to the questions in attempts to answer them.

I have several questions in mind now; no doubt more will occur to us as we study. One question is "How does culture influence personality?" To understand this, we can read Sapir's "Culture, Genuine and Spurious," Geertz's *Poison Time and Conduct in Bali*, and H. Hong Kingston's "Shannon" from *The Woman Warrior*. Another question we can ask is "How do language and thought relate?" For some answers we will turn to Orwell's description of Newspeak in *1984*, Huxley's description of the mind beyond words in *Heaven and Hell*, and Viorst's discussion of cryptonyms in *Language, Thought, and Reality*. We will examine the Whorf-Sapir hypothesis and, following reason, discuss its implications with regard to cultural and linguistic universals, bringing to bear Chomsky's ideas expressed in *Language and Mind*. I would also like us to practice and study closely using exercises in silence and reading selections from Steiner's *Language and Silence*, as well as Basso's "Silence in Western Apache Culture."

We will touch on questions of translation: across ages, across color, across languages, borrowing a few ideas from Steiner in *After Babel*, and from Bernstein, Labov, and Habermas.

There is much to be known about all of these questions, and I will encourage you to go more deeply into them through writing and reading.

The class will meet Tuesday and Thursday, 10:30-12:00.

Enrollment limit: 20, on a first come basis.



## LC 157 TELEVISION CRITICISM

Stanley Staniski

This course will be a group independent study of television criticism. The activities will be readings, viewings, and group discussions.

Although attempts will be made to construct guidelines by which television programs can be analyzed, these will merely serve as a starting point for discussing what larger issues and cultural elements are present in television programming. Various approaches to television criticism and analysis will be discussed as well as the function these approaches can play in understanding what television is and can be.

The class will meet Monday evenings, 7:00-8:30.

Enrollment limit: 12, with permission of the instructor.

## LC 161 THE COLOR AND LIGHT CIRCUIS

(NS 110)

(WA 190)

Stanley Goldberg, Albert Woodhull, Arthur Hoener, Christopher Witherspoon

See Natural Science course description.

## LC 159 GAMES

Allen Hanson and William Marsh

After John von Neuman proved the Minimax Theorem, he and Oscar Morgenstern developed a theory of games as a branch of mathematics intended explicitly and primarily to be useful in the social sciences. The first half of this course will be devoted to gaining an understanding of the theories and of more recent work in the field as presented in Thomas C. Schelling's *The Strategy of Conflict*. The second half of the course will be concerned with games as an approach to "rational intelligence" and, more broadly, human problem solving. We will see how computers can be programmed to play games and even develop sophisticated strategies. In particular, we will look at the status of chess playing programs.

The course will require only high school algebra as prerequisite.

The class will meet Monday, Wednesday, and Friday, 9:30-10:30.

Enrollment limit: 32, by lottery at first class meeting.

## LC 162 SPATIAL RELATIONSHIPS AND SOCIAL COMMUNICATION

John Hornik\*

Robert Sommer defines personal space as "an area with invisible boundaries surrounding a person's body into which intruders may not come." It is similar to the concept of individual or personal distance which ecologists use in referring to normal spacing patterns observed among animals of a single species. Situations in which animals or men are unable to maintain appropriate interpersonal distances are widely assumed to be threatening and stressful. We attempt to protect ourselves from these aversive effects through the use of physical props such as chairs, tables, and walls, as well as by maintaining "socially approved" distances in interaction.

From this point of view, spatial needs and preferences determine interpersonal distance, and thus physical distance symbolizes social relationships. But the characteristics of spatial arrangements may alternatively be viewed as a causal agent—that is, one which influences social communication. From this perspective, the systematic investigation of spatial relationships; rather they create them. The focus of this course will be on examining ideas about interpersonal distances and social relationships and about the design of environments and social behavior. In addition, we will review and discuss theories of crowding. We will also look at the process of threat construction and at the methods that social researchers employ. The systematic investigation of spatial relationships and social communication. The latter will include some first-hand experience in the collection and analysis of data.

The course will meet Monday, 2:00-3:00.

Enrollment limit: 25, by discussion at first class meeting.

\*Appointment pending.

## LC 185 THE LISP PROGRAMMING LANGUAGE

Elitor Soloway\*

This six-week course will provide an introduction to the programming language LISP. The data types and operators in LISP are more appropriate to problems involving complex strings of symbols than are other languages, for example, APL. LISP provides a powerful interactive environment in which to explore solutions to problems in natural language understanding, game playing, and learning. In cognitive psychology simulations of human information processing are often written in LISP, due to its expressive power.

While no background is required, some experience in programming would be helpful. If you are unsure of the adequacy of your background but would like to take the course, contact the instructor at 545-2764 (office) or 549-2812 (home).

The required text for the course is *The Little Lisper* by Daniel P. Friedman (1974, Science Research Associates, Inc.).

The course will meet Monday and Wednesday, 10:30-12:00 (same time as LC 269). All those intending to take this course should attend the first and second meeting of LC 269; at this time the schedule of the remainder of the term will be discussed.

Enrollment limit: 30

Mr. Soloway is a graduate student in computer science at the University of Massachusetts completing his Ph.D. on computer learning mechanisms.

## LC 158/258 TELEVISION RESEARCH

Peter Crown\*

This course will outline the theory, technique, and application of the controlled experiment in television research (as contrasted with the polling and inventory methods which now predominate). The intent of the course is two-fold: (1) to teach some basic principles of experimental psychology, and (2) to apply these principles to a new approach to studying the behavior of television viewers. This approach is directed toward the noncontent aspects of television, i.e. television as a visual stimulus where the independent variables are editing, rate, visual and auditory complexity, and novelty. It is hoped that an on-going research project will be in operation so that students will have the opportunity to participate in research activities.

The class will meet Monday and Wednesday, 10:30-12:00.

Enrollment limit: 20

\*Appointment pending.

## LC 170/270 MEANING

James Paul Gee

This course will be concerned with the nature of human language, with special reference to meaning.

First we will investigate how the structure of a sentence determines its (literal) meaning. We will introduce the theory of transformational-generative grammar and explicitly take up the question of the role of semantics (the theory of meaning) in the theory.

Next we will consider the role of the verb in a sentence and the various roles non-phrases play in the "drama" set up by the verb (e.g. "The man (Agent) sold a book (Theme) to the woman (Recipient)"/"The woman (Recipient) bought a book (Theme) from the man (Agent)"). We will go on to detail a theory of "thematic" or "case" relations (i.e. of the above sorts of "roles").

We will also take up the question of the role played by such notions as "subject," "object," "indirect object" (grammatical relations) in language.

Then we will consider the meanings of words and the way in which words pattern into semantic fields (rather like mosaics where the space may be filled up with pieces of different shapes and sizes and where certain pieces may be missing). We will sketch a theory of the "lexicon," taking up questions of lexical structure, lexical redundancies, and lexical generalizations.

From the level of the sentence we will turn to the level of discourse and investigate the communicative structure of languages in terms of such notions as "Topic" versus "Comment" and "Old Information" versus "New Information." Here we will investigate principles languages use to determine word order and to structure messages.

Then we will consider the nature of speech acts, presupposition, and conversational implicature—that is, how we do things not merely say them in language; how we can imply what we haven't literally said, and so forth. Here we will look into "pragmatics," the role of language in use and context.

Throughout the course we will draw our data from English as well as other languages, and will be concerned with discovering universal factors underlying languages and cultures.

As we develop a view of meaning in language we will gradually also take up topics in the philosophical theory of meaning and the philosophy of language, e.g. such topics as the nature of truth conditions in relation to a theory of meaning, sense and reference, opaque contexts in language, the *de dicto/de re* distinction, the analytic-synthetic distinction, entailment, conceptual truths, and so forth.

The class will meet Monday and Wednesday, 1:00-2:30.

Enrollment limit: 20, on a first come basis.

## LC 219 COMMUNICATIONS POLICY RESEARCH

James Miller

The media of mass communications are usually subject to the influence of public policy. Such is always the case with forms of telecommunications—United States radio and television, to take an obvious example, are subject by law to federal government regulation. That media operation and content are variously affected by public policy made and implemented by the government should not be surprising, given the media's potential power for contributing to political change, their economic importance, and their significant role in socialization.

This course will examine the increasingly common use of scientific theory and method in the making of public policy for mass communications by individual countries and international bodies.

We will have several objectives: to identify recent cases in which research has contributed to the process of public policy for specific communications issues; to assess the value of research in making enlightened communications policy; to examine critically how research theory and method can be used both as tactical devices to protect the media's self interests, and as instruments in the hands of advocates of "the public interest."

As part of the regular Spring Term seminar series on media structure and control, this course will focus mainly on United States electronic media. We will also investigate cases of communications research in the public policy process in Canada and Western Europe, and look at the continuing international debate within UNESCO regarding the so-called free-flow of information issue.

Students will, as a major responsibility in the course, demonstrate how published research can be used to evaluate a communications issue and inform public policy options. This will require the development of a sophisticated knowledge about public-policy making and about such selected communications issues as media ownership, United States children's television, funding public broadcasting, and the future of the British Broadcasting Corporation.

The class will meet Tuesday, 1:00-3:00, and additionally as required.

Enrollment limit: 10, with permission of the instructor after first class meeting.

## LC 227 PERSON PERCEPTION: THE DEVELOPMENT OF UNDERSTANDING OF PERSONS, INTERPERSONAL RELATIONSHIPS, AND THE SOCIAL WORLD

Ellen Cooney

Recently there has been considerable interest in studying social development by analyzing the individual's way of conceptualizing and understanding the social environment. In general such studies have attempted to define stages in the child's concepts and ways of thinking about various aspects of the social world, including persons, interpersonal relations, and the self. This course will review this literature on social cognition and attribution as well as provide the student with a supervised research experience in this area.

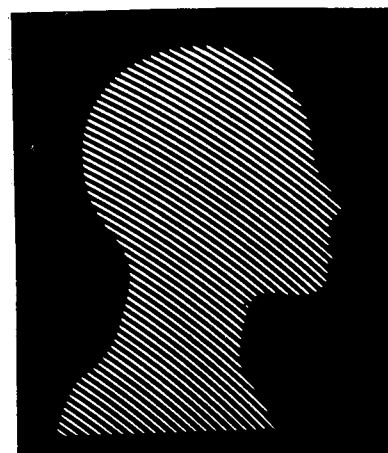
In the first half of the course we will review the theoretical and empirical literature. Included here will be an overview of social-cognitive and attribution theory as well as discussions of specific research, including Kohlberg's descriptions of stages of moral development, Selman's and Flavell's studies of the child's developing understanding of persons and interpersonal relations, Loevinger's analysis of the stages of ego development, and Kelley's work on the development of social attribution.

In the second half of the course students will undertake their own study of the child's developing conceptions of some aspects of the social environment. Possible topics include developing conceptions of self identity, sex roles, parents, teachers, emotional disorders, and physical handicap. This research will involve both a review of existing literature in the area chosen as well as considerable supervised field research.

Class meetings will include lectures, discussions of the readings and of student research, and class presentations of student research. Some background in psychology, in particular in cognitive developmental theory, is strongly recommended, but not required.

The class will meet Tuesday and Thursday, 1:30-3:00.

Enrollment limit: 12, with permission of the instructor after the first meeting of the class.



## LC 229 COGNITIVE DEVELOPMENT

Deborah Knapp

This is a course about how children think. Among the topics to be covered (this list is not exclusive) are:

1. **Infant perception.** To what extent is the world of the infant a "blurring, hazy confusion" and to what extent does it have structure? What abilities do newborns have to perceive shapes, patterns, and spatial arrangements? 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?
2. **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? How do children come to understand the concept of number? Why don't children appreciate some magic tricks? How do (and how should) children learn to read? Under this heading are individual special topics such as imagery and spatial representation, classification, conservation, and inferences and transitive reasoning.
3. **Meta-awareness.** When and how do children introspect about their own thinking? Do they monitor their understanding of an explanation to see whether they really understand or not? How much of their own memory limitations do they realize? How do they learn to plan out an activity strategically, several steps in advance? How do they learn what it means to verify a conclusion?
4. **Stage theories and critical periods.** What have different theorists said about the qualitative differences among children of different ages? How can stage theories account for learning and progress from one stage to another? Can qualitative differences be reduced to quantitative ones? Critical periods: Is it true that children can learn certain things only at certain ages? (For instance, is "sensitive" language after adolescence more difficult?) We'll examine language after adolescence more difficult? We'll examine some preschool teaching programs that rely on the supposed superiority of young children in learning some things.

This course will be run like a graduate seminar: some lectures (quite possibly accompanied by videotapes) and also an emphasis on discussion of extensive readings. We'll read selected parts of Piaget's books, a number of recent research articles, and a few things on educational theory and materials (with a view to evaluating them).

Some knowledge of Piaget and/or child development would be helpful, for example, LC 122 Child Development or LC 223 Piaget. Some topics from those courses will be covered in more detail, and new topics will be introduced. However, no previous experience with developmental or cognitive psychology is necessary.

The class will meet Tuesday and Thursday, 1:00-2:30.

Enrollment limit: 20, to be chosen by lottery at the first class meeting. Some spaces will be reserved for Five-College students.

## LC 234 TELEVISION PRODUCTION PROJECT: WHOLE WHEAT VIDEO

Stanley Staniski

This course will be a continuation of LC 134. Production began during Fall Term will be continued and/or expanded.

Since the "back-to-land" movement has wide ranging effects and influences, the initial groundwork established during Fall Term will serve as a basis of operation for the spring. Advanced production techniques will be discussed and applied as well as more sophisticated approach to topic interpretation. Students will be asked to apply skills they acquired during the Fall Term or through previous experience. New students coming into the course without production skills will be asked to acquire those skills through participation in the projects and through Library mini courses.

The class will meet Tuesday and Thursday, 9:00-12:00, but much of the production work will take place outside regular meeting times.

Enrollment limit: 20, with permission of the instructor.

## LC 235 FIELD METHODS IN LINGUISTICS

Nancy Frishberg

This course is intended to introduce the methods of investigating a new language to students with some background in linguistics, anthropology, or other LAC disciplines. We will work with a native speaker of a (probably) non-Indo-European language, and will learn how to separate the new sounds into distinct segments, how to identify words, how to make grammatical sentences, ask questions, and address problems in syntax and phonology using the new language as source data. The object of the field work is not to become fluent speakers of the new language but to become "fluent" in discussing the structure of the language and in learning what are good questions to ask about it, and to become aware of problems in this language which may shed light on issues of sociolinguistics and culture to a lesser extent as we go about the field work.

The class will meet Tuesday and Thursday, 10:30-12:00.

Enrollment limit: 20, by instructor's permission after first class meeting.





# LC 280 BOOK SEMINAR: THE JOURNALISM OF SOCIAL CONSCIOUSNESS

David Kerr

This seminar will concern "muckraking" and "advocacy" in American journalism from the turn of the century to the present and will include critical considerations of the practice as well as examples of the craft. Practitioners studied will range from Upton Sinclair and Ida Tarbell to Jack Anderson, Seymour Hersh, and Jimmy Breslin. Although not primarily an historical study, the seminar will examine chronologically a wide range of material from twentieth century America. We will also look at the use of fiction and fictional devices for journalistic purposes.

The reading rate will be roughly equivalent to a book a week, and there will be two papers of modest length required, one of which will be the basis for a student-led discussion.

The seminar will meet Monday, 1:00-3:00.

Enrollment limit: 12, by lottery if necessary.

## WORKSHOP CONVERSATIONAL COMPUTER

Charles Velcy

See course description in Social Science listings.

## FOREIGN LANGUAGES

### LC 150 INTERMEDIATE SPANISH

TBA

The second term of intensive Spanish will continue to stress listening and speaking skills, with increased grammar content, including all the tense modes. 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 for them should contact the instructor for further information.

Time: TBA

Enrollment limit: 20

### LC 151 INTERMEDIATE FRENCH

Raymond Pelletier

This course is designed for students who have completed an elementary French course or its equivalent. Class time will focus on conversation, using cultural differences, current events, magazine and newspaper articles, films and literary works as points of departure. Language structure will be highlighted in class to coincide with the grammar text adopted for the course. Active class participation is required, and students can expect to direct at least one activity during the term. In addition, students are strongly encouraged to undertake independent projects in one or more of the following areas: translation, interpretation or advanced readings, composition to speak, read, and write. The project is meant to give the students the opportunity to focus on one aspect of language that they would like to develop more fully. The results of the independent work should be presented to the class as a whole (when applicable).

The class will meet Wednesday and Friday, 1:00-2:30.

Enrollment limit: 20, by interview with the instructor.

The following courses have a dual nature. On the one hand they are Division I courses in particular L&C disciplines, and the material treated may well lead to Division I examination work. On the other hand, they are taught in a foreign language, and will thus enable intermediate and advanced students in French and Spanish to improve their skills in those languages.

An interview with the instructor(s) will be necessary for admission to the course, primarily to determine the student's level of competence in the foreign language. Active fluency is not a requirement, but the student must have at least an adequate ability to comprehend the spoken language in question. In the foreign language, although the main thrust of these courses, like all Division I courses, is to explore substantive, interesting intellectual questions.

### LC 146 CANADA FRANCAISE, FRANÇAIS CANADIEN

Mark Feinstein and Raymond Pelletier

In much the way that other societies are torn over racial and social class distinctions, Canada is divided linguistically. Speakers of French--a majority in Quebec and a relatively small minority elsewhere--have been discriminated against in employment, education, and social and political life in general. In spite of the English domination of nominally bilingual Canada, however, French Canadian culture has silently sustained itself: the history, folklore, music, literature, even the cinema of Quebec are rich and unique. In this course we will be examining these aspects of French Canadian life with a particular emphasis on the French language in Canada: What is its linguistic nature? Its history? How is it distinct from standard "Parisian" French? Why is it regarded by many as a "corruption" or "distortion" of French? How has it been influenced by surrounding cultures (English, Indian, and others)?

In addition we are interested in the general question of bilingualism, especially as it pertains to Quebec. During the last few decades an attempt has been made to temper the linguistic conflict in Quebec by imposing an official policy of full bilingualism. But the attempt is problematic; recently, for example, the pro-independence party which Quebec's official language, and main language of education. We will be looking, then, at questions like: Can a society expect to establish a balanced, equal bilingualism? What role does bilingualism play in the educational process? Does it have psychological implications? How does bilingualism affect cultural phenomena?

La majorité des québécois parlent français, mais ils restent une minorité au Canada. Malgré la domination sociale des Canadiens anglais, la population franco-canadienne a soutenu une culture riche et indépendante. Ce cours propose d'examiner la situation actuelle de la langue québécoise pour arriver à comprendre comment et pourquoi certains la considèrent une "corruption" du français parisien, et comment elle a été influencée par les cultures avec lesquelles elle devait coexister. On s'intéressera en plus aux problèmes de bilinguisme et aux problèmes effectués pour redonner à la langue française la première place dans la société québécoise. On examinera donc la nature du bilinguisme, l'effet du bilinguisme sur l'enseignement, et la manifestation d'une société bilingue dans la littérature franco-canadienne.

The class will meet Tuesdays and Thursdays, 1:30-3:00 p.m.

Enrollment limit: 20, with instructor's permission.

### LC 140 LL BILINGUALISM

Paloma Garcia-Bellido

In this course we will be taking a direct look at what it means to be a bilingual Spanish-English speaker in our predominantly English-speaking society. For one class meeting a week we will talk with a person from a local community whose first and main language is Spanish, but whose bilingual life between the two languages. In other class meetings we will be examining the methods and assumptions of sociolinguistics and sociology of language, in hopes of finding answers to the kinds of questions that arise from bilingualism: How do the two languages affect each other linguistically? What attitudes do bilinguals have to their two languages? When will they use one language or the other? What language(s) do their children know and use? To expect that Spanish will have an important role in the future of their community (unlike the experience of many other foreign language groups in America)? What are the cultural and political problems which confront an active bilingual in this region? In addition to classroom, students will be encouraged to do field work projects on their own.

Durante este curso investigaremos sobre lo que significa ser un hablante bilingüe de español e inglés en una sociedad donde la nuestra predominantemente de habla inglesa.

Una vez por semana hablaremos con una persona de la comunidad local cuya primera lengua sea el español pero que divide su vida entre las dos lenguas. En las otras clases examinaremos los métodos y las presuposiciones de los sociolingüistas y de la sociología del lenguaje, con la esperanza de encontrar contestaciones para la clase de cuestiones que surgen con el bilingüismo: Como afectan las dos lenguas lingüísticamente a una persona o la otra? Que actitudes tienen los bilingües ante las dos lenguas? Cuando usan una lengua y cuando otra? Que lenguas conocen y usan sus hijos? Estimulan una lengua mas que la otra? Green (o confían en) que el español jugara un papel importante en el futuro de la comunidad (distinto al de la experiencia de otros grupos lingüísticos extranjeros en America)? Cuales son los problemas culturales y políticos que concierne a un bilingüe a ser activo en esta región?

Ademas del trabajo a desarrollar en clase, se estimulara a los estudiantes para que elaboren proyectos de trabajo practico por su cuenta.

Time: Class will meet Tuesday and Thursday, 9-10:30 a.m.

Enrollment limit: 20, with permission of the instructor.

\*Appointment pending.

## SCHOOL OF NATURAL SCIENCE CURRICULUM STATEMENT

Students signing up for Natural Science courses should be clear as to the distinction between Division I and Division II courses. The School of Natural Science is trying very hard to gear its courses to the specific needs of students. If you do not find a course you are interested in taking or feel that we have overlooked something, please take your ideas to the school's Curriculum Committee (Raymond Coppinger, Chair).

Division I courses are intended to lead to Division I degrees, independent studies and examinations. The emphasis in these courses is on "mode of inquiry". Teachers will introduce you to the problem and excitement in the field and show you the methodology of exploration in science. In this sense these courses have been designed not as surveys or the proliferation of the present scientific paradigm, but geared to questioning and testing current scientific thought.

Division II courses are more traditional in nature. They are designed for concentrators or, in the old sense, majors. Since Division II concentrators do not necessarily fall in traditional Division II courses, we will try to honor student assessment of their needs through the creation of new courses. However, in these courses students are expected to work more independently, should expect to pursue the subject matter on their own and should expect to make up deficits in their knowledge on their own.

Courses entitled "Division I/II" usually fall into some nether category and are quite often service courses needed by "non-science" concentrators.

Five College students are welcome in our courses. We would like to encourage those Five College students who have trouble with science or have mental blocks against science to give a Division I course a try. We will try to help Five College students adapt our system to their individual institution.

