<table>
<thead>
<tr>
<th>Time</th>
<th>1st Come</th>
<th>1st Open</th>
<th>1st Come</th>
<th>Instr Per</th>
<th>1st Int</th>
<th>Instr Int</th>
<th>1st Int</th>
<th>Instr Int</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>70</td>
<td>80</td>
<td>70</td>
<td>80</td>
<td>70</td>
<td>80</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>TTH 130-3</td>
<td>TTH 7-9pm</td>
<td>TTH 930-11</td>
<td>TTH 9-1030</td>
<td>MWF 130-3</td>
<td>MWF 930-11</td>
<td>M-F 7-11pm</td>
<td>M-F 7-11pm/TTH 130-5</td>
<td>TTH 3-5</td>
</tr>
<tr>
<td>TTH 930-11</td>
<td>TTH 9-1030</td>
<td>MWF 130-3</td>
<td>MWF 930-11</td>
<td>TTH 1030-12</td>
<td>TBA</td>
<td>Photo Lab</td>
<td>Photo Lab</td>
<td>ARB</td>
</tr>
<tr>
<td>TBA</td>
<td>Photo Lab</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
</tr>
<tr>
<td>TBA</td>
<td>Photo Lab</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
</tr>
<tr>
<td>TBA</td>
<td>Photo Lab</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
<td>ARB</td>
</tr>
</tbody>
</table>
HAMPShIRE COLLEGE
Spring Term, 1972

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Dates and Calendar</td>
<td>2</td>
</tr>
<tr>
<td>The Human Development Program</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language Instruction</td>
<td>4</td>
</tr>
<tr>
<td>School of Humanities and Arts</td>
<td></td>
</tr>
<tr>
<td>List of Courses</td>
<td>5</td>
</tr>
<tr>
<td>School of Natural Science and Mathematics</td>
<td>25</td>
</tr>
<tr>
<td>List of Courses</td>
<td></td>
</tr>
<tr>
<td>School of Social Science</td>
<td>46</td>
</tr>
<tr>
<td>List of Courses</td>
<td></td>
</tr>
<tr>
<td>Program in Language and Communication</td>
<td>69</td>
</tr>
<tr>
<td>Statement by the Program Coordinator</td>
<td></td>
</tr>
<tr>
<td>List of Courses</td>
<td>70</td>
</tr>
</tbody>
</table>
REGISTRATION DATES AND CALENDAR

The following course listing for Spring Term 1972 is fairly complete, but a few additional descriptions will be distributed prior to registration.

- Registration Period for Spring Term: Monday, December 6 - Friday, December 10
  - Discussions with Advisers and Instructors: December 6-8
  - Sign-up for Courses with Course Instructors: December 9-10
- Spring Term Courses Begin: Wednesday, February 2
- Drop-Add Period: Wednesday, February 2 - Wednesday, February 16
- Last Day to Register for Five College Interchange: Friday, February 11
- Spring Recess: Saturday, March 18 - Monday, April 3
- Last Day of Classes: Saturday, May 13
- Reading and Examination Period: Monday, May 15 - Friday, June 2

Students from the other four institutions wishing to take a Hampshire College course should telephone or talk with the instructor no later than Wednesday, December 8, about permission to enter the course.
THE HUMAN DEVELOPMENT PROGRAM

Spring Term 1972

The Human Development Program in the Spring Term 1972 will offer a collection of workshops exploring modes of personal growth and aspects of the individual life process. The Program's principal goal is to help its participants toward their own maturing—toward fuller consciousness of themselves, the issues and relationship and styles and symbolization that may offer a better purchase on living well with themselves and others. Individual workshops will differ widely in the directness and the styles with which these goals are addressed. Some workshops will be offered by faculty members as part of the regular Spring Term curriculum (see list below). Others -- indeed the majority of workshops -- will be organized as Merrill House or Dakin House courses or informal programs, drawing leadership from all sectors of Hampshire's community and from outside the College. Workshops in the second -- less official -- category will also differ widely in length: from single weekend to full term. In addition, the Human Development Program will sponsor a series of evening events -- discussions, films, lectures, demonstrations, and festive occasions -- open to the College community.

Of the Human Development Program's likely twenty-odd workshops to be conducted in the Spring Term, probably six will be offered as part of the College's regular curriculum, and their descriptions are to be found elsewhere in this catalog; perused together, those descriptions offer a partial but concrete expression of the Program's directions and modes of work. They include:

Movement Workshop
HA-155
Dimensions of Consciousness (two workshops)
HA-195
Boettiger

Workshop in Visual Experience
HA-165
Mayes

Science and Eastern Thought
N5-182
Domash

Problems in Child Development: Fatherhood and Play
SS-168
Farhan

John R. Boettiger, Chairman
Human Development Program
FOREIGN LANGUAGE INSTRUCTION

Spring Term, 1972

The Spring Term will offer students a variety of ways to exercise their interest and skill in French and Spanish. Students interested in pursuing the study of either language should consult with Professor James Watkins in Academic Building 201. (It is not necessary to register for such work, though successful completion of a term's work in foreign language study will be acknowledged in your College transcript.)

* French language seminars, grouped according to proficiency levels and organized to direct students with previous training in French through a comprehensive, individual review, will meet once a week during the Spring Term.

* French conversation groups will also meet regularly every afternoon, Monday through Thursday. For information, students should see Tom Capretz, Lindsey Hicks, or Davis Lockwood.

* A relatively advanced group, now reading a contemporary French novelist, will decide before the end of the Fall Term the particular subject it will discuss in the Spring. New students, with the suitable proficiency, are invited to attend.

* Beginning students of French enrolled in the Fall course on self-instruction will pursue their work independently during the Spring. Through the January Term, as well as the Spring, Mr. Watkins will meet with them, as needed, for individual guidance. Student tutors will also be available for regular sessions of structured oral practice.

In Spanish, conversation groups will meet regularly this Spring, three days each week, and are open to all interested students. The Fall Term Language and Communication course in teaching English to Spanish-speakers will continue as a group Independent Study project. Theory studied during the Fall will begin to be applied in the classrooms of the West Street Elementary School in Holyoke.

Students with an already advanced proficiency are encouraged to use it as an active part of their three-course program. Mr. Pollock (Spanish) or Mr. Watkins (French) will be happy to consult with students about relating foreign language materials to their work in courses or individual projects.
SCHOOL OF HUMANITIES AND ARTS

DIVISION I

ALTERNATIVE ENVIRONMENTAL STRUCTURES  Mansfield
HA-101

AMERICAN WRITERS AND RACE  Terry
HA-191

APPRENTICE COURSE IN FILM MAKING  Liebling
HA-167 (HA-200)

CONTEMPORARY SCULPTURE - THE PROCESS, THE PROJECT  Mansfield
HA-196

DIMENSIONS OF CONSCIOUSNESS  Boettiger
HA-195

EVOLUTION OF ENGLISH  Houle
HA-127 (LC-128)

THE LITERATURE OF THE CARIBBEAN  Marquez
HA-107

A MAN: ALBERT CAMUS  Haden
HA-131

THE MAN-MADE ENVIRONMENT  Juster and Pope
HA-136

MOVEMENT WORKSHOP  F. McClellan
HA-155

MUSIC IN THE TWENTIETH CENTURY  R. McClellan
HA-158

PUPPET WORKSHOP  Terry
HA-139

RUSSIA AND THE WEST  Hubbs
HA-175

STILL PHOTOGRAPHY WORKSHOP  Mayes
HA-150

STRUCTURES AND MATERIALS OF MUSIC  R. McClellan
HA-159

STUDIO  Hoerner
HA-180
THOMAS JEFFERSON
HA-137

THREE AMERICAN POETS
HA-104

WHAT HAPPENS AT THE MOVIES?
HA-112

WORKSHOP IN VISUAL EXPERIENCE
HA-165

DIVISION II

APPRENTICE COURSE IN FILM MAKING
HA-200 (HA-167)

ASPECTS OF EXISTENTIALISM
HA-220

FUNCTIONAL SCULPTURE
HA-235

GRAPHIC DESIGN APPRENTICESHIP
HA-240

OUGHT LITERATURE BE TAUGHT?
HA-275

PROBLEMS IN ENVIRONMENTAL DESIGN
HA-250

SCIENCE, ART, AND METAPHYSICS IN THE ENLIGHTENMENT
HA-245 (HA-250)

SEMINAR IN ELECTRONIC MUSIC
HA-270

THEATRE OF MIXED MEANS
HA-265

THE TROUBADOURS: NERUDA, VALLEJO, GUILLÉN
HA-260

RELATED COURSES IN THE LANGUAGE AND COMMUNICATION PROGRAM

THE MEDIUM AND THE MESSAGE: EXPLORATIONS IN COMMUNICATION AND CULTURE
LC-118

THE RETREAT FROM THE WORD
LC-115

F. Smith
D. Smith
Liebling
Mayes
Liebling
Haden
Mansfield
Hoener
Roberts
Norton and Pope
Hubbs and Goldberg
R. McClellan
F. McClellan and Landfield
Marques

Lyon
ALTERNATIVE ENVIRONMENTAL STRUCTURES

Robert Mansfield

A workshop in spatial awareness and environmental design. The creative direction will shift from theoretical to practical application. Design principles will be examined and applied to the actual construction of an alternative environment on campus.

Workshop members will be divided into work crews that will be asked to deal with specific problems in construction, planning, and researching. Class time will be the hub of communicating the ideas, directions, and problems that the crews confront individually and collectively.

Although this workshop will deal primarily with creative architecture, it will also confront basic issues in landscaping, material application, economics, art, and life.

The course will meet twice a week for two-hour meetings. There will be a lab fee of $15.00, and the course is limited to twenty students.

AMERICAN WRITERS AND RACE

Eugene Terry

A seminar on the fictive images of black people and the problem of race held by both black and white authors of the 19th and 20th centuries - Melville, Chesnut, Cable, Mark Twain, Denhor, Johnson, Glassow, Hughes, Faulkner, Styron, and Baldwin. The members of the class are asked to prepare papers based on the readings of these or other authors' works for presentation to the group.

This course will meet for a two-hour period once a week. Enrollment is limited to sixteen students.

APPRENTICE COURSE IN FILM MAKING

Jerome Liebling

Theories and techniques of film production will be developed through the relationship of apprentice to advanced student.

Division I students will participate in the ongoing film production activity of Division II students. The broad range of film inquiry and investigation, as well as actual production techniques,
HA-DIV 1

will be advanced through collaborative effort.

The class will meet twice a week for 2½ hours per meeting and is limited to six Division I and six Division II students. There will be a fee of $15.00 for materials.

HA-167 (HA-200)

CONTEMPORARY SCULPTURE - THE PROCESS, THE PRODUCT
Robert Mansfield

This workshop is designed to give the individual exposure to the creative processes that are incorporated in the making of contemporary sculpture.

Experimentation with materials, methods, and applications will be of primary concern to the workshop. Sculptural concepts will be discussed and confronted through slide presentations, field trips, films, group critiques, and practical involvement.

As a means of establishing a visual awareness of sculptural space, the direction will relate to contemporary sculpture through design, theory, art, technology, aesthetics, and individual confrontation.

The class will meet twice a week for two-hour periods. Enrollment is limited to sixteen students, and there will be a lab fee of $20.00.

HA-196

DIMENSIONS OF CONSCIOUSNESS
John Boettiger

This course, having undergone three successive incarnations, deserves a fresh description. It will still be designed as an experimental workshop to understand better some of the varieties of conscious experience to which men and women are led in their search for personal growth.

It is likely that we will start with the life of the body, exploring through natural movement and stillness the awareness of self that comes through listening to the body's own subtle language. We'll also find ways to be with others without words, discovering some of the problems and potential of nonverbal communication. In some of the movement sessions together, in time alone, and with the companionhip that is natural to them, and through reading and talk, members of the workshop will be seeking the integrity-in-motion of body and psyche, and the essential connectedness between those aspects of self and the natural world through which they move.
Dream experience and authentic fantasy, if we can reawaken to them and to their playful and serious spirit within us, offer an extraordinarily rich access to personal insight. Similarly, shared fantasy in life and friendship can often provide a couple or a group new perspective on human relationships. Members of the workshop will have an opportunity to explore some Gestalt awareness ways toward reawakening and integrating the less conscious and more imaginative aspects of themselves.

Thirdly, the workshop will be concerned with the arts and disciplines of meditation. While different schools and approaches to meditation vary in their immediate objects and methods, there seems to be some reasonably common ground: seeking, through meditation, to calm the mind, reduce noise and stress, remove some of the automaticity and selectivity of ordinary awareness, and allow thereby a fresher, more vivid awareness of self and surroundings. In essence then, meditation is concerned with "cleansing the doors of perception."

Finally, and often in conjunction with the pursuits described above, members of the workshop will be exploring for themselves and in the lives of others (encountered in person, through reading and film) the realities of personal growth through human relationships; the primal reality of mother and father for a daughter or son, and the perception, care, courage, and passion by which we know another in love and friendship.

Each workshop will work as a group twice a week for two-hour sessions. In addition to these two weekly meetings, the workshop will probably plan a longer weekend session. The work will include journal-writing, reading, and some films, as well as experiential sessions and talks together. The style of our time together, in so far as it can be gathered into generalization, works toward openness, directness, lack of clutter or coercion, and sensitive care for others.

Two "Dimensions of Consciousness" workshops will be offered in the Spring Term. Each workshop will be limited to sixteen students for a total of thirty-two.

This seminar is offered within the Human Development Program.

HA-195

EVOLUTION OF ENGLISH

Sheila Houle

Het aet, we Car-Dana in gerdagun
handcynings bryn safrunon,
ha ba arplingas ellen fremedon.

9
WHEN THAT APRIL WITH HIS SHOWERS COME
The droughts of March hath perjured to the root
And hasted every wayne in swich licour.
Of which vertu engendred is the flour.

These two passages—the opening lines of Beowulf followed by the first lines of the Prologue to The Canterbury Tales—may not look like samples of our native language, but they are. They represent two major phases in the evolution of English, known as Old English and Middle English. In this course we will study the origins of our language and the ways it has changed from the time of the Beowulf poet—the sounds we will learn to pronounce Old and Middle English so we can read the literature out loud, the way sentences are put together, the changes in meanings of words. We will look at these forces outside language which effect some of these changes—political, military, social, even geographic influences, borrowings from other languages and so on. And we will be studying these older stages of Modern English primarily through the literature of each period. Thus we'll not only have authentic examples of the language, but we'll also have an opportunity to read these texts in the original version.

The class will meet twice a week for 75-minute periods and will be limited to twenty students.

THE LITERATURE OF THE CARIBBEAN

Robert Marquez

This course will consist of selected readings in the literature of the Caribbean. Our primary concern will be with searching out the more common themes and preoccupations manifest in the writing of the islands and, more particularly, with the specific treatment given to these themes by individual prose writers and poets. We will be paying particular attention to History, Salt, Society, and Social Change as envisioned by these writers. The question of approach will, in turn, be related to the question of technique and style. The emphasis will be on the Spanish speaking Caribbean, especially the work of Edmundo Desnoes, Alejo Carpentier, Enrique LaGuerre, and René Marquez, but we will also be examining the work of writers from the islands of Martinique, Haiti, Trinidad, St. Lucia, and Barbados in an effort to identify existing—or non-existent—patterns and distinguishing characteristics among the writers of three major language groups in the Caribbean.

The course will meet once a week for two hours, and each student will meet with me at a regularly scheduled conference to discuss the course readings, papers, projects. There is no foreign language required for the course. This course will be limited to sixteen students.
A MAN: ALBERT CAMUS

James Haden

What is humanistic education for, if not for individuals? And if for individuals, it would seem to have to be, at some point or other, about individuals.

This course is conceived as an effort to take a true individual in his individuality just so far as we can, and to make it seem worthwhile to try to discover and to recognize that individuality. The world has produced and is still producing people of marked and powerful personhood, their names and fragments of their personalities have become embedded in human history and ideas, but academia normally prefers to take them in a partial, abstract, and dilute form. To cite a few diverse examples: Galileo, Abelard, Jefferson, Socrates, Michelangelo. These are people who are far more than the categories of artist, statesman, scientist, or philosopher to which they are customarily assigned. And in this "more" consists their individuality.

In this trial run of the foregoing notions, the person selected is Albert Camus. We need to be concerned with every facet of his life and work: not merely his literary production and his philosophical essays on man and society, but also his work as journalist, his notebooks, his personal relations with the Parisian intelligentsia, his efforts to be an honest man in dark times. And the purpose of all this is to try to use these to triangulate the Camus that eludes every category.

It will be possible, and indeed necessary, for students in this course to take one or two of these facets for special, intensive study, but it will be equally vital for all to bring their discoveries and interpretations to the rest, so that all may constantly be asking what relations this facet has to that one. So the course will have to be an exercise in both individual and joint study, and we shall have to devise fitting methods of realizing this aim.