## SCHOOL OF NATURAL SCIENCE

### DIVISION I COURSES:

#### HISTORY OF ASTRONOMY

ASTFC 34

White\* Seitzer\*

#### BASIC PHYSICS

NS 182

Kraus, K. Gordon, Hafner, Hartline, Reid, Wolf, Goldberg

#### THE STRUCTURE OF MOLECULES (Mini)

NS 158

Friedman, Goldberg

#### ELEMENTARY THERMODYNAMICS (Mini)

NS 159

Gross

#### RATES OF CHEMICAL REACTIONS (Mini)

NS 163

Lowry

#### EVOLUTION OF THE EARTH

NS 107

Reid, Woods

#### RIVER DYNAMICS (Mini)

NS 188

Foster, Reid

#### THE COLOR AND LIGHT CIRCUIS

NS 110 (NS 190, LC 161)

Goldberg, Woodhull, Hoener, Witherspoon

#### BRAIN AND EYE (Mini)

NS 131

Albert Woodhull

#### PIGMENTS, DYES, AND THE ARTIST'S PALETTE: THEORY AND PRACTICE (Mini)

NS 134

Goldberg

#### RUBBERBANDS, RAZOR BLADES AND CHEWING GUM

NS 146

Hartlines

#### HUMAN BIOLOGY I: THE INTERRELATIONSHIP OF THE SOCIAL AND BIOLOGICAL SCIENCES FOR PUBLIC HEALTH

NS 121 (SS 113)

Foster, von der Lippe, Oyewole

#### NUTRITION AND OBESITY

NS 144

Friedman

#### HUMAN REPRODUCTIVE BIOLOGY

NS 141

Greenleaf

### PSYCHOLOGY

NS 156

Cywelo

### NATURAL SELECTION

NS 119

Coppinger, Gross

### SCIENTISTS AND DISSENT: THE COMMUNICATION GAP

NS 127

Van Raaite

### SCIENTIFIC QUANTIFICATIONS

NS 1-5

Gross, Ziegler

### THE FAMILY FARM IN THE U.S.: FROM SELF-SUFFICIENCY TO SELF-DESTRUCT

NS 153

Slater

### HORTICULTURE

NS 177

Semman, Borne, Averill

### GARDENING, ORGANIC AND OTHERWISE

NS 117

Averill

### WILDFLOWERS: HIGH IN THE SHOOKIES, AND DOWN AT HAMPSHIRE (Mini)

NS 116 (OF 262)

Averill, Latta

### BEEKEEPING (Mini)

NS 135

Kieniec, Hoffman

### DIVISION I/II COURSES:

#### COSMOLOGY

ASTFC 20

Harrison\*

#### A GEOLOGIC HISTORY OF THE CONNECTICUT VALLEY

NS 108/208

Woods

#### BIO-MEDICAL ISSUES AND FEMINISM (II)

NS 105/205

Raymond

#### MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS

NS 161/261

Hoffman

#### API AND QUANTITATIVE METHODS

NS 168/268 (SS 255)

Sutherland

### DIVISION II COURSES:

#### INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS I

ASTFC 22

Gordon\*

#### OBSERVATIONAL RADIO ASTRONOMY

ASTFC 38

Huguenin\*

#### ASTROPHYSICS II--RELATIVISTIC ASTROPHYSICS

ASTFC 44

Greenstein\*

#### SOLID STATE PHYSICS AND ELECTRONICS

NS 211

Wolf

#### GEOPHYSICS AND GEOCHEMISTRY OF THE OCEANIC CRUST

NS 216

Hartline, Reid

#### ORGANIC CHEMISTRY II

NS 234

Lowry

#### AQUATIC ECOLOGY

NS 202

Van Raaite, Grimm, Hurd

#### AQUATIC ECOLOGY LAB

NS 203

Van Raaite, Grimm, Hurd

#### ANIMAL PHYSIOLOGY

NS 217

Woodhull, Hartline

#### BEHAVIOR GENETICS SEMINAR

NS 206

Coppinger, Henriques, Miller

#### BIOLOGY AND MATHEMATICS

NS 209

Scopham\*

#### THE PUMP OR THE WELL

NS 207

Slater

#### WHO CONTROLS TECHNOLOGY?

NS 219 (SS 247)

Kraus, Shapiro

#### LINEAR ANALYSIS AND DIFFERENTIAL EQUATIONS

NS 267

Hoffman

#### INTRODUCTION TO THE ANALYSIS OF BIOLOGICAL MODELS

NS 221

Riggs

#### \*Members of Five-College Astronomy Department

#### ASTFC 34 HISTORY OF ASTRONOMY

Richard White and Waltraut Seitzer (both Smith)

Astronomy and cosmology are traced from prehistoric relics through the beginnings of Egyptian and Babylonian astronomy to a dual culmination 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 Monday and Wednesday from 2:30 to 3:45 at Smith College. This is a Division I course.

NS 182 BASIC PHYSICS

Allan Kraus, Kurtis Gordon, Everett Hafner, Fred Hartline, John Reid, Michael Wolf and Stanley Goldberg

This course is a continuation of the full year course begun last semester. Topics to be covered are electricity and magnetism, optics, spectroscopy, and the quantum theory of atoms and molecules. Students who want to take this course should have taken the first semester or an equivalent course at some other college. The mathematical level of the course will be reasonably high, but calculus is not required.

Class will meet three times a week for 14 hours.

A general chemistry sequence of minicourses is being offered for the Spring term. The first course will be on the **STRUCTURE OF MOLECULES** by BethAnn Friedman and Stanley Goldberg; the second on **Elementary Thermodynamics**, by Michael Gross; and the third on **RATES OF CHEMICAL REACTIONS**, by Nancy Lowry. You may take any or all of the courses. Enrollment will be limited to 16 in each section, first come.

**NS 158 THE STRUCTURE OF MOLECULES (4 wk. minicourse)**  
BethAnn Friedman and Stanley Goldberg

Molecules are invisible particles--yet we can establish their molecular shapes by a number of techniques. In this course we will discuss how we can both experimentally and theoretically determine molecular structure.

No background in chemistry is necessary. This course will be taught the first 4 weeks of Spring term. It will meet twice a week for 1 1/2 hours.

**NS 159 ELEMENTARY THERMODYNAMICS (4 wk. minicourse)**  
Michael Gross

What does heat have to do with temperature? What--to a physicist and chemist--is energy? What is entropy? And enthalpy? These are some of the questions that thermodynamics deals with--and which this course will treat. We will begin with a qualitative account of the basic concepts of thermodynamics, in a somewhat unusual way; we will examine the chronological development of thermodynamics, with the assumption that abstract concepts make more sense if you understand what problems the scientists who invented them were trying to solve. The latter part of the minicourse will focus on quantitative applications of these concepts in solving problems. 2nd & 4th wks.

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

**NS 163 RATES OF CHEMICAL REACTIONS (4 wk. minicourse)**  
Nancy Lowry

A + B - C

How fast does it go?  
And how do we know?  
This is the question for our mental digestion.

Class will meet twice a week for 1 1/2 hours. Last 4 wks.

**NS 107 EVOLUTION OF THE EARTH**  
John Reid and Geoffrey Woods

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 specimens and under the microscope. The second aim of the course will be to develop an ability to interpret landscapes from the viewpoints those processes which have shaped and continue 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.

Two 1 1/2 hour class meetings plus one 3 hour field trip/lab per week.

**NS 188 RIVER DYNAMICS (minicourse)**  
John Foster and John Reid

It has been said that the hills surrounding the Connecticut River were once 15,000 feet high. They have been carved down to form today's landscape mostly by running water. Our aim in this course is to investigate experimentally the properties of flowing streams and rivers--how they vary with slope, rainfall, variations in the shape of the channel, etc.--and how the force of moving water operates to reshape the landscape. We will approach this problem in various ways:

- By making measurements of velocity, cross section, sediment load, etc., including the forces exerted by the water on the banks of the streams and on other objects (including a canoe).
- By studying papers from the research literature on the quantitative behavior of rivers and river systems.

The courses will meet one afternoon a week for field trip plus a 1 1/2 hour meeting to analyze data and discuss readings. The course is open to anyone willing to 1) attend a brief white water canoeing course before the course begins; 2) get wet; 3) maybe learn some physics. The course will start after spring vacation.



**THE COLOR AND LIGHT CIRCUS**  
Stanley Goldberg, Albert Woodhull, Arthur Hoener, Christopher Witherspoon

The core of this course is a lecture series by the listed faculty and outside experts which explores, in a summary fashion, the nature of light and color and the relationship between color perception, individual psychology and physiology. Also the principles of classical and modern color theory will be applied to various technologies (pigments, film, dyes) and artistic media.

In addition to the lectures, which will be given once a week for 1 1/2 hours each, there will be a series of mini-courses and short seminars, descriptions of which follow.

**NS 131 BRAIN AND EYE (two 6 wk. minicourses)**  
Albert Woodhull

**Brain and Eye I: Light, Darkness and Color.** The eye is not just a camera. It is a part of the brain. This course will provide an introduction to the nervous system and the brain through examination of the way the rods, cones, and other cells of the retina begin the process of analyzing light for brightness and color. 1st & 6th wks.

**Brain and Eye II: Form and Pattern.** What does the brain do with the information it gets from the eye? In this course we'll look at what neurophysiologists have learned about the way patterns of light on the retina are converted to patterns in the brain. The previous minicourse is not a prerequisite. 2nd & 6th wks.

**NS 134 PIGMENTS, DYES, AND THE ARTIST'S PALETTE: THEORY AND PRACTICE (6 wk. minicourse)**  
Stanley Goldberg

This minicourse will examine the history of theories of color vision and color mixing. Our aim will be to account for the varieties of color that are normally perceived both in light sources and in pigment. Such an accounting should give one the power of control. We will examine the current rival theories which purport to explain the world of color perception. These theories include modified Young-Helmholtz theory and Land theory. 1st & 6th wks.

**NS 146 RUBBERBANDS, RAZOR BLADES AND CHEWING GUM**  
Beverly and Fred Hartline

This potpourri of amateur science is geared for students who are overwhelmed by "science." The course will be a free-flowing exploration of our world, stimulated and guided by class curiosity. We will hone our thinking skills by identifying problems, formulating hypotheses, controlling variables and devising experiments to test our theories. We'll do projects in biological and physical science fields. As far as possible, we shall use only common materials and equipment, and we'll make sure everyone understands how everything works. We hope to show that science does not require fancy equipment, and that it can add dimension to everyday life.

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

**NS 121 HUMAN BIOLOGY I: THE INTERRELATIONSHIP OF THE SOCIAL AND BIOLOGICAL SCIENCES FOR PUBLIC HEALTH**  
(SS 113) John Foster, Robert van der Lippe, Sandra Oyewole

**See Social Science Course Description.** Sandra Oyewole, who is a microbiologist, will also incorporate into the Human Biology Program a series of lectures in developing countries, discussing microbial diseases of man, such as malaria and cholera, which still present major problems in other countries.

**NS 144 NUTRITION AND OBESITY**  
BethAnn Friedman

This course will examine the relative role of nutrition in weight loss. One way of determining this is by focusing on reducing diets which place restrictions on the types of food ingested rather than on the amounts. An example is the Atkins diet which is a high protein-low carbohydrate diet. Is this just another bizarre reducing diet or does it have a scientific basis? We will try to answer this question both by reading original papers and by experimenting in the lab.

The course is designed for Division I students. No background in biology is necessary. It will meet formally for the first 6 weeks for two 1 1/2 hour discussion sessions and one 3 hour lab per week. The next four weeks will be used to work on individual and group projects and the remaining two weeks will be set aside for presentations of projects and discussions.

**NS 141 HUMAN REPRODUCTIVE BIOLOGY**  
Walter Greenleaf

The main task of this course will be to acquaint its participants with the biology of the female and male reproductive systems. Four primary objectives are: 1) to convey a basic working knowledge of human reproductive physiology; 2) to introduce the mode of inquiry used in science, and its basic tools; 3) to demonstrate how to critically handle primary research literature, and familiarize members with the current research issues in the field; 4) to demonstrate how the library and the laboratory can be used to satisfy an individual's curiosity about biological questions.

The program will serve as a good mechanism for the development of a division one exam. However, division two biology students will find the readings and the research projects challenging. Student input will be encouraged into both the structure and the content of the course. The program will climax with a symposium of student research to be presented to the Hampshire community in May.

The class will meet formally twice a week for 1 1/2 hours, to discuss readings and conduct course and laboratory work. Meetings will be in the evenings, to help alleviate the usual schedule conflict problem. In April, there will be a three week moratorium on formal class meetings; the time to be spent preparing for the symposium reports, which will be presented in May.

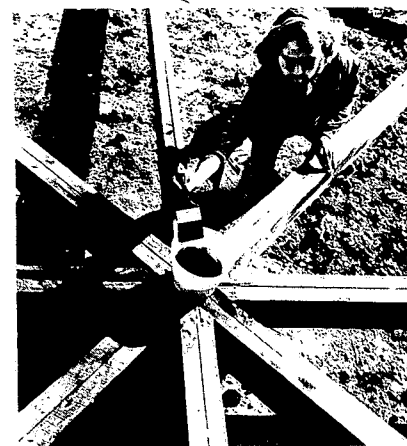
**NS 154 MICROBIOLOGY**  
Sandra Oyewole

The lecture-discussion format of this course will be designed to introduce students to basic principles of microbiology as well as current topics of research. Emphasis will be on bacteria and their viruses, with some discussion of animal virus systems. Microorganisms will be discussed both as agents of disease and as benefactors of humans. The laboratory skills learned in the initial sessions will later be applied to independent projects. Hopefully students will leave the course with an appreciation of the subtlety and variety of microbial life and with the ability to use some of the research tools of the microbiologist.

Class will meet twice a week for 1 1/2 hours, plus lab.

**NS 119 NATURAL SELECTION**  
Raymond Coppinger and Michael Gross

The concept of Natural Selection has been a fundamental theory in biology for over one hundred years: a fact of life. The Truth. This course, which is taught by an evolutionist and an historian of science will re-examine supporting and non-supporting evidence for this theory. We will look at Darwin's arguments as he stated them (in two astonishingly concise pages) in his letter to Asa Grey, and we will follow the development of the theory. Was the scientific method used properly throughout this process or was it stretched slightly? Is the theory nothing more than a myth about nature constructed to fit the values of a capitalist society? Class will meet twice a week for 2 hours.



**NS 157 SCIENTISTS AND NONSCIENTISTS - THE COMMUNICATION GAP**  
Charlene Van Raalte

Is C.P. Snow right--are there two noncommunicating cultures? (the scientists and the nonscientists)? Are scientific topics correctly described to the public in newspapers and magazines? If you read about an interesting scientific problem in TIME, how can you learn more about that topic?

In this course, we will focus on the written communication of science (mostly biology since the instructor is a biologist). After choosing several scientific topics, we will compare/contrast the presentation of these topics in newspapers, popular science magazines and primary research journals. Students in the course will be expected to direct discussions and prepare a portfolio of focused articles. Several papers will be required--written both in the style of a scientist and a journalist. The end of the course will be for independent work (you could write a scientific newsletter, a series of newspaper articles or even begin a Division I exam on a subject you discovered during the semester). Five-college students will be graded.

Class will meet twice a week for 1 1/2 hours. Enrollment will be limited to 15, by permission of instructor.

**NS 145 SCIENTIFIC COUNTERREVOLUTIONS**  
Michael Gross and Amy Ziegler\*

Have critics of science, technology, and technocracy done more than criticize--have they offered a constructive vision or model of an alternative way to organize society which does not rely on scientific progress and technological development? We will begin by looking more closely at what science is, by examining its emergence in the seventeenth century. We will then look at the social and political values with which it was affiliated and at some of the visions it inspired, such as Samuel Butler's *Erwholen*. We will then turn to the critics, ranging from the poets Whitman and Blake to such moderns as Jacques Ellul and Theodore Roszak examining, in their responses to science and its implications, the threads from which to weave alternative social fabrics.

Students should have read Alan Watts' *The Way of Zen* by the first class meeting.

Class will meet twice a week for 2 hours.

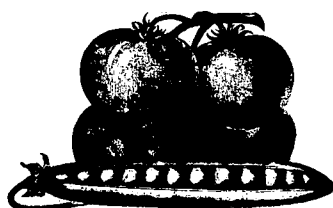
\*Amy Ziegler is a Division III student studying appropriate technology.

**NS 153 THE FAMILY FARM IN THE U.S.: FROM SELF-SUFFICIENCY TO SELF-DESTRUCT**  
Paul Slater

The farm family once met virtually all of its requirements on the farmstead. Over time, family farmers became increasingly specialized, increasingly mechanized and efficient, but today they are often looked upon as economically obsolete.

In this course we will look at the past performance of the family farmer, how and why changes were made, and we will try to determine why, after following the rules laid down by the established authorities, the family farmer is considered by many of the current crop of authorities to be either not worth saving or beyond redemption.

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



## NS 177 HORTICULTURE

Nick Seamon and Peter Boume, Mary Beth Averill  
(Supervisor)

This course will examine traditional horticultural practices with regard to their theoretical bases in the botanical sciences. Horticulture has traditionally dealt primarily with ornamental design and practical greenhouse techniques. While these will be studied as important concepts, we will also deal with some of its other applications such as small scale farming and orcharding.

Topics to be covered include: plant growth and development, taxonomy, field identification, physiology, plant structure, ornamental and landscape design, pest prevention, disease control, and vegetative propagation. Emphasis in the labs will be placed on the integration of scientific experimentation with horticultural techniques. We will also spend some time working with the maple sugaring process as an example of plant physiology and structure.

This course is designed for Division I students who have little or no experience in the sciences. There will be numerous opportunities for independent work leading to Division I exams throughout the course of the semester.

Class will meet twice a week for 1½ hours. A 3 hour per week lab will be scheduled during the first week of classes.

\*Nick Seamon is a Div. II Student in Natural Science, Peter Boume is a Div. III student in Natural Science.

## NS 117 GARDENING, ORGANIC AND OTHERWISE

Mary Beth Averill

We'll cover the basics of growing plants for food and satisfaction. Topics will include major plant groups; plant structure; what to plant, where, when, how; mulching; preparing and analyzing your soil; plant breeding; etc. Format will be reading and discussion with lab and greenhouse work to fill in the gaps. Students may decide to organize a Hampshire garden, but it is not an integral part of the course.

Class will meet twice a week for 2 hours.



## NS 116 WILDFLOWERS: HIGH IN THE SMOOKIES, AND DOWN AT HAMPSHIRE (miscourse)

Mary Beth Averill and Ralph N. Lutz

This course is for those who wish to learn how to identify wildflowers and to view them in an ecological context. Complete beginners, as well as advanced students are encouraged to participate. Course prerequisites include curiosity, enthusiasm, and the ability to both change in independent study and participate in a group activity.

Early in the course, we will spend a week in the Great Smoky Mountains National Park, which straddles the border between Tennessee and North Carolina. The park is a botanically unusual area, which is noted for its exceptional variety of plants. The mountains harbor both the southern species native to the region, and northern species which retreated before the great continental glaciers. The park's topographic relief (from 875 to 6643 feet), and rainfall (averaging from 50 to 100 inches per year, in different places) also help to account for its rich flora. The Smokies are also a favorite area for herpetologists, because of their diverse and rich salamander populations. Although we will be concentrating on wildflowers, we will provide an opportunity for people who are interested in animal populations to conduct salamander studies.

While in the National Park, we will stay in one of the developed campgrounds and conduct day trips in the area. Camping will provide an inexpensive means of living down there, and we will try to live as comfortably as possible. This is not a wilderness outing. The expense of the trip will be about \$40-\$50 per person. Most of the trip gear will be provided by the Outdoors Program.

Prior to the Smokies trip, there will be a weekend workshop (camping overnight) on April 1 and 2 during which we will work out the logistics of the trip, covering basic botanical groundwork, and discuss the literature. There may be as many as 3 additional, short meetings before the trip. Following the trip, there will be 3 or 4 afternoon field trips in the Ashcroft area to study the spring wildflowers. Students should make a commitment to the entire course, not just to the Smokies trip.

We will provide encouragement and support for those students who wish to do Division I exams as an outgrowth of this course; however, these students should discuss ideas with us well in advance (by the end of February). People who are looking for Division III research ideas will find many opportunities in the Smokies.

The first meeting will be March 28. Class will be once a week for 4 hours, plus April 1 and 2 (weekend), and April 15-22 (entire week).

Enrollment is limited to 13 students, by interview of instructors.

## NS 135 BEEKEEPING (miscourse)

Walter Niemiec\* and Kenneth Hoffman

This course is designed to introduce students to the fine art of beekeeping. It will start with a short historical perspective; from primitive man's robbing of the bees' nests in hives to the present system developed by Langstroth and hollow trees to the present system developed by Langstroth and Dadant. By the end of the course, students should have acquired enough knowledge to properly manage their own hive. Those interested in starting their own colony should contact Wally Niemiec (203 CSC) early in February to discuss the feasibility of owning a hive and to allow time for the ordering of equipment.

Topics will include: Anatomy of the Honey Bee; Activities of the Bees (communication and orientation); Division of labor in the hive; sources of nectar and pollen; Management of Honey Production; Disease and Enemies of the Honey Bee; and Beekeeping Equipment.

This course will be offered the second six weeks of the semester. Class will meet three times a week for 1½ hours, plus lab. Time for working in the hives will be scheduled accordingly.

Enrollment is limited to 15, on a first come basis. Sign up with Wally Niemiec. No grades will be given to 3-College students.

\*Laboratory Faculties in Natural Science.

## ASTFC 20 COSMOLOGY

E. R. Harrison (UPass)

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. Prerequisites: one semester of calculus and one physical science course.

Class will meet Mondays and Wednesdays from 1:25 to 3:20. This is a Division I or II course.

## NS 108/208 A GEOLOGIC HISTORY OF THE CONNECTICUT VALLEY

Goofrey Woods

The geology of the Connecticut Valley has been under close scrutiny since the middle of the nineteenth century. When one sits through the literature, it becomes clear that geologists are in disagreement about the origin and significance of certain geologic structures. Why does the Holyoke Range have an east-west trend? Why is there a topographic high formed by the soft sedimentary rocks of Mount Toby? How much movement was there along the fault zone at the eastern border of the Valley, and what direction did it move? What is the "Amherst Salient" and did it have any significant role in shaping the surface features we see today?

In an effort to gain a perspective on problems such as these, we will study the geologic history of the area in chronological sequence, relating a more general geologic history of New England with a detailed study of the Connecticut Valley. Verification of ideas put forth in the reading material will be sought out in the field as time and weather allow. An in depth investigation of some facet of Valley geology will be required of each student.

This course is designed for students who have had at least one course in basic geology. We will work towards learning to apply this geologic knowledge, both while reading research material and deciphering the rock record.

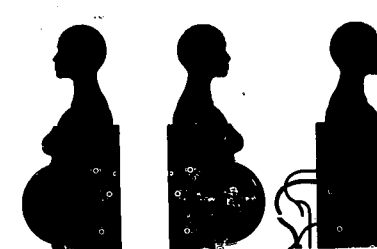
Class will meet twice a week (once for 1½ hours and once for 4 hours).

## NS 105/205 BIO-MEDICAL ISSUES AND FEMINISM (II)

Janice Raymond

A continuation of NS148/248 but may be taken separately. Two major areas will be explored: 1) Questions of death and dying -special attention will be devoted to: the meaning and context of death in western, patriarchal society and how this same society has viewed mortality and immortality; new definitions of death; the euthanasia debate; the rituals of death (religious and secular) and their comparison to the "rituals" of socialized femininity. 2) Theories of sex differences with special consideration of the issue of transsexualism. We will focus on the recent "orgasm" theories of sex differences especially as developed in the work of John Money. We will study transsexualism as an example of testing these theories, doing an analysis of its various causation theories and some autobiographical accounts.

Class will meet twice a week for 1½ hours. Enrollment is by interview with instructor.