The class will meet twice a week for two-hour periods, and is limited to sixteen students.

THE MAN-MADE ENVIRONMENT

Norton Juster and Earl Pope

This course is a continuation of the Fall Term course which dealt with the making and understanding of the human environment—the cities and towns and places where people live—and the way in which human activities and needs find expression in forms that reflect their lives and values. It is concerned with perception, visual awareness, a developed sensitivity to surroundings, an
HA-DIV 1

understanding of place, and a sense of the individual as an effective force in altering or creating his own environment.

It is primarily a workshop course, using research, analysis, and design projects of a non-technical nature to investigate and uncover environmental problems and to understand the creative processes through which environment is made.

The subject of these investigations will include the following:

1. Man - How he sees and senses his environment, his physical capacities and limitations, his functional and psychological needs as concern his environment, and how he adapts and uses his environment.

2. The environment today - The problems bequeathed from the past, the historical context, the uses of technology, the dehumanized environment.

3. The approach to creating environment - The identification of human needs today, definition and analysis of the problems of environmental design and factors which limit and affect it.

4. Perception - sensitivity to one's visual world, seeing with a knowing eye, visual thinking, and visual communication.

5. The creative act - translation of program, perception, and technical skill into form.

While much of the work will require visual presentations and analysis, no prior technical knowledge or drawing skills are necessary. Permission of the instructor is required for those students not enrolled in the Fall term course. The class will be divided into two sections which will meet simultaneously. There will be two three-hour meetings per week, and enrollment is limited to twenty-four students.

HA-136

MOVEMENT WORKSHOP

Francie McClennan

This workshop will incorporate elements from Yoga, sensory awareness, and movement exploration. The workshop hopes to offer participants:

1. the opportunity to explore—through kinetic responses and verbal and emotional stimuli—how their body movement is a reflection and a communicating element to others of who they are.

2. a means of personal growth through the processes of experiencing, observing, and evaluating their own responses and the
responses of others.

3. an opportunity for an intensive study derived from class work or readings (in the form of a written or live presentation) of some aspects of non-verbal communication.

The workshop will meet twice a week for two-hour periods. There will also be individual meetings scheduled during the term. Enrollment is limited to fifteen students.

This workshop is offered within the Human Development program.

HA-155

MUSIC IN THE TWENTIETH CENTURY

Randall McClellan

Beginning with a summary of the state of music at the close of the nineteenth century, this course will follow the development of music through the twentieth century to the present day as it relates to the social, political, and artistic movements of Western Civilization. Among the areas to be examined are the aesthetics and philosophies of the composers, compositional techniques, analysis of key works, and the economic and social status of musicians. The course will rely heavily on selected readings and listening.

The class will meet for two 2-hour sessions and one 1-hour session per week. Enrollment is limited to twenty students.

HA-158

PUPPET WORKSHOP

Eugene Terry

The puppet workshop is an attempt to develop a marionette and puppet theatre on Hampshire's campus. The emphasis last spring was on the construction of a theatre. This term the emphasis will be upon the construction of figures for theatrical purposes—various types of puppets, methods and principles used in construction, and the creative use of materials. Although the emphasis is on construction and the producing of a variety show, members of the group are asked to concern themselves with the history and aesthetics of this form of theatre.

The class will meet twice a week for two-hour periods. Enrollment is limited to sixteen students.

HA-139
RUSSIA AND THE WEST
Joanna Hubbs

A course in Modern Russian History with a particular emphasis on cultural dislocation resulting from pressures from the West and problems of national organization. Forced Westernization causes a split in traditional culture and the emergence of two cultures: native and Western. Emphasis will be given to the impact of this split upon the psychological makeup of the late 18th- and 19th-century intelligentsia.

Multi-media methods (church music, folk literature, design and art, music, film—especially Eisenstein's works) underscore the clash of traditional Russian culture with the intellectual and technocratic borrowings from the West. We will consider the emergence of Western genres—drama, novels, journals, and the division of native and Western culture in Russia as a conscious-unconscious split. The role of the artist is seen as of particular importance in the attempts of the intelligentsia to come to terms with their dilemma.

Readings will be primarily from literary sources. The class will meet three times a week for two-hour sessions. Enrollment is limited to sixteen students.

STILL PHOTOGRAPHY WORKSHOP
Elaine Hayes

This course concerns the photograph as Art and Communication and its production and implications.

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

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

A $15.00 lab fee is charged for this course. The College will supply chemicals, laboratory supplies, and special materials and equipment. The student provides his own film and paper. The class will meet twice a week for two-hour sessions, and there will be several field trips. Enrollment is limited to twelve students.
STRUCTURES AND MATERIALS OF MUSIC

Randall McClellan

This course is designed to continue the work begun in the fall course "Technical Aspects of Music." The earlier course, however, should not be considered a prerequisite to this course. Areas to be explored will be melodic writing, two-, three-, and four-part writing, harmonic practice, form, and texture. Stress will be on analytic techniques and the aesthetics of musical practice with the music drawn from Western, Indian, and Japanese cultures.

The course will meet three times a week for one-hour sessions. Enrollment is limited to twenty students.

HA-159

STUDIO

Arthur Hoener

Both of the following studio workshops will constitute a Division I course. Workshops may be taken in any order; i.e., one workshop in the Fall Term and the other during the Spring Term, or two workshops in either the Fall or Spring Term.

Each workshop will meet twice a week for two hours—once with the instructor and once with a Hampshire Fellow.

Students will be responsible for their personal art supplies which are available through local dealers.

Section 1:

Color and Design - An integrated study of basic color and design principles and how they relate to contemporary art forms. Design principles that are relevant to both two and three dimensional organization will be related to color theory and form.

The course is designed to develop and refine visual perception as well as to develop a working knowledge of basic principles.

Section 2:

Studio Workshop - This workshop will be treated as an open studio. Students will design their own course of study in consultation with the instructor. Projects may be developed, for example, around painting, drawing, sculpture, or design ideas or deal with the techniques of silk screen, photo silk screen, printmaking (woodcuts, wood engraving, paper prints, etc.) or typographic studies.

HA-180
THOMAS JEFFERSON

Francis Smith

This seminar will study Jefferson. That is harder than it seems, because he is a protean figure in our history. One of his biographers said: "If Jefferson was wrong, America is wrong; if America is right, Jefferson was right." Others have found him a classic outsider, out of touch with his times. He has been praised and ridiculed in all his roles—as President, scientist, political organizer, revolutionary, philosopher, architect, writer, slaveholder. He fathered a great university, and he mothered a political party. We will read him as a practical revolutionary with a lot to say about freedom, peace, and the powers of the people in the American experience. We will also look closely at the persistent but shifting image of Jefferson in the American mind.

This seminar will meet twice a week for one two-hour meeting and one one-hour meeting. Enrollment is limited to twenty students.

THREE AMERICAN POETS

David Smith

Introduction to the work and life of three American poets—Whitman, Frost, and Robert Lowell—through extensive reading of their works with corollary readings in biography, autobiography, and critical interpretation. These poets are chosen in particular because of the seeming closeness of their poetry to their lives and the resultant problems of critical interpretation. Class members may choose one of these or another American poet as the subject of a "Life History": an in-depth interpretation of the biographical poet and his created persona.

The class will meet twice weekly, once as a full meeting and once in a smaller group. Individual writing will be encouraged. Enrollment is limited to twenty students.

WHAT HAPPENS AT THE MOVIES?

Jerome Liebling

An attempt will be made to analyze various components of the film experience from "Art" to "Home Movies." Films will be viewed and re-viewed, sometimes frame by frame; through readings and discussion, cinematic values and techniques will be studied. The course will deal with history, aesthetics, perception, consciousness, bibliography, image, documentary, cinema verite, skin-flicks, classics, confrontation, personal experience, mindlessness, therapy, budgets, money, fame, freedom, fantasy, and whatever else comes along.
The course will consist of film viewing, readings, lectures, forums, and discussions. There will be no film production.

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

HA-112

WORKSHOP IN VISUAL EXPERIENCE

Elaine Hayes

This course is concerned with creative experience through still and motion picture photography.

The course will follow an inquiry into personal vision using various mediums. The student will attempt to gain awareness of the visual environment and his relationship to it. Through the use of polaroid photography, video tape, film, found photographs, games, sensory awareness problems, self documentation, and machine printing, the student will concern himself with the experience of the visual image as it relates to perception, emotion, fantasy, individuality, and culture. No prior experience in still photography or film is required, and the darkroom will not be used. The course is intended to relate to the human development curriculum and is offered within the Human Development program.

The class will meet twice a week for two-hour sessions, and there will be a lab fee of $15.00. Enrollment is limited to sixteen students.

This workshop is offered within the Human Development program.

HA-165
APPRENTICE COURSE IN FILM MAKING

Jerome Liebling

See description for HA-167.

HA-200

ASPECTS OF EXISTENTIALISM

James Haden

The course name means that I intend to center on certain parts of the existentialist 'movement' (which is nothing if not ill-defined) and not to try a full survey. I want to spend time with some thinkers who might be said to compose the humanistic/atheistic side of the movement, namely, Søren Kierkegaard, Friedrich Nietzsche, Paul Tillich, Martin Buber, Simone Weil, and Karl Jaspers. These people are generally indistinguishable from those who are more closely allied with the phenomenological wing of existentialism, such as Martin Heidegger, Jean Paul Sartre, and Maurice Merleau-Ponty.

The form of the course will be intensive study of selected major writings by the persons chosen. Some books I have in mind are: Thus Spoke Zarathustra (Nietzsche), Concluding Unscientific Postscript (Kierkegaard), I and Thou (Buber), and The Need for Roots (Weil). I will choose the first half of the syllabus and be open to recommendations for the second half.

These are hard works, and they demand thorough immersion in them and in related ideas and writings. (For instance, to understand Kierkegaard well, you ought to have some notion of the Bible, Hegel, and Socrates; to grasp Jaspers, you need some understanding of Kant.) You don't have to have this acquaintance to start with, provided that you are willing to gain it through self-education as we go along.

The course will meet twice a week for two-hour sessions. Tutorial sessions are available by special arrangement and may be conducted as many hours as necessary.

HA-220
FUNCTIONAL SCULPTURE

Robert Mansfield

Basically, this workshop will deal with three-dimensional design and its application to the construction of sculptural furniture.

Relationships of man to his environment will be examined as a means by which the design process can begin. The integration of art, machine, form, function, and the individual will be confronted in the construction of independent and collective projects.

Using the concept that less is more, the direction will be to design and build functional, versatile art forms.

Class will meet twice a week for two hours. The class is limited to ten students and there will be a lab fee of $20.00.

GRAFIIC DESIGN APPRENTICESHIP

Arthur Hoener

The mission of the graphic designer today is to develop visual organizations that will expand upon a verbal message or to present an aspect of a message that cannot be completely conveyed with words. This course will involve the development of visual information for the College through design, typography, illustration, and photography.

Students serving as apprentices will be involved in all aspects of the design process from the conception of ideas through the preparation of finished art and mechanicals, booklets, brochures, posters, and any other graphic material that the College feels it might need to develop its visual imagery.

Design process, decision-making, and the hard realities of getting a piece of visual communications completed will be major considerations.

Limit is eight student apprentices -- at least two photographers. (Admission with permission of instructor only) The class will meet twice a week; one will be for two hours and one will be for four hours.

HA-260
OUGHT LITERATURE BE TAUGHT?

David Roberts

Works of art are of an infinite loneliness and with nothing to be so little reached as with criticism. Only love can grasp and hold and fairly judge them.

--Rainer Marie Rilke, Letters to a Young Poet

...I took only half my trips in Law, idly turning over for the rest to English literature—a subject we can all study for ourselves in our spare time without the need for academic instruction.

--J. R. Ackerley, My Father and Myself

...No teacher ever said: "Don't value uncertainty and tentativeness. Don't question questions. Above all, don't think." The message is communicated quietly, insidiously, relentlessly, and effectively through the structure of the classroom: through the role of the teacher, the role of the student, the rules of their verbal game, the rights that are assigned, the arrangements made for communication, the "doings" that are praised or censured.

--Neil Postman and Charles Weingartner, Teaching as a Subversive Activity

Even youth culture, with its declared affinity for minorities and the outcast, is all too often hostile or indifferent to any curriculum or study that does not reinforce or reiterate its cardinal perceptions. No less than the "straight" culture, it excludes whatever it cannot cope with or somehow assimilate to itself. It is a closed, not an open, culture.

--William Arrowsmith, "Teaching and the Liberal Arts: Notes Toward an Old Frontier"

Besides the dilemmas suggested by the above quotes, any attempt to teach literature in a classroom raises a host of implicit problems. Not for all the agonizing of modern education over "method" and "relevance," few courses face these problems head-on, or try to make them part of the course itself. For instance:

What actually gets taught in the usual literature course? Does it damage literature to teach it? Does it enhance it? Is it morally compromising to be a teacher? A student?

What is literature itself—what is it used for and good for? Is it taste important? How does a book become part of the "official" canon of literature?

If you can teach literature at all, how can you do it best? What pressures and limitations does the institution—college as a whole, or the class itself—put on a reader’s response to a book?
HA-DIV II

"Ought Literature To Be Taught?" is about these problems. The formal shape of the class (where and when we meet, how we conduct our sessions) will be partly determined by the class itself. The reading list is deliberately eclectic, in hopes of encouraging a wide range of controversy. "Guest" teachers and speakers will be invited.

Reading list (tentative):

The problem of interpretation - two modern poets:

W. H. Auden, About the House
Sylvia Plath, Ariel

The canon - what is literature?

The Book of Revelation
The Tempest
Anonymous Victorian, My Secret Life
Frank Waters, The Book of the Hopi

What should be taught and how:

Roger Ascham, The Schoolmaster
C. S. Lewis, The Abolition of Man
George Leonard, Education and Ecstasy
Harold Taylor, Students Without Teachers

Prose (structure, texture, meaning, and tone):

Swift, Tale of a Tub
Melville, Billy Budd

The course will meet three times a week for 1½-hour periods. There will be a limit of twenty students.

HA-275

PROBLEMS IN ENVIRONMENTAL DESIGN

Norton Juster and Earl Pope

This course will concern itself with research and/or design studies of some of the basic problems in or relating to the making of environment. The course will be run on a workshop basis with both an individual and team approach to the problems proposed. Each term one or more of these problems will be investigated in depth with the objective of:

1. Engaging the student in the full range of professional environmental design concerns:
   A. To define and extend their interests
   B. To increase their understanding of the scope and complexity of environmental problems

21
C. To assist them in developing methods for approaching and analyzing environmental problems
D. To develop skills in conceptualizing, developing, and communicating ideas.

2. Developing significant and meaningful material in the field of environment that will be of value to both the community and the profession at large.

Some projected areas for investigation are:

1. Studies in urban form - with particular emphasis on the Connecticut Valley
2. The Making of a College - Studies of the relation of form and idea
3. Perception and Play - the objectives and design of recreation spaces
4. Prefabrication and the systems approach to environment
5. The mobile environment
6. The market place
7. Implications of technology on environment
8. Deniable, expandable, expendable, and temporary environments
9. Experimental learning environments.

While the precise subject matter of the course may not be determined in advance, it could include any of the above or other problems of similar scope and value.

Permission of the instructor needed. The enrollment is limited to twelve students, and the class will meet twice a week for two-hour periods.

HA-250

SCIENCE, ART, AND METAPHYSICS IN THE ENLIGHTENMENT
Joanna Hubbs and Stanley Goldberg

The 18th-century Enlightenment as a period in history has been identified with the "philosophies" of various disciplines—science, art, philosophy, and religion. It has been maintained by some recent scholars that despite individual differences between philosophies, there was only one Enlightenment. That point of view will be pursued in this course.

The 18th-century might be called "The Natural Century." It was the century of natural morality, natural religion, natural art, and natural philosophy. In the beginning Isaac Newton proclaimed discovery of the "god's true laws" which govern the operation of the universal clockwork. And at the end of the period Emmanuel Kant defined what has transpired as nothing less than man daring to accept the essential loneliness of individuality—"daring to know."
The course will be organized as a seminar and will be topic oriented around a set of common readings. Each student will be expected to make individual contributions in class.

The course will meet twice a week for two hours and tutorial sessions will be available twice a week for one hour.

HA-245 (NS-230)

SEMINAR IN ELECTRONIC MUSIC

Randall McCollan

Areas of concentration in this course will be studio techniques, electronics, problems and methods of electronic composition and aesthetics of composition. Individual projects will be expected ranging from short electronic compositions to collaborations in multi-media and Bio-Music.

The course will meet once a week for two hours and there will be a limit of 12 students.

HA-270

THEATRE OF MIXED MEANS

Francis McCollan and Tim Landfield

This workshop will focus on movement and acting techniques and improvisation, culminating in individual and group environmental productions. We also plan to study and discuss elements of performance/production, experimental theatre production, "street theatre," and audience-performer interaction. Members of the workshop will be encouraged to explore resources in visual and sound media as an element of the theatre/dance/movement experience.

This workshop would meet three times a week for two hour sessions.

Tim Landfield is a Hampshire Fellow in the School of Humanities and Arts.

HA-265

THE TROUBADOURS: NERUDA, VALLEJO, GUILLÉN

Robert Marquez

The Journals of Ralph Waldo Emerson include the following entry: "Give me initiative, dramatic, prophesying, non-making words." It would be difficult to find a more appropriate expression of the creative spirit behind the work of Pablo Neruda (Chile: 1904- ), César Vallejo (Peru: 1892-1938), and Nicolás Guillén (Cuba: 1902- ).
Combining the lyrical with the prophetic and indeed the apocalyptic, these poets turned from the hermetic self-centeredness of a purely private anguish to the public role, the more ecumenical vision, of the troubadour whose songs help to define and solid at the same time that they reflect the ethos of a people. That they are honored as the national poets of their respective countries or that Neruda's publications include his own Canción de gasta is no accident.

In this course, we will take a close, in-depth look at the poetry and poetic development of these three renowned and influential poets, paying particular attention to:

- their approach to the poet's craft
- the nature and consistency of their "worldview"
- their attitude toward literary trends and fashions
- their role as "nacional" or "continental" poets
- the Revolution: poetry, politics, and the masses

The approach will be comparative, with an eye to exploring the specific importance of generational and extra-literary experiences—such as their common experience of the Spanish Civil War or their membership in the Communist Party—among poets whose differences are as intriguing as the similarities.

Though a reading knowledge of Spanish is recommended, enrollment in this course will be restricted only by the inavailability of the poets' work in English translation. The course will meet once a week for two hours. Readings will include the following:

Nicolás Guillén: Síngora Cosong, El son esterpe, La paloma de vuelo popular, Temas, El grán zoo.

César Vallejo: Los herederos carros, Trilce, Poesías humanas, España, Aperta de mi este clitor.

Pablo Neruda: 20 poemas de amor y una canción desesperada, Tercera residencia, Canto General, Otros elementos, Canción de gasta.

MA-240
NATURAL SCIENCE AND MATHEMATICS

When enrolling for a course with a double number, enroll using the "100" number if you are taking the course as a Division I course, and the "200" number if you are taking the course as a Division II course.

NS 141 PERSPECTIVES IN EXPERIMENTAL SCIENCE (NS 241)
Division I and II Modules
NS 141-1 Theory of Relativity (NS 241-1)--C. Gordon
   (Module 1)
NS 141-2 Sound (NS 241-2)--Hafner (Module 1)
NS 141-3 Chemical Equilibrium (NS 241-3)--Lowry (Module 1)
NS 141-4 Extra-Terrestrial Communication (NS 241-4)--
   C. Gordon
Division I and II Courses
NS 142 Plain Old Chemistry (NS 242)--Lowry
NS 143 Basic Physics (NS 243)--Bernstein, Donash, Goldberg
NS 145 Light Waves and Holography (NS 245)--Donash
Division II Courses
NS 246 Organic Chemistry Laboratory--Lowry
NS 247 Theoretical Biophysics--Bernstein

NS 105 DE RERUM NATURA (NS 205)
Division I and II Modules
NS 105-1 Human Nutrition (NS 205-1)--Miller
NS 105-2 Natural History of Infectious Diseases
   (NS 205-2)--Miller
NS 105-3 Life in a Compost Heap (NS 205-3)--Miller
Additional Modules to be announced.
Division II Courses
NS 206 Immunology--Parker
NS 207 Matter and Life--Parker
NS 208 Vision--Bruno

NS 123 THE WORLD OF MATHEMATICS (NS 223)
Division I and II
Infinitesimals--Marsh
How to Lie with Statistics--Kelly, Hoffman
The Fine Art of Counting--Hoffman
Conic Sections and Other Pretty Curves--Kelly
Artificial Intelligence--Le Tourneau
Automata Theory--Le Tourneau
Piaget and the Foundations of Mathematics--Marsh

25
Division I and II Courses
NS 124 The Calculus Workshop (NS 224)--Goldberg, Hoffman
NS 126 Elementary School Mathematics (NS 256)--LaTourneau
LC 126 Computers, Artificial Intelligence and Logic--LeTourneau (See description listed in Language and Communication section)

Division III Courses
NS 228 Analysis--Kelly

Other Projects and Term-Long Activities
The Prime Time 17-17 Theorems
Computer Programming Laboratory
Everything You Always Wanted to Know About Mathematics *But We're Afraid to Ask
Teaching and Tutoring Here and Abroad
The Computer Strike Force
Models and Movies
Programmed Instruction and Instructional Projects
Faculty/Student Problem Seminar
The Hampshire College Summer Study in Science and Mathematics

ENVIRONMENTAL QUALITY PROGRAM
Division I and II Courses
NS 171 EQP Science for Elementary School Children in Holyoke (NS 271)--Bruno
NS 172 EQP Animal Behavior and Ecology in an Urban Environment (NS 272)--Coppinger
NS 173 EQP Urban Environmental History (NS 273)--Goldberg
NS 174 EQP Power Conservation (NS 274)--Hefner
NS 176 EQP Waste Disposal in Holyoke (NS 276)--Miller
NS 177 EQP Clinical Public Health Problems in Holyoke (NS 277)--Parker
NS 181 EQP Air Pollution and Lasers (NS 281)--Bernstein
NS 183 EQP "To Be Continued..." (NS 283)--Staff
SS 143 The Economics of Pollution--Howard (See description listed in Social Science section)
SS 151 The Political Economy of Holyoke: An Urban Perspective--Howard, Watson (See description listed in Social Science section)

NS 182 SCIENCE AND EASTERN THOUGHT (NS 282)
Division I and II Modules
NS 182-1 The I Ching (NS 282-1)--Domash (Module 1)
NS 182-2 The Physiology of Yoga and Meditation (NS 282-2)--Domash
NS 182-3 Ways of Knowing in Science and Nonscience (NS 282-3)--Domash
DIVISION II COURSES
NS-230 Science, Art and Metaphysics in the Enlightenment--Goldberg, Rubs (SS-265)
NS-235 Behavior Genetics--Farnham, Miller (SS-202)

DIVISION III COURSES
Seminar in Art and Technology--Bonash, Hoener

FIVE-COLLEGE ASTRONOMY
NS-122 Introduction to Astronomy and Astrophysics -- Greenstein (Amherst College)
NS-134 Development to Astronomy -- Seitzer (Smith College)
NS-238 Techniques of Modern Astronomy -- Huguenin (University of Massachusetts)
NS-DIV I & II

NS 141 PERSPECTIVES IN EXPERIMENTAL SCIENCE (NS 241)
Lawrence Donash, Coordinator

This program is a set of modular courses plus semester-long courses designed to introduce students to contemporary topics and problems in the physical sciences. Students will normally choose three modules to be taken sequentially during the Spring Term, or one semester-long course. Each modular course lasts for about one month.

In the Spring Term our modules will include studies of Sound, Light, Relativity and Chemical Equilibrium. The semester-long courses in the program will include Basic Physics, Theoretical Biophysics, and Organic Chemistry.

During Spring Term registration for PES each student will register either for a semester-long course or for the first module he wishes to take. If he registers for a module, his subsequent module choices can be delayed until the term has begun. Since the modules are not sequential and have no prerequisites, he can take them in any order. A student may, with the approval of his advisor, enroll for any of the month-long modules without being enrolled in the total program.

The following month-long Division I and II modules will be taught. Additional modules will be announced later.

NS 141-1 The Theory of Relativity - Courtney Gordon (NS 241-1) (Module 1)
The theory of relativity contains some fascinating surprises concerning:
1. Time--the clock paradox
2. Mass and length at high speed
3. Interstellar travel
We will strive towards a working understanding of special relativity. No previous background is assumed. The modules will meet once for two hours and once for one hour each week.

NS 141-2 Sound - Everett Hainer (NS 241-2) (Module 1)
The electronic synthesizer lends itself not only to the production of music, but to the study of sound under ideal laboratory conditions. We will use the synthesizer as a provocative way of introducing ourselves to the laws of classical physics, with emphasis on the properties of oscillations and waves. Students will be encouraged to master studio techniques so that they can qualify as independent users of equipment for the purposes of music, but the primary emphasis will be on the physics of sound. The module will meet two hours, twice each week.
NS 161-3 Chemical Equilibrium - Nancy Lowry (NS 261-3) (Module I)
Equilibrium considerations are important in all branches of science. Chemical equilibria are especially interesting in the light of their effect on systems as varied as rivers, lakes, oceans, and blood. The course is to be entirely self-taught through films, tapes, a text, miscellaneous readings, and problems; the instructor is available as a consultant.

NS 141-4 Extra-Terrestrial Communication - Courtney Gordon (NS 241-4)
The subject of extra-terrestrial intelligence has fascinated mankind for ages. We are at last close to the time when extra-terrestrial communication may be possible. How can we communicate? Are there other worlds ready to receive our messages? Have other worlds already tried to communicate with us? Our search will lead us to consider:
1. the origin of life—necessary conditions and the transfer of genetic information.
2. the evolution of stars and how it affects life on surrounding planets.
3. sending messages using radio telescopes.
4. the meaning of "communication" itself—what forms can communication assume?
Examples will be drawn from nonhuman communication on the earth (such as among dolphins or other animal species).
Shklovskii and Sagan's excellent book *Intelligent Life in the Universe* will be used extensively. Other readings will be taken from research articles in current journals.
The course will meet once for two hours and once for one hour each week, for eight weeks (equivalent to two one-month modules).

The following semester-long courses will be taught:

NS 144 Plain Old Chemistry - Nancy Lewy (NS 244)
Many students have expressed an interest in a general Chemistry course. We will meet twice a week; most class meetings will center around problem solving or laboratory work.

NS 143 Basic Physics - H. Bernstein, L. Domash, S. Goldberg (NS 243)
Several concepts have been proposed as the basis of this course, including studies of quantum mechanics, energy, analogous physical structures as illustrated by various examples of oscillators, and the historical concepts of simple symmetries. This course is real physics, and the
more mathematical background its participants have, the better; nevertheless it is a first course in physics and the nature of previous exposure is expected to be quite inhomogeneous. A detailed description of the course will be available prior to registration for the Spring Term. The course will meet two hours, twice a week.

NS 145 Light Waves and Holography - Laurence Domash (NS245)
This is a full semester laboratory course that replaces the one-month module previously announced for the Fall Term. We will study the diffraction of light waves and the rich field of application that arises from them, including:
- the understanding and making of holograms, using laser light.
- the treatment of photographs by "spatial filtering."
- Fourier transforms,
- the measurement of bacteria shapes by diffraction scattering of laser light.
The course will meet for one two-hour class and one two-hour lab per week.

NS 246 Organic Chemistry Laboratory - Nancy Lowry
A semester-long Division II course. Beginning or continuing students of organic chemistry will spend six hours in lab each week. Detailed information on the experiments we will be doing will be available prior to Spring Term registration.

NS 247 Theoretical Biophysics - Herbert Bernstein
A semester-long Division II course; Division I students may enroll with the permission of the instructor.

Theoretical biophysics is a growing field of intellectual endeavor. Its practitioners, who will shortly include members of this course, attempt to apply mathematical models to biophysical problems, in analogy to theoretical physics. Some of the topics which are of current interest, and therefore may be investigated, are:
- simple models of biological systems.
- computer simulations of life processes, ecosystems, or aspects of macromolecular energy flow.
- discovery of approximate mathematical equations describing biophysical events.

Of particular interest might be a study of recent attacks on the problems of growth and differentiation. One topic which surely will be introduced (due to the instructor's interest) is the application of nonequilibrium thermodynamics to biological systems.
The biologist wants to understand life, but life, as such, does not exist; nobody has ever seen it. What we call "life" is a certain quality, the sum of certain reactions of systems of matter, as the smile is a quality or reaction of the lips. I cannot take the girl in my right arm and her smile in my left hand and study the two independently. Similarly, we cannot separate life from matter and what we can only study is matter and its reactions. But if we study this matter and its reactions, we study life itself.*

We adopt this point of view as a framework for this program. The organization of cells is such that each of the life processes, such as respiration, metabolism or reproduction, can be studied in isolation from the others, often in systems which are clearly not living. Thus we offer in DRH both semester-long courses plus a series of units or "minicourses," each approximately four weeks' duration and each dealing with a fundamental biological problem. The courses and the units will employ a variety of organisms, use different experimental techniques, and present different points of view. Each will be guided by an instructor who will provide an experience reflecting his or her own scientific life style-field trips to collect live material, intensive laboratory work, abstract theory—as the case may be. Students may enroll either for a course or for a series of three units for the semester. However each unit as well as each course is intended to be more or less self-contained, so that some students may participate in only a single unit if it is of particular interest.

The units and courses will be accompanied by a series of weekly discussions given by the biologists participating in the program. It is expected that these discussions will include arguments on controversial topics relating to the subject matter of the units and courses. The discussions are intended to provide unity to the entire program by thus drawing together each of the topics being taught in the Spring Term.

In the Fall of 1971 the minicourses dealt with individual life processes:

- Fermentation ("The Lives of Yeasts")
- Energy production
- Enzymes
- Heredity ("Beanbag Genetics")

* A. Szent-Gyorgyi, *The Nature of Life.*
Communication between cells
Immunology and specificity ("Self and Not-Self")
Animal Behavior

More detailed descriptions of these minicourses are given in the fall catalogue. In the spring term the program will focus on integration and interaction of biological systems. It will deal with topics such as human nutrition, infectious diseases, compost heaps, hormones and hormonal control, enzyme control mechanisms, induction and repression and genetic control, physiological responses to environmental conditions and the integration of a complex organism by the central nervous system. For the benefit of students who have not had the experience of the first semester there will be a weekly seminar of directed readings and discussion which will provide the necessary background.

Minicourse descriptions will be available shortly before the semester begins. The semester-long courses for the spring are described below:

NS 206 Immunology - David Parker
In the past few years immunology has become a crossroads of medicine, protein chemistry, and cell biology. The basic questions--how does the body acquire the information to synthesize thousands or millions of antibody molecules of different structure, each specific for a particular foreign antigen? What are the cellular events which lead to the appropriate expression of that information when the body encounters a foreign substance? How does the body distinguish self from not-self and so avoid mounting an immune response against itself--represent a major interdisciplinary attack on the problem of the extraordinarily complex cooperation of billions of cells in the development and function of the body.

Students working with me in immunology will engage in critical reading and discussion of experimental approaches in the original literature. There will be opportunities for extensive laboratory work.

NS 207 Matter and Life - David Parker
Recent advances in biology have led to an understanding of basic life processes in terms of the chemistry of small molecules, proteins, and nucleic acids. Biological specificity can be explained in terms of coordinated weak chemical interactions between the active sites of proteins and the groups of the molecules with which they interact; both the astounding stability of the inheritance of genetic information and the innumerable small variations which have led to the incredible diversity of living systems have their basis in the chemistry of DNA.
These concepts form a basis for understanding the higher levels of biological organization from cell structure to ecology. They also enable an approach to the previously unintelligible problem of the origin of life on earth.

Students in this course will work with me in the opposite direction to gain an understanding of the chemical basis of life by studying its origin on earth. The class might conclude by considering whether life of independent origin and other technological civilizations are likely to exist elsewhere in the galaxy.

NS 208 Vision - Marie Bruno

Vision or something like it is important to the behavior of a great number and diversity of organisms. In this seminar we will read original research papers on the anatomy, biochemistry and neurophysiology of visual systems. We will examine the various techniques used to study a variety of photoreceptor systems of animals with primitive eyes such as flatworms to animals with complex eyes such as man and honeybees. The course will meet twice each week, two hours per meeting.

NS 123 THE WORLD OF MATHEMATICS (NS 223)

David Kelly, Coordinator

Students may expect to encounter problems in mathematics and mathematicization in a wide range of studies, and it is hoped that Hampshire’s mathematical community might provide short and long range support to many of the College’s courses and programs.