## NS 161/261 MATH FOR SCIENTISTS AND SOCIAL SCIENTISTS

Kenneth Hoffman

Traditionally, a semester or year of calculus has been standard mathematical preparation for scientists and quantitatively-minded social scientists. With the ready availability of high-speed computers, however, a number of other tools have become as useful, in a number of cases displacing calculus altogether. It is our feeling that for almost all scientists and social scientists, with the possible exception of physicists and engineers, this course will be of more use than the calculus. We will cover the following topics:

- Computer simulation
- Elementary linear algebra and matrices
- Input-output diagrams
- Linear models
- Quick calculus (basic definitions and ideas; no theory; about two weeks)
- Finite difference methods
- Elementary probability and statistics
- Markov chains

Other topics may be included. The computer will be used throughout the course. No previous programming experience is necessary.

Class will meet three times a week for 1 hour plus weekly problem session.

## NS 168/268 APL AND QUANTITATIVE METHODS (SS, 255)

Michael Sutherland

The course will initially rely heavily on the APL based statistical package ADAPT now running at UPass. Through constant use of this package students will be exposed to the basics of statistical data analysis, e.g., plots of data, t tests, regression and correlation, analysis of variance and analysis of covariance. Log-linear models, factor analysis, canonical correlations and on and on. In each case extensive computer use of one degree of freedom tests. They will also overcome the shock of using a time-sharing computer during this period as there will be extensive exercises that will require going beyond the packaged programs and actually modifying or building new programs. The latter half of the course will expose the students to the more sophisticated (and bizarre) forms of data analysis, e.g., multivariate regression or analysis of variance, log-linear models, factor analysis, canonical correlations and on and on. In each case extensive computer use of one degree of freedom tests. They will also overcome the shock of using a time-sharing computer during this period as there will be extensive exercises that will require going beyond the packaged programs and actually modifying or building new programs. The latter half of the course will expose the students to the more sophisticated (and bizarre) forms of data analysis, e.g., multivariate regression or analysis of variance, log-linear models, factor analysis, canonical correlations and on and on. In each case extensive computer use of one degree of freedom tests. They will also overcome the shock of using a time-sharing computer during this period as there will be extensive exercises that will require going beyond the packaged programs and actually modifying or building new programs.

Many people may wish to participate in only the first part of the course (involving the ADAPT package, intermediate statistics and introductory APL). Feel free to do so.

Class will meet twice a week for 2 hours.



## ASTFC 22 INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS II

Kurtis Godwin

Variable and exploding stars, pulsars, x-ray and radio astronomy, the interstellar medium, galactic structure, external galaxies, quasars, and cosmology. Prerequisites: 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.

Text: Smith and Jacobs, *Introductory Astronomy and Astrophysics*, Van Nostrand, *The Invisible Universe* (recommended).

Class will meet Mondays and Wednesdays from 1:30 to 3:00 plus labs on Thursday at 8:00 P.M. (additional labs possible on other nights for observing) at Hampshire College. This is a Division II course.



## ASTFC 38 OBSERVATIONAL RADIO ASTRONOMY

G. Richard Huguenin (UPass)

An introduction to methods of astronomical radio observation and data reduction. Specific techniques of radio astronomy physics, emission of radiation by accelerated charges in superfluids and plasmas, and pulsar magnetospheres, pulsar electrodynamics, neutron star structure, hydrodynamics of differential rotation in stars, black holes, and gravitational radiation. Prerequisite: ASTFC 43 or permission of instructor.

Class will meet Tuesday and Thursday from 2:30 to 3:45 at the University of Massachusetts. This is a Division II course, requiring instructor permission.

## ASTFC 44 ASTROPHYSICS II--RELATIVISTIC ASTROPHYSICS

George Greenstein (Adherant)

Continuation of ASTFC 43. Stellar implosions and supernovae, degenerate matter in highly evolved stars, neutrino astrophysics, emission of radiation by accelerated charges in superfluids and plasmas, and pulsar magnetospheres, pulsar electrodynamics, neutron star structure, hydrodynamics of differential rotation in stars, black holes, and gravitational radiation. Prerequisite: ASTFC 43 or permission of instructor.

Class will meet Monday and Friday from 1:25 to 3:20 at the University of Massachusetts. This is a Division II course.

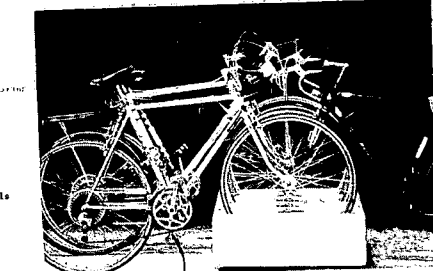
## NS 211 SOLID STATE PHYSICS AND ELECTRONICS

Michael Woolf

This is a Division II course, meant to be appropriate for students with some knowledge of calculus, physics (one semester at the college level) and electronics (Ohm's law, for example).

The elements of the quantum theory of solids will be developed and used to introduce ideas of the energy band structure of semiconductors. Toward the end of the semester, students will perform detailed laboratory measurements on solid state devices such as diodes, bipolar and field-effect transistors.

Class will meet twice a week for 1½ hours.



NS 216 GEOPHYSICS AND GEOCHEMISTRY OF THE OCEANIC CRUST

Beverly Hartline and John Reid

Are there magma chambers under mid-ocean ridges? What are their properties and how do they control (or how are they controlled by) spreading center processes? Is there really a low velocity zone and what constraints might such a zone place on upper mantle temperature and composition? How does the crust cool and evolve as it moves away from the ridge crest?

We'll integrate available geochemical and geophysical data to tackle these important questions and others. A brief overview of the relevant geophysical techniques will be included. Readings will be taken from the current literature, and we will analyze the proposed models critically by paying special attention to how reasonable their physical and chemical assumptions and implications are.

Prerequisites: are introductory chemistry, physics and petrology or instructor permission. Class will meet twice a week for 1 1/2 hours.

NS 234 ORGANIC CHEMISTRY II

Nancy Lowry

This course is a continuation of the first semester course. Emphasis is on the use of instrumental methods in determination of structure of organic compounds.

Class will meet three times a week for one hour plus one two hour lab.



NS 202 AQUATIC ECOLOGY

Charlene Van Raalte, Nancy Grimm\*, and Richard Hurd\*

This is an advanced ecology course intended for those students who already have some familiarity with ecological principles. Our primary objective is to explore the structure and function of aquatic ecosystems through a detailed look at their chemical, physical, and biological components.

We will devote the first half of the semester to the physical and chemical aspects of lakes, streams, and marine systems. During the latter half of the semester we will cover the biological components and begin to put together the pieces of a big picture of aquatic ecosystem structure. Here we'll investigate current and classical ecosystem theories, and hopefully generate some ideas of our own.

The text will be Wetzel's (1975) *Limnology*, supplemented by readings of marine biological and limnological literature. Students are encouraged but not required to enroll in the aquatic ecology lab. Written papers and/or oral presentations will be required for evaluation.

Enrollment is open. Division I students may take the course by instructor permission. Class will meet twice a week for 1 1/2 hours.

\*Nancy Grimm and Richard Hurd are Division III students in Natural Science.

NS 203 AQUATIC ECOLOGY LAB

Charlene Van Raalte, Nancy Grimm\*, and Dick Hurd\*

In this course we will focus on the techniques used in the ecological study of marine and fresh waters. Hydrological, chemical and ecological principles of lakes, streams and of the marine environment will be illustrated in the laboratory and during field trips. Aquatic Ecology (lecture/discussion) is recommended as a supplement to the laboratory course.

The class will meet once a week for an afternoon. Four-five laboratory reports will be required.

\*Nancy Grimm and Dick Hurd are Division III students in Natural Science.

NS 217 ANIMAL PHYSIOLOGY

Albert Woodhull and Fred Hartline

This course will attempt to cover the range of material that would be found in a course in general and comparative physiology at another college, but the approach here will be to get at general principles in the context of reading about current experimental work. Other readings will be used for background. The laboratory will be designed to illustrate integrative in the application of technology to problems of biological measurement; the goal will be to develop a view of measurement as an engineering problem. In practice this will mean that special equipment will be assembled from available apparatus when and where possible. The course will logically break into two halves:

Part I: Animals as Model Humans. This approach will look at ways in which very different animals can be used for experimental illustration of principles common to all animals... what is often called "general" physiology.

Part II: Animals as Adapted Organisms. In the second half of the course we will look at differences between animals that reflect adaptations to special environmental conditions, the subject matter of "comparative" physiology.

Class will meet two mornings a week for 1 1/2 hours, plus one 2 hour afternoon lab per week.

NS 206 BEHAVIOR GENETICS SEMINAR

Raymond Copplinger, Jane Henriques, and Lynn Miller

This course will explore through lecture and discussion that fuzzy boundary between behavior and genetics. We will read and evaluate original research in this rapidly growing field. Though the ultimate goal of this endeavor is to think about the genetics of human behavior we will read a wide variety of literature.

The seminar will meet three times a week for the first five weeks, for two hours each meeting; each student or group of students will work for the next four weeks on projects with students of the faculty; then we will gather together in the last weeks to exchange our insights.

NS 209 BIOLOGY AND MATHEMATICS

Paul Sternberg\* and Kenneth Hoffman

Biologists have investigated and given detailed descriptions of complex biological systems. Yet, often they are unable to do more than describe the changes which they observe. The mechanisms by which these systems change remain elusive. In these instances, mathematical models become important tools. To help gain an understanding of these biological problems, we will focus on a few biological problems, such as the control of cell division and growth, the control of gene expression during development, and the molecular basis for circadian rhythms. We will first try to understand the particular problem in a descriptive sense, by reading original research papers. We may even want to look at some of these problems in the lab. We will then determine if there are mathematical models which describe the type of phenomena we are observing and use if these models aid to our insight of the biological variables involved.

Students interested in this course should feel comfortable dealing with unknowns (x, y, and z) in mathematics. For information before the term see Bethann Friedman or Ken Hoffman.

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

\*Paul Sternberg is a Div. III student in Natural Science. Faculty Supervisor is Kenneth Hoffman.

NS 207 THE PUMP OR THE WELL

Paul Slater

Most of the progress in our agricultural system has resulted from efforts to increase the efficiency of the "pump" rather than with improving or maintaining the "well". In this course we will discuss the latter issue: How can we reduce demands on the well and help to assure a sustained yield over the long term?

We will deal with such topics as: reduced use of petrochemicals; increased use of organic soil amendments (greater utilization of agricultural residues, sewage sludge, etc.); increased use of integrated pest management; appropriate technology; more diversified cropping and animal husbandry; and methods of preserving agricultural land. Emphasis will be placed upon New England's agricultural sector.

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

NS 219 WHO CONTROLS TECHNOLOGY?

(SS 247)

Allan Kraus, Stewart Shapiro

Who controls technology? There are three main schools of thought on this question, which can be summarized as follows:

1. The people control technology. The growth of technology is stimulated by the legitimate demands of people for a higher standard of living, greater personal freedom, and national prestige and power.
2. The capitalists (state or monopoly) control technology. Technological growth is controlled and manipulated by a small elite largely for its own benefit and for the perpetuating its power over the rest of us.
3. No one controls technology. Technological momentum has become so great that it is now beyond our ability to control. The cancerous growth of technology and "technique" into every aspect of our lives is a punishment for the arrogance of believing that we could become the lords and masters of nature.

In this seminar we will read and discuss the writings of some of the most eloquent and persuasive defenders of each of these points of view. The seminar will meet for one hour every week, and all students will be expected to take charge of one week, and all students will be expected to take charge of one week, either singly or in small groups. Division III students may, with the permission of their committee, use this seminar to fulfill their internship requirement.

Enrollment is limited to 20, by permission of instructor. Class will meet once a week for 2 hours.



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, 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 Kreidler, Kuller, Ostberg and Perkins.

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

NS 221 INTRODUCTION TO THE ANALYSIS OF BIOLOGICAL MODELS

Douglas S. Riga

Real biological systems are much too complicated for direct mathematical description. But a real system can often be represented by a simplified model, whose behavior can be analyzed mathematically. In this course, the student will learn how to work with such model systems. A brief review of fundamentals (dimension, checking of equations, causal relationships (dimensional analysis), and the solutions to some of the classical partial differential equations of mathematical physics) will be followed by a step-by-step introduction to biological modeling. Fully illustrated by two examples. In the remainder of the course, the general techniques of modeling will be used to study various biological problems including exponential growth and decay, compartmental analysis, the distribution of radioactive tracers within the body, blood flow, enzyme-substrate and drug-receptor interactions, and kidney function. Throughout the course, realistic homework exercises will be regularly assigned, interacted, and discussed, so that the student can develop a real working knowledge of each topic and technique.

Prerequisite: Two semesters of college calculus, or permission of the instructor. Enrollment is limited to the first 26 meeting the prerequisite who sign up. Class will meet three times a week for 1 hour.

SCHOOL OF SOCIAL SCIENCE

CURRICULUM STATEMENT

Faculty in the School of Social Science, representing a variety of disciplines and interests, are working toward a curriculum that will encourage students to think about interdisciplinary methods and perspectives of social science. The approaches and to develop their concentrations accordingly. The Division I courses are intended as an introduction to the methods and perspectives of social science. They deal with relatively limited topics and afford you opportunities to develop your skills in formulating questions and answers. With the experience gained in one or two such courses you should be able to prepare an acceptable Division I examination. Division II courses are intended for students who have developed a concentration and who are prepared to commit themselves to more intensive and comprehensive study of a subject. They cover more ground and assume your ability to integrate material into your own concentration, and perhaps to take off in new directions appropriate to your own interests.

Division I students will find in this list courses suitable to a range of interests, all designed to offer you some initial understanding of how we frame questions and work toward answers. Among our Division II courses you will find courses appropriate to concentrations in law, women's studies, American social history and politics, Third World nations, education and counseling, social and political theory, and many other possibilities. Division III students with social science interests should find course descriptions carefully and discuss with their advisors course concentration committees all courses of possible usefulness. It is also advisable that you discuss courses with instructors and determine in advance whether or not they will contribute substantially to your concentration.

As a supplement to the brief biographies at the back of this catalog, here are some more personal autobiographical statements by faculty in the school. We hope that you'll find these helpful as a guide to people whose interests and abilities might best match your educational needs.

\*See statement on Law Program, page 18.

**Richard Albert** - My main focus during graduate school in political science was comparative political development in Latin America. I did several studies on the development of political institutions in the Caribbean, especially the Dominican Republic. In the last year of graduate school, I changed my interest to urban politics and did my dissertation on politics and education. I finished my dissertation while a member of the Research Staff of the Urban Institute in Washington, D.C. After leaving the Institute, I continued to come to Hampshire College in September 1971. I continued my interest in questions of urban politics and public policy as the Special Assistant to the Director of the Model Cities Program in Holyoke, Massachusetts, from 1971-1973. The courses I offer relate to these interests, especially to the impact of public policies on the lives of the urban poor.

**Carol Remelgard** - My primary field of study has been Imperialism, and its function in the evolution of capitalism, and the ramifications of imperialism: the economic, political and cultural dimensions of underdevelopment. The geographical focus of this work has been Latin America and Africa, with particular emphasis on the role played by the United States on these continents in the maintenance of colonial and neo-colonial systems.

In the course of examining the options open to countries in the capitalist periphery, I became involved in study of the Cuban Revolution. I have, as well, done a good deal of work on the Russian Revolution, particularly on its development through the 19th century, prior to the taking of power, and on Russian literature, again, particularly on the 19th century.

**Robert Birney** - In addition to continuous teaching interests in theoretical and empirical studies of personality, I have published work on experimental studies in human motivation. My hope is to design studies especially suited to the Hampshire context for conducting personality research.

**Louise Parham** - I am a clinical child psychologist by training, but that tells little about either my current interests or my past history. My undergraduate work was at the University of Minnesota where I majored in psychology (after several false starts in other directions) and minored in humanities. As a graduate student, also at the University of Minnesota, I worked in both the Psychology Department and the Institute of Child Development as well as hanging around the Zoology Department (taking genetics courses). My dissertation on food competition (and other scintillating matters) in mice was successfully defended in 1967 although it was basically indefensible. After a great deal of training and experience "caring" children and a year of teaching psychology at Yale and after that the story goes on and on, mostly in California.

My current interests are in the human life cycle from birth to death, in the interaction of constitutional and experiential factors in influencing people's behavior, in behavior genetics and endocrinology, and in the methods and ethics of research. I am still interested in clinical psychology and research. Although I am not a practicing clinician, I am still interested in the psychology of women. I am a woman, I am no more interested in the psychology of women than in the psychology of men; I am wildly curious about just about anyone.

**Oliver Foulkes** - I came to Hampshire College from a background of work with ACLU and a poverty lawyer. I studied at Southern College in Memphis, University of Glasgow, and Memphis State and Vanderbilt Law Schools. While in private practice in Memphis, I helped organize an Old legal services program for that city. Later I developed mental patient legal representation projects at several institutions in Western Massachusetts. I have had experience in training undergraduate students as I have had experience in the areas of poverty and mental health law. My interests are civil liberties, poverty law, and teaching interdisciplinary social science through field study.

**Penina Glasser** - My major field of interest is United States social history. I especially like the history of radical and reform groups, women's history and contemporary social movements. I also try to think of myself as someone who is "in the moment". I have lived and done research in Chile and Israel. Right now I am writing about the history of American radical pacifists in World War II and contemporary Israeli war resisters.

**Leonard B. Glick** - My interests include general anthropology, culture and personality, ethnicity and nationalism, and anthropology of religion. Although I try to maintain facility with most aspects of social and cultural anthropology, I am especially interested in political and cultural problems in nations comprising two or more major ethnic groups, and in cross-cultural studies of perception, religion, and world view. Since coming to Hampshire I have developed interests in Jewish history and culture and am cooperating with students in introducing courses in this area.

**William Grohmann** - My primary interest is in higher education - including purposes, policies and effects of college and universities; historical and sociological analysis; trying to put things in perspective. I am willing to work on some (non-Hampshire) areas of education study on other levels. Also: technical areas of education study related to colonialism or Micronesia (or Pacific studies) and social issues: some aspects of "human development." I'm willing to discuss proposed individual or group independent study projects.







## SS 156 SOCIAL CONTROL AND DISPUTE SETTLEMENT

Barbara Yngvesson

What do we mean by "law", and what does law do? Law is popularly considered to serve as a mechanism for social control and as a means of settling disputes. What other, perhaps latent, functions does law serve? In this seminar we will focus on some functions of law (for example, manifest functions such as conflict resolution, maintenance of social order, effecting social change, and latent functions such as the creation and maintenance of deviance) with a view to discovering what forms and processes are involved in accomplishing these "law jobs". Very informal as well as more structured forms of law will be investigated, using data from our own and other societies. The dominant perspective in the course will be anthropological, but sources from the fields of sociology, law and the humanities will also be used.

The course will be organized around a series (three or four) of field and library research problems in which class members will participate as individuals or as teams. Class meetings will be devoted to providing the necessary background and framework for approaching the problems, and to a discussion and coordination of the results and implications of the research.

The class will meet twice a week for 1½ hours each meeting. Enrollment is limited to 20.

## SS 157 WOMEN AND REFORM: AN HISTORICAL VIEW

Pamina Glazer and Miriam Slater

This course focuses on women as agents of social change and reform in the late 19th and early 20th centuries. We are interested in examining reform movements led by women and how and why they differed from movements in which men were the primary leaders. We will attempt to assess the impact of reform activity not only on those groups who were the beneficiaries of these changes but also on the lives of the reformers.

We shall begin with the theoretical considerations which bear on the motivation of reform activity generally, and then review the relevant historical background which forms the context of examination of the major institutions and structures which are causally related to the nature of reform and to the public and personal style of its leadership. Toward this end we will examine the following topics:

- I. Changes in attitudes toward education and the narrowing of access to specialized training.
- II. Professionalization: the increase in specialization, quantification, and exclusivity; the carving out of parallel professional routes for women.
- III. Friendship: the nature of friendship patterns and its relationship to leadership roles among women.
- IV. Case Studies: three models of reform -- Jane Addams, Emma Goldman, Margaret Sanger.

Two papers will be required. The course will meet twice a week for 1½ hours each session.

Enrollment is limited to 35.

## SS 184 DECENTRALISM: THE EXPLORATION OF COMMUNITY AND WORK ENVIRONMENTS

Myrna Breitbart and Nasta King\*

Concentrations of power reflected in political and economic centralization contribute to high levels of alienation, inefficiency, and exploitation. In this course we will consider how decentralization affects people directly in their personal and working lives. We will also explore alternative modes of decentralization based largely on the ideas of social anarchism. Anarchism, as a broad philosophy of human development, will be discussed in the context of contemporary movements for decentralization, alternative technology, community and workers' control, ecology, and women's liberation. An important aim will be to examine how theoretical notions of anarchist-decentralism can be applied to promote radical social change. These topics will be examined through written materials, personal experience, and observation of current neighborhood and workplace organization.

In addition to considering alternative modes of social and political organization, this course will explore the process of decentralism -- that is, the means by which individuals (and communities) begin to explore, comprehend, and gain control over the crucial social and economic forces affecting their lives. Key readings will include works by Kropotkin, Goodman, Bookchin, Le Guin, Priere, Sennett and Cobb, Merkwich, Vanek, Gores, etc. This course will meet twice a week for 1½ hours each session.

\*Nasta King is co-assistant master of Merrill House.

## SS 198 THE FORGOTTEN PEOPLE: LAW AND THE STATE MENTAL INSTITUTION

Oliver Fowlkes

Thomas Szasz has called residents of state mental institutions "the forgotten people". The following questions will be raised in the context of this course: why do mental institutions exist and whose interests do they serve? What is the relationship between law and psychiatry? Does a patient have a right to treatment or to refuse treatment? What impact will new legislation and patients' rights movement have on residents in total institutions? To what extent is law effective in improving treatment or fostering de-institutionalization?

The course will examine the above issues with the purpose of illuminating supporting class readings and projects with field experience. Students will look at literature by Szasz, Goffman, Rothman, Scheff, Mechanic and Rosenhan. Leading constitutional issues will be discussed along with actual cases arising in local mental health institutions.

The aim of the course is to acquaint students with issues involved in mental institutionalization and to consider possible alternatives. It is also focused on developing "tools" for eventual participation in more extensive field work and will utilize the Massachusetts mental health law as a basis.

In response to inquiries from what appears to be a large number of students in need of "directed projects" leading to Division I Social Science exams, I will hold a workshop as part of this course in which various tasks and exercises may be translated into exams. Students with these needs are urged to enroll.

The course will meet at least twice a week for one and a half hours each. In addition each student will be expected to do some additional time to class preparation and field observation. A fair amount of reading will be expected in addition to writing three papers during the term on topics of interest encountered in the course. Enrollment is limited to 25.

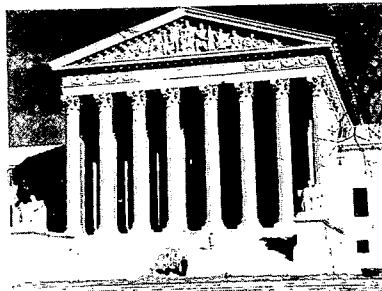
## SS 207 RESEARCH SEMINAR: PROFESSIONALS AND COMPLEX ORGANIZATIONS

Richard Albert

One of the major developments in the world of work in the 20th century has been the emergence of the prestige and power of the professions. Occupations classified as professions have proliferated and the power and influence of the classic professions, such as medicine, law, and college teaching, has grown immensely. These developments have occurred at the same time that complex organizations have grown in their importance as sources of jobs and as influences over our daily lives. In the last few decades, the growth of the professions and that of complex organizations have overlapped and more and more professions are practiced in organizational settings.

The purpose of this seminar is to explore the interrelationships between professional work and complex organizations and develop a research design to carry out a study of those interrelationships. We will deal with general issues about professions and complex organizations, but will focus on a comparison between the academic and medical professions.

The seminar is limited to ten Division II students with sufficient background to develop and carry out a research project. The course will meet once a week for two hours.



## SS 209 CRIME AND PUNISHMENT

Oliver Fowlkes and Lester Masor

Issues of crime and punishment are central in modern society. Much of our daily news, our politics, and our major forms of entertainment are given to accounts of some aspect of the criminal law and the processes of its administration. This course will review each of the principal aspects of the law and institutions involved with crime and punishment with a view toward developing an understanding of both their specific character and their general role in contemporary society.

Among the matters we will consider are such institutions as the police, the criminal courts, prosecution and defense lawyers, probation, imprisonment and parole; the main features of the substantive and procedural criminal law and proposals for change in them, and specific controversies over the uses of the criminal law in relation to economic power, against certain lifestyles, and concerning methods used by police agencies in prisons. Although our emphasis will be strongly upon the contemporary United States, we will try to place our study in historical and comparative perspective.

The course will meet twice a week for 1½ hours. Enrollment is unlimited.

## SS 210 INTRODUCTORY ECONOMICS

Frederick Weaver

An introduction to economic analysis, covering the principles of both major areas of conventional economic theory (i.e., micro and macro); serves as the needed prerequisite to virtually all advanced economic courses and itself contributes to a wide variety of concentration.

The text is R. Lipsey and P. Steiner, *Economics* and the accompanying workbook; we will meet for two 2 hour classes per week.

Enrollment is unlimited. Five-College grades will not be given.

## SS 215 CAPITALISM AND EMPIRE: SEMESTER II (THE 19th AND 20th CENTURIES)

History Group

(This course will not be offered in 1977-78)

The second semester of this course will focus on the class structure of advanced capitalist society, the development of industrial and monopolistic capitalism, the political and social implications of this development, and the growth of colonialism and neo-colonialism. The course will include European, U.S. and Third World developments, concentrating on the rise of the American empire and contradictions in the advanced capitalist world.

The course is not a narrative "survey" course. Our interest is in the development of modern institutions, questions of political economy, social structure, power, colonialism, imperialism and revolution. Its purpose is to give Division II students sufficient historical and conceptual knowledge to provide the basis for a social science concentration. The course will be given by a group of faculty from a variety of disciplines (History, Law, Political Science, Economics) concerned with historical questions and an historical approach to the development of society. By working as a team, by focusing on several key events, certain essential books and debates, and by providing some narrative history, we can cover a large period of time and still provide a basic interpretation of the history leading to the development of contemporary society.

In association with these lectures, we are offering a series of mini-seminars which are designed to focus on particular questions in greater depth. These seminars will also offer a forum for further discussion of theses and questions treated in the lectures. We are encouraging students who are enrolled in the lecture course to plan on taking one or more of these seminars according to individual interest. The seminars are open only to students enrolled in the Capitalism and Empire course in this or previous terms.

## SS 220 HUMAN MOTIVATION

Robert Birney

The reading will concentrate on the literature of motive measurement and function. Following a brief historical review of motive theory, studies of experimental work by Atkinson, McClelland, Winter, and Zuckerman will be read. Students will be asked to select papers from current research for class presentation or term reports.

The course will meet twice a week for two hours each session. Enrollment is unlimited.

## SS 224 BLACK AMERICANS IN A CAPITALIST ECONOMY

Lloyd Hogen

This is the second term of a course which is an ambitious attempt to synthesize a vast body of economic knowledge in terms of a significantly large and identifiable group in the society. The American economy is used as the setting, and black Americans are selected as the group for special study. The aim is to develop a set of tools, methods, concepts, and approaches which may be generalized to other important groups in the society. For example, the course should give some clue about the way in which the economy impinges on different ethnic groups, women, poor people, regional enclaves, etc. The course is organized around the operation of five sets of economic institutions -- process of consumption, process of production, labor market, consumer commodity market, and the process of capital accumulation. Each set of institutions is analyzed from the standpoint of competing methodologies -- neo-classical, radical, conservative, etc. General understandings and conclusions are derived. In turn these are specialized to the specific impact on the black population in the U.S. Great stress is placed throughout on data sources as well as on empirically derived parameters based on the existing theories and conceptions. The course is developed over two terms. The first term concentrates on (a) the historical development of capitalism in the world and its origin here in the U.S., (b) the process of consumption, (c) the process of production, and (d) an introduction to market theory. The second term is devoted to a detailed analysis of the labor market, the consumer commodity market, and the process of capital accumulation. A very extensive set of readings and a research paper are required.

The course will meet twice a week for 1½ hours each session. Enrollment is unlimited.

## SS 229 DEVELOPMENT AND UNDERDEVELOPMENT IN LATIN AMERICA

Frederick Weaver

Why is there so little industrial dynamism among the national economies of Latin America? The populations of the larger nations in the region are relatively literate, urbanized, and integrated into market relationships, but there is very little of the spontaneous, self-sustaining industrial growth one might expect from reading in conventional or Marxist economic theory. The purpose of this course will be to explore the logical and empirical properties of different explanations which have been proposed for Latin American underdevelopment. We will begin with the works of S. and B. Stein, C. Furtado, A. G. Frank, and S. Bally for some general backgrounds and interpretations before turning to more specific country studies. In our effort to find plausible explanations, we will also draw on works focusing on other Third World areas as well as on Europe and the U.S. which might be applicable to Latin America in whole or in part.

The class will meet for two 1½ hour sessions per week, and in addition to the reading and discussions, it will involve some class presentations and a concise research paper. Students with at least an introductory level background in economics, social theory, or history (especially of Latin America and Europe) will be at a disadvantage.

Enrollment is unlimited.

## SS 233 EUROPE WEST AND EAST: CONFRONTATION OR CONVERGENCE?

Ruth C. Lawson\*

This seminar will enable students to examine a series of recent and contemporary aspects of the increasing interaction between West and East European states. It will also be attentive to the assumptions, perceptions, objectives and claims of the United States and the Soviet Union concerning the area.

Topics to be considered individually or in groups may be selected according to students' preparation and interests from among the following: Human Rights (individual contacts across frontiers, dissemination of information, cultural and educational exchanges, the implications of disinformation); Political-Military Relations (the NATO and Warsaw Pact systems compared and contrasted; the erosion of alliance cohesion; negotiations concerning mutual force reductions in Central Europe; the control of strategic and other weapons, Berlin; the issue of all-European security arrangements); Political-Economic Relations (the European Community and COMECON; trade agreements and relations, the issue of most favored nation treatment, the extension of government credits, cooperation in agriculture and transportation); Scientific-Technological Cooperation. Students may wish to add other topics.

Meeting times: 1 - 3:00 p.m., Thursday.

Enrollment: 20.

\*Ruth C. Lawson is an Emeritus Professor.

## 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, Conant, Henry, Rogers, Goodman, Dennison, MacLure, Holt, and others to the mainstream of American educational philosophy. Our concern will be with the social 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 philosophies and social realities.

Enrollment is unlimited. The course will meet twice a week for 1½ hours each session.

## SS 247 WHO CONTROLS TECHNOLOGY?

(HS 219)

Allan Kras and Stewart Shapiro

Who controls technology? There are three main schools of thought on this question, which can be summarized as follows:

1. The people control technology. The growth of technology is stimulated by the legitimate demands of people for a higher standard of living, greater personal freedom, and national prestige and power.
2. The capitalists (state or monopoly) control technology. Technological growth is controlled and manipulated by a small elite largely for its own benefit and for the perpetuation of its power over the rest of us.
3. No-one controls technology. Technological momentum has become so great that it is now beyond our ability to control. The cancerous growth of technology and "technique" into every aspect of our lives is our punishment for the arrogance of believing that we could become the lords and masters of nature.

In this seminar we will read and discuss the writings of some of the most eloquent and persuasive defenders of each of these points of view. The seminar will meet for one afternoon each week, and all students will be expected to take charge of one seminar, either singly or in small groups. This course may also be used as a basis for the seminar for interested Division III students with permission of their committee.

Enrollment is limited to 20.



SS 253 PERSONALITY, MORAL DEVELOPMENT AND SOCIAL LIFE  
Margaret Cerullo and Maureen Mahoney

Personality development and socialization can be seen as two ways of conceptualizing the same process. Theories of personality development, however, have traditionally been the domain of psychology, whereas socialization has been the concern of sociologists. These two perspectives have led psychologists and sociologists to formulate different kinds of questions, but there are several points of intersection. These points emerge in theories that examine the nature of motivation in relation to developing social behavior. Such theories raise the questions of moral and cognitive development on the one hand, and the importance of social and peer relations on the other. The process of socialization is then conceived partially as one of learning, and learning, in turn, is seen as participation in social interaction. The sociological rather than individualistic attitude toward personality development leads us to theories of society that also analyze cognitive processes.

We shall examine the interrelation of psychological and sociological theories as they address these issues through the work of Freud, Rousseau, G.H. Mead, Dewey, Durkheim, Parsons, Sullivan, Piaget, and Marcuse. The following are examples of questions that will be considered:

1. How does the theorist define the relationship between innate motivation and learned values? What are the significant elements in socialization? What role does rationality play?
2. How do social cohesion and social order come into being? Is social conflict inevitable? Are individuals necessarily and naturally brought into opposition with social order? What is self-interest?
3. Why do certain theories give such importance to communication and meaning in the creation of social order, while other theories attribute more importance to self-preservation?

The interdisciplinary focus will be represented by the instructors as well as the subject matter -- Margaret Cerullo is a sociologist and Maureen Mahoney is a developmental psychologist.

Enrollment is unlimited. The course will meet twice a week for two hours each session.



SS 255 APL AND QUANTITATIVE METHODS  
(SS 268) Michael Sutherland

The course will initially rely heavily on the APL based statistical package ADAP, now running at U. Mass. Through constant use of this package students will be exposed to the basics of statistical data analysis e.g., plots of data, t tests, regression and correlation analysis of variance and the use of one degree of freedom contrasts. They will also overcome the shock of using a time-sharing computer during this period as there will be extensive experience with the package going beyond the packaged program and actually modifying or building new programs. The latter half of the course will expose the students to the more sophisticated (and bizarre) forms of data analysis e.g., multivariate regression or analysis of variance, log-linear models, factor analysis, canonical correlations and on and on. In each case extensive data analysis and APL programming will be expected of the students. The specific topics to be covered are yet to be determined -- but contingency table analysis using log-linear models will be there!

Many people may wish to participate in only the first part of the course involving the ADAP package, intermediate statistics and introductory APL. Feel free to do so.

Enrollment is unlimited. The course will meet twice a week for two hours each session.

SS 259 UNDERSTANDING AND EXPLANATION  
Barbara Yngvesson

In what ways can we seek (1) to understand and (2) to explain the riddles of human culture and behavior? In this course we will examine the attempts of western anthropologists, historians and others to make sense of beliefs and practices which defy western notions of rationality and of the interconnectiveness of events. Our aim will be to participate in a working knowledge of some of the principal explanatory frameworks (positivist and logical empiricist, cultural materialist, phenomenologist, French structuralist, critical theories) used by social scientists today, to consider the sources of these approaches in the intellectual traditions of 18th and 19th century France and Germany, and to evaluate their usefulness as tools for understanding. In addition we will seek to define ethical and intellectual problems involved in using western notions of rationality, functional, etc. for understanding and evaluating non-western societies and cultures. Works to be used in the course include Evans-Pritchard's *Black Magic*, Boyer and Hassenbaum's and Trevor-Roper's studies of witchcraft; several of Clifford Geertz's essays on various aspects of Balinese society and culture (with particular attention to his analyses of Balinese concepts of person and of time); and Levi-Strauss' *The Savage Mind*.

The class will meet once a week for two hours. Enrollment is unlimited.

SS 261 THE STRUCTURE OF ECONOMIC THEORIES  
Stanley Warner

The intent of this course is, in the first instance, to develop a firm grounding in a number of economic theories -- theories which address a wide range of economic issues. In the process we will work with the comparative evaluation of alternative forms of economic reasoning, addressing both the formal structure of these theories and the question of what constitutes confirming evidence. Among the theories we will cover are:

- Theories of inflation as a way of introducing some basic questions about how economic theories are constructed;
- Classical and Marxian theories of rent, surplus, and income allocation;
- Two-sector vs. multi-sector models with an emphasis on both input-output and the spatial location of economic activity;
- Economic models of the U.S. economy with particular focus on the short-run long-term annual model and the issue of how structural changes are "foreseen" by historically derived relationships;
- Social class as a category of economic analysis, with an emphasis on what is included in a variable by definition and what is left to be explained.

The course assumes a curiosity about the conceptual processes which lead to very different economic theories and a willingness to use library reserve articles as the primary reading. Prior work in economics would be helpful but is not required; a facility for thinking in algebraic and geometric terms is the more general prerequisite.

The course will meet twice weekly in 1 1/2 hour sessions. Enrollment is limited to 18.

SS 267 SOCIAL THEORY: MARXISM AND PSYCHOANALYSIS  
Joan Landes

Marxism and psychoanalysis are two major traditions in twentieth century social and political thought. The first is said to refer to political economic matters, the second to individual psychological life. Within this course we will move beyond such categorization to explore the psychological implications of Marxist theory and the political dimension of Freud's thought. We will begin with an examination of the writings of Marx and Freud, moving on to later writers who attempt to bridge the two traditions. In particular, we will focus on the contributions of German Freud-Marxists, critical theorists and feminists. Wilhelm Reich, Herbert Marcuse, Max Horkheimer, Juliet Mitchell, Russell Jacoby and others.

We will address the methodological dimension of each theory. Substantively, we will focus on Freud's dynamic conception of the mind and Marx's theory of alienation. Major topics to be considered include: the theory of class consciousness; sexual repression and political domination; the "baking" of female sexuality; authority relations in personal life; and the constitution of subjectivity in the modern world.

Students are urged to provide evidence of background readings in both traditions by way of courses or independent studies by consulting with the instructor during preregistration period. A list of recommended readings to be completed during January term will be provided for those who wish to enroll in the course but do not have the suggested preparation. Limit: 20 students. By permission of the instructor. Five College students are welcome. The course will meet once a week for two hours.

SS 275 STATE AND SOCIETY  
Margaret Cerullo, Frank Holmquist, Joan Landes and Lester Mazor

This course will first examine past and present theories of the capitalist state and its relation to society. We will also study the following specific topics and their relationship to the theories: the nature of the contemporary American class structure; the rise and contemporary nature of the American welfare state; the creation of American ideology and consciousness and its relation to the state; the role and function of major American political institutions, including the presidency, congress, parties, courts, elections, the military, and the state bureaucracy; the current urban crisis; the tendency toward the "corporate" model in American politics; and finally an examination of strategies for fundamental change.

Some likely readings will include selections from: Hegel, Marx, Gramsci, Weber, MacPherson, Poulantzas, Miliband, Laclau and Offe; and books such as: Jürgen Habermas, *The Legitimation Crisis*; O'Connor, *The Fiscal Crisis of the State*; Douglas Dowd, *The Twisted Dream*; Ralph Miliband, *The State and Capitalist Society*; James Weinstein, *The Corporate Ideal in the Liberal State*; Frank Jakubowski, *Ideology and Superstructure in Historical Materialism*.

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

SS 276 COMPARATIVE SOCIALIST DEVELOPMENT  
Carol Bengelendorf and Frank Holmquist

The wide variety of socialist development experience will be explored as well as what is common to all. The focus will be upon the historical framework, class structure, and political and economic organization. We will examine the various development strategies pursued, performances obtained, and quality of life enjoyed.

We will study the Soviet Union, China, and Cuba in some detail. While we intend to approach these societies from a broadly comparative perspective, we will also explore in depth certain topics that have a special bearing on each society such as the extensive economic debates in the Soviet Union in the 1920s; the Cultural Revolution in China, and the process of institutionalizing new political structures since 1970 in Cuba.

The topics to be discussed within a comparative framework will include: the background and nature of each revolutionary situation; the nature of class structures before and after the Revolution; attempts to create new political institutions appropriate to the evolving societies; the nature and degree of work-place, local and national mass participation; the relation between agriculture and industry in development; the choice between peasant small holding, state farm, and fully collective organization in agriculture; planning and marketing structures; the roles of women and intellectuals; and overall theories of the process of transition from capitalism to socialism.

The course will meet twice a week for 1 1/2 hours each session. Enrollment: consent of instructors.

SS 280 THE MANIPULATED ENVIRONMENT: A GEOGRAPHIC PERSPECTIVE ON SOCIAL PROBLEMS  
Myrna Breitbart

Remember that fourth grade geography course which "did so much to mold your character" -- the course which posed such earth-shaking questions as "Where do our bananas come from?" or "What is the capital city of Idaho?" In this course, the notion of geography as "resource inventory" and map-making will be laid to rest. Spatial analysis will be used instead to demystify many of the social and economic contradictions of capitalism and to pose new questions: How do human relations affect the use of an environment? What kinds of attitudes do capitalist and socialist modes of production engender toward the environment? How was the discipline of geography employed (in the early years of capitalist development) to promote imperialist interests in Western Europe? What are the spatial dialectics of imperialism -- the relationships between centers and peripheries of economic development? How do the contradictions of capitalism (as reflected in spatial organization) affect people in their living environments? In what geographic context is capital most effectively accumulated? What is the role of spatial planning under capitalism? What would a Marxist or Anarchist "landscape" look like?

Radical geography is a study of the quality of life and the human experience of space. Production and reproduction of the material basis of life occurs within a particular kind of environment, generating a particular use and organization of resources. In this course, we will examine the built environment of capitalism to determine some of the interconnections between political economy and spatial organization (e.g., the movement of commodities and people, growth of urban centers, land use, concentration of economic activity, etc.). Specific topics to be covered include, housing and class struggle, imperialism and geopolitics, inequality, poverty and environment, regional development and underdevelopment, access to social services, urban planning, etc.

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

SS 295 SEPARATION AND LOSS: THEORETICAL AND CLINICAL PERSPECTIVES  
Eva M. Brown

We will look at the processes of separation and loss and their role in normal and abnormal growth and development.

Theoretical readings will cover source material of Freud, Sullivan, Winnicott, Guntrip and Bowlby, with exposure to some of their clinical case material as well.

Students will be encouraged to apply theory to practice and those students involved in a clinical practice now or in the past will be given preference in enrollment.

The seminar will meet once a week (Wednesdays 10-12 - flexible) and will aim to relate theoretical material to clinical issues. Meetings will take the form of discussions, presentation of case material, lectures on request....

Class limit: 12 students. Interview requested -- please bring your resume or some material from your Central Records file.

For further information call Jeanne Lapan, ext. 568, and leave a message. Eva Brown's office is located in Franklin Patterson Hall 65.

#### WORKSHOP: CONVERSATIONAL COMPUTER

Charles Welyts

Computers can be used to store large amounts of information. The stored information can be from any field of interest -- history, sociology, art, architecture, economics, etc.. This information is only useful to us if we can easily request any specific data that we want from the computer. Some science fiction such as Star Trek and Star Wars present computers that respond beautifully to spoken requests for information:

Captain Kirk - "Where is the Klingon third fleet."

Computer - "Alpha Centauri, first quadrant, fourth sector."

Unfortunately, at present it is not possible to converse with the computer in this way.

You will learn a written language for use in asking questions of a computer. This language is designed for use by people with no knowledge of computers. This type of language is called a query language and is used to retrieve information from a computer.

The purpose of this course is twofold:

1. The query language will illustrate the use of computers as a tool you can apply to your own field of interest.
2. Your reaction to the language will aid in the development of a query language.

The approach taken will be much the same as that of a course in, say, conversational French. You will learn how to converse with the computer without having to know the details of how a computer works. Enrollment is unlimited. The course will meet on MWF from 9:30-10:30 for a period of about five weeks.

\*Charles Welyts is a Ph.D. candidate in the Computer and Information Science Department at the University of Massachusetts.



## DIVISION III INTEGRATIVE SEMINARS

### THE ECONOMICS OF INTIMACY IN 302

#### ATHENS IN 305

#### TRANSITIONS IN 310

#### WOMEN IN THE ARTS IN 314

#### MUSEUM STUDIES IN 317

#### ISSUES IN ENVIRONMENTAL STUDIES IN 322

#### IT'S ABOUT TIME IN 328

#### PERSPECTIVES ON ADULT DEVELOPMENT IN 333

#### LOGIC OF SOCIAL SCIENCE ANALYSIS IN 335

#### INTEGRATED ECONOMIC THEORY IN 340

#### WOMEN AND LANGUAGE IN 343

#### SYMBOLISM IN 347

### IN 302 THE ECONOMICS OF INTIMACY

Jill Lewis

In this seminar we will discuss and explore, via readings or acquired knowledge each of us has from different disciplines, connections in the field of human experience affected by western culture and capitalism around the function of romantic love as an ideological determinant of patriarchal capitalism. The central questions discussed will be concerning the relationship of the ideological to the economic, of reproduction to production, of monogamy to profit, of emotion to labor. The context will be an exploration of the relationship between patriarchy and capitalism.

We will discuss—among other things—the family, monogamy, the housewife function, the ideology of relationships, marriage and sexuality, fetishism, penetration, commodity mentality, female labor under capitalism, conscientization, abortion and the state, monopoly capitalism and consciousness control, imperialism and sadism.

We will question how capitalist patriarchy necessitates and actively generates modes of behavior which reinforce economic and sexual exploitation. While discussing the historical, economic and cultural factors of patriarchal capitalism, the seminar will involve a political confrontation with our own attitudes and emotional structures in our lives shaped within the context of these oppressive forces.

A reading list is available in the Humanities and Arts Office (EDH-12). Students should try to read at least half of the books before Spring Term begins.

The seminar will meet once a week for a three-hour session, including a pot luck meal. Enrollment by interview only.

#### IN 305 ATHENS

Robert Neagher

To integrate is not to mix or to cross or to confuse; in fact, to integrate is itself a misnomer. For what is integral is already of itself one and pure and whole—a source and a fullness to be discovered rather than assumed. The concern for integration is thus the concern to disclose and to dwell in a moment and in a place in which seemingly disparate energies and aspirations and designs cohere. The moment of intellect and imagination and history that is ancient Athens seems indeed to have been and to remain such a point of origin and fullness. Each member of this seminar will trace a path of return from a particular contemporary concern or discipline to its Greek predecessor. Physicists may then find themselves in discussion with Democritus, pre-medical students with Hippocrates, while Greek poetry or art or dance or drama or religion will engage other students with each of these interests. The emphasis in each case will be upon original sources which will enable students to discuss and to argue and to explore their own central concerns in the company of ancient Greek counterparts as well as in the somewhat hellenized company of fellow Division III students.