Course numbers: NS-123 and NS-223 are offered as a convenience to those students wishing to make a formal commitment to mathematical activity during a given term. The nature of that activity is subject to great variation. Many of the activities of the program are expected to develop during the term as particular needs and interests are identified. The Math Room (SB 125) bulletin board will provide an up-to-date listing of current and upcoming seminars, classes, lectures, problems and proposals.
The following activities are proposed for the Spring Term:

A. Seminar and Modular Courses (most of these are tentatively planned for four weeks)
   - Infinitesimals (Marsh)
   - How to Lie with Statistics (Hoffman and Kelly)
   - The Fine Art of Counting (Hoffman)
   - Comic Sections and Other Pretty Curves (Kelly)—this will possibly be a PES section also
   - Artificial Intelligence (Le Tourneau)
   - Automata Theory (Le Tourneau)
   - Piaget and the Foundations of Mathematics (Marsh)

B. Term-Long Activities
   - NS 124 The Calculus Workshop (see course description) (NS 226)
   - NS 126 Elementary School Mathematics (see course description) (NS 226)
   - NS 228 Analysis (see course description)
     - The Prime Time 17-17 Theorems
     - An interesting theorem in the Math Room at 5:17 of each prime-numbered school day.
     - Computer Programming Laboratory
     - Faculty/Student Problem Seminar
   - LC 126 Computers, Artificial Intelligence and Logic (see L&L)

C. Other Projects
   - The Hampshire College Summer Study in Mathematics and Science Teaching and tutoring here and abroad
   - Planning, preparation, and presentation of support materials for courses, special lectures, etc.
   - The Computer Strike Force
   - Models and movies
   - Programmed instruction and instructional projects
   - Independent study projects
   - Everything You Always Wanted to Know About Mathematics
     "But Were Afraid to Ask"
NS 126 The Calculus Workshop (NS 226)

Offered each term, the lecture/classes and problem seminars of the Calculus Workshop are designed to serve a variety of needs and to accommodate students with a wide range of backgrounds. For some, the techniques of the calculus will provide a powerful tool for investigations in the sciences; others may approach the subject with a greater interest in the conceptual development of the subject than in mastering its techniques.

During the Spring Term, the major component of the workshop will be the course:

Calculus and the Physics of Motion (Hoffman and Goldberg)

Students may choose also (or instead) to participate in selected modules or problem seminars.

Calculus and the Physics of Motion - Kenneth Hoffman and Stanley Goldberg

This course is intended for people who do not know calculus or physics and who may, in fact, be scared to death of both subjects. We will investigate the language of calculus not only for its internal consistancy and beauty, but also as it is applied to a physical problem—describing the motion of physical objects in a variety of circumstances. We will also examine carefully the manner in which mathematicians and scientists such as Archimedes, Galileo, and Newton have attempted to grapple with the problems of calculus. The dynamics of calculus can be investigated in many ways. One of the most recent and most interesting makes use of the computer. This will afford us the opportunity to examine in detail processes about which one could until recently only wave one’s arm. We will also have the opportunity to find out just how easy it is to learn the rudiments of computer programming. The workshop will meet three hours each week, and students will break into smaller groups after the first three weeks.

NS 126 Elementary School Mathematics - Jack Le Tourneau (NS 226)

The main purpose of the course is to study the need for and the role mathematics plays within the elementary school curriculum. It is an appropriate subject not only for those interested in mathematics and/or teaching but also for those interested in what might be called the sociology of elementary school curriculum development (recall that it was the "new math" which played a vanguard role in the current rather general redefinition of elementary school curriculum).
NS-DIV I & II

During the semester we will study the mathematical topics currently taught in grades K through 8, the problems facing teachers of this material and some of the innovative curriculum projects currently being developed in various parts of the country. This work will be placed in context by reading some of the general criticism currently being directed at the elementary schools.

In addition there will be an opportunity for extended classroom observation in the local schools and the possibility of developing small segments of mathematical curriculum which can subsequently be field tested under the auspices of Hampshire College's Early Identification Program. Courses will meet two hours twice per week.

NS 220 Analysis - David Kelly
A Division II course. Prerequisite: some calculus or the instructor's consent.

This course, designed to provide a foundation in analysis for further studies in mathematics and the physical sciences, will study the following topics:
- Calculus in several dimensions
- Limits, continuity, and topology
- Power series
- Fourier analysis
- Differential equations

While the development of the material will be mathematical, problem seminars will include significant examples of the application of these mathematical techniques. The course will meet four hours each week.

ENVIRONMENTAL QUALITY PROGRAM

Many students at Hampshire are aware of our rapidly deteriorating environment, our neglect of air and water quality, our misuse of soils and other natural resources, our contempt for the survival of species that share the planet with us and our priorities which place the advance of technology above the unforeseeable dangers implicit in that advance.

This Environmental misuse and neglect have been manifested most clearly in our nation's cities. With this in mind, Hampshire College's Environmental Quality Program (EQP) will be focused on
the urban environment of Holyoke, Massachusetts, in the spring of
1972. The Program will be continuing much of the work it began
in the fall of 1971 in cooperation with the Holyoke Model Cities
Program. New students and EQP veterans will find fruitful
opportunities in the Program.

Because of its close proximity to a great many colleges,
Holyoke has just about been studied to death. Why then, one might
ask, is Hampshire College going to go into a city whose every
citizen has been interviewed four times?

In the past, study teams have done excellent research but con-
tributed very little. The Environmental Quality Program approaches
Holyoke with an orientation toward urban "problem-solving." This
"problem-solving" approach may assume many forms. From aiding the
city in designing a new sewage treatment plant to attempting to
identify and treat parasites in the City's foreign populations.
From working with elementary school children to monitoring air
pollution in cooperation with the Holyoke Community College.

The goal of the Program is to provide students with a meaning-
ful educational experience giving them a chance to apply their
knowledge and at the same time provide Holyoke with some needed
services.

The following faculty members will be contributing to the
Program:

Herbert Bernstein--Air Pollution and Lasers
Merle Bruno--Science for Elementary School Children in Holyoke
Raymond Coppinger--Animal Behavior and Ecology in an Urban
Environment
Stanley Goldberg--Urban Environmental History
Everett Haefner--Power Conservation
Margaret Howard--The Economics of Pollution
Lynn Miller--Waste Disposal in Holyoke
David Parker--Clinical Public Health Problems in Holyoke
John Nelson w/Margaret Howard--The Political Economy of Holyoke
EQP Staff--"To Be Continued..."

NS 171 Science for Elementary School Children in Holyoke - Merle
Bruno (NS 271)
Science is often ignored in elementary school curricula
because schools feel that the materials will be too expensive
or that teachers must have a specialized science background
in order to teach it successfully. However, neither of
these things need be true. What's more, working with science
materials can give a teacher more opportunities to work with
children individually and can allow the children to grow in different sorts of ways than they can in other settings.

Students in this course will work with children in Holyoke. Workshops with and about science and children will be a part of the course. Students who have had experience in this area may be asked to conduct or participate in some of these workshops. There will be two hour meetings, twice a week, plus time to be determined for work in Holyoke.

NS 172 Animal Behavior and Ecology in an Urban Environment* - Raymond Coppinger (NS 272)

Most cities support thriving populations of all types of life. It is estimated, for instance, that 50,000 dogs survive and prosper in the 250 square miles of New York City. This is probably one of the most successful adaptations that occurs in nature and yet very little study has been done on animal populations in urban areas. A new ecosystem has been initiated within the last century and a half, one made of asphalt and brick and which has been designed for human beings. Like any other ecosystem it calls for adaptations on the part of plants and animals that once lived there as well as those species which have been introduced since. Viewing the growing megalopolis that now exists between Plymouth, Virginia and Plymouth, New Hampshire, including Baltimore, New York, and Boston (and Holyoke), it's hard to believe that few people have ever studied the ecology of this area. It will be our purpose in this course to study urban ecology in its many forms. One one-hour lecture and one three-four hour lab.

The possibilities for study are numerous:
- The interaction of man and his insect parasites, the cockroach, the bed bug, the clothes moth, the house fly.
- The dog and feral cat populations which seem to run the city of Holyoke in the dawn hours.
- The microclimate of large cities.
- The introduction of exotic animals into the American city as, the exotic diseases that come with them, Pigeons and cryptosporidial meningitis and histoplasmosis.
- Rate and bubonic plague. Dogs and rabies which are now on the increase. Old World man and smallpox.
- The natural history of Holyoke.

And we may find out just what "nature" will mean in the year 2000 when everything has been paved over.

*Course designed by Thomas Sperry, Hampshire College student.
NS 173 Urban Environmental History - Stanley Goldberg (NS 273)
This UDF seminar concentrates on obtaining and evaluating photographic representation of the City of Holyoke and how it got to be the way it is.

NS 174 Forestry Conservation - Everett Hauser (NS 274)
A general study which will focus on the Canaan Mountain hydroelectric pumped storage projects. The course will include trips to the currently proposed site of the project at Canaan Mountain, Connecticut.

NS 176 Waste Disposal in Holyoke - Lynn Miller (NS 276)
The operators of a paper mill in Holyoke and the citizens of Holyoke have a common problem—what can they do with solid and liquid waste? The traditional answers are to dump them on the commons (public ground) or, if that is impossible, find a profitable use for the wastes.

Unfortunately for us today the first answer has prevailed throughout the world even in our public health practices. We do treat our sewage (as little as the enlightened taxpayer will allow us)—then we throw away, burn, bury, or pollute our rivers with the tons of "first quality" fertilizer resulting from a well run sewage plant.

The paper mill operator dumps sulfite "waste" because he cannot profitably reclaim it. This waste, like sewage, can be converted by microorganisms into potentially useful organic forms.

The householder dumps his paper, garbage and other wastes. Most household wastes are biologically or chemically "rich" (in energy) and could be usefully recycled. Why doesn’t Holyoke (and other communities) recycle its wastes?

This seminar will examine, through field trips, literature, and in the laboratory, one of these "problems"—the one (sewage, sulfite or solid waste) to be decided upon by the group. We will not only learn what has been done in the past but will attempt to formulate and test novel solutions to the problem.

Whichever problem is selected will be the subject of continued study beyond the fall term.

Field Trips: 2 times weekly for 3 weeks
1 time weekly for 7 weeks
NS-DIV I & II

Literature: Extent maps of sewage (storm and sanitary systems); operation and plans for sewage and solid waste disposal; contracts for solid waste collection and disposal; municipal regulations for disposal.

NS 177 Clinical Public Health Problems in Holyoke - David Parker (NS 277)
This will be a continuation of a Fall Term course. Modifications may be made based on experience in the fall.

NS 181 Air Pollution and Lasers - Herbert Bernstein (NS 281)
A seminar-workshop wherein we learn
(1) What makes and constitutes air pollution,
(2) What makes a LASER tick, and
(3) How the latter might be applied to locating and measuring the former.

The students (and professor) will study the theory and application of air pollution detection and monitoring by lasers. We will investigate various mechanisms such as holograms, fluorescence and Mie scattering, and then determine how they may be used in combating air pollution.

NS 183 "To be Continued..." (NS 283)
Several students have expressed interest in continuing the work they began during the Fall Term. This "course" has been created to accommodate these students. The work will be almost totally independent. Each student will work with one or more faculty members of his choice. The faculty will act mainly in an advisory capacity. Each student should make arrangements with the faculty member he wishes to work with before registration. There will be a two hour weekly meeting of all the seminar's participants.

Staff available to students:
Herb Bernstein  John Foster  Nancy Lowry
Ray Coppinger  Stan Goldberg  Lynn Miller

NS 182 Science and Eastern Thought (NS 282)
The following set of three one-month modules may be taken either as a semester course (in which case it is called "Science and Eastern Thought,") or else individually, mixed during the term with other modules from FES or modular offerings from the World of Mathematics or DBN. Each module is self-contained and has no prerequisites. The course will meet two hours once a week.

This seminar is offered within the Human Development Program.

40
NS 182-1 The I Ching - Lawrence Domash (NS 282-1)
The ancient Chinese "Book of Changes" is examined in relation to the ideas of cause and effect found in classical and modern quantum physics through a variety of readings. What is the principle of causality in the I Ching? How is the structure of hexagrams related to their meaning? Does our science include universal principles like Yin and Yang? The course begins with practical experience with using the I Ching as an oracle, and we may invite guest lecturers. The course will meet two hours once and one hour once a week.

NS 182-2 The Physiology of Yoga and Meditation - Lawrence Domash (NS 282-2)
The ancient Hindu literature about the human body, its nervous system and its evolution, including the ideas of asana, the chakras, prana, kundalini and the "seven states of consciousness" are compared directly with modern scientific data on physiological measurements of anxiety levels, blood chemistry, metabolism and electroencephalography of meditators. Included in material and class experimentation with alpha brain wave generation. (Those practicing or about to start transcendental meditation will find relevant information.)

NS 182-3 Ways of Knowing in Science and Non-science - Lawrence Domash (NS 282-3)
Different styles of thinking in the history of theoretical physics (Plato, Kepler, Einstein, Feynman) are compared with "non-scientific" modes of thought exemplified by Carlos Casteneda ("Teachings of Don Juan") and the Hindu Vedic descriptions of "direct cognition" of nature through subtle states of the nervous system. The course will meet two hours once and one hour once a week.
A Division II course.

The 18th Century Enlightenment as a period in history has been identified with the "philosophes" of various disciplines—science, art, philosophy and religion. It has been maintained by some recent scholars that despite individual differences between philosophes, there was only one Enlightenment. That point of view will be pursued in this course.

The Eighteenth Century might be called "The Natural Century." It was the century of natural morality, natural religion, natural art, and natural philosophy. In the beginning Isaac Newton proclaimed discovery of the "God's true laws" which govern the operation of the universal clockwork. And at the end of the period Emmanuel Kant defined what had transpired as nothing less than man daring to accept the essential loneliness of individuality—"daring to know."

The course will be organized as a seminar and will be topic oriented around a set of common readings. Each student will be expected to make individual contributions in class.

NS-230 (NH-265)

NS-235 BEHAVIOR GENETICS

Loutie Farnham and Lynn Miller

A Division II course.

The study of behavioral genetics will focus upon the origins of individual differences in important human characteristics such as intellect and personality. Race and social class will be discussed as expressions of genetic effects. The course will be concerned with the interaction of heredity and environment in determining behavior, although the contribution of heredity will be emphasized. Mammalian analogs of human traits will be studied; for example, genetic aspects of infant human learning will be discussed as they relate to individual differences in intellect in humans.

The basic reading materials will be research papers and theoretical articles by such contributors as Vandenbergh, Gottesman, Rosenblith and Hety, and readings from Hanovszvits, Lindsey, and Thiessen's Behavioral Genetics: Method and Research. Additional
reading may be assigned from such sources as Dobzhansky's *Hmankind Evolving*, Carter's *Human Heredity*, and Fuller and Thompson's *Behavior Genetics*.

The principal goal of the course is to attain familiarity with the progress made in applying basic concepts from genetics to social science problems. The course also aims to integrate concepts from various disciplines concerned with behavior: material from the behavioral sciences, particularly psychology, will be related to concepts from the biological sciences by means of the methods, experimental designs, and concepts of genetics.

- The course will meet twice a week for two hours and will be jointly taught by a member of the School of Natural Science and Mathematics and a member of the School of Social Science.

NA-235 (SS-202)
SEMIfAR IN ART AND TECHNOLOGY

A. Hoener and L. Donash

This Division III integrative seminar, offered jointly by Natural Science and Mathematics and Humanities and Arts, is continued through Spring 1972. The following description from Fall 1971 remains in effect:

While recent developments in technology (laser light, holographic images, computer graphics) have wonderful potential applications to works of art, there does not yet exist a group of people ready to take full advantage of the possibilities.

It is unusual to find scientists and technologists who are themselves first-rate artists, or, on the other hand, artists who have the background to take up and understand physical techniques in such depth as to permit them to build the same sort of personal and intuitive feeling as they have for the nature and limits of their usual materials of canvas, paint, metal and stone.

This seminar, led by a sculptor and a physicist, will introduce the student to a variety of techniques, including:
- laser light and interference
- holography and coherent optics
- computer-generated sculpture (possibly)
- MOOG electronic music synthesizer as an interactive element

The role of the physicist (Mr. Donash) will be to demonstrate and suggest new phenomena and supply scientific understanding of their use. The sculptor (Mr. Hoener) will deal with the practical and artistic problems of turning technology into art. Both will deal with the aesthetic and philosophical problems presented by such a synthesis. The seminar will meet on Monday 5:30-7:00.
**FIVE-COLLEGE ASTRONOMY**

**NS 122 Introduction to Astronomy and Astrophysics** - Greenstein (Amherst College) (NS 222 = ASTFC 22)

An introduction to astronomy for students with some familiarity with calculus and physics. Much of the relevant physics will be reviewed in class in order to even out differences between students with different backgrounds. Nevertheless, a certain "feel" for physics will be assumed. A rough outline of the course (which will probably be changed as the course progresses):

1. Pictures—a quick photographic survey of everything from planets to galaxies; the distance scale of the observed universe;
2. The relation of stellar populations to galaxy type as a clue to the formation of galaxies;
3. Nuclear energy in stars;
4. Stellar magnitudes—black body radiation;
5. Stellar spectra—the Bohr atom;
6. The H–R diagram and stellar evolution;
7. Three ways for a star to die—white dwarfs, pulsars, black holes.

Time will be left for a fairly detailed study of pulsars as an example of how research progresses. Each student will engage in a fairly extensive research project, culminating in a term paper, which will constitute a large part of his or her work in the course. Labs will be held, but will not constitute much work.

TTh 2:00-3:30 PM, at Amherst College

**NS 134 Development of Astronomy** - Seitter (Smith College) (NS 234 = ASTFC 34)

The progress of astronomy, traced from prehistoric petroglyphs to the space age. Emphasis on the development of important ideas in the field and the relation of astronomy to other cultural trends. Supplemented by occasional use of the planetarium and the departmental telescopes. This course presumes some knowledge of astronomy, or the willingness to acquire it through extra independent reading.

M W 2:00-3:30 PM, at Amherst College

**DIVISION II**

**NS 238 Techniques of Modern Astronomy** - Huguenin (University of Massachusetts) (ASTFC 38)

An introduction to modern methods of astronomical observation and data reduction. Specific techniques of optical astronomy, radio astronomy, and space astronomy are discussed and analyzed. Laboratory experiments and field observations performed by students during the semester. Prerequisite: a physics course or permission of instructor.

TTh 2:00-3:30 PM, at the University of Massachusetts
SCHOOL OF SOCIAL SCIENCE

DIVISION I

COMMUNICATION AND PUBLIC POLICY
SS-102
K. Rosenthal and R. Waller

COMMUNICATIONS EMPIRES
SS-104
D. Linden

CONFLICT RESOLUTION IN THE INTERNATIONAL SYSTEM
SS-106
R. Turlington

CULTURE AND COGNITIVE PROCESSES
SS-110
M. Cole

THE ECONOMICS OF POLLUTION
SS-142
M. Howard

THE FAMILY
SS-113
W. Wilson

FROM THE OLD LEFT TO THE NEW
SS-116
P. Glaser

INTELLECTUALS AND SOCIAL CHANGE
SS-123
J. Koplin

INTRODUCTION TO CARIBBEAN ECONOMIC PROBLEMS
SS-126
K. Barnes

AN INTRODUCTION TO SOCIAL THEORY: MARX AND BEYOND
SS-131
F. Weaver and K. Bell

THE LAWYERS
SS-139
L. Mazor

MEASURES OF MAN
SS-157 (SS-227)
N. Stillings

THE MODERN ECONOMIC HISTORY OF WOMEN
SS-138
M. Howard

MOTIVES AND SOCIETY
SS-164
R. Birney

THE POLITICAL ECONOMY OF HOLYOKE: AN URBAN PERSPECTIVE
SS-151
M. Howard and J. Nelson
POLITICS OF EDUCATION
S5-137
R. Alpert

POPULATION GROWTH AND SOCIAL CHANGE
S5-154
B. Linden

SCHIZOPHRENIA
S5-159
L. Farnham

SOCIOLOGISTS AT WORK
S5-171
B. Linden

TUDOR-STUART ENGLAND: THE FIRST ROAD TO MODERNIZATION
S5-181
M. Slater

THE WORLD ECONOMY
S5-186
F. Weaver

PROBLEMS IN CHILD DEVELOPMENT: FATHERHOOD AND PLAY
S5-188
L. Farnham

SOCIAL CONTROL AND DISPUTE SETTLEMENT
S5-188
B. Yngvesson

SYMBOLIC SYSTEMS
S5-174
B. Yngvesson

DIVISION II

BEHAVIOR GENETICS
S5-202 (HS-235)
L. Farnham and
L. Miller

MEASURES OF MAN
S5-227 (S5-127)
H. Stillings

POLITICAL WOMAN IN AMERICA
S5-206
G. Hollander and
P. Glazer

PRISONS
S5-208
D. Mats and W. Bullard

PROBLEMS IN THE PHILOSOPHY OF LAW AND JUSTICE
S5-214
L. Mazor

REGIONAL INTEGRATION AND ECONOMIC DEVELOPMENT: A STUDY
OF THE CARIBBEAN FREE TRADE ASSOCIATION
S5-216
K. Barnes

47
A study of regulatory practices affecting the mass communications media at federal, state, and local levels. Students will learn the principles of the control, licensing and regulation of public communication networks, through consideration of a number of specific cases and problems. The course will focus on radio and television, rather than the print media.

Topics to be considered will include the following:

1.) The history of licensing and regulation in this country: the theory, the enabling legislation, and the growth to power of the regulating agencies - Federal Communications Commission, Federal Trade Commission, public utilities commissions, local governments - and what they can and cannot do. Patterns of regulation in other countries will be considered briefly.

2.) Common carriers: telephone and telegraph - Communications systems for hire.

3.) Over-the-air systems: radio and television networks - Who owns the airwaves?

4.) What is regulated: content versus process
   a.) Political broadcasting, Section 315, and the "Fairness Doctrine"
   b.) Television in the courtroom: the right to privacy.

5.) Cable television (CATV).

6.) Copyrights, as they are and as they might be.

7.) Blacklisting

Field work will be possible, at the student's initiative. In particular the granting of a CATV license in Northampton, and the beginnings of a national political campaign will provide a local or wider context for field work in conjunction with the course.

The course will meet twice a week - once for a lecture and discussion, and once in a seminar. Additional tutorial sessions with the instructors will also be scheduled.
55-DIV I

Two papers will be expected. One short paper will deal (for example) with a particular regulatory practice or theory, with its history, with a particularly pertinent case study. A longer paper will deal in depth with a major issue in the field, and will be based on research in the field or the library.

55102

COMMUNICATIONS EMPIRES

Barbara Lindon

The media reflect and generate social and cultural change. In this course we will investigate the structure of communication institutions, the relations between political processes and communications content, influences on media development, and the role of communication in influencing attitudes and behavior. A part of the course will focus on the socially-conscious films made in America during the 1930’s, in order to examine causes of this unusual period in filmmaking and to contrast it with development of the television documentary.

Students will each present two case studies, one based on published research in a specific medium, and one based on a content analysis of a media format. Contemporary thinking and theories about the effects of mass communication and problems in the conceptualization of “mass society” will be stressed.

Class hours will be discussed at the first class meeting.

55104

CONFLICT RESOLUTION IN THE INTERNATIONAL SYSTEM

Barbara Turlington

War between societies is as old as organized society itself. Wars have been fought for reasons which range (ostensibly) from personal insult to a ruler to trade disagreements, from schemes to eliminate “undesirables” to those for total world domination. War appears to be the dominant mode for settling conflicts, yet in fact most serious conflicts between states do not result in war. Many alternatives have been used, and this course is designed to examine some of them.

Diplomacy, international law, regional organizations, and broad international organizations have played central roles in the efforts of states to coexist. Making frequent use of case studies, we shall examine instances of their application. We will examine both what happens when the conflict-resolution machinery is successful and when it is not, and the extent to which it may be possible to control the results of breakdowns.
Several papers will be expected from each student.

The course will meet twice a week for two hours.

CULTURE AND COGNITIVE PROCESSES
Michael Cole

This course will combine the techniques of anthropology, psychology, and linguistics to explore the way in which thought processes reflect and depend upon culture. A special problem in the course will be to discover the ways in which seemingly unimportant, commonplace behavior can be used as evidence of cognitive activity.

Class hours will be discussed at the first class meeting.

THE ECONOMICS OF POLLUTION
Margaret Howard

The reduction of pollution is a costly process, and every society must in one manner or another decide how much pollution it will have. Our economy for a variety of reasons, has a strong bias towards a high and growing level of pollution.

We will first, using models of the economy and of economic decision-making derived from standard economic theory, learn ways to analyze such questions as growth and pollution, the inability of the market and the private property system to control pollution, the impact of water pollution control measures on various sorts on industries and municipalities, the distribution of costs of pollution and pollution control, and population growth and pollution.

Secondly, we will investigate the ways in which decisions regarding pollution and its control have been and are being made. We will examine the role of business interests, other private interests, the "public interest" of regulatory agencies, law, and the institution of private property.

This course will attempt to introduce students to key principles of economic theory and the theory of political economy, and to the use of such theory in dealing with a particular social issue.

The class will meet twice weekly for 1½ hours per meeting.
THE FAMILY

Whitlaw Wilson

The family is the basic social unit in our society. Early
in the seminar the normative family (white, middle-class, two
children) will be studied. Particular emphasis will be upon
how children are introduced to the culture in which they live
through the family. Thus, child rearing practices, personality
formation, and the socialization process will be highlighted.

Against this normative family each seminar member will
select a family in contrast to it for his independent study
project. Again the emphasis will be on how the child is intro-
duced to the culture in which he lives through the family.

Examples could include a welfare family for a study of the
single-parent family; the Navaho for a study of family life
within extended clans and kinship patterns; the communal families
of Kenya; the parent, parent-substitute families of the Kibbutz
or orphanages; a particular historical period for considering
families of the past, etc.

The final third of the seminar will provide the opportunity
for each student to become the teacher in presenting findings.

Seminar members will be invited to contribute those family
experiences they have had to the discussions at certain times
in the course.

At least one field trip will be scheduled during the semester.
Each student will be expected to write two brief papers in addition
to the major independent paper. Other papers may be required.

The class will meet twice weekly for two hours each
meeting.

FROM THE OLD LEFT TO THE NEW

Penina Glazer

This course will concern itself with social and intellectual
history from the 1930s to the 1960s. We will examine radical
movements in the United States, emphasizing their analysis of
American society, their proposed solutions and the effect of
their ideas and programs. Beginning with an examination of the
traditional Marxist parties in the 1930s, we will study social
and political issues which led to their decline, what happened
during and after the war, the silent fifties, and the re-
emergence of the "new left." The rise and development of the
civil rights and anti-war movements will be considered in some detail.

The class will meet twice a week -- the first session will be for two hours and the next for one hour.

SS116

INTELLECTUALS AND SOCIAL CHANGE

James H. Koplin

I am by most definitions included in the category "intellectual." You have elected to spend four years in an environment where intellectual development is given primary focus. The world outside the campus is going through increasingly rapid and often violent social change. We will examine the role (or roles) intellectuals have played in these circumstances -- and some of the comments that have been made about the results. We will also ask the question "What are our responsibilities?"

No attempt will be made to examine all points of view with respect to this material. I am most competent to represent the arguments from the perspective of a social scientist who accepts a radical analysis of the current scene. The following suggested readings reflect this bias; but, I assume that members of the class will add to and delete items from this list as we work together during the first meetings of the class.

Suggested major works:


Short articles of interest:


The class will meet twice a week using a 1½ hour seminar-discussion format. Smaller tutorial sessions will be arranged as needed.

SS123

53
SS-DIV I

INTRODUCTION TO CARIBBEAN ECONOMIC PROBLEMS

Knolly Barnes

This course identifies and analyses the pressing economic problems facing the Commonwealth Caribbean (English-speaking Caribbean territories).

Naturally the overriding economic problem of the region is the slow pace at which economic development has taken place. But specifically we shall be concerned with an examination of the various historical, institutional, and demographic factors, both internal and external, which have retarded the pace of regional economic development, e.g., the multi-national corporation, agricultural specialization, population growth. I will also place emphasis on inter-territorial differences in the severity of economic problems, since these have been an important deterrent to the establishment of a viable political entity for the region.

As many of the economic problems of the region are shared by other developing nations, the course should be advantageous to the student interested in the broader field of economic development or poverty in addition to those whose primary interest lies in Caribbean economics or politics.

Reading material for this course will consist of journal articles of the Social and Economic Studies series of the Institute of Social and Economic Research of the University of the West Indies and in addition various publications of individual territorial governments. Supplementary readings from standard texts on economic development will also be suggested.

The class will meet once a week for two hours.

SS126

AN INTRODUCTION TO SOCIAL THEORY: MARX AND BEYOND

Frederick Weaver and Robert Bell

Twentieth Century social science, especially in the U.S., has until recently refrained from attempting to explain the development and workings of the whole of society and has instead concentrated on intensive examination of narrower topics. Recently, however, accompanying increased intensity of social conflicts, there has been a renewal of interest in the comprehensive world views of earlier thinkers. In this course, we will devote approximately the first six weeks to exploring the nature of Marxian theory through reading and discussing selections by Marx, Engels, and others. The focus will be on dialectical materialism
and the labor theory of value as an organic approach to the
study of society and social change. In the second part of the
course, students will elect one of two sections. One section
will continue the study of Marxian theory and read some works
by modern Marxist scholars in order to see the theory applied
and developed in analysing concrete events and processes as well
as to learn more about history, revolution, and current social
reality. The other section will continue the general theme of
social analysis at the systemic level. Readings will be selected
from the works of John Stuart Mill, Herbert Spencer, Emile
Durkheim, Max Weber and possibly from some secondary sources.
Emphasis will be placed on the understanding of the comprehen-
siveness of these theories, the strengths and weaknesses of a
totalistic approach, and their methodological implications,
particularly in view of the nature and value of empirical studies.

The class will meet twice weekly for 1½ hours each meeting.

Robert Bell is a Hampshire Fellow in the School of Social
Science.

55131

THE LAWYERS
Lester J. Hazor

The legal profession has been very conspicuous in American
culture. Lawyers have played a large role in the shaping of
our basic institutions, and they occupy many positions of power
in government and business. Recently, new forms of "public
interest" law practice have arisen, giving another dimension to
the role of lawyers as agents of social change. This course will
examine the legal profession in America from a sociological per-
spective.

We will pursue such questions as: Who goes to law school?
What effect does law school have on the people who attend? How
are legal services distributed? What are the differences be-
tween large law firms, small law firms, solo practitioners,
corporate house counsel, neighborhood law offices, public de-
fenders, prosecution offices, etc.? What is the formal structure
of the legal profession? The American Bar Association? How is
the legal profession stratified along lines of race, sex,
financial status, ethnic background, geography? What are the
main tenets of the professional ethics of lawyers? To what
extent are they observed? What is the enforcement process? A
large question in the course will be the nature of profes-
sionality and the effects it has both on those inside and those out-
side any profession.

We will make field trips to a law school and to several
sites where lawyers are engaged in different types of practice.
Students may extend their field study of a particular aspect of
the legal profession by individual work.

Materials for the course will include a number of studies of different styles of law practices; for example: Swigel, The Wall Street Lawyer; Levy, Corporation Lawyer -- Saint or Sinner?; Garlin, Lawyers on Their Own; and larger studies such as Mayer's The Lawyers. We will also use autobiographies and biographies of lawyers and novels and films portraying the legal profession.

The class will meet twice weekly for two hours each.

SS119

MEASURES OF MAN

Mel Stilings

The course provides an opportunity to study the judgment of people and institutions on either the Division I or Division II level.

The student chooses his own work in the course from a set of opportunities which range from a set of readings on a topic such as intelligence testing to participating in a field project such as studying the use of tests in a local elementary school. Through this choice the student can introduce himself to independent study at a level which he feels he can manage.

The class meetings are devoted to developing an understanding of the problems and functions of human judgment through the study of psychological testing, and attitude and opinion research. Several class meetings are devoted to taking and examining particular psychological tests. Some of the study projects arise from this aspect of the course.

It is hoped that the members of the class will develop a sophisticated and creative approach to the problems of evaluation at Hampshire. For his study project in the course, the student may investigate some aspect of evaluation at Hampshire.

Early in the semester the class will meet twice weekly, two hours each session. This will be followed by individual conferences with the instructor concerning the student's project.

SS127 (SS227)
THE MODERN ECONOMIC HISTORY OF WOMEN

Margaret Howard

Economists, and particularly economic historians, have traditionally ignored the place of women in their study of the changing economic situation of mankind. This course will break new ground (I have not heard of such a course given elsewhere) by trying to understand the economic position of women in recent history, as it has changed and as it has remained the same. Focusing primarily on America, but glancing as well at England and elsewhere, we will look at such topics as the following: women and the household production of goods and services for family use and for cash; the effect of urbanization and industrialization on home production; women as child bearer and child rearer; women in the factory labor force; the slave woman; men's jobs and women's jobs, and wage discrimination; impact of changing technology; class differences in the economic roles of women; the particular experience of the black woman, and of the immigrant woman; women and trade unions; woman's economic dependence on men; woman as consumer; the educational history of women; the single woman; women in poverty.

Readings for the course will come from diverse sources: old and recent histories, autobiographies, novels, and the writings of modern women's liberationists. In addition to reading and discussion, each person in the course will be encouraged to do one or more oral history interviews with older women, and to report on the results orally and in writing. Such interviews would include questions drawn up by the class, plus additional open-ended questions put by the interviewer. Students who do not wish to do oral history interviewing might substitute other sorts of research projects.

The class will meet twice weekly for 1 1/2 hours each meeting.