To qualify for this seminar, each interested Division III student must submit a brief statement of interest to Robert Neagher (Warner House 6) by Monday, November 21, indicating the title and scope of his/her Division III independent study project and the specific area(s) of interest relating to this seminar. Students accepted to the seminar will then be notified so that students might get underway before the second term in exploring the classical sources bearing on their own particular questions and concerns. The hope is that together the members of the seminar will explore with some thoroughness each of the essential dimensions of Athenian life in its own interrelatedness and in relation to our own life and thought. "Future ages will wonder at us," said Pachelbel of his native Athens, "as the present age wonders at us now." Perhaps it is the truth of these words and of this wonder which may be thought of as a central and shared hope for this seminar.

Meeting times: TBA.

#### IN 310 TRANSITIONS

John Boettiger and David Smith

"We come to something without knowing why." —Theodore Roethke

This integrative seminar is intended to explore the implications in literature, psychology, and art—and for ourselves—of the symbolism of transitions and boundaries.

At the beginning of the semester discussions will derive from readings in literature and psychology—for example, Robert Frost, Virginia Woolf, Robert Coles, Thomas Cottle. Subsequently, the material of the course should be suggested by the theme as it informs the lives and works of the individual participants. "Transitions" struck us as a particularly appropriate theme for Division III students and for integration.

The seminar will meet once a week for supper and conversation at the Boettiger and Smith houses, beginning at 6:00 and ending around 10:00 in the evening on Thursdays.

Enrollment is limited to 10 students. Selection will be by interview. Please get in touch with John Boettiger or David Smith before the end of the fall term.

### IN 314 WOMEN IN THE ARTS

Sally Kaplan\* and Sally Allen

This seminar will examine the role of women in a wide variety of fields of art: visual arts, dance, writing, theatre. We will read works by and about women artists, look at the history of women in art, and bring in guest speakers who can speak to this experience. Far more, the seminar will provide a supportive atmosphere for Division III students to present their own art work and performance. Much of the format of the course will depend on the particular interests of the students who decide to participate.

Meeting times: TBA.

\*Sally Kaplan is a Division III student concentrating in dance.

### IN 317 MUSEUM STUDIES

Van Halsey and Channing Harris\*

Museums today are pursuing a greater variety of purposes than ever before, and as their roles become more complex, so too does the range of skills necessary for their success: conservation, education, graphics, design, administration, public relations, etc. This seminar will provide a focus for investigating these concerns, through presentations by outside speakers, visits to a variety of museums, and opportunities to work on projects (such as a museum exhibit). Furthermore, it is hoped that students having expertise in specific areas will share it. (Students planning the seminar have already expressed interest in restoration, display techniques, and grant application writings.)

The class will meet once a week for two hours with occasional field trips running later.

\*Channing Harris is a Division III student.

### IN 322 ISSUES IN ENVIRONMENTAL STUDIES

Repha N. Lutes

This seminar will examine a number of issues which are of a controversial nature, and which cross the traditional boundaries between the natural sciences, social sciences, and humanities. In a number of cases, our discussions will focus upon a key essay and the literature which was published in response. For example, we will discuss Lynn White, Jr.'s, "The Historical Roots of Our Ecologic Crisis," in which he argued that the Judeo-Christian tradition bears a large responsibility for our environmental problems; and Garrett Hardin's, "Living with the Lifeboat," in which he proposes that the earth should not be viewed as a spaceship, but as a lifeboat, and that we should be careful who among the Third World nations we allow aboard.

We can also examine, as time and group interest permit, the question of: Should non-human objects be granted legal rights? Is small necessarily beautiful? To what extent can ecology tell us how we ought to interact with our environment? How much should we alter nature?

There are no clear and universally accepted answers to these questions. This seminar will examine the debates associated with them and make its own contribution. The students will attempt to reach their own, informed conclusions and prepare position papers. The papers will be shared with the group, discussed, and probably revised.

These issues can be approached from a variety of points of view and disciplines. Students from all of the Schools are encouraged to join and contribute their own perspectives. Faculty members from the four Schools, and members 12 people outside of the College will be invited to participate in a number of our meetings.

Enrollment will be limited to 15, on a first come basis. Meeting times: TBA.

### IN 328 IT'S ABOUT TIME

Kurtis Gordon and Christopher Witherpoon

In the first few meetings of the seminar, the instructors will outline some of the ways in which physicists and philosophers have understood (or tried to understand) time. For the remainder of the term, the seminar will delve more deeply into questions raised by the interests of the seminar members—including, perhaps, some raised during the introductory sessions.

A tentative partial reading list includes: P.C.W. Davies' *Space and Time in the Modern World*; J. D. Barrow's *Time and Space*; R.W. Gale's *The Philosophy of Time*; and B.C. van Fraassen's *An Introduction to the Philosophy of Science*.

Students interested in participating in this seminar should contact one of the instructors, so that we may get (and distribute to the participants) a timely idea of the range of fields to be represented. We do not expect to give grades to 5-college students.

Meeting times: TBA.

### IN 333 PERSPECTIVES ON ADULT DEVELOPMENT

Louise Farnham

There has been little question of the importance of understanding the development of the infant, the child, and the adolescent; much empirical research and theory in the social sciences has concerned these age groups. Until recently, however, the lives of people older than college students have not been the subject of social scientists' investigations (except for the elderly), although the entire human life cycle has inspired literature and art and can be studied in biography and autobiography. Social scientists' interests have been shifting and, as a result, more theory and more data have become available to facilitate the study of adult development from social science perspectives.

This seminar may be based upon work from some or all of the following: the social sciences, drama, literature, art, biography and autobiography, and human biology. The syllabus will be determined in large part by the seminar members, who will each be expected to present a seminar report and lead a discussion dealing with a relevant topic. For the first few weeks of the term, members of the seminar will read and discuss material chosen by Louise to provide an overview of the topic. Ideally, the seminar members' presentations will be related to their Division III project and will reflect a variety of approaches to the understanding of adult life.

The seminar will be strictly limited to Division III students, and to 12 members of the seminar who are interested. Selection will be made on the basis of an interview.

The class will meet once each week for two hours with extra meetings as necessary to permit student presentations.

### IN 335 LOGIC OF SOCIAL SCIENCE ANALYSIS

Barbara Linden and 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 (such as Karl Popper's *The Structure of Scientific Inquiry*) 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.

There will be two seven-week sessions, six students in each, permission of instructors required. The course will meet once a week for two hours.

### IN 340 INTEGRATED ECONOMIC THEORY

Daniel Livingston\*, Philip Trauer\* and Stanley Warner, Faculty Supervisor

Since the formulation of the Marxian critique of Political Economy there has existed a tension between two fundamentally different approaches to economic theory. The Marxian approach is at its heart socio-theoretical, focusing on economic behavior as a reflection of underlying social relationships. The Classical and Neo-Classical approaches on the other hand model themselves on the methodology of the Natural Sciences, seeking to ground theory in a concept of natural law. The conflict between these two approaches to economic behavior has implications that extend far beyond economics itself pervading nearly the entire spectrum of social science. We shall attempt to focus on this conflict by using a reading/discussion format which considers the classical authors in historical context.

This seminar will be divided into two parts, the first extending from Adam Smith through Ricardo and Marx to Marshall. In the second part we will consider the same tension as it has existed in the 20th century. Each part will extend for one semester in the 1977/78 academic year.

We encourage anyone interested in taking the course to talk to one of the two discussion leaders; prerequisites will be secondary to an interest in and commitment to the seminar. The course will meet once a week for three hours. Enrollment is unlimited.

\*Daniel Livingston and Philip Trauer are Division III Hampshire College students.

### IN 347 SYMBOLISM

James Miller

Human beings are, inescapably, users of symbolic forms. In addition to being users, some of us are also analysts of symbols. We include linguists and communications students (theorists and video producers alike), cultural anthropologists, epistemologists, sociologists of knowledge, artists, students of literature, and filmmakers. We make it our business to make sense of different aspects of the symbolic environment, just as natural scientists plumb the physical environment.

It is the purpose of this integrative seminar to bring together people who investigate a common subject—symbols—and do so from a variety of perspectives. We will all read Berger and Luckmann's *The Social Construction of Reality*, and maybe one or two other short works. Each person will select favorite pieces from his/her area for the rest of us to share.

A basic question to be addressed is: To what extent are people users of (and/or) symbolic forms in their everyday lives? Can we, as scientists and creative artists, make these forms more apparent, and more consciously manipulable, to others?

The seminar will meet once a evening a week, 7:30-10:00, day to be announced.

Enrollment limit: 10, with permission of instructor after first class meeting.

### IN 343 WOMEN AND LANGUAGE

Nancy Friesberg and Emily Pearl\*

Dear Emily:

I know that the tape of our conversation about what's going to be in the course is supposed to be the course description and that tape is on reserve in the library, but I thought I would write a few words about what I think the integrative questions are for the class to consider.

We've already touched on the language related questions in which we see women as the pivotal factor: intonation, language change, psychology, men's words vs. women's words in language? small group interaction (turn-taking, interrupting behavior, women's voices in literature. Maybe a way to state the larger question is to ask: Can we find differences in the way women use language in English? In every language? Is there something about women's social status or behavior which implies language differences? Is there an identifiable women's culture that is revealed through the language women use? Are there reasons to be learned from linguistics or other language sciences that would suggest applications of language planning, ways to change the language to create a women's culture? I think the bigger questions like these might not come through from just the reading or discussions of work that has been done unless we really work to bring them out and then that work is the integrative work of this class.

I'm thinking about limiting the enrollment to about 15 people—how does that sound to you? We'll meet once a week on Wednesday from 7:30 to 9:30, and not always at the College. I hope we get more input from people outside of LAC disciplines who are willing to also consider some of the issues we have suggested.

Nancy

\*Emily Pearl is a Division III student.

## LEGAL STUDIES

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, concentrations, 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. (Free-law counseling is done by E. Oliver Fowler and Lester J. Mazur.)

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. This Spring we will be offering SS 209, *Crime and Punishment*, taught by Lester Mazor and E. Oliver Fowlkes, to introduce students to the criminal justice system.

Each year the Law Program offers some 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. During Spring 1978, we will offer SS 198, *The Forgotten Peoples: Law and the State Mental Health System*, taught by E. Oliver Fowlkes, and SS 156, *Social Control and Dispute Settlement* by Barbara Ingveson.

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 placements; Barbara Linden has special interest in legal aspects of urban planning and organizational aspects of law enforcement; Lester J. Mazor is especially interested in legal history, philosophy of law, the legal profession, criminal law, labor law and family law; Barbara Ingveson has special interest in social control and dispute settlement. 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 concentrations 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, and 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 Francisca Duda, Patterson Hall, Room 218. The Law Program Center, where students working in the Program may organize and conduct their activities is in Dakin House, D-101 Lounge.

Francisca Duda  
E. Oliver Fowlkes  
Suzanne Bailey  
David Katzman  
C. Karp  
Robert Ryan  
David Weissbard  
Lester J. Mazor  
Barbara Linden  
Stewart Shapiro  
Barbara Ingveson

## FOREIGN LANGUAGES BILINGUAL/BICULTURAL STUDIES

Faculty: Carollee Bengelsdorf, Mark Feinstein, Nancy Frishberg, Paloma Garcia-Bellido, James Gee, Leonard Glick, Ferné Holmquist, Robert Marquez, Raymond Pelletier, Hedvig Rose, and Janet Tallman.

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, and bilingual/bicultural studies, in particular. In addition to the regular foreign language instruction, the School of Language and Communication plans, in the future, to offer courses in the above disciplines in 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 language study at Hampshire, however, is on the linguistic and social phenomenon of bilingualism and biculturalism, and on the interactions of different language-speaking groups. The Bilingual/Bicultural Studies Program is an attempt to put phenomena like Spanish-English bilingualism among Puerto Ricans and Chicanos, for example, into a broader intellectual context. The goal is to integrate current thinking and research in linguistic theory (of the nature of language universals, language learning, semantics, etc.) with anthropological, educational, political, psychological and sociological research about situations where two or more linguistically and culturally distinct peoples must coexist, assimilate or separate.

In this country, the experience of Hispanic bilingualism is most directly relevant; hence, Spanish language and culture are often focal points of courses in the program. But courses also deal with the complex linguistic experiences of other multilingual societies -- such as Canada, India, Belgium, China, Malaysia, the Soviet Union, South Africa, New Guinea, Norway -- as well as the role of Black and Native American bilingualism and biculturalism in the United States.

Although competence in a particular language is not a requirement of the program, ample opportunities are available for students to develop their foreign language skills, particularly in French and Spanish. In addition, the courses often provide a close examination of a wide variety of other languages, and students with no previous training in these 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 the 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.

Recent courses which pertain to this area have included: "Bilingualism," "Sociolinguistics," "Black English," "Literature and the Black Aesthetic," "Humanity: An Anthropological Perspective," "Interpreting Other Cultures," "Ethnography," "The Spanish Language," "American Sign Language," and "Human Language."

Students can design concentrations on the social implications of bilingualism among Portuguese-American children; anthropological and linguistic problems of translation; sociolinguistic aspects of educating bilingual Puerto Rican children; and the relationship between language, psychology and culture, among others. Many good fieldwork opportunities exist in bilingual communities throughout the country, and several students have found placements in schools and social agencies in these communities.

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

Courses and faculty relevant to the program are:

RA 207	France: Literature of a Great European Power or France: Cultural Manifestations of Capitalism, Imperialism, and their Forms of Patriarchy	Lewis
LC 139	International Communications: Cultural Domination or Global Village?	Miller, J.
LC 143	Simplicity and Complexity: Pidgeon and Creole Languages, Nonstandard Dialects and Children	Feinstein
LC 155	Culture, Language, and Personality: A Twentieth Century Road Game	Tallman
LC 170/270	Meaning	Gee
LC 235	Field Methods in Linguistics	Frishberg
LC 238	Pattern and Ritual in Everyday Life	Tallman
LC 239	Culture and Communication Theory	Church
LC 244	Language, Literature, and Culture	Lyon
LC 150	Intensive Intermediate Spanish	TBA
LC 151	Intensive Intermediate French	Pelletier
LC 146	Canada Franca, Franca Canadian	Feinstein Pelletier
LC 160	El Bilinguismo	Garcia-Bellido
SS 116	The Jews in Russia	Glick
SS 135	Race to Power: The Struggle for Southern Africa	Bengelsdorf
SS 145	Ethnicity and Politics	Glick
SS 229	Development and Underdevelopment in Latin America	Weaver
SS 259	Understanding and Explanation	Ingveson



## RECREATIONAL ATHLETICS

SHOTOKAN KARATE (BEGINNING)	RA 101	Marion Taylor
INTERMEDIATE SHOTOKAN KARATE II	RA 103	Marion Taylor
ADVANCED SHOTOKAN KARATE	RA 106	Marion Taylor
AIKIDO	RA 105	Marion Taylor
HATHA YOGA (BEGINNING)	RA 106	Georgia Noble
HATHA YOGA (CONTINUING)	RA 107	Georgia Noble
TAI CHI CHUAN (BEGINNING)	RA 108	Paul Gallagher
TAI CHI CHUAN (CONTINUING)	RA 109	Paul Gallagher
PHYSICAL FITNESS CLASS (THE EXERCISISTS)	RA 111	Renate Rikkers, Andrea Wright
FENCING	RA 112	Will Weber
WOMEN'S SELF-DEFENSE	RA 113	Pat Turney
MEDITATION	RA 114	Edward Connolly
SHOTOKAN KARATE (BEGINNING)	RA 101	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 combination thereof; basic starting and basic kata, a programmed sequence of techniques; and a defense against multiple opponents.		
Class will meet on Tuesdays and Thursdays from 2:30-4:30 p.m., in the South Lounge, RCC.		
Five College students will be graded on a pass/fail basis and must negotiate credits with the instructor before finalizing them with their registrars.		
INTERMEDIATE SHOTOKAN KARATE II	RA 103	Marion Taylor
This course is for students who have completed RA 101 and RA 102, or the equivalent.		
The class will meet Tuesdays, Thursdays, and Sundays from 7:00-9:00 p.m., in the South Lounge, RCC.		
ADVANCED SHOTOKAN KARATE	RA 106	Marion Taylor
This course is for students who have attained the rank of brown belt or black belt.		
Class will meet Sundays and Mondays, 4:00-6:00 p.m., in the South Lounge, RCC.		
AIKIDO	RA 105	Marion Taylor
Aikido is a Japanese form of unarmed self-defense having no offensive capabilities. It depends for effectiveness on the defender maintaining his own balance while redirecting the opponent's attack so as to unbalance him. Aikido techniques allow the opponent's attack to be foiled; the opponent to be helped to the ground gently, and pinned there without doing any physical damage to him. The beginning class will learn basic rolling falls both front and rear; methods of leading the opponent off balance and into falling; types of pins, and ways to gain release from various grabbing or holding attacks.		
All students will meet Mondays and Wednesdays, 11:00 - 1:00 p.m., in the South Lounge, RCC.		
Five College students will be graded pass/fail.		
HATHA YOGA (BEGINNING)	RA 106	Georgia Noble
The beginning class will cover learning and practice of basic breathing methods and postures. Emphasis will be placed on developing a healthy and supple body.		
Class meets Mondays from 2-3:15 p.m., Center Room, Donut IV.		
HATHA YOGA (CONTINUING)	RA 107	Georgia Noble
The intermediate class will continue with postures and breathing exercises of more advanced levels. There will also be a greater emphasis on meditation.		
Class will meet on Mondays from 3:30-4:45 p.m., Center Room, Donut IV.		
Five College students will be graded on a pass/fail basis and must negotiate credits with the instructor before finalizing them with their registrars.		

## EDUCATION 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 the child is a part; what is the impact of different philosophies and policies on the structure of education and on the child. Students desiring a concentration in this program are encouraged to use both approaches in their search for understanding.

Thus, using these inquiries as a guide, students are urged to select from among the following listing, as well as from other related offerings in order to develop a better grounding for more specific topics of their own choice. Those students desiring to become classroom teachers should consult with Hedy Rose, Coordinator of Education and Child Studies, regarding additional requirements.

LC 152, Adolescence and the Search for Identity	SS 234, Philosophies of American Education
LC 229, Cognitive Development	SS 260, Search and Society
LC 143, Problem-Solving	SS 253, Personality, Moral Development, and Social Life
LC 227, Person Perception: The Development of Understanding of Persons, Interpersonal Relationships, and the Social World	SS 127, The Family in Transition
SS 220, Human Motivation	SS 140, On Deschooling Society
	SS 161, Experimental Colleges
	SS 142, The Purpose of College

### Related Courses:

LC 145, Simplicity and Complexity: Pidgeon and Creole Languages, Nonstandard Dialects, and Children
LC 146, Canada Francais, Francais Canadien
LC 150, El Bilinguismo
LC 170/270, Meaning
RA 277/IC 277, Sound and Meaning in Poetry
RA 182/282, An Introduction to Children's Theatre



RA 108 TAI CHI CHUAN (BEGINNING)  
Paul Gallagher

Tai Chi Chuan is a "moving meditation". Although at advanced stages the forms might be used for self-defense, early learning of the forms is rather more for health, concentration, fluidity and understanding the principles of the ancient Chinese classics. The class will meet on Mondays from 6:30-7:45 p.m., South Lounge, RCC.

Five College students will be graded on a pass/fail basis and must negotiate credits with the instructor before finalizing them with their registrars.

RA 109 TAI CHI CHUAN (CONTINUING)  
Paul Gallagher

The continuing class will meet on Mondays from 8:00-9:15 p.m., South Lounge, RCC.

Five College students will be graded on a pass/fail basis and must negotiate credits with the instructor before finalizing them with their registrars.

RA 111 PHYSICAL FITNESS CLASS (THE EXERCISITS)  
Renate Birkner and Andrea Wright

This course is designed to promote good health, flexibility, cardiovascular efficiency and a sense of well being. Individual exercise programs and appropriate diet are considered on an individual basis.

Class will meet on Tuesdays and Fridays, 12:15-1:15 p.m., in the Robert Crown Center. A non-credit course, free to Hampshire students but fee funded for staff and faculty.

RA 112 FENCING  
Will Weber

Classes for both beginners and experienced fencers. No experience necessary, however, and beginners are especially welcome. Basic equipment is provided.

A non-credit course that meets two evenings per week in the Robert Crown Center.

RA 113 WOMEN'S SELF-DEFENSE  
Pat Turney

A course which will not only give you healthful exercise but can add meaning to your life and a means of protection for you as well. No experience necessary.

A non-credit course that meets two afternoons or evenings per week in the Robert Crown Center.

RA 114 MEDITATION  
Edward Connolly

Meditation touches the stillness of mind that is nothing more or less than total presence in the living moment. Through sports we cultivate the same kind of presence of mind (allow the mind to stray for a split second and the ball slips through our hands.)

A non-credit course. Meets Wednesdays and Fridays, 8:15-9:15 a.m., in the RCC.

## OUTDOORS PROGRAM

The Outdoors Program is a voluntary, co-ed alternative to compulsory physical education and physical learning experiences with the rest of College and life. Programmatically 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") and expanding Outdoors Program Courses to include interdisciplinary offerings (like Dave Roberts' "Literature of Great Expeditions" course).

"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 in the form of martial arts and body awareness alongside of climbing and kayaking courses.

A third goal, to facilitate a personal experiencing of nature, will terminate into a personal experiencing of 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 O.P.'s major trips and expeditions occur. Climbing trips have included ascents of the Brooks range in Alaska and the American West. Among Ed's concerns mountains; kayaking trips have included boating on the Rio Grande in Texas and four spring trips to the Smoky Mountain rivers. Other trips include women's winter camping and canoe and backpacking in Utah.

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 one-self and the world with other ways of acquiring knowledge.

Ed Ward, Director of the Outdoors Program, is also an experienced mountaineer who has climbed extensively in Alaska, subarctic Canada and the American West. Among Ed's concerns within the O.P. are community involvement and leadership training, as well as teaching lead rock climbing and ice climbing.

Dave Roberts, professor of literature and mountaineering, is an experienced mountaineer who has been on twelve Alaskan expeditions. He is also the author of *The Mountains of My Fear and Delirium: A Wilderness Narrative*.

Carol Fisher, kayak instructor, has been the National Champion in Whitewater Kayaking for five years. Her other interests lie in the areas of nutrition, physical fitness, environmental awareness, running and ecology.

Ralph Luts, the O.P. naturalist, is currently doing doctoral work in environmental education and interdisciplinary approaches to the man/nature theme. His O.P. courses reflect Ralph's concerns about the environment. Ralph is also a faculty associate in the School of Natural Science.

OP 107 CONNECTICUT RIVER PADDLING  
Carol Fisher

People wishing to take this course must know how to swim, no previous kayaking experience required. Learn how to use kayaking for fun and fitness, condition your upper body and cardiovascular system and learn a skill used for transportation, trips, competition or fitness being outside. Stroke technique, conditioning methods and practice in progressively tippler and faster kayaks, one and two-person kayaks will be available.

Class meets Weds. and Fri. from 7:00 - 9:00 am. Meet at RCC.



OP 124 TOP ROPE ROCK CLIMBING  
David Roberts

This course will teach people how to rope rock climb safely and will introduce them to several of the local climbing areas. No experience is needed. Class meets Friday afternoons from 1:00 - 6:00. Sign up at the O.P. office. Class starts on March 31.

Five-College students must negotiate credits with the instructor before finalizing them with their registrars.

OP 125 BEGINNING WHITewater KAYAKING  
Carol Fisher

Participants must know how to swim, but no previous kayaking experience is needed. You will learn the basic kayaking strokes, the eskimo roll, techniques for righting the kayak after an upset; whitewater river techniques, eddy turns, ferrying, surfing; and river judgment and safety - when to run a river, when to scout, when to portage.

There is a limit of 10 people. Class meets Thurs. from 1:00 - 3:00 pm and, starting March 30 it will meet from 1:00 - 6:00 for river trips. Meet at pool, RCC.

OP 155 NORTH CAROLINA WHITewater TRIP (SPRING BREAK)  
Carol Fisher

People planning on taking this trip must have some kayaking experience. The intermediate group will run progressively more difficult whitewater each day on the Nantahela and Chattooga Rivers and learn more whitewater techniques with some slalom practice and perhaps a beginning whitewater competition at the end of the week. The advanced group will run difficult rivers (Ocoee and Chattooga Section IV), practice slalom and whitewater technique and work on conditioning.

Participants must know the eskimo roll. The trip will run from March 17 - 26.

OP 204 LEAD ROCK CLIMBING  
Ed Ward

For people who have some climbing experience but do not yet lead, this class will teach the basics of lead climbing. Class will meet on Tuesday afternoons from 1:00 - 6:00. Permission of Ed Ward or David Roberts is needed. Class starts March 7. Register at the O.P.

Five-College students must negotiate credits with the instructor before finalizing them with their registrars.

OP 205 INTERMEDIATE-ADVANCED WHITewater KAYAKING  
Carol Fisher

Participants in this class should know the eskimo roll, whitewater technique and preferably have their own boats. You will learn advanced whitewater maneuvering using slalom gates, conditioning methods for kayaking: weight training, flatwater work, cardiovascular training, paddleboard; learn whitewater techniques - best line down a river, efficiency of stroke.

Limit of 10. Meets Tues. 1:00 - 3:00, after March 30 1-6.

OP 215 PRACTICUM IN ENVIRONMENTAL EDUCATION (I)  
Ralph Luts, Candace Julian\* and Steve Stanne\*

The Hitchcock Center for the Environment can provide a variety of opportunities for students who wish to gain teaching experience in environmental education. More detailed descriptions of these opportunities will follow. If you wish to participate in the Center's program, call either Candace Julian or Steve Stanne (226-6006) for an interview. Students who are accepted will be required to prepare a learning contract. The interviews should be conducted no later than January 31st.

Five College students must be interviewed before they register for the course, and will be graded on a pass/fail basis.

Practicum in Environmental Education: Elementary School "Discovery Field Trips"

These are activity oriented field trips to local conservation areas, which are conducted for Ashcroft area elementary schools. The program will give you an opportunity to work with children, become familiar with environmental education resources and methods, and gain some background in natural history. No previous experience is necessary. Participation requires a minimum of about 8 hours/week. This includes a Monday afternoon preparatory workshop, and assisting with the trips on either Weds. or Thurs. 9:00 am - 1:00 pm. If you wish to become involved more deeply, you may arrange to participate in the classroom presentations which are conducted before and after each trip.

Time will be by arrangement with the Hitchcock Center where classes will be held. Interviews will be done by the Hitchcock Center staff.

\* C. Julian is Executive Director for the Hitchcock Center and S. Stanne is the Director of School Programs with the Hitchcock Center.

OP 216 PRACTICUM IN ENVIRONMENTAL EDUCATION (II)  
Ralph Luts, Candace Julian and Steve Stanne

Practicum in Environmental Education: Individual Project

(Read introductory paragraph in OP 215)  
The Hitchcock Center can provide a variety of learning opportunities on the Div. II and Div. III levels for students with commitment and experience in environmental education. These range from teaching on a "one-shot" basis, to full internships. Speak to Ralph Luts or the Center staff about your ideas. An example of one kind of possibility, students with teaching experience who wish to develop and teach an educational unit may make arrangements with the Center to do so in the Ashcroft area schools. The Center can provide entry into the schools by publicizing your teaching unit, and matching you with a teacher who needs your services. The Center can also provide some help in improving your teaching methods, and the supervision necessary to insure a presentation of high quality (a matter of great concern to the Center). You must have the experience and ability necessary to undertake an independent project.

OP 230 CONCENTRATED CONTINUING TOP ROPE CLIMBING  
Ed Ward

This class is designed for people experienced in top rope or lead climbing who wish to concentrate on expanding their resources 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 through 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 on Tuesday afternoons from 1:00 - 6:00. Permission of David Roberts or Ed Ward is needed. Class starts March 7. Sign up in O.P. office.

Five-College students must negotiate credits with the instructor before finalizing them with their registrars.

OP 231 ENVIRONMENTAL EDUCATION CENTERS: PROGRAM AND ADMINISTRATION  
Ralph Luts

There is a growing number of museums, camps, nature centers, sanctuaries, and resource centers, which deliver environmental education (EE) services to public schools and surrounding communities. This course will examine the ways in which the programs of such institutions are designed and administered. Topics will include: the variety of programs and services provided by centers, their philosophies, and how they are put together; the use of community resources, and relationships between the centers and their communities; fundraising, budgeting, and basic accounting practices; public relations; the relationship between the governing board, director, and staff; and day-to-day administrative realities.

The course is designed for students who have already gained a good deal of experience in EE, and who wish to gain a broad overview of the ways in which EE centers are operated. It will draw heavily upon the participants' experiences. As a major project for the semester, each student will identify a project which s/he will work to implement, visit centers with similar programs, review the appropriate literature, identify available resources, and write a detailed and polished project proposal. Each student will also prepare a programmatic and administrative analysis of an operating center, which will be shared with the group.

Enrollment is open. Times TBA.

OP 235 ALL THE THINGS YOU ALWAYS WANTED TO DO AT LEAST ONCE (BUT PERHAPS NOT TWICE)  
Lynn Cullen and Tom Peteragen

In this course we will be trying out a whole gamut of outdoor pursuits, to compare what you like and dislike and to get to know some good spots in the vicinity. Each Thursday afternoon we will set off for one of the area's prime rivers, woods, backroads, mountains, lakes, cliffs or caves. From there we will embark on the particular pleasures of orienteering, climbing, rafting, kayaking, backpacking, building shelters, or canoeing. There will be two or three overnights as well - probably backpacking and kayaking. Frequently someone who is deeply involved in the pursuit of the day will come along to provide a glimpse of the kind of rounding traditions. People who have absolutely no previous experience in the outdoors and no equipment will be given first priority. People who are already involved in one or more of the pursuits and want to widen their perspectives on ways to explore the outdoors are also eligible, and may possibly share the leadership for some sessions.

The class has a limited enrollment of 15 people and will meet Thursdays from 1:00 - 6:00. Sign up in O.P. office.

Five-College students must negotiate credits with the instructor before finalizing them with their registrars.

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 to all the 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 in administration of its educational policies, scholarship and loan programs and athletic and other College-administered programs.

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

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 and Title IX of the Education Amendments Act of 1972.

OP 260 ENVIRONMENTAL EDUCATION SEMINAR  
Hampshire students and Ralph Latta

Those who are interested in participating in a student planned and led seminar in environmental education are encouraged to attend the first meeting of this course. At this meeting you will be able to help to make the decisions of whether or not we should conduct such a seminar, and if so, what should take place within it. It is all up to the imagination and commitment of those who come to the meeting. Ralph Latta is organizing the first meeting, and will be available as a resource person, but he will not assume the primary responsibility for the leadership of future meetings. What do you want to happen? Come, help make it happen.

Five College students who are interested in environmental education are encouraged to participate on an informal, non-credit basis. Enrollment is open, time and place TBA.

OP 262 WILDFLOWERS: HIGH IN THE SMOOKIES, AND DOWN AT  
(NS 116) HAMPSHIRE

Ralph Latta and Mary Beth Averill

See listing under Natural Science courses for full description.



FEMINIST STUDIES

Although Hampshire does not presently have a formal feminist studies program, a number of faculty members are willing to help students with academic work in this field:

Humanities and Arts

Sally Allen  
L. Bronn Kennedy  
Jill Lewis

Language & Communication

Nancy Frelberg  
Janet Tallman

Natural Science

Nancy Goddard (LV ST 78)  
Saundra Oywole  
Janice Raymond

Social Science

Carol Bengelodorf  
Penina Glaser  
Gloria Joseph  
Joan Landes  
Lester Meier  
Laurie Nisonoff (LV AY 77-78)  
Miriam Slater  
Barbara Turlington

Related courses for Spring Term 1978 are:

- HA 124, Black Women, White Women: Literature, Politics, and Our Lives
- HA 183/283, Women and Leadership
- NS 105/205, Bio-Medical Issues and Feminism
- NS 120, The Insurgent Slaver -- The Black Woman in U.S.A.
- SS 157, Women and Reform: An Historical View
- IN 314, Women in the Arts
- IN 343, Women and Language



ENVIRONMENTAL STUDIES  
AND PUBLIC POLICY

Allen Krass - Faculty Coordinator

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 energy conservation 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, 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 Mass. PIRO and the Alternate Bury 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 to encourage participation from the three other Schools. 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.

- NS 117, Gardening, Organic and Otherwise Averill
- NS 119, Natural Selection Coppinger, Gross
- NS 145, Scientific Counterrevolutions Gross, Ziegler
- NS 153, The Family Farm in the U.S.: From Self-Sufficiency to Self-Destruct Slater, P.
- NS 154, Microbiology Oywole
- NS 157, Scientists and Nonscientists - The Communication Gap Van Ransle
- NS 177, Horticulture Seamon, Boume, Averill
- NS 188, River Dynamics Foster, Reid
- NS 202, Aquatic Ecology Van Ransle, Grimm, Hurd
- NS 203, Aquatic Ecology Lab Van Ransle, Grimm, Hurd
- NS 207, The Pump or the Well Slater, P.
- NS 219 (SS 247), Who Controls Technology? Krass, Shapiro
- NS 221, Introduction to the Analysis of Biological Models Riggs
- SS 109, Social Analyses of Space Linden
- SS 113 (NS 121), Human Biology I: The Interrelationship of the Social and Biological Sciences for Public Health Foster, Oywole, von der Lippe
- SS 184, Decentralism: The Exploration of Community and Work Environments Breitbart, King
- SS 233, Europe West and East: Confrontation or Convergence? Lawson
- SS 280, The Manipulated Environment: A Geographic Perspective on Social Problems Breitbart

Related courses are:

- HA 136, The Men-Made Environment: The Physical Determinants of Form Juster, Pope
- HA 201, American Landscapes Smith, D.
- LC 219, Communications Policy Research Miller, J.
- LC 234, Television Production Project: Whole Wheat Video Staniski
- NS 107, Evolution of the Earth Reid, Woods
- NS 108/208, A Geological History of the Connecticut Valley Woods
- NS 116 (OP 262), Wildflowers: High in the Smokies, and Down at Hampshire Averill, Latta

INTRODUCTORY MATHEMATICS,  
STATISTICS, AND  
COMPUTER SCIENCE

Five courses will be repeated every year; they all provide students with powerful tools for use in other fields.

Every Fall

- NS 161/261 Mathematics for Scientists and Social Scientists
- LC 156 Introduction to Computers and Programming
- NS 160 Confident Calculus
- LC 206 Strings, Trees, and Languages

Every Spring

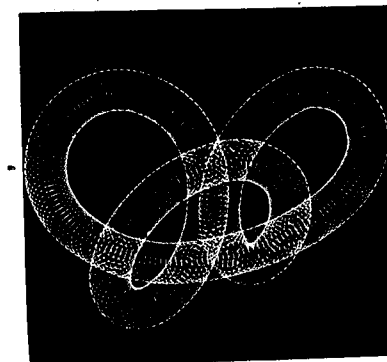
- NS 161/261
- LC 156 (alias NS 168) (no calculus)
- NS 267 Linear Analysis and Differential Equations

The courses below are listed, very roughly, in order of how much mathematical background will be needed in taking them. We are all interested in helping students choose the right course, so come talk to one of us. Also, it is worth noting that in addition to courses there are Math Review Sessions and Prime Time Talks that can often provide students with just enough mathematics for their needs, and that many students learn some mathematics and computer programming on their own or from a friend.

Spring 1978

- LC 156 Workshop: Conversational Computer
- LC 185 The 115P Programming Language
- LC 162 Linear Perspective
- LC 159 Games
- NS 161/261 Mathematics for Scientists and Social Scientists
- NS 160/260 (SS 255) APL and Quantitative Methods
- LC 269 High Level Programming Languages
- NS 267 Linear Analysis and Differential Equations
- NS 209 Biology and Mathematics
- NS 221 Introduction to Analysis of Biological Models

All of the first six courses except LC 162 provide elementary introductions to aspects of computer science with NS 168 devoting perhaps the most time to programming; LC 269 is the main course this term for students whose Division II work is in the computer science and others able to work at that level. The first two courses neither require nor contain much mathematics.



We consider Mathematics for Scientists and Social Scientists to be the best single mathematics course for students interested in the social and biological sciences, including those interested in medical school. In particular, it contains an adequate introduction to the basic programming techniques and to the major ideas of the calculus. The course is at a first-term-of-college level and needs no mathematics background other than, say, two years of high school mathematics; on the other hand, it is so useful in concentrations in the social and biological sciences that we list it at both the Division I and II levels. The latter remark also holds for APL and Quantitative Methods, which provides our only introduction to statistics this term.

We now move to a discussion of courses aimed at mathematically confident students, including entering students considering concentrations in the mathematical or physical sciences and some Division II students wanting specific mathematical backgrounds.

The calculus is one of the major achievements of humankind, and while students can see enough of it for most people's needs or desires in Mathematics for Scientists and Social Scientists, we offer Confident Calculus each fall, intending to cover the material usually taken in two semesters of freshman calculus. Students considering concentrations in mathematics or physics should take it in their first Fall Term at Hampshire or at least discuss taking it with the instructor.

The computer is now playing a role in providing interesting problems to mathematics equal to that enjoyed by physics; any student concentrating in the mathematical sciences should seriously consider LC 269. NS 267 is perhaps the most important course to be taken early in a mathematics concentration, and it should be considered seriously by anyone with theoretical interests in physics or computer science. Finally, there are two advanced courses in applications of mathematics in biology.

Before closing we would like to point out that students use mathematics, statistics, or computer science in many Division I examinations in the Schools of Language and Communication, Natural Science, and Social Science; usually these examinations involve at least potentially applications to other subjects in the School in question. We are interested in talking to students about examination possibilities.

Finally, we are all interested in advising students about courses in the other colleges and the various departments of the University.

Allen Hanson  
Kenneth Hoffman  
David Kelly  
William Marsh  
Michael Sutherland



COLLEGE WRITING:  
READING IMPROVEMENT

The Reading and Writing Improvement Program offers both group work and individual assistance to students. Deborah Bacal, Director of the Program, offers professional help in writing, reading, and study skills on either a short-term or long-term basis, depending on the needs of the student.

Writing: 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. In addition, this year the following course will be offered by Georgia Sassen:

Supportive Editing

Students who are having trouble with writing can often improve their skills by getting something--anything--down on paper and working on it. The process of making what comes out the first time into readable, logical prose is really an editing process applied to one's own work. This course will bring together students who want to improve their writing, as well as those who are good writers and editors but want to learn to edit in a new way which includes teaching and supporting. For those with some editing experience, this will be a chance to sharpen and broaden those skills. The editors will look into what went wrong in a sentence, a paragraph, or an argument and learn/teach to correct and improve. The process of "fixing" will be left to the writer him/herself as much as possible.

Evaluation of our progress as a group will include the progress made by the editors as well as the improvement in the skills of the writers. Writing assignments will include both work that students are preparing for other courses or examinations and special exercises.

If you would like further information on the above course, contact Georgia Sassen in the Options Office.

Courses in college writing are offered each term by Professor Eugene Terry in the School of Humanities and Arts. In addition, several professors have agreed to dedicate their courses as particularly appropriate for students working on writing skills.

Reading and Study Skills: Ms. Bacal offers group and individual work on reading (comprehension, retention, speed) and on study skills. In January, the Putney Reading Course will be given at Mount Holyoke and Hampshire for a special fee.

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 Dwyll.

Laboratory: This year the program will be expanding to include a wider drop-in service and a lab space in which books, exercises, and self-administered reading and skills programs will be available.

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



## FIVE COLLEGE APPOINTMENTS

**Janice Raymond, Assistant Professor of Women's Studies/  
Medical Ethics** (at Hampshire under the Five College program)

1. Hampshire, Natural Science 105/205, **BIO-MEDICAL ISSUES AND ETHICS (II)**. The course will consider two major subject areas: (1) questions of death and dying with special attention to the meaning and context of death in this society; so-called new definitions of death; and the euthanasia debate. We will be especially concerned with how the rituals of death and dying (both sacred and secular) parallel the rise of socialized femininity; (2) transsexual surgery with special attention to the medical model of treatment, questions of unnecessary surgery, medical experimentation, and eugenics. We will also examine the literature on sex differences, questions of gender identity and role, and sexual socialization.

2. Smith, Soc./Anthro. 225b, **WOMEN AND THE HEALTH SYSTEM**. Issues of health care and delivery as they relate to women. Medicine as religion and the function of male myths, ministers, and ministers' sons. Women as health care workers and patients; the "sexual politics" of sickness; the doctor-patient relationship; the nurse-practitioner movement; M.D. education and women; the self-help movement; gynecology and obstetrics; estrogen replacement therapy. The course will develop a critical perspective, with special attention to the ethical issues involved, and the development of alternative ethical and social policy.

**Indira Shetye, Assistant Professor of South Asian Studies** (at Amherst under the Five College program)

1. Amherst, Asian Studies 22, **CLASSICAL LITERATURE OF INDIA IN TRANSLATION**. An examination of the classical forms of Indian literature with reference to theme, style and imagery. The material considered includes the poetry of the Vedas, the great epics (Mahabharata and Ramayana), Hindu and Buddhist folktales (Panchatantra and Jataka), romance (The Ocean of Story), lyric poetry from the Sanskrit and Tamil Anthologies, and the classical drama (Sakuntala and The Little Clay Cart). In interpreting the texts, attention will be given to the indigenous aesthetic theories of *rasa* ("mood") and *dhvani* ("suggestion").

2. University, Asian Studies 190B, **REPRESENTATIVE SANSKRIT II**. A continuation of the first semester course.

**Van R. Halsey, Jr.**, dean of admissions and associate professor of American Studies, was associate director of admissions at Amherst College from 1956 to 1965. His special interests include teacher training and the production of new history materials for secondary schools. His B.A. is from Rutgers University and his Ph.D. from the University of Pennsylvania.

**Arthur Hoener**, 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 Boston Architectural Center.

**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.

**Joanna Hubbs**, assistant 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.

**John Jaxel**, visiting assistant professor of art, holds a B.F.A. and M.F.A. from Yale University. He has taught at Northeastern College and the University of New Hampshire.

**Thomas Joslin**, visiting 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 been twice won awards from the National Endowment for the Arts for his work in film education.



**Norton Jucker**, associate professor of design, is a practicing architect, designer, and writer whose books include *The Phantom Alibi*, a children's fantasy, and *The Box and the Lion*, a mathematical fable made into an Academy Award-winning animated film. His B.A. is from the University of Pennsylvania, and he studied at the University of Liverpool on a Fulbright scholarship.

**Ann Kearns**, visiting assistant professor of music, is director of the Hampshire Chorus and holder of an M.M. in music history from the University of Wisconsin. For several years she has conducted an Amherst-based in Camera Singers. She is also a professional flutist.

**Louise 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.

**W. Wayne Kramer**, visiting assistant professor in theatre, comes to Hampshire with fifteen years experience in theatre arts training, including eleven years in the production of black drama and original scripts. He has also served as a design consultant in alternative design modes for theatre. He holds a B.F.A. from the University of Texas and an M.F.A. from the University of Oklahoma, both in drama.



**Jill Lewis**, assistant professor of humanities, holds a B.A. from Bowdoin 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 will teach courses in literature and cultural history at Hampshire.

**Jerome Lieblich**, 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, was chairman of the American Studies curriculum at the University of North Carolina at Chapel Hill and Hampshire's first Dean of the College. He holds a Ph.D. from the University of Minnesota and is editor of *Santayana on America*. He holds a joint appointment with the School of Language and Communication.

**Robert Marquez**, associate 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 publisher/translator of Latin American poetry. He holds a B.A. from Brandeis and a Ph.D. from Harvard. Professor Marquez is on leave from Hampshire for the academic year.



**Elaine Mayes**, 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. Professor Mayes will be on leave during the Spring Term.

**Francis McCallan**, assistant professor of dance, received a B.S. in dance from the Juilliard School of Music and an M.Ed. from the University of Massachusetts. She was a member of the Joan Kerr Dance Company and the Anne Sokolow Dance Company; she has also assisted Jose Limon. She is a certified teacher of Labanotation and Effort/Shape Movement Analysis. She has reconstructed several works from Labanotation scores. In addition to being a dancer and choreographer, Francis has studied sensory awareness with Charlotte Selver.

**B. Randall McCallan**, assistant professor of music, received his B.M. 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 electronic music studio. An active composer-performer of orchestral, chamber, choral, and electronic music, 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 Soundless Sound*. His current studies include sensory awareness with Charlotte Selver and the music of non-western cultures. His music is published by Western International Music and by Sonax Music Press, and his electronic music is available on Opus One records. Professor McCallan is founder and director of the New Arts Foundation.

**Robert Meagher**, 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 *Personality and Powers*, *Belongings*, *Toothing Stones: Rethinking the Political*, and *Cave Wives*. 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.

**William O'Brien**, assistant professor of theatre arts, has had considerable experience in acting and directing. He received his B.S. from Fairfield University, his M.A. from the University of Rhode Island, and his M.F.A. from the Goodman Theatre and School of Drama. Professor O'Brien will be on leave for the academic year.

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

**Lawrence Pritchett**, assistant professor of history, is a graduate of the London School of Economics from which he received an M.Sc. in politics and a Ph.D. in French Hegelian philosophy. He is a writer, who lives mostly in New York City. His articles have appeared in various magazines and journals. At present he is at work on a long study of poetry and sexual politics in modern society. He is also a filmmaker and has been involved in making scores of documentaries for BBC television in London. Professor Pritchett will not be on campus during the Spring Term.



**Paul Pope**, associate professor of design, holds a B.Arch. degree from Northeastern College at Raleigh and has been design and construction critic for the Pratt Institute in New York City. He has been engaged in private practice since 1962.

**David Roberts**, associate professor of literature and director of the Outdoors Program, holds a B.A. from Harvard University and a Ph.D. from the University of Toronto. He is the author of *The Mountain of the East*, a book about mountain climbing, and *Reberber: A Wilderness Narrative*.

## FACULTY SCHOOL OF HUMANITIES AND ARTS

**Josephine Abady**, assistant professor of theatre arts, holds a B.S. in speech and theatre from Syracuse University and an M.F.A. in directing from Florida State University. She has taught theatre arts at Florida State and at several New England schools, most recently at Bennington College in Vermont.