MOTIVES AND SOCIETY

Robert Birney

A study of the major incentive systems used in human societies to guide and direct behavior. Beginning with Atkinson's statement of the problem, we will examine the models of McClelland, Rutter, and Atkinson for their usefulness in generating research and action programs for social change. The literature on motivation for achievement, affiliation, and power will be studied with special attention to experimental and observational researches.

Students will be encouraged to conduct replication studies using data gathered from the class where possible. The course
SS-DIV I

will meet twice weekly, once for an hour of lecture discussion, and once for two hours of project design and analysis.

Major titles from which reading will be drawn are Atkinson's *Introduction to Motivation*, McClelland's *The Achieving Society*, and Winter's *The Power Motive*, and Birney, Burdick and Tevan's *Fear of Failure*.

SS146

THE POLITICAL ECONOMY OF HOLYOKE:
AN URBAN PERSPECTIVE

Margaret Howard and John Wilson

In this course we will attempt to construct a relatively comprehensive picture of the economy and institutions of the city of Holyoke. As a class, we will decide what information we want and are able to find out about the city. Individual or group efforts may focus on such topics as changing location and characteristics of the population, ownership and quality of housing, location and ownership of industry, education, taxes and public finance, employment characteristics, commuting patterns, welfare, health facilities, and history.

This research will require learning various research methods including location of data sources, elementary statistical techniques, interviewing, and use of maps and charts. Our work will go on in conjunction with the Holyoke Planning Board and Holyoke Redevelopment Authority who are responsible for planning and renewal for that city. By the end of the course, we will hope to have our research in presentable form, using maps, charts, statistical analyses, photos, and/or written work so that it can be used by Holyoke agencies to complement their work and by Hampshire people to gain a better picture of the city.

Paralleling this research, we will read and discuss material in order to understand and evaluate three general ways of analysing the city's economy and institutions - the conservative, the liberal, and the radical points of view - and to see how they relate to urban structure and problems. The class will meet twice a week, once to discuss the general readings, and once to discuss the ongoing research and to learn various research techniques.

John Wilson is Special Assistant to the Dean of Social Science for Field Studies and Assistant Model Cities Evaluator.

SS151

58
POLITICS OF EDUCATION

Richard Alpert

Education and politics have most often been thought of as antithetical activities. But, more and more, the two are being recognized as very much involved with each other. School board and tax elections, the relationship of the school board to the school administration and the community, the role of unions, and the issues of decentralization and community control all point sharply to the intimate connections of political processes with the structure and operation of the school system. The school system also affects the polity. Children are socialized and educated into and about politics. The school system is an important instrument for the transference of political myths and loyalties, and for general citizenship training.

This course will explore and analyze the kind of politics and political functions that surround the public schools. The readings will be varied -- drawing both from scholarly works and journalistic accounts. Students will also be asked to draw on their own school experience to breathe more life into and add new insight to the readings. The course will be of a lecture-discussion type -- sometimes I will talk a lot, other times very little. If possible, field trips will be arranged to local school board meetings.

Sample Readings:

Plato, The Republic; Alan Rosenthal, ed., Governing Education: Confrontation at Ocean Hill-Brownsville; Charles Silberman, Crisis in the Classroom.

The class will meet twice a week: the first session will be for two hours and the next for one hour.

SS117

POPULATION GROWTH AND SOCIAL CHANGE

Barbara Linden

This course will concentrate first on the demographic aspects of population growth. Emphasis will be on classical and current theories about mortality and fertility rates, international and internal migration, and the natural factors affecting growth. Students will each choose one country or geographic area to study, and will present a summary of that country's population changes as they relate to demographic variables.

The second half of the course will be concerned with the importance of sociological factors in the analyses of population
problems. We will study the relationships between growth and social structure; cultural attitudes and determinants of fertility patterns; the impact of different age distributions on social change; the relations between migration and mobility; the impact of industrialisation and urbanization; and problems in social policy formation. Class members will continue their focus on one country or area, concentrating on the social factors in population growth, and will present their findings and ideas in the form of a research proposal.

Class hours will be discussed at the first class meeting.

SS154

SCHIZOPHRENIA

Louise Farcham

The seminar will address such questions as: What is the nature of schizophrenia? What are the criteria for differentiating schizophrenia from other forms of psychopathology? How does schizophrenia develop? What therapies are employed in the treatment of schizophrenia and how effective are they?

The first part of the seminar will be devoted to an introduction to the general principles of abnormal psychology and the classification and description of disorders. The remainder of the course will deal specifically with schizophrenia, its causation, incidence, and treatment. Reading assignments will include selections from Laing's The Divided Self, Green's I Never Promised You a Rose Garden, Goffman's Asylums and Hollingshead and Redlich's Social Class and Mental Illness as well as research papers investigating the roles of sociocultural and biological factors in the etiology of schizophrenia. Additional selections will deal with methods of treatment.

The seminar will meet once a week for two hours with one tutorial hour. The work of the seminar will include an independent project which can be either an oral presentation to the class or a research paper.

SS159

SOCILOGISTS AT WORK

Barbara Linden

During this term we will do intensive case analyses of six empirical studies in sociology. The focus will be on the methods of research employed, the logic of analysis, the relationship between methodological and theoretical decisions, and the impact of political contexts on research projects. We will review some of the basic methods and problems in experimental models, survey design, participant observation, content analysis
and interviewing. Throughout the course, special attention will be given to the problem of formulating empirical and theoretical questions to be tested. The class will conduct either a group research project or will pursue individual projects, which will be presented to the class for discussion.

Class hours will be discussed at the first class meeting.

TUDOR-STUART ENGLAND: THE FIRST ROAD TO MODERNIZATION

Miriam Slater

This course will be organized as a series of major topics covering a variety of historical problems with an emphasis on sociological development. England in the early modern period is well suited to such an approach because it offers a good case study of a single country which was also the first society to experience modernization. It offers the student the opportunity to deal with a manageable range of historical evidence without having to narrow the range of hypotheses which can be examined.

Major topics which will be tested:

1. The Nature of Bureaucracy and the Rise of the Modern State. Does the development of bureaucracy and the modern nation state fit the Weberian model? When did the modern state begin? What are the social consequences of bureaucratization and increasing specialization?

2. Protestantism and the Rise of Capitalism. What, if any, are the connections between Protestantism, especially Puritanism, and the development of capitalism in Western Europe? (The Weber-Tawney thesis). What is the nature of the Puritan character? Is it more accurately described by Freud, Erikson, or Brown? What are the contributions and limitations of the new psycho-historical studies? What is the connection between value system and economic behavior?

3. Theories of Economic Growth. How important is the price revolution as a factor in the rise of capitalism? Is this a period of transition from feudalism to capitalism as the Marxists would have it? What is the nature of the demographic balance between population and food supply? Is the Malthusian demographic cycle valid? Does the three-stage model of economic growth, including "take-off," fit the English experience?

4. Sociology of Revolution. What is the nature of political
and constitutional conflict in this period? Is it ideological or behavioral? Are the revolutionaries seeking to protect their liberties or their vested interests? Are they motivated by idealism and morality or seeking psychological relief of personal tensions? What are the effects on individual freedom and political life of the monopoly of internal violence by the state?

Sample Readings:


The course will be composed of one two-hour class meeting and a tutorial per week.

SS181

THE WORLD ECONOMY

Frederick Weaver

The first part of the course will deal with the mechanisms of international trade and finance and the need to establish a viable system of international payments. We will study the role of gold, the U.S. dollar, and the International Monetary Fund, focusing on the strains the present structure has undergone due to the increasing ability of the European Economic Community and Japan to challenge U.S. economic and political leadership.

The class will meet twice a week for 1½ hours each meeting.

SS186

PROBLEMS IN CHILD DEVELOPMENT: FATHERHOOD AND PLAY

Louise Farnham

Course description will be provided at a later date.

SS148
SS-DIV I

SOCIAL CONTROL AND DISPUTE SETTLEMENT
Barbara Yngvesson
Course description will be provided at a later date.

S5166

SYMBOLIC SYSTEMS
Barbara Yngvesson
Course description will be provided at a later date.

S5174

63
SS-0IV II

BEHAVIOR GENETICS

Louise Farnham and Lynn Miller

The study of behavioral genetics will focus upon the origins of individual differences in important human characteristics such as intellect and personality. Race and social class will be discussed as genetic constructs. The course will be concerned with the interaction of heredity and environment in determining behavior, although the contribution of heredity will be emphasized. Mammalian analogs of human traits will be studied; for example, genetic aspects of infrahuman learning will be discussed as they relate to individual differences in intellect in humans.

Basic readings will be found in such sources as Dobzhansky's Mankind Evolving, Carter's Human Heredity, and Fuller and Thompson's Behavior Genetics. The reading materials will also include research articles and theoretical papers by such contributors as Vandenberg, Cotteslan, Rosenthal and Kety, and readings from Mineovitz, Lindsey, and Thieessen's Behavioral Genetics: Method and Research.

The principal goal of the course is to attain familiarity with the progress made in applying basic concepts from genetics to social science problems. The course also aims to integrate concepts from various disciplines concerned with behavior; material from the behavioral sciences, particularly psychology, will be related to concepts from the biological sciences by means of the methods, designs, and concepts of genetics.

The course will be jointly taught by a member of the School of Natural Science and Mathematics and a member of the School of Social Science.

The class will meet twice weekly for two hours each meeting.

SS-202 (NB-235)

MEASURES OF MAN

Neil Stillings

See SS-127 for course description

SS-227 (SS-127)
SS-DIV 11

POLITICAL WOMAN IN AMERICA

Gayle Hollander and Penina Glazer

The course will attempt to analyze the nature and forms of female political participation in American history. Topics will include: The Western Political Tradition and Women; Female Rebellion Against Puritan Theocracy; Women and the American Legal Tradition; Women in War and Revolution; Women in Socio-Political Movements (Abolitionism, Temperance, Trade Unions, Settlement House, etc.); Southern and Minority Women and Their Relationship to Regional and Ethnic Political Activity. Political goals and tactics, and forms of direct (leadership, voting, demonstrations) versus indirect (writing, auxiliary participation, and so on) political influence will be studied.

Case histories of particular individuals, such as Mother Jones, Jane Addams, Lydia Maria Child, Frances Willard, Emma Goldman, Eleanor Roosevelt, and others will be read. Sources will include not only biography and autobiography but fiction, old and new scholarly literature on women, the writings of the women's movement, as well as films. A portion of the class's time will be spent uncovering sources and compiling a bibliography for others who wish to explore these topics independently or as part of other course work. Five-College enrollment will be especially encouraged.

The class will meet three times weekly with two 2-hour sessions and one 1-hour session.

SS-206

PRISONS

David Matz and Wendy Bullard, Teaching Assistant

Prisons - what function do they or can they serve in society? What effect do they have on those who are incarcerated? Are they necessary? Are there feasible alternatives? What social pressures produce change in prisons?

Through written material, discussion with people with first-hand knowledge of prisons, and personal contact with correctional machinery, the class will assess the impact of our present correctional system on both society and the individual. Specific areas (juvenile institutions, women prisoners, the growing consciousness of a "convicted class"... will be explored as the interests of the class dictate.

The class will meet two hours a week and irregularly on evenings when there are lectures.

Wendy Bullard is a second-year Hampshire student.
PROBLEMS IN THE PHILOSOPHY OF LAW AND JUSTICE
Lester J. Mazor

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

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

No previous work in philosophy or law is presupposed.

Materials for the course will include Friederich, Philosophy of Law in Historical Perspective, Hart, The Concept of Law, Fuller, The Morality of Law, and problem materials prepared by the instructor.

The class will meet once a week for two hours, plus an hour weekly tutorial to be arranged.

REGIONAL INTEGRATION AND ECONOMIC DEVELOPMENT:
A STUDY OF THE CARIBBEAN FREE TRADE ASSOCIATION
Knolly Barnes

Throughout both developed and less developed world alike, regional economic integration is being tested and tried as a vehicle for stimulating economic growth and development. We will examine one such scheme, the Caribbean Free Trade Association (CARIFTA) in terms of its potential for promoting regional growth and development.

After a brief survey of the characteristics of territorial economics and the historical movement to regional economic integration, we will analyze different possible integration models in order to determine whether the free trade model chosen is optimal for the Caribbean.

Next we will examine the traditional economic theory of
economic integration to determine its relevance, if any, to the Caribbean case and to establish the a priori conclusions which it suggests about the development potential of CARIFTA. Further we will evaluate these a priori conclusions using statistical indicators of the first three years of operation of the scheme.

One important aspect of all integration schemes involves the sharing of the benefits among participants. Has this distribution problem been satisfactorily resolved by CARIFTA?

By the end of the course we should reach some definite conclusions of the development potential of regional economic integration among small, open, overly dependent economies.

Major sources will be:

J. Viner, The Customs Union Issue; H. Brescater and C. Thomas, The Dynamics of West Indian Economic Integration; B. Balsasa, The Theory of Economic Integration; A. McIntyre, Decolonization and Trade Policy in the West Indies; and numerous articles in Social and Economic Studies of the University of the West Indies.

The class will meet once a week for two hours.

SS216

SOCIAL AND ECONOMIC HISTORY OF LATIN AMERICA

Frederick Weaver

This is a history course, but a history course in which we will be constantly trying to structure our understanding of Latin America's past in order to better understand its present. The emphasis, therefore, will be on the development of the economic, social, and political forms of underdevelopment and how they differ from country to country. We will give particular attention to such influences as colonial organization, modes of labor mobilization, the place of Latin America in the world economy, and the social impact of partial industrialization.

The class will meet twice a week for 1½ hours each meeting.

SS218

SOVIET POLITICAL LIFE

Gayle Hollander

Pursuing on Soviet internal affairs, the course will raise and attempt to answer critical questions about twentieth century political systems. In particular, consideration will be given to "citizen politics," the aspects of Soviet political life which most affect individual members of the society. Topics will include: Background to Revolution and the Bolshevik Assumption of Power,
SS-DIV II


At the beginning of the course, lectures will be given in order to bring students to a point where they have a minimal background for doing some independent reading and research. Students will be expected to complete a project which will be both written and presented to the class at some point during the semester. Sources for study will consist of conventional social scientific literature, journalistic writings, fiction, and films. The class will meet for two hours a week. A knowledge of Russian would be useful for the independent project, but is not required for the course.

SS222

PERSPECTIVES ON LEGAL BEHAVIOR

Barbara Yngvesson

Course description will be provided at a later date.

SS204

68
The Division I offerings in Language and Communication are designed to acquaint students with a number of fundamental questions concerning the structure, function, and scope of both natural and artificial languages. In Division I students will begin to theorize about language by exploring the fundamentals of logic and linguistics. They will gain insight into their native language by considering the concerns and methods of psychology and philosophy. And they will acquire the basic elements of computer programming, which for many students will be their first introduction to artificial language. By exploring natural and artificial languages concurrently, Division I students should reach an unusually deep understanding of both.

Students in Division I will also investigate basic problems in communication. They will discover, for example, that although any five-year-old child knows the rules of his own language, linguists and psychologists cannot yet adequately account for the child's competence. Students will find that although mass media are central to modern life, we still have very little understanding of the ways in which communications technology affects society. Students in Division I will confront social problems involving communication, ranging from the problems of privacy and data banks to the difficulties of linguistic minorities who must somehow survive in mass culture.

The Division I offerings in Language and Communication utilize a variety of formats, including a core series of lectures, direct experience with computer programming, and small individual seminars devoted to the intensive study of any of a wide variety of topics. Unlike previous semesters, seminars in Language and Communication will begin on the first day of the Spring term, and continue through the term. A series of lectures on topics central to the Language and Communication curriculum will be offered, beginning about the fourth week of the term.

The description of the Computer Programming Laboratory refers to a laboratory which is available for the entire term. Participation is open to all students in the College and should not usually be selected as a Division I course in Language and Communication.