**Sally Allen**, assistant professor of cultural history, earned her B.A. and M.A. at the University of Manitoba and her Ph.D. in Renaissance history at the University of Toronto. Before coming to Hampshire, Sally worked at the Everywoman's Center at the University of Massachusetts.

**William Arnold**, associate professor of photography, holds a B.A. from San Francisco State College and an M.F.A. from the San Francisco Art Institute. He has taught photography at various colleges and was until recently chairman of the photography department at the Pratt Institute in New York.

**John Bortolotto**, associate professor of human development, joined the Hampshire planning staff in 1967. His principal teaching and writing interests include the human life cycle, the psychodynamics of the family, psychoanalysis and psychotherapy, and self-reflective disciplines of personal growth. He has taught at Amherst College from which he has a B.A. His clinical training and Ph.D. are in psychology and psychotherapy, and he maintains a small private therapy practice in Northampton.

**Raymond Kenyon Bratt**, 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.

**Irene Carey**, assistant professor of human development, will receive a doctorate in education from the University of Massachusetts where she has been director of their Undergraduate Intern Program in Community Development for the past two years. Her B.A. was from Trenton State University. Irene is also master of Enfield House, from Ohio State University.

**Ann Camparelli**, faculty associate in education, has a B.A. from Carleton College and has done some graduate level work at Queens College. She has taught elementary school for seven years, in Connecticut and Massachusetts, and has served as a resource person for the University of Massachusetts "Integrated Day Program" and for the Gateway Regional School District in Massachusetts.

**Barry Goldenhehn**, dean of Humanities and Arts and associate professor of literature, holds a B.A. in philosophy from Oberlin College and an M.A. in literature from the University of Wisconsin. His poetry has been widely published in collections, periodicals, and anthologies. He has taught creative writing at several colleges and universities, most recently at Goddard College where he was also director of the graduate program.

**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 Fleisling Walker fellowship in doctrinal theology for study 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 experiential education groups. She shares the mastership of Dakin House with Graham Gordon.



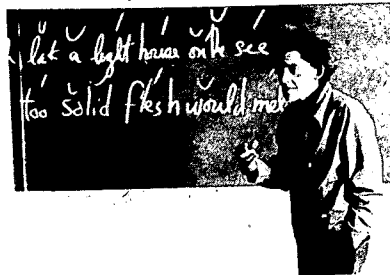
**Andrew Salkey**, associate professor of writing, has published widely in the fields of fiction, non-fiction, and poetry. A Jamaican national, Mr. Salkey has also worked as a broadcaster, journalist, teacher, and lecturer. He received his education at St. George's College and Murre College in Jamaica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

**David E. Smith**, professor of English, holds a B.A. from Middlebury College and a Ph.D. from the University of Minnesota. He has taught at Indiana University, and his interests include colonial American writing, nineteenth-century American literature, and American intellectual and religious history.

**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. Professor Smith will be on leave for the academic year.

**J. David Stokes**, visiting assistant professor of art, holds a B.F.A. in printmaking from Miami University and an M.F.A. in sculpture from the Pratt Institute. He has taught graphic design and sculpture since 1964 and was on the Smith College faculty from 1969-1977.

**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 has 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 northeastern colleges and museums.



**Rumana Talty**, assistant professor of literature, has taught at Southern University in Baton Rouge; Johnson Smith University in Charlotte, North Carolina; Cramling College in Louisiana; and St. Augustine's College in Raleigh, North Carolina. She has a B.A. from Harvard University and a Ph.D. from the University of Massachusetts.

**William (Vlahos) Wood**, assistant professor of music, attended the Detroit Institute of Musical Art of the University of Detroit and the University of Massachusetts from which he earned a B.A. in ethnomusicology. He has gained a wide reputation for his work in Afro-American music and ethnomusicology. At Hampshire he is directly involved in the Residential Learning Center for the Arts.

## SCHOOL OF LANGUAGE AND COMMUNICATION

**Ellen Verd Conroy**, assistant professor of psychology, holds a B.A. from Radcliffe College and is completing her doctoral dissertation on the process of social-cognitive stages among children at Harvard Graduate School of Education. She has worked as a pre-doctoral intern in child psychology at the Judge Baker Guidance Center in Boston. She is interested in cognitive-developmental theory, social and ego development, and applications of social-cognitive-developmental theory to clinical and educational practice.

**Peter Cronin**, visiting assistant professor of television, has a Ph.D. from the University of Arizona in physiological psychology, and has taught at Columbia University and New York Medical College. He has had a number of videotape showings and broadcasts, and was acting-in-residence and research coordinator at The Television Laboratory at WNET/13, New York.

**Mart Feinstein**, assistant professor of language studies, has a Ph.D. in linguistic theory (phonology) from the City University of New York. Among his special interests are Spanish-English bilingualism, implications of sociolinguistic research for a general theory of language (especially phonological theory), and neurolinguistics (aphasiology).



**Nancy Frithberg**, assistant professor of linguistics, holds an A.B. from the University of California, San Diego, and a Ph.D. from the University of California, San Diego. She is certified as an expressive interpreter of American Sign Language and has served as an interpreter at the National Theater of the Deaf Summer School in Waterford, Connecticut.

**Paloma Garcia-Bellido**, faculty associate in Spanish, holds an M.A. in linguistics from the University of California at Santa Barbara and a Ph.D. in linguistics from the University of Massachusetts where she is a teaching assistant in the department of linguistics and the department of Spanish and Portuguese.

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

**Allen Hanson**, assistant 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 non-numeric programming, artificial intelligence, and pattern recognition. At the University of Minnesota he developed courses in computing fundamentals, artificial intelligence, and higher level languages.

**John Horvath**, visiting assistant professor of psychology, received a B.S. from Tufts University and a Ph.D. from the University of Illinois, Champaign-Urbana. His main interests are in social and ecological psychology.

**David Kerr**, assistant professor of mass communications, has a B.A. from Miami University in Oxford, an M.A. from Vanderbilt University, and is completing a Ph.D. at Indiana University. His teaching experience includes courses in communication research and journalism.

**Deborah Knapp**, assistant professor of psychology, earned her B.A. in philosophy and psychology at Harvard College. She is a doctoral candidate at the University of California at San Diego and has done research in limited capacity, automatization, and the child's acquisition of language. Her teaching interests include cognitive psychology, psycholinguistics, cognitive development, language development, theory of education, and philosophical problems in psychology.

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

**William Marsh**, associate professor of mathematics, was chairman of the mathematics department at Talladega College in Alabama. His B.A., M.A., and Ph.D. are from Dartmouth, and his special interests include the foundations of mathematics and linguistics.

**James Miller**, assistant professor of communications, holds a B.A. from Western Illinois University, an M.A. from the University of Denver, and he completed his Ph.D. in communication research at The Annenberg School of Communications of the University of Pennsylvania. He has taught courses in communications at Brock University and has special interests in communication theory and government-media relations.

**Richard Miller** is director of educational technology and assistant professor of communication technology. He 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. Mr. Miller will be on leave for the academic year 1977-78.

**Raymond Rallister**, visiting assistant professor of French, has a B.A. from Providence College, an M.A. from the University of Massachusetts, and a Ph.D. from the University of Massachusetts.

**Michael Radetsky**, assistant professor of philosophy, received a B.A. from Cornell University, and an M.A. from the University of California, Berkeley, where he is working on his doctorate. A Woodrow Wilson Fellow, his special interests are philosophy of action and philosophy of psychology.



**Stanley Stanislav**, assistant professor of television, has an M.A. from Michigan State University in educational and public television. He spent a year as television producer-director with the Armed Forces radio and television service in Korea. He holds a joint appointment with the Library where he serves as television producer.

**Neil Stillings**, assistant professor of psychology, has a B.A. from Amherst and a Ph.D. in psychology from Stanford. 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. He is coordinator-elect of the School of Language and Communication this year.



**Janet Tillman**, assistant professor of anthropology, received a B.A. from the University of Minnesota and is completing her doctorate at the University of California at 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**, assistant professor of philosophy, is completing his Ph.D. at the University of California at Berkeley where he was a Danforth Graduate Fellow and a teaching associate. Both his thesis and his book progress are in the philosophy of perception. His other research areas include philosophical psychology, the philosophy of language, and the philosophy of art. He grew up in Arkansas and has a B.A. from Arkansas Tech, where most of his work was in music and literature. He later 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 is coordinator of the School of Language and Communication this year.



## SCHOOL OF NATURAL SCIENCE

**Mary Beth Averill**, assistant professor of botany, received her Ph.D. from the University of Oregon, with a study of the microclimate that inhabits the insides of Douglas fir needles. She is involved with the University of Oregon, the University of Hawaii, and California Polytechnic State University, and has a major interest in micro-ecology, a field which she has pioneered.

**Marle Bruno**, associate professor of biology, holds a B.A. from Syracuse University and a Ph.D. from Harvard. She is involved in sensory neurophysiology (especially vision) and elementary school science teaching. 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 (Norie will be on leave during spring semester, 1978.)

**Raymond P. Copping**, associate professor of biology, has worked at the Woods Hole Oceanographic Institute, the Smithsonian Astrophysical Observatory in Cambridge, the U.S. Fish and Wildlife Service, and the Beebe Tropical Research Station in the life service. He holds a B.S. from Amherst, Smith, Mt. Holyoke, UMass., and varied interests include philosophy, forest management, animal behavior, New England birds, monkeys in the Caribbean, African ecology, biosocial human adaptation (anthropology/ecology) and neotony theory (book in progress). Ray has been a past New England sled dog racing champion and has originated his own breed of sled dog.

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

**Bethann Friedman**, visiting assistant professor of biochemistry, received her Master's degree from Smith College. She is interested in chemistry, mathematics (especially catastrophe theory), and molecular development. She was an honors student in undergraduate chemistry at Smith College.

**Nancy Giddard**, associate professor of biology, was previously chairperson of the department of natural science and mathematics at the University of Michigan. She obtained her Ph.D. from Ohio State University. Involved in teaching courses on human reproduction, health care for women and endocrinology, she is also interested in field ecology, human and comparative anatomy, parasitology, marine biology and tropical (Caribbean) ecology. (Nancy will be on leave Spring Semester 1978.)

**Stanley Goldberg**, associate professor of history of science, taught at Antioch College, was a senior lecturer at the University of Zambia, 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.

**Courtney Gordon**, associate professor of astronomy, 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, and the Kitt Peak National Radio Astronomy Observatory. In addition to extraterrestrial communication, codes and ciphers and animal communication (dolphins and chimps), she is a member of the Five College Astronomy Department, and this year is Associate Dean of Advising at Hampshire.

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



**Walter Gramling**, faculty associate in biology, received his Bachelor's degree from Hampshire College, with a concentration in reproductive and human biology. He is specifically interested in the relationship of hormones to human behavior.

**Michael Gross**, assistant professor of history of science, received his B.S. in chemistry from Brooklyn College and his Ph.D. in 19th century physiology from Princeton. Interests include the history of biology, especially evolution, physiology and medical theory, embryology, and molecular biology; history of social and behavioral sciences; science and social thought; and modern European social and intellectual history.

**Ernest Rafter** - professor of experimental physics, was an associate physicist with the Brookhaven National Laboratory, an NSF fellow at Cambridge University and a faculty member at the University of Rochester, where he received his Ph.D. His interests include the physics of electronic tubes, nuclear physics, cosmic rays, environmental science, holography, and A.P. He served as the first Dean of the School of Natural Science at Hampshire.

**Beverly Hartline** - visiting assistant professor of geophysics, earned her A.B.D. at the U. of Washington, where she is a doctoral candidate. Her interests include the physics, chemistry and geophysics of snow.

**Frederick Hartline** - visiting assistant professor of neurophysiology, received his A.B.D. from the U. of Washington, where he is a doctoral candidate. He is interested in glaciology, seismology, geology, and anthropology.

**John B. Reid Jr.** - assistant professor of geology, has pursued his lunar surface and earth's interior research at the Smithsonian Astrophysical Observatory, the Geochronology Laboratory at M.I.T., and Rensselaer Polytechnic Institute, and Los Alamos National Laboratories. He received his Ph.D. from M.I.T. He previously taught in three high school physics programs. 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.

**Douglas S. Riggs** - Emeritus professor of pharmacology, received his M.D. from Yale University School of Medicine. He previously taught at the School of Medicine of the State University of New York at Buffalo (where he was Chairman from 1954-56), Harvard Medical School, Yale, and was a biochemist at Fairfield State Hospital. His special interests involve biostatistics (applying mathematical methods to biological problems), natural history and the outdoors, especially biking and hiking.

**Paul Slater** - visiting assistant professor in agriculture and planning, received his B.S. and Masters in Resource Planning from the University of Massachusetts. He is currently a member of a subcommittee of the Governor's Commission on the Status of Women entitled "Women in Agriculture, Food Policy and Land Use Reform," and is an agricultural consultant to the Hampshire County Planner. Paul's interests cover the broad issues of land use and resources, particularly in New England.

**Alison S. Kelly** - associate professor of physics and science policy assessment, was educated at Cornell and Stanford, where he received his Ph.D. in theoretical physics. He previously taught at Princeton University, 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 arms 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.

**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 Amherst 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 Projects in Northampton. Her interests include stereochemistry and organic molecules, environmental chemistry, science for non-scientists, toxic substances, the bassoon, and nature study.

**Ralph Latta** - faculty associate in natural science and also naturalist in the Outdoors Program, is currently doing doctoral work in environmental education and interdisciplinary approaches to the man/nature theme at the University of Massachusetts School of Education.



**Lynn Miller** - professor of biology, has taught at the American University of Beirut and at Adelphi University. He has a Ph.D. from Stanford. His principal interests are applied microbiology (composting, sewage treatment, fermentation) and social aspects of genetics (agriculture, genetic engineering, genetic counseling) as well as stress and disease. He is especially interested in working with students on independent study, tutorials, and small group projects. His research concerns ergosterol metabolism in yeasts and PTC tasting in humans. Lynn is Acting Dean of the School of Natural Science this year.



**Sandra Oyewole** - assistant professor of microbiology, does research in biochemistry at the University of Massachusetts in addition to teaching at Hampshire. She received her Ph.D. from the University of Massachusetts. Her research involves membrane development, structure and function, in addition she is interested in microbiology from a public health standpoint in developing countries, research on the microbial contribution to energy production, the microbes that inhabit us, and cancer.

**Janice Raymond** - assistant professor of women's studies and medical ethics under the Five College Program, received her Ph.D. from Andover Newton Theological School and Boston College. She is at Boston College, the New School for Social Research, Andover Newton, and UMass Boston. She is interested in the past, present and future of women's health, abortion, the sexual politics of mental health, and women's health care delivery.



**John B. Reid Jr.** - assistant professor of geology, has pursued his lunar surface and earth's interior research at the Smithsonian Astrophysical Observatory, the Geochronology Laboratory at M.I.T., and Rensselaer Polytechnic Institute, and Los Alamos National Laboratories. He received his Ph.D. from M.I.T. He previously taught in three high school physics programs. 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.

**Douglas S. Riggs** - Emeritus professor of pharmacology, received his M.D. from Yale University School of Medicine. He previously taught at the School of Medicine of the State University of New York at Buffalo (where he was Chairman from 1954-56), Harvard Medical School, Yale, and was a biochemist at Fairfield State Hospital. His special interests involve biostatistics (applying mathematical methods to biological problems), natural history and the outdoors, especially biking and hiking.

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**Michael Sutherland** - assistant professor of statistics, holds an interschool appointment in Natural Science and Social Science. He has been a consultant with the Systems Management Corporation in Boston and has worked on problems involving applications of statistics to the social sciences. His Ph.D. is from Harvard. His interests include mathematics, statistics, philosophy, carpentry, machinery, automobiles, and people.

**Charlene Van Roubic** - assistant professor of botany, received her B.A. from Skidmore and her Ph.D. from Boston University Marine Program, Marine Biology Lab., Woods Hole. She most recently taught at Dalhousie University in Nova Scotia. Her research has been in the area of salt marsh and estuarine ecology, sediment-water interactions, nitrogen fixation and denitrification.

**Albert Woodhull** - assistant professor in 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 basis of behavior and on the visual system in humans and animals. He encourages students to participate in his research on visual thresholds. He is also interested in embryology, electronics for instrumentation, and alternative energy sources.

**Ann M. Woodhull** - assistant professor of biology, is especially interested in physiology and neurobiology, biochemistry and molecular biology, and biological toxins. Her teaching experience includes mathematics in Nigeria as a Peace Corps volunteer, and Harvard University. She received her Ph.D. from the University of Washington. Ann will be on leave Spring Term 1978.

**Conroy Woods** - faculty associate in geology, received his B.A. from Hampshire College, where he did Division III work on the geochemistry of ultramafic nodules from Kilbourne Hole, New Mexico. He has done research work at M.I.T. and Los Alamos National Labs. His interests include evolution of the earth and, in particular, geological problems of the Connecticut Valley.

**Michael Woolf** - visiting assistant professor of physics, is an experimental low temperature physicist who enjoys teaching astronomy, electronics, fluids, shape changes with time, and of course, physics. His Ph.D. is from the University of California at Berkeley, and he has worked at Bell Labs and taught at U.C.L.A.

#### 5-College Astronomy Department Faculty:

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

**Thomas R. Dennis** - assistant professor in astronomy at Mt. Holyoke College.

**George Greenstein** - assistant professor in astronomy at Amherst College.

**Edward R. Horvath** - professor of astronomy at the University of Massachusetts.

**C. Richard Huguenin** - professor of astronomy and physics at the University of Massachusetts.

**William M. Irvine** - chairman of 5-College Astronomy Department and professor of physics and astronomy at the University of Massachusetts.

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

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

#### SCHOOL OF SOCIAL SCIENCE

**Richard W. Alpert**, associate dean of the college 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.

**Carollee Hengstler**, assistant professor of political science, holds an A.B. from Cornell, studied American history at Harvard, and is working on a dissertation in political science from MIT. 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.

**Robert C. Birney**, Vice President of Hampshire College and professor of psychology, was a member of the Four College Committee which helped plan Hampshire College. He served as the first Dean of the School of Social Science and before that was chairman of the psychology department at Amherst College. Holder of a B.A. from Wesleyan University, he earned his Ph.D. from the University of Michigan.

**Wynne Breitbart**, visiting assistant professor of geography, has an A.B. from Clark University, an M.A. from Rutgers and is a doctoral candidate in geography at 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 strategies for community development; and problems in providing urban housing, employment, and social services.

**Eva Brown**, visiting associate professor of psychology, has a B.A. from Cornell University and an M.A. and Ph.D. in clinical psychology from Columbia University. She is chief psychologist and director of training and research at the Holyoke-Chicopee Mental Health Center where she is involved in administrative, clinical, teaching, consulting and research functions.

**Margaret Cerullo**, visiting 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 Farham**, Dean of the School of Social Science and 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.

**E. Oliver Foulkes**, assistant professor of law, received a B.A. from Northwestern 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. Glaser**, 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 Bauer Fellowship. Her special interests include American intellectual history with emphasis on radical left wing movements in the United States during the 1940's.

**Leonard B. Gluck**, 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 in St. Lucia, West Indies, for a public health program and a study of ethno-medicine and social organization in the New Guinea Highlands.

**William Grohman**, assistant professor of education and Master of Greenleaf House, has a B.A. from Cornell and an M.A. from Columbia, and is preparing a doctoral dissertation for Union Graduate School. He has been a Peace Corps teacher in Micronesia as an assistant dean of students at Columbia. His area of special interest is non-traditional alternatives in higher education.

**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 Senior Economist at the Black Economic Research Center. He is author of numerous articles and has taught at Amherst College and Harvard University.

**Frank Holquist**, 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.

**Gloria J. Joseph**, professor of education, has a B.S. from New York University and a Ph.D. from Cornell University. 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 director 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., J.A., and Ph.D. degrees from the University of Minnesota, and taught at Vanderbilt University. His special interests are psycholinguistics and cognitive psychology.

# SPRING TERM COURSE GUIDE 1978

**Joan S. Landis**, assistant professor of political science, holds a B.A. from Cornell University and an M.A. and a Ph.D. from NYU, where she completed her doctorate in 1975. She was formerly an assistant professor of political science at Bucknell University. She is primarily engaged in teaching and research in the areas of political and social theory and women's studies, with additional interests in American politics.

**Ruth Lawson**, emeritus professor and former chair of political science department at Mount Holyoke College, and a Senior Fellow in Hampshire's Frontier Program; graduate of Bryn Mawr College; Guggenheim Fellow, NSF advanced research fellow, American International Law Fellow, U.S. Specialist grant award from U.S. State Department. Taught at Academy of International Law in the Hague; at Tulane University, and Mount Holyoke College.

**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 architectural consultant for problems in college housing at the University. Her academic interests include urban blight and the sociology of education.

**Lester Mager**, 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.

**Margaret 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.

**Laurie Misonoff**, assistant professor of economics, holds an S.B. from M.I.T. and an M. Phil. from Yale, where she is a doctoral candidate. She was a Woodrow Wilson Fellow at Yale and is finishing her dissertation with the aid of a Ford Foundation Fellowship in Women's Studies. Her interests include American economic history, women's studies, labor and public policy issues. Professor Misonoff will be on leave academic year 1977-78.

**Anson Rubinbach**, assistant professor of history, holds a B.A. from Hofstra University and an M.A. and a Ph.D. from the University of Wisconsin, where he also taught European history. He is interested in modern, social and intellectual history with special emphasis on Central Europe. He will be on leave spring semester 1978.

**Hedwig Rose**, assistant professor of education and coordinator of the Education Studies Program, has a B.A. from Cornell and an M.A. in education from Smith College where she concentrated in comparative education. She is presently a doctoral candidate at the University of Massachusetts. She was a supervisor of practice teaching at Smith College's Department of Education and Child Study and has worked with the Northampton public school system.

**Stewart Shapiro**, visiting assistant professor of political science, holds an A.B. and M.A. from SUNY at Binghamton and is a Ph.D. candidate at the University of Massachusetts. His fields of specialization are American government and public policy with particular interest in the areas of environmental policy, theories of stratification and educational policy; political theory; and international relations.

**William Slater**, associate professor of history and Master of Merrill 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.

**Barbara Turlington**, Dean of Academic Affairs and assistant professor of political science, has taught at Connecticut College and Mount Holyoke College. She attended Swarthmore College and has a B.A. from the American University of Beirut. She has taught English in Ethiopia and did graduate work in international relations and law at Columbia University.

**Robert von der Lippe**, associate professor of sociology, 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 at Amherst College. His B.A., M.A., and Ph.D. degrees are from Stanford University.

**Stanley Warner**, associate professor of economics and Master of Merrill 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 S. Weaver**, associate professor of economics and history, 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 Weissman**, 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.



## CLASS SCHEDULE SPRING TERM 1978

### SCHOOL OF HUMANITIES AND ARTS

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
HA 107 Contact Improvisation	E. Huston	1st Come	27	TBA	Arts Bldg
HA 108 Color	A. Hoener	Open	None	TTh 1030-12	FPH ELH
HA 110 Film Workshop I	T. Joslin	Lottery	12	M 130-5	
HA 112/					
212 Amer Black Autobiog	E. Terry	Open	None	MW 130-3	PH D-1
HA 113 The Print	J.D. Stokes	Open	None	TBA	
HA 115/		Beg-Lottery	20	TTh 1030-12	Dance Studio
215 Studio Exp- Dance	F. McClellan, et al	Int-Lottery	20	TBA	
		Adv-Instr Per	20	MW 1-3, F 1030-12	Dance Studio
		1st Come	20	MW 3-5	Kiva
HA 116 Mod Visionary Writing	C. Hubbs				
HA 117/					
217 Art in Craft	R. Superior	Open	None	W 730-10pm	Arts Bldg
HA 118 Myth and History	J. Hubbs	Open	None	TTh 1-3	Blair
HA 119 Movement Workshop	F. McClellan	Lottery	20	MW 1030-12	Dance Studio
HA 121 Gods/Beasts/Mortals	R. Meagher	Open	None	TBA	
HA 122 Painting	J. Murray	1st Come	15	TTh 915-1045	Arts Bldg
HA 123/					
223 Exploring Sexuality	L. Gordon/G. Gordon	Instr Int	16	TTh 9-1030	DH Masters
HA 124 Black Women/White Women	J. Lewis	Open	None	TBA	
HA 129/					
229 Seminar-Modern Lit	C. Hubbs	Open	None	M 7-9pm (2/6/77 only)	Blair
HA 131/					
231A Poetry Writing Workshop	A. Salkey	Instr Per	16	T 130-3	EDH 17
HA 131/					
231B Poetry Writing Workshop	B. Goldensohn	Instr Per	15	M 1-4	PH B-1
HA 134 College Writing	E. Terry	1st Come	18	TTh 11-1	PH D-1
HA 136 Man-Made Environment	N. Juster/E. Pope	Lottery	24	MTh 130-430	CSC 3rd Fl
HA 140 Vision & Revision	W. Arnold, et al	Open	None	W 7-9pm	FPH WLH
HA 150 Still Photo Workshop	W. Arnold	Instr Per	15	M 1-5	Photo Lab
HA 151/					
251 Images/Process/Trans II	J. Jagel	Instr Per	10	T 1030-12	Art Bldg
HA 152/					
252 Film Image-Gay	T. Joslin	Open	None	T/W 7-11pm, Wam	FPH MLH/Kiva, Lib 3
HA 153/					
253 Afro-Am Chamber Ens	V. Wood	Audition	20	MW 1230-3	Music Bldg
HA 159/					
259 Hampshire Chorus	A. Kearns	Audition	None	TTh 7-9pm	Red Barn
HA 162 Rehearsal & Performance	J. Abady/W. Kramer	Open	None	W 3-5	PAC
HA 163/					
263 Fiction Writing Workshop	A. Salkey	Instr Per	16	Th 130-3	EDH 17
HA 167/					
267 Way of Philosophy	R.K. Bradt	Open	None	W 830-1030	FPH 103
HA 172/					
272 Hist Per-Afro-Am Music	V. Wood	Open	None	MW 830-1030	FPH ELH

## SCHOOL OF HUMANITIES AND ARTS

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
HA 178/ 278 Begin Scene Study	J. Abady	Instr Per	12	WF 1-3	PAC
HA 182/ 282 Intro-Children Theatre	W. Kramer	1st Come	12	TTh 10-12	Div IV
HA 183/ 283 Women & Leadership	R. Carew	1st Come	12	TTh 1-3	EH Masters
HA 190 Color & Light Circus	S. Goldberg, et al	Open	None	TBA	
HA 194/ 294 Prose Writing Workshop	D. Roberts	Instr Int	20	M 1-4	EDH 16
HA 199/ 299 Art of Biography	D. Roberts	Open	None	TTh 1030-12	EDH 16
HA 201 American Landscapes	D. Smith	Instr Per	25	TTh 1030-1230	FPH WLH
HA 207 France	J. Lewis	Instr Per	20	TBA	
HA 210 Film Workshop II	T. Joslin	Instr Per	12	T 130-5	FPH ELH
HA 219 Ways of Seeing	J. Murray	1st Come	25	Th 130-330	Arts Bldg
HA 220 Film/Photo Studies	J. Liebling	Open-Concentrators		W 1-5	Blair
HA 224 Adv Tutor-Shakespeare	L.B. Kennedy	Instr Per	10	MWF 3-5	PH C-1
HA 225 Photo Workshop	J. Liebling	Lottery	12	T 2-5	Photo Lab
HA 226 Bk Sem-Journalism	D. Kerr	Lottery	12	M 1-3	PH C-1
HA 232 GIS-Elec Music Comp	R. McClellan	Instr Per	10	F 1-3	FPH 101
HA 235 Design Tech-Theatre	W. Kramer	Instr Per	10	MW 10-12	Div IV
HA 237 Editorial Writing	D. Kerr	Instr Per	9	W 1-3	PH C-1
HA 243 Art/Society-Ren Italy	S. Allen	1st Come	20	MW 1030-12	FPH 104
HA 245 Healing Force-Music	R. McClellan	Instr Per	15	MW 1-3	Music Bldg
HA 255 Labanotation	F. McClellan	Open	None	T 11-1, Th 11-12	Smith
HA 257 Santayana	R. Lyon	Open	None	TBA	
HA 260 Heidegger/Tradition II	R.K. Bradt	Open	None	W 3-5	FPH 103
HA 261 Advanced Approaches	J. Abady/W. Kramer	Instr Per	None	TTh 1-3	PAC
HA 264 Mothers/Fathers, Etc.	N. Payne/J. Boettiger	Instr Per	16	TTh 9-1030	Blair
HA 269 Origins-Romanticism	J. Hubbs	Open	None	TTh 1030-12	Blair
HA 273 Humanities Seminar II	R.K. Bradt	Open	None	W 730-10pm	Donut 4
HA 277 Sound/Meaning-Poetry	J. Gee	Instr Per	15	TTh 9-1030	FPH 104
HA 280 Studio Art Critique	A. Hoener/R. Superior	1st Come	15	T 1-4	Arts Bldg
HA 284 Dance Works	F. McClellan	Open	None	TBA	
HA 285 How Bach Did It	R. McClellan	Instr Per	20	MW 1030-12	Music Bldg
HA 288 Reading Group-Mod Lit	R. Lyon	Instr Per	8	TBA	
HA 289 Shakespeare & Woolf	L.B. Kennedy	1st Come	28-Div II	MWF 9-1030	Blair
HA 293 GIS-Score Analysis	R. McClellan	Instr Per	8	Th 1-3	FPH 212

## SCHOOL OF LANGUAGE AND COMMUNICATION

LC 129 Newspapers	D. Kerr	1st Come	25	TTh 1030-12	FPH 108
LC 139 International Communic	J. Miller	Instr Per	15	TTh 9-1030	FPH 106
LC 141 Philosophy-Perception	C. Witherspoon/J. Brumbaugh	Instr Per	20	MWF 1030-12	FPH 106
LC 142 Linear Perspective	W. Marsh	Lottery	20	MWF 1-2	FPH 105
LC 143 Problem Solving	D. Knapp	Lottery	20	TTh 1030-12	CSC 125
LC 145 Simplicity/Complexity	M. Feinstein	1st Come	20	TTh 1030-12	FPH 104
LC 152 Adolescence/Identity	E. Cooney	Instr Per	25	TTh 9-1030	FPH ELH
LC 154 Winning Arguments	M. Radetsky	Instr Per	20	MW 1030-1130	FPH 107
LC 155 Culture/Lang/Personal	J. Tallman	1st Come	20	TTh 1030-1230	EDH 15
LC 157 TV Criticism	S. Staniski	Instr Per	12	M 7-830pm	Kiva
LC 158/ 258 TV Research	P. Crown	1st Come	20	MW 1030-12	FPH 103
LC 159 Games	A. Hanson/W. Marsh	Lottery	32	MWF 930-1030	FPH 106
LC 161 Color & Light Circus	S. Goldberg, et al	Open	None	TBA	
LC 162 Spatial Relationships	J. Hornik	1st Come	25	M 2-5	FPH 105
LC 170/ 270 Meaning	J. Gee	1st Come	20	MW 1-230	FPH 104
LC 185 LISP	E. Soloway	1st Come	30	MW 1030-12	FPH ELH
LC 219 Comm Policy Research	J. Miller	Instr Per	10	T 1-3	PH A-1
LC 227 Person Perception	E. Cooney	Instr Per	12	TTh 130-3	FPH 104
LC 229 Cognitive Development	D. Knapp	Lottery	20	TTh 1-230	FPH WLH
LC 234 TV Production Project	S. Staniski	Instr Per	20	TTh 9-12	TV Studio
LC 235 Field Meth-Linguistics	N. Frishberg	Instr Per	20	TTh 1030-12	FPH 107
LC 237 Editorial Writing	D. Kerr	Instr Per	9	W 1-3	PH C-1
LC 238 Pattern/Ritual	J. Tallman	1st Come	16	MW 1030-1230	EDH 4
LC 239 Culture/Communication	J. Church	Open	Div II	TTh 1-3	EDH 4
LC 244 Lang/Lit/Culture	R. Lyon	Open	None	TTh 1030-12	EDH 4
LC 246 Cognitive Psychology	N. Stillings	1st Come	20	MW 3-430	FPH 106
LC 260 Conventional Gesture	J. Wattman	1st Come	20	WF 9-1030	EDH 15
LC 266 Exp TV Workshop	P. Crown	Instr Per	12	MW 1-5	TV Studio
LC 269 Programming Languages	A. Hanson/E. Soloway	1st Come	20	MW 1030-12	FPH 108
LC 277 Sound/Meaning-Poetry	J. Gee	Instr Per	15	TTh 9-1030	FPH 104
LC 278 Adv Philosophy Seminar	J. Gee	1st Come	12	W 3-5	FPH 104
LC 279 Modern Analytic Philo	M. Radetsky	Instr Per	30	MW 130-3	CSC 114
LC 280 Book Sem-Journalism	D. Kerr	Lottery	12	M 1-3	PH C-1

## LANGUAGE STUDIES

LC 146 Canada Francais	M. Feinstein/R. Pelletier	Instr Per	20	TTh 1-3	FPH 107
LC 150 Intens Inter Spanish	TBA		20		
LC 151 Intens Inter French	R. Pelletier	Instr Per	20	WF 1-230	FPH ELH
LC 160 El Bilinguismo	P. Garcia-Bellido	Instr Per	20	TTh 9-1030	FPH 103

## SCHOOL OF NATURAL SCIENCE

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
NS 105/ 205 Bio-Med Issues-Fem II	J. Raymond	Instr Int	None	TTh 130-3	PH B-1
NS 107 Evolution of Earth	J. Reid/G. Woods	Open	None	TBA	
NS 108/ 208 Geologic Hist-CT Valley	G. Woods	Open	None	TBA	
NS 110. Color & Light Circus	S. Goldberg, et al	Open	None	TBA	
*NS 116 Wildflowers	M.B. Averill/R. Lutts	Instr Int	13	T 1-3	CSC Lab
NS 117 Gardening-Organic/Other	M.B. Averill	Open	None	MF 1-3	CSC 3rd Fl
NS 119 Natural Selection	R. Coppinger/M. Gross	Open	None	MF 3-5	EDH 15
NS 121 Human Biology I	J. Foster, et al	1st Come	32	TTh 9-1030	CSC 114
*NS 131 Brain & Eye	Al Woodhull	Open	None	MWF 1-2	Kiva
*NS 134 Pigments/Dyes/Artist	S. Goldberg	Open	None	TBA	
*NS 135 Beekeeping	W. Niemiec/K. Hoffman	1st Come	15	MWF 1-230	CSC 2nd Fl
NS 141 Human Repro Biology	W. Greenleaf	Open	None	TBA	
NS 144 Nutrition & Obesity	B. Friedman	Open	None	WF 9-1030/W 130-430	PH A-1/Lab
NS 145 Scientific Counterreivs	M. Gross/A. Ziegler	Open	None	TTh 1-3	EDH 15
NS 146 Rubberbands, Etc.	B. Hartline/F. Hartline	Open	None	MW 1030-12	CSC 2nd Fl
NS 153 Family Farm in U.S.	P. Slater	Open	None	TBA	
NS 154 Microbiology	S. Oyewole	Open	None	WF 1030-12/1-330	PH B-1/Lab
NS 157 Scientists/Nonscientists	C. Van Raalte	Instr Per	15	TTh 1-230	CSC 2nd Fl
*NS 158 Structure of Molecules	B. Friedman/S. Goldberg	Open	None	TTh 9-1030	PH A-1
*NS 159 Elem Thermodynamics	M. Gross	Open	None	TTh 9-1030	CSC 3rd Fl
NS 161/ 261 Math-Scntsts/Sci Scntsts	K. Hoffman	Open	None	MWF 930-1030	FPH MLH
*NS 163 Chemical Reactions	N. Lowry	Open	None	TTh 9-1030	EDH 15
NS 168/ 268 APL & Quantitative Meth	M. Sutherland	Open	None	TTh 1-3	FPH 108
NS 177 Horticulture	N. Seamon/P. Bowne	Open	None	TBA	
NS 182 Basic Physics	A. Krass, et al	Open	None	MWF 830-10	CSC 114
*NS 188 River Dynamics	J. Foster/J. Reid	Open	None	M 1-6	CSC 2nd Fl
NS 202 Aquatic Ecology	C. Van Raalte, et al	Open	None	MW 1030-12	EDH 17
NS 203 Aquatic Ecology Lab	C. Van Raalte, et al	Open	None	W 1-5	CSC Lab
NS 206 Behav Genetics Seminar	R. Coppinger, et al	Open	None	TBA	
NS 207 Pump or Well	P. Slater	Open	None	TBA	
NS 209 Biology & Math	P. Sternberg	Open	None	TBA	
NS 211 Solid State Physics	M. Woolf	Open	None	MW 130-3	CSC 125
NS 216 Geophysics/Chemistry	B. Hartline/J. Reid	Instr Per	None	MW 1-230	EDH 17
NS 217 Animal Physiology	Al Woodhull/F. Hartline	Open	None	MW 9-1030/Th 1-3	FPH 105/Lab
NS 219 Who Controls Technology	A. Krass/S. Shapiro	Instr Per	20	W 1230-3	FPH 103
NS 221 Biological Models	D. Riggs	1st Come	24	MWF 1-2	EDH 4
NS 234 Organic Chemistry II	N. Lowry	Open	None	MWF 1030-12	EDH 15
NS 267 Linear Analysis	K. Hoffman	Open	None	TTh 1-230	CSC 125
ASTFC 020 Cosmology	E.R. Harrison	Open	None	MW 130-3	Amherst
ASTFC 022 Astron/Astrophys II	G. Gordon	Open	None	MW 130-3/Th 8-10pm	FPH 108/CSC 3rd Fl
ASTFC 034 History of Astronomy	R. White/W. Seitter	Open	None	MW 230-345	Smith
ASTFC 038 Obs Radio Astronomy	G.R. Huguenin	Instr Per	None	TTh 230-345	GRC534/UMass
ASTFC 044 Astrophysics II	G. Greenstein	Instr Per	None	MF 125-320	GRC534/UMass

## SCHOOL OF SOCIAL SCIENCE

SS 109 Social Analysis-Space	B. Linden	1st Come	16	T 1030-1230	FPH 105
SS 113 Human Biology I	J. Foster, et al	1st Come	32	TTh 9-1030	CSC 114
SS 116 Jews in Russia	L. Glick	1st Come	25	MF 1030-12	EDH 16
SS 120 Insurgent Sister	G. Joseph/C. Oliver	Instr Per	20	TTh 1030-12	FPH 106
SS 123 Social Change-The 60's	S. Nesich/L. Mazor	1st Come	25	TTh 1-3	FPH 106
SS 126 Intro-Economic Lit	L. Hogan	Instr Per	20	TBA	
SS 127 Family in Trans-Modern	G. Joseph et al	1st Come	35	TTh 1-3	CSC 114
SS 129 New China	J. Koplin	Lottery	20	TTh 9-1030	EDH 17
SS 133 Urban/Politics	S. Shapiro	1st Come	20	TTh 1030-12	FPH 103
SS 135 Race to Power-S. Africa	C. Bengelsdorf	1st Come	20	TBA	
*SS 140 Deschooling Society	W. Grohmann	1st Come	20	TBA	
*SS 141 Experimental Colleges	W. Grohmann	1st Come	20	TBA	
*SS 142 Purpose of College	W. Grohmann	1st Come	20	TBA	
SS 145 Ethnicity & Politics	L. Glick	1st Come	20	TTh 130-3	FPH 105
SS 156 Social Control/Dispute	B. Yngvesson	1st Come	20	MW 1-3	EDH 15
SS 157 Women & Reform	P. Glazer/M. Slater	1st Come	35	TTh 9-1030	CSC 125
SS 184 Decentralism	M. Breitbart/N. King			MW 1030-12	PH A-1
SS 198 Forgotten People	O. Fowlkes	Lottery	25	MW 1-230	FPH 107
SS 207 Research Seminar	R. Alpert	Instr Per	10-Div II	Th 8-10pm	CSC 114
SS 209 Crime & Punishment	O. Fowlkes/L. Mazor	Open	None	MW 1030-12	FPH WLH
SS 210 Intro-Economics	F. Weaver	Open	None	WF 9-1030	PH B-1
SS 220 Human Motivation	R. Birney	Open	None	WF 1030-12	CSC 125
SS 224 Black Amers-Cap Econ	L. Hogan	Open	None	TBA	
SS 229 Devel/Underdevel-L. Amer	F. Weaver	Open	None	MW 1-3	FPH WLH
SS 234 Philos-Amer Education	H. Rose	Open	None	TBA	
SS 247 Who Controls Technology	A. Krass/S. Shapiro	1st Come	20	W 1230-3	FPH 103
SS 253 Personality-Moral Devel	M. Cerullo/M. Mahoney	Open	None	MW 1-3	FPH 106
SS 255 APL & Quantitative Meth	M. Sutherland	Open	None	TTh 1-3	FPH 108
SS 259 Understand/Explanation	B. Yngvesson	Open	None	T 1-3	EDH 16
SS 261 Structure-Econ Theories	S. Warner	1st Come	18	TBA	
SS 267 Social Theory-Marx/Psych	J. Landes	Instr Per	20	T 1-3	FPH 103
SS 275 State and Society	M. Cerullo, et al	Open	None	TTh 1030-12	FPH ELH
SS 276 Comp Socialist Devel	C. Bengelsdorf/F. Holmquist	Instr Per		TBA	
SS 280 Manipulated Environment	M. Breitbart	Open	None	MW 130-3	PH A-1
SS 295 Separation & Loss	E. Brown	Instr Per	12	W 10-12	PH D-1

# INTEGRATIVE SEMINARS

COURSE	INSTRUCTOR	ENROLLMENT METHOD	LIMIT	TIME	PLACE
IN 302 Economics-Intimacy	J. Lewis	Instr Per		TBA	
IN 305 Athens	R. Meagher			TBA	
IN 310 Transitions	J. Boettiger/D. Smith	Instr Int	10	Th 6-10pm	
IN 314 Women in the Arts	S. Allen/S. Kaplan			TBA	
IN 317 Museum Studies	V. Halsey/C. Harris	Open	None	Th 1-3	FPH 103
IN 322 Environmental Studies	R. Lutts	1st Come	15	W 930-12	EDH 16
IN 328 It's About Time	K. Gordon/C. Witherspoon	Instr Per	25	W 330-5	CSC 125
IN 333 Adult Development	L. Farnham	1st Come	12-DIII	W 3-5	FPH 105
IN 335 Soc Sci Analysis	B. Linden/R. von der Lippe	Instr Per	12	W 1-3	PH B-1
IN 340 Economic Theory	S. Warner, et al	Open	None	TBA	
IN 343 Women & Language	N. Frishberg/E. Pearl	Instr Per	15	W 730-930pm	PH C-1
IN 347 Symboling	J. Miller	Instr Per	10	T 730-10pm	PH A-1

# OUTDOORS PROGRAM

OP 107 CT River Paddling	C. Fisher	Open	None	WF 7-9am	RCC
*OP 124 Top Rope Climb	D. Roberts	Open	None	F 1-6	RCC
OP 125 Beg Whitewater Kayak	C. Fisher	1st Come	10	Th 1-3 (*1-6)	RCC
*OP 155 N.C. Whitewater Trip	C. Fisher	See Course Description			
*OP 204 Lead Rock Climb	E. Ward	Instr Per	None	T 1-6	RCC
OP 205 Int/Adv Whitewater	C. Fisher	Instr Per	10	T 1-3 (*1-6)	RCC
OP 215 Practicum-Env Ed I	R. Lutts, et al	Instr Int		See Course Description	
OP 216 Practicum-Env Ed II	R. Lutts, et al	Instr Int		See Course Description	
*OP 230 Cont Top Rope Climb	E. Ward	Instr Per	None	T 1-6	RCC
OP 231 Environ Ed Centers	R. Lutts	Open	None	Th 1-3	EDH 16
OP 235 All the Things	L. Cullen/T. Peterson	1st Come	15	Th 1-6	RCC
OP 240 Environ Ed Seminar	R. Lutts, et al	Open	None	T 730-930pm	Kiva
*OP 262 Wildflowers	M.B. Averill/R. Lutts	Instr Int	13	T 1-3	CSC Lab

# RECREATIONAL ATHLETICS

RA 101 Beg Shotokan Karate	M. Taylor	Open	None	TTh 230-430	So Lounge
RA 103 Int Shotokan Karate II	M. Taylor	Open	None	TThSun 7-9pm	So Lounge
RA 104 Adv Shotokan Karate	M. Taylor			SunM 4-6pm	So Lounge
RA 105 Aikido	M. Taylor	Open	None	MW 11-1	So Lounge
RA 106 Beg Hatha Yoga	G. Noble	Open	None	M 2-315	Donut 4
RA 107 Cont Hatha Yoga	G. Noble	Open	None	M 330-445	Donut 4
RA 108 Beg Tai Chi Chuan	P. Gallagher	Open	None	M 630-745	So Lounge
RA 109 Cont Tai Chi Chuan	P. Gallagher	Open	None	M 8-915pm	So Lounge
RA 111 Physical Fitness Class	R. Rikkers/A. Wright	Open	None	TF 1215-115	RCC
RA 112 Fencing	W. Weber	Open	None	TBA	
RA 113 Women's Self Defense	P. Turney	Open	None	TBA	
RA 114 Meditation	E. Connolly	Open	None	WF 815-915	RCC

# COLLEGE WRITING: READING IMPROVEMENT

Supportive Editing	G. Sassen	Open	None	T 1030-1230	PH B-1
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# CODES

CSC	Cole Science Center
EDH	Emily Dickinson Hall
FPH	Franklin Patterson Hall
LIB	Harold F. Johnson Library
RCC	Robert Crown Center
DH	Dakin House
EH	Enfield House
PH	Prescott House
DONUT	Center Room-Greenwich House
ELH	East Lecture Hall
MLH	Main Lecture Hall
WLH	West Lecture Hall
PAC	Performing Arts Center

TBA	To Be Announced/Arranged
GIS	Group Independent Study

\* Course is not term-long;  
see course description.

# Hampshire College

Amherst, Massachusetts / 01002