69
DIVISION I

CLEAR THINKING FROM THE WHOLE EARTH CATALOG
LC-124  Marsh

COMPUTERS, ARTIFICIAL INTELLIGENCE AND LOGIC
LC-126  LeTourneau

CRYPTOGRAPHY AND CRYPTOANALYSIS
LC-132  Holmes

THE EVOLUTION OF ENGLISH
LC-128  Houle

HISTORICAL THEORIES OF LANGUAGE
LC-114  Mitchell

HUMAN LANGUAGE AND HUMANE SCHOLARSHIP: EDWARD SAPIR (1884-1939) AND NOAM CHOMSKY (1928-)
LC-160  Rardin

LANGUAGE ACQUISITION
LC-105  Koplin

THE MEDIUM AND THE MESSAGE EXPLORATIONS IN COMMUNICATION AND CULTURE
LC-118  Jussim

MORAL DISCOURSE
LC-112  Witherspoon

PSYCHOLOGY OF COMMUNICATION
LC-116  Stillings

THE RETREAT FROM THE WORD
LC-115  Lyon

TOPICS FROM THE HISTORY OF LOGIC
LC-122  Marsh

TRUTH
LC-165  Witherspoon

WHAT'S IN A LANGUAGE?
LC-130  Stillings

THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE TO SPANISH SPEAKERS
LC-136  Follick
DIVISION II

FORMAL LOGIC
LC-202
J. LeToureen

INTRODUCTION TO LINGUISTICS
LC-205
R. Bardin

THE POLITICS OF LANGUAGE
LC-204
M. Lillys

COMPUTER PROGRAMMING LABORATORY

71
CLEAR THINKING FROM THE WHOLE EARTH CATALOG

William Marah

Among the many goodies described in this incredible document are about a dozen books on the subject of clear, efficient thinking. This seminar will read most of these books - and a few others - and will go through four or so of them in detail, with the goal of actually improving the student's ability to solve certain kinds of problems and to think more logically (when such bizarre behavior seems appropriate). We will certainly read:

- *Systems Thinking*, by F. E. Emery, ed.
- *Thinking Straighter*, by George Henry Moulès
- *How to Solve It*, by George Polya

and at least one book from the area of general semantics. In addition, each student will be expected to learn to flow-chart and program problems for the computer (which is petty and pedantic enough in matters of detail to warm the heart of many a logician). Finally, the class will write its own reviews of the books we have read and compare them with the generally favorable comments in the Whole Earth Catalog.

COMPUTERS, ARTIFICIAL INTELLIGENCE AND LOGIC

Jack LeTourneau

Artificial intelligence will be examined; the study of methods which allow machines to act in ways which would be called intelligent by a human observer. During the last fifteen years, certain steps have been made in this direction (for example, it is now possible for a computer to learn to play checkers at the level of current world checker champions). However, in spite of progress on many frontiers, the area of artificial intelligence fails to have many central concepts or theories which can be broadly applied. Study in this area has indeed been attacked by many as either premature, presumptuous, or possibly an affront to man's dignity. However, it is precisely the freshness of the area which draws many workers. During the first part of this seminar, we will study this literature (including even a few works of science fiction) and some of the criticism provoked.

The second part of the seminar concerns itself with limitations that have been discovered to be inherent in any proposed
definition of machine intelligence. In particular, we will study
the famous Gödel incompleteness theorem of mathematical logic.
There is much controversy concerning this work for some have
claimed that the theorem shows that man's mind cannot be a machine
- even a very complex machine - and that further the work shows
that there is no perfect scientific language.

In the last part of the course students will work totally on
individual computer programming tasks that have arisen during the
previous weeks. A knowledge of the programming language APL will
be necessary at this stage but they will have been sufficient time
in the previous work to acquire this skill.

This course will meet twice a week, 1½ hours each session.

CRYPTOGRAPHY AND CRYPTOANALYSIS
Roger W. Holmes

This course has two aims: a presentation of the various
systems by which plain text has historically been rendered secret
by the cryptographer, and experience with some of the methods by
which secret messages have been analyzed by the cryptanalyst in
the attempt to restore them to their original plain text.

A third of the course will be given to cryptography. These
systems only will be considered in which large amounts of cipher
text are provided relative security in spite of efficient inter-
ception and analysis. Such systems are required when as many as
two hundred message centers are sending two hundred messages of two
hundred words each daily. The best examples of such systems are
found in military cryptography. It is easy to devise a system
that is secure but not usable: nor is it difficult to find a
system that is usable but not secure. A balance must be established
between secrecy, in the sense of significant delay, and usability.
There are certain classical ways in which this balance has been
sought and which underlie contemporary computerized practice.

The second two thirds of the course will be devoted to the
principles of analysis useful to the cryptanalyst in his attempt to
produce plain text from the cipher messages which are intercepted.
Again, certain classical principles of analysis have been discovered,
perfected, and computerized, and these will be used by students to
break secret messages given out as weekly assignments.
There will be seminar discussion and students will be given
the opportunity to invent, with the limits described, their own
cryptographic systems and their own cryptanalytic methods. But
the success of a course such as this, in which no textbooks are
available, depends on a certain amount of orderly treatment by
the instructor and the presentation in class of typical problem
situations. No facility in foreign language is necessary, nor is
mathematics beyond arithmetic.

THE EVOLUTION OF ENGLISH

Sheila Houle

Nowe, we Gif-Doms in gerdagum
Headynge frum gefrunum,
He ye as Yellages ellin fremdon.

Whan that April with his shoures soote
The droghte of March hath perced to the root
And bathed every veye in swich licour
Of which vertu engendred is the flour.....

These two passages -- the opening lines of Beowulf followed
by the first lines of the Prologue to The Canterbury Tales --
may not look like samples of our native language but they are!
They represent two major phases in the evolution of English, known
as Old English and Middle English. In this course we will study
the origins of our language and the ways it has changed from the
time of the Beowulf poet -- the sounds (we will learn to pronounce
Old and Middle English so we can read the literature out loud),
the way sentences are put together, the changes in meanings of
words. We will look at those forces outside language which effect
some of these changes -- political, military, social, even
geographic influences, borrowing from other languages and so on.
And we will be studying these older stages of Modern English
primarily through the literature of each period. Thus we'll not
only have authentic examples of the language but also an
opportunity to read these texts in the original version.

Two 75-minute classes weekly.

LC-128 (MA-127)
HISTORICAL THEORIES OF LANGUAGE

Stephen O. Mitchell

A survey of the major historical linguistic theories and their impact on various literary and social practices.

After an initial introduction to early widespread linguistic concepts such as "name magic" and "tongues", the course will move to a consideration of Plato, Quintillian, Longinus and other theoreticians who influenced both formal literary work and educational theory. The course will conclude with an investigation into the origins and effects of several persistent linguistic concepts, including Universal Grammar, Roots, Correctness, and Decline.

Under the guidance of the instructor, students who enroll in this course will be encouraged to select some earlier literary, religious, or political document and to write a paper explaining its linguistic assumptions.

The course will meet twice a week. The first meeting will be for two hours and the second for one hour.

LC-114

HUMAN LANGUAGE AND HUMANE SCHOLARSHIP:
EDWARD SAPIR (1884-1939) AND NOAM CHOMSKY (1928-)

Robert Rardin

Edward Sapir and Noam Chomsky have made brilliant contributions in this century to the study of linguistics. Sapir's book Language and his research in American Indian languages remain central to modern linguistics. Chomsky's work on the theoretical foundations of linguistics caused a conceptual revolution in the field, with shock waves extending to other social sciences, particularly psychology.

Sapir and Chomsky have done more than study the structure of language, however: their intellectual genius has always been informed by social conscience.

In addition to being a linguist, Sapir was an anthropologist, poet, and critic. He was passionately concerned about the quality of life. In an essay written after the first world war Sapir wrote, for example: "A genuine culture refuses to consider the individual as a mere cog....The major activities of the individual must directly satisfy his own creative and emotional impulses, must always be something more than means to an end."
LC-DIV I

The great cultural fallacy of industrialism, as developed up to the present time, is that in harnessing machines to our own uses it has not been known how to avoid the harnessing of the majority of mankind to its machines."

In the same intellectual tradition, Chomsky has divided his time between linguistics and social criticism: "Any person who is paying serious attention to the contemporary scene must face a serious dilemma. On the one hand, he wants to accept the role of a responsible and sane citizen which, to me, entails a willingness to commit himself to bring about large-scale changes in American society. And at the same time he wants to make his own contribution to contemporary culture, whatever it may be, as a scientist, as a scholar, as an artist. It is not so obvious that these roles are reconcilable...and if either is abandoned it can be done only at significant personal and social cost."

This seminar will explore the "dilemma" to which Chomsky refers. We will seek to integrate the works of these two scholars, to understand the connection between their linguistic work and their social concern.


Three one-hour meetings per week.

LC-160

LANGUAGE ACQUISITION

James Koplin

Almost all children acquire the language of their community on a regular schedule and within a relatively short period of time. We will spend most of this course examining what it is that the child does in this task. Special attention will be given to the descriptive material in such sources as Ruth Weir's Language in the Crib, moving on to Roger Brown's studies of pre-school children, and finally to Carol Chomsky's analysis of the continued development of language in the grade school years. There is no substitute for thorough acquaintance with this work as a basis for understanding the question,
"How does a child do it?" The only accurate answer at this time, however, is that "nobody really knows."

Each student who enrolls in the seminar will be encouraged to locate a child in the community whose language development can be observed during the term. This is not a requirement, but experience with this course during the past year has indicated that this concrete field observation of a child in the process of acquiring language was an invaluable aid to understanding the theoretical issues discussed during class sessions. Time will be made available near the end of the term for these students to report on their work for the benefit of everyone.

The course will meet twice a week, 1½ hours each session.

THE MEDIUM AND THE MESSAGE:
EXPLORATIONS IN COMMUNICATION AND CULTURE

Estelle Jussim

When Marshall McLuhan published Understanding Media in 1964, he precipitated such violent critical controversy over his basic hypotheses that the dust hasn't settled yet. What may prove surprising is that his ideas were by no means new, his sources were readily available, and his most inflammatory notions may be susceptible to scientific test.

Why, then, was the idea that "the medium is the message" so shocking and bewildering? Should the conflict between oral-aural and print-visual cultures engage our serious attention? How does a culture rely upon communication, and what happens within a society when it shifts its media bases? Can there be any truth to the theory that the alphabet and the printing press have contributed as much to the enslavement of men's lives as to the liberation of their minds? Does literacy per se affect individuals and their emotional characteristics? Do media really structure our responses to messages? What is a "message"? Is there a meta-communication beyond verbal and non-verbal modes that exists subliminally in the nexus of technology/culture/society? Is the "message" of technology necessarily evil?

The ramifications of these questions are many and profound, and they reverberate into unexpected corners of our lives. The seminar will therefore concentrate on liberating the student from what McLuhan calls "the somnambulism of non-awareness" of how media manipulate our unconscious responses. The seminar should
assist the student toward the comprehension that media analysis is relevant to the study of all cultural phenomena.

Among the readings will be: Melisham's Gutenberg Galaxy and sections of Understanding Media, Raymond Rosenthal's Melisham Pro and Don, Lewis Mumford's Technics and Civilization, selections from the work of Siegfried Giedion, Harold Innis, Margaret Mead, J.C. Carothers, David Reisman and Daniel Boorstin.

Guest lecturers may join us for discussion of their specialized insights: for example, Professor Lester Mayor may talk to us about law and its origins in written language.

Students will be encouraged to correlate seminar work here with topics or activities developed in other seminars or workshops, and tutorial topics will include a section on media and the developing nations.

It is strongly urged that students wishing to enroll consult the seminar leader well in advance of the beginning of the seminar meetings.

Two 2-hour meetings per week for the first month; then one 2-hour meeting per week plus a 1-hour tutorial.

Limit on enrollment: 20.

This course can be used in preparation for the Division I examination in the School of Humanities and Arts.

LC-118

MORAL DISCOURSE

Christopher Witherspoon

A surprisingly large number of the things we say are either clearly moral in nature or have in some important sense a moral aspect, and moral disputes and controversies are among the most important we find ourselves participating in. Such talk will be our concern in this course. We will look carefully at examples of it drawn from historical and fictional sources as well as from our friends, relations and other contemporaries; we will produce a good deal of it, both on our own and as spokesman for (or better, incarnations of) certain moralists and moral philosophers; and we will then step back to consider a number of problems about it and about the thought it expresses. In the first part of the course, a typical class session might consist of an attempt to describe and analyze three particular cases in which one person accuses another of irresponsibility, the latter trying to exonerate himself while not denying most of the facts cited by his critic;
in the second part, a debate on killing the severely and
irremediably retarded highlighted by impassioned remarks by Tolstoi,
Kant, Ayn Rand and perhaps "Dear Abby"; in the third part, a
discussion of the view that moral statements can be neither true
nor false, with some time spent considering the relevance of the
fact that such statements often appear to entail other statements,
including ones that are straight-forwardly "factual".

Two 2-hour meetings per week. Tutorial monthly with a
required paper.

LC-112

PSYCHOLOGY OF COMMUNICATION

Neil Stillings

In this seminar we will consider two topics, persuasive
communication and nonverbal communication.

We will read and discuss literature in psychology and
anthropology with the aim of understanding the ways in which the
two subjects can be studied rigorously.

Two 2-hour sessions per week.

LC-116

THE RETREAT FROM THE WORD

Richard C. Lyon

This century has put language on trial. The adequacy of
words to describe the world and our experience of the world is now
questioned. The worth of words as the necessary means to
intelligence or as a possible means of personal fulfillment is in
doubt. Old claims for the importance of verbal discourse are
being challenged by formidable rivals; visual images, the abstract
languages of the sciences and mathematics, religious and aesthetic
contemplation, mysticism, music and dance, modes of non-verbal
communication within groups. These are ways of knowing and of
communicating which bypass the verbal, or subsume it, and which
are often said to be superior to it.

The seminar will consider several aspects of this "retreat
from the word" in order to determine some of the things words can
and cannot do, their status with respect to consciousness, and
their relation to reality.
LC-DIV 1

Discussion will center on the ideas or works of a number of philosophers, critics, and poets. These may include William James, Santayana, Wittgenstein, Emerson, George Steiner, Dwight McDonald, Marshall McLuhan, Wallace Stevens. Students will be asked to help in drawing up a list of others whose works may be read.

This course can be used in preparation for the Division I examination in the School of Humanities and Arts.

One 1-hour class meeting per week plus group tutorials.

LC-115

TOPICS FROM THE HISTORY OF LOGIC

William Marsh

Formal logic came to be recognizably like its current form sometime early in the twentieth century. This form is enough better than earlier logic to make it inadvisable for a student to study logic initially in a historical sequence, so the beginning of this course will be devoted to an introduction to the languages and results of modern logic. After this introduction, however, it would seem interesting to look at episodes of the history of logic in light of where logic turned out to go and in comparison with mathematics, philosophy or linguistics going on at the same time. Possible topics for study are Aristotle, the Stoics, the Scholastics, Leibniz, Peirce, Frege and the development of Boolean algebra. The topics chosen will be decided on by the class.

This class will meet twice a week for two hours.

LC-122

TRUTH

Christopher Witherspoon

In this seminar we will discuss a number of philosophical problems which have to do with truth, meaning, and knowledge. Among the questions we will take up are: (a) What (if anything) are we saying of something when we say that it's true? (b) What sorts of things can be true or false, and which of these (e.g. beliefs, sentences, propositions, assertions) in basic (or basic for certain purposes)? (c) What is it that makes true "things" which are true and makes false "things" which are false? (d) How is something's being true related to its "working", or to the desirability of the consequence of accepting it as true? to the possibility of confirming, verifying or proving it? to its being
"true for" certain people? to its being "significant" -- perhaps emotionally or "existentially" -- to various people?

We will begin by critically examining various positions and beliefs held by participants in the seminar, as well as some gems of contemporary folk wisdom concerning truth. Next the important traditional theories will be considered, and selections from such philosophers as Plato, Aristotle, Bradley, James and Russell will be read; and we will go on to talk about some interesting recent accounts, including those of Tarski and Strawson.

One 2-hour meeting per week plus a tutorial. Paper required every two weeks.

LC-165

WHAT'S IN A LANGUAGE?

Neil Stillings

What makes a symbol system a language? What makes a symbol system adequate for human communication?

We will begin with a system of logic which has been proposed as a model for language. First we will explore the properties of this system, then we will figure out its deficiencies as a model for human language, and then consider ways of improving it.

Language study in this century has been motivated by the idea that the structure of language is the key to man's uniqueness. The course will be guided by this spirit, though we will be concerned less with distinguishing man from the lower beasts, than with distinguishing him from other language users such as robots and logicians.

Two meetings per week, 1/2 to 2 hours each.

LC-130

THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE TO SPANISH SPEAKERS

Seymour Pollock

The course will involve students in a comparative study of two languages, Spanish and English. They will consider the nature of those conflicts which can and do arise when a Spanish speaker, already familiar with the culture and structure of his native language, is involved in learning the structure and culture of a
LC-DIV I

second language -- in this case, English. Readings, lectures, and discussions will be in both English and Spanish. A good working knowledge of Spanish is a prerequisite for enrollment.

The course will serve as preparation for eventual field work with Puerto Rican school children in Holyoke. Qualified students, therefore, are urged to arrange with their host institutions for suitable assignments as teaching aids and/or tutors in the ESL programs of the Holyoke school system (i.e., the Holyoke Tutorial sponsored by the Spanish Department of the University of Massachusetts). Qualified Hampshire College students will, as part of their training, serve as teaching aides in the ESL program of the West Street school in Holyoke. The amount of time which a student wishes to give to field work will be worked out with the instructor. (Such field work could constitute an Independent Study project for the January, Spring, or Fall Terms.)

Careful contrastive analysis of Spanish and English, an introduction to the culture of the Puerto Rican Spanish-speaking child, and actual experience in a real teaching situation will offer a basis for preparation of instructional materials, the planning of language courses, and the development of actual classroom techniques. Students will, therefore, be encouraged to undertake independent research along these lines.

The class will meet twice a week, in the evenings, for one hour and 15 minutes each.

LC-136
LC-DIV II

FORMAL LOGIC
Jack LeTourneau

Work in logic during the twentieth century has been and continues to be one of the exciting chapters of both mathematics and philosophy. This subject has grown naturally from a descriptive study of "proper reasoning" to an abstract discipline within its own right. In recent years applications of logic have extended beyond the true parent fields to new areas of computer science, linguistics and cognitive psychology.

In addition to studying some of these applications the course is intended to accomplish a detailed survey of the major results obtained in logic during this century. Work to be studied includes propositional languages, a study of both the syntax and semantics of first-order languages (including the completeness and incompleteness theorems of Godel and an introduction to model theory), the formalization of the notion of algorithm and an introduction to recursive function theory and finally some mention of contemporary work concerning the independence of various statements from the common axioms of set theory.

Two 75 minute classes per week.

LC-202

INTRODUCTION TO LINGUISTICS
Robert Rardin

"In the beginning was the Word...." We have always been awed by the power of language, the communicative magic which seems to be our most characteristicly human feature. Only recently, however, has our fascination with language led to serious thought about it. Linguistics is one of the youngest sciences, so an introduction is necessarily an exploration of both the foundations and the frontiers of the discipline.

This course will introduce students to the basic elements of modern linguistic theory. The fundamental concepts of phonology, syntax, and semantics will be presented within the framework of generative (transformational) grammar. These concepts will be developed as we describe the sound system and sentence structure of English. We will extend them to a general theory of language, a universal model which attempts to account for human linguistic competence.
In this course we will spend much of our time playing with words and sentences. We will observe, for example, that the superficially similar words “eager to please” (where John is interpreted as the deep-structure subject) and “John is eager to please” (where John is interpreted as the deep-structure object). We will try to explain how English speakers differentiate the homophones sentences: “This baby has red marks” and “This baby has read Marx.” We will investigate the ambiguity of modal verbs in sentences like “Mary must go to school” (assertion/obligation) and “Mary won’t talk” (prediction/volition).

The course will involve lectures, discussions, and individual projects. Readings will include major linguistic papers on English, and students will be encouraged to undertake independent linguistic research on English or any other languages they may know.

Two 75 minute classes per week.

LC-205

THE POLITICS OF LANGUAGE

Matja Lillya

This course will focus in part on the linguistic concerns of developing countries as they forge nation states from former colonial empires. It will also examine established nations where changing times have produced new language and communications problems or aggravated old ones. We will seek answers to linguistic needs brought about by the demands for universal education, technical and economic advancement, and political stability. This will mean scrutiny of optimal choices among proposed orthographies, methods of lexical augmentation, and roles played by non-standard languages within given national boundaries.

By way of background information we will touch upon the great nationalist fervor of 19th century Europe which produced the development of many national languages capable of meeting the needs of modern nation states.

Several decades ago Havránek listed four requirements which national languages must satisfy. They must serve the communicative, the technically practical, the technically theoretical and the aesthetic functions. These standards may have to be revised for present day national languages. With world-wide mushrooming of scientific information, for example, many highly developed languages no longer choose to satisfy the technically theoretical
function entirely. Thus, countries such as Japan and Sweden publish much of their scientific research in English to reach a wider reading audience.

Also under consideration will be the cultural and political views of groups of individuals who will be affected by national linguistic policy and their role in formulating linguistic policy. That is, we will look at what it means to be an individual who is faced, on the one hand, with the pressures of learning a new language and new cultural norms in order to participate fully in a national society, and on the other hand, is bound by older loyalties to a different regional or tribal culture.

Two 1½ hour classes weekly.

LC-204
COMPUTER PROGRAMMING LABORATORY

Artificial languages - especially those languages capable of computer implementation - are an ever-present facet of technological society. Most people are at least vaguely aware that these languages have a high potential for use and for misuse. To encourage a more complete understanding of these problems and to provide direct experience with computers and programming languages, the Program in Language and Communication maintains a computer laboratory of time-sharing terminals and a range of self-instructional materials. These materials are designed to support a variety of interests: from those who want to casually browse to those who need and desire a high degree of programming proficiency. The laboratory will be open during the entire semester and interested students may start work at any time.

Since this laboratory is open to all students in the College, and since an individual's level of involvement is entirely at his own discretion, this laboratory should not be selected as part of a student's principal work in Language and Communication, but as a supplement to it.
THE HUMAN DEVELOPMENT PROGRAM

Spring Term 1972

If I am not for myself, who will be?
If I am for myself alone, what am I?
If not now, when?

--Ethics of the Fathers 1:14

The Human Development Program in the Spring Term 1972 consists of a collection of workshops exploring modes of personal growth and aspects of the individual life process. The Program's principal goal is to help its participants toward their own awakening -- toward fuller consciousness of themselves, the issues of growth as persons that most affect them, the crafts of encounter and relationship and aloneness and symbolization that may offer a better purchase on living well with themselves and others. Individual workshops will differ widely in the directness and the styles with which these goals are addressed. Six workshops will be offered by faculty members as part of the regular Spring Term curriculum. Others, indeed the majority of workshops, will be organized as Merrill House or Dakin House courses or informal programs, drawing leadership from all sectors of Hampshire's community - students, staff, faculty - and from outside the College. In addition, the Human Development Program will sponsor a series of events - discussions, films, lectures, demonstrations, and festive occasions - open to the College community.

A Note on Joining Workshops:

Information about signing up for any of the House courses here described is available in the appropriate House office. Those interested should act soon; most workshops are limited in enrollment and most will be getting under way early in February. The six School courses were enrolled in December.

John R. Boettiger, Chairman
Human Development Program
HUMAN DEVELOPMENT WORKSHOPS

COURSE TITLE

"The Book That Changed My Life"
Celebration of Community: Fairy Tale Theater
Children's Books?
Dance Workshop
Dimensions of Consciousness
Hard Times - Gentle Men
Hatha Yoga
Hermann Hesse
Human Growth Through Theater
Humanistic Education
If We Think Back Through Our Mothers
Loneliness
Meditation in Action
Movement Workshop
Poetry for Personal Growth
Poets' Workshop
Problems in Child Development: Play and Fatherhood
Prose Fiction Writing Workshop
R. D. Laing
Reading the Bible for Fun and Prophets
Science and Eastern Thought:
The I Ching
The Physiology of Yoga and Meditation
Ways of Knowing In Science and Nonscience
Seeing Photographically

LEADERS

Robert Gogan
Susan Posner, Susan Bumagin
Richard Hexter
Marta Renzi, Didi Levy
John Boettiger
Robert Rardin
Jim Bierman
Michael Morin
Karl Whittenburg, Mary Greene, Rosemary Quinn
Richard Wagman
Carolyn Atkinson
Susan Bumagin
Sam Gearhart
Francia McClellan
David Britton
Jonathan Wright, Paul Callahan
Louise Farnham
Lee Harding
David Vicario
Philip McKeen
Lawrence Domash

Paul Margolis, Michael Stutz, Neil Weinberg
COURSE TITLE
Tai Chi Chuan
William Faulkner
Workshop in Picture-Making
Workshop in Visual Experience
Kundalini Yoga

LEADERS
Master T. T. Liang
Charles Atkinson
Pge Morris, Laura Evans
Elaine Mayes
Steve Josephs
"THE BOOK THAT CHANGED MY LIFE"

Robert Gogan

To most of us, literature has been a source of nurture for our development as humans. Probably everyone who is literate could name at least one book which contributed significantly to their personal growth.

I would like to gather together people to whom literature has been an important factor in helping them develop a personal philosophy of life. We would compile a reading list for the course consisting of one book representing each person participating — it could be a novel, autobiography, or biography — which played an important role in the personal growth of that person; and in a weekly seminar led by the person who chose the book of the week, we would discuss whatever about the book was most meaningful to each of us.

My personal objectives in taking part in such a course will be to explore the commonness of human experience through literature, to try to broaden my capacity for empathy with all people, to see how we’re all the same. I will be interested to read and discuss not only a book which I have found strengthening, but ones which others have grown from by reading, and to have the opportunity to see how it touched them.

Because of the personal nature of the course, I would like to limit the size of the seminar to eight or ten members of the community; by the same token I would like to ask those who do decide to take the course to make the commitment to come as often as possible, since in my opinion it is important to the success of such a seminar that the participants know each other in a better than "acquainted" sort of way. I’d like to continue the course all semester or as long as interest continues.

A Dakin House course.
CELEBRATION OF COMMUNITY: FAIRY TALE THEATER

Susan Posner and Susan Banagin

We would like to form a theater group to perform a modern, creative version of a fairy tale. We see this as involving the idea of community in two ways. The first, through looking at theater as a communal experience. Originally, it was the celebration of the community. The Greeks, through the use of their myths, celebrated their common heritage and affirmed their unity by drama. The productions were events to which all Athenians came, creating unity by their presence. The Medieval morality plays also spoke to a common heritage, a religious one. However, in our modern society there is no such common experience. Those plays that work well generally speak to a single subject, such as Simon to wealthy New Yorkers or Bullins to Black Americans. We would like to find some common denominator, at least something a little broader than just a single group. Therefore, we look to the fairy tale as a common childhood experience. And as such, it tells a lot about the society from which it comes. In presenting it, we would like to broaden it in just this way, to include its implications. Also, in presenting it on stage, we would want to expand it into an experience that is theater, not just storytelling. It is a celebration and an experience.

To do this, we see the best mode of operation being a troupe; a group that works together in producing as well as performing the play. One of us has worked this way before, and finds this type of theater the best for producing an organic whole. This is using a community to effect a larger community.

We would like to keep the group small, say seven or eight people. But these people would have to be willing enough to commit themselves to work, and to group work. They need not have had any previous experience in theater. All we’re looking for is energy and commitment - and to have fun.

A Dakin House course.
CHILDREN'S BOOKS?
Richard Hexter

No, I don't think it will be any good trying to go back through the wardrobe door to get the coats. You won't get into Narnia again by that route. Eh? What's that? Yes, of course you'll get back to Narnia again some day. Once a king in Narnia, always a king in Narnia. But don't go trying to use the same route twice. Indeed, don't try to get there at all. It'll happen when you're not looking for it. And don't talk too much about it even among yourselves. And don't mention it to anyone else unless you find that they've had adventures of the same sort themselves. What's that? How will you know? Oh, you'll know all right. Odd things, they say - even their looks - will let the secret out. Keep your eyes open.

(The Lion, The Witch, And The Wardrobe)

I am looking for a group of people who want to find ways of sharing their love and interest in children's books. The group can take as many forms as there are people and books. Some people have expressed an interest in reading aloud, and others in trying to write, but these are decisions to be made by the group. We will meet for two hours a week to start with, but this too can change by group decision.

Possible Readings:
The Chronicles of Narnia
The Borrowers
A Wrinkle In Time
Charlotte's Web
The Little Prince
Alice In Wonderland
The Phantom Tollbooth
The House On Pooh Corner
The Wind In The Willows
Where The Wild Things Are

The only course requirement is that you have been a child.

A Dakin House Course
DIMENSIONS OF CONSCIOUSNESS

John Boettiger

This course, having undergone three successive incarnations, deserves a fresh description. It will still be designed as an experimental workshop to understand better some of the varieties of conscious experience to which men and women are led in their search for personal growth.

It is likely that we will start with the life of the body, exploring through natural movement and stillness the awareness of self that comes through listening to the body's own subtle language. We'll also find ways to be with others without words, discovering some of the problems and potential of nonverbal communication. In movement sessions together, in time alone, and with the companionship that is natural to them, and through reading and talk, members of the workshop will be seeking the integrity-in-motion of body and psyche, and the essential connectedness between those aspects of self and the natural world through which they move.

Dream experience and authentic fantasy, if we can reawaken to them and to their playful and serious spirit within us, offer an extraordinarily rich access to personal insight. Similarly, shared fantasy in love and friendship can often provide a couple or a group new perspective on human relationships. Members of the workshop will have an opportunity to explore some Gestalt awareness ways toward reawakening and integrating the less conscious and more imaginative aspects of themselves.

Thirdly, the workshop will be concerned with the arts and disciplines of meditation. While different schools and approaches to meditation vary in their immediate objects and methods, there seems to be some reasonably common ground: seeking, through meditation, to calm the mind, reduce noise and stress, remove some of the automaticity and selectivity of ordinary awareness, and allow thereby a fresher, more vivid awareness of self and surroundings. In essence then, meditation is concerned with "cleansing the doors of perception."

Finally, and often in conjunction with the pursuits described above, members of the workshop will be exploring for themselves and in the lives of others (encountered in person, through reading and film) the realities of personal growth through human relationships: the primal reality of mother and father for a daughter or son, and the perception, care, courage, and passion by which we know another in love and friendship.

Each workshop will work as a group twice a week for two-hour sessions. In addition to these two weekly meetings, the workshop will probably plan a longer weekend session. The work will include journal-writing, reading, and some films, as well as experiential sessions and talks together. The style of our time together, in so far as it can be gathered into generalization, works toward openness, directness, lack of clutter or coercion, and sensitive care for others.

Two "Dimensions of Consciousness" workshops will be offered in the Spring Term. Each workshop will be limited to 16 students for a total of 32.

School of Humanities and Arts Course

HA-195
HARD TIMES - GENTLE MEN

Robert Bardin

In America, gentlemen are not gentle men. Men in our society give little or no support to each other - as brothers, as fathers and sons, or as friends. American men compete in destructive ways, contributing to the sexism, militarism, and materialism which characterize American life. American men go through life lonely, afraid of women and afraid of other men. Our definitions of masculinity often exclude tenderness. Our culture is terrified by homosexuality.

In this course we will try to develop some positive images for ourselves as men, to discover some models of masculinity which offer more hope than those of John Wayne and Lyndon Johnson. We will work together to liberate each other - to learn to support other men as we seek a common road toward a better life.

The text for this course will be a book by Paul Potter called: A NAME FOR OURSELVES: FEELINGS ABOUT AUTHENTIC IDENTITY, LOVE, INTUITIVE POLITICS, US (published by Little, Brown). The course is intended for men, but it will meet periodically with women's support groups which are active in the College - to discuss problems which men and women share as they work toward liberation. We will meet one evening a week throughout the semester. The course will be limited to ten men. If more than ten are interested, we will try to organize more groups. See the convener for details.

A Merrill House course

DANCE WORKSHOP

Marta Renzi and Didi Levy

We will explore the role of the beginner in modern dance both as a performer and as audience. This course will be designed specifically to allow the student with minimal or no previous training in dance to participate in several aspects of dance. We will spend time working on basic technique, improvisation, composition, theory, and philosophy. Workshop time will be devoted to increasing each student's kinesthetic awareness and control, as well as exploring the creative process of dance. As important as individual awareness may be, there is another kind of excitement in using group studies as a creative stimulus. Therefore, the workshop will begin with individual work and culminate in the study of dance as a group activity.

Workshop limited to ten with two 1 1/2 hour meetings a week.

A Merrill House course
HATHA YOGA

Jim Bieman

Posture, breath, meditation.
Meeting time to be arranged.

A Merrill House Course

* Jim Bieman teaches drama and film at Amherst College. He has studied and practiced Hatha Yoga under several teachers.

HERMANN HESSE

Michael Morin

One of the most influential writers of our time, Hermann Hesse has dealt with many of the problems of consciousness and relationship that face us now.

Such questions as "Does Hesse provide any useful solutions to today's problems?" and "What is Hesse's idea of wholeness of self?" will be dealt with; and in the process, some kind of a working understanding of a few of his works will be attempted.

Readings: Demian, Narcissus and Goldmund

Readings will also include one or two other books by or about Hesse to be decided upon by the workshop at the first meeting.

A Dakin House course.
HUMANISTIC EDUCATION

Richard Wagoner

I would like to organize a workshop on humanistic approaches to education. We will explore affective or humanistic methods of teaching that could be used in a classroom situation. Techniques to be investigated include variants or adaptations of sensory awareness and movement work, Eric Berne's Transactional Analysis, Gestalt Therapy, and role playing. There is a variety of other possibilities for exploration, and members of the workshop will have an opportunity to share and suggest their own interest.

I wish to explore this area of education because it remains, despite a recent upsurge of interest, relatively unknown and unused. I believe it has great potential for making schools saner places and for helping students realize who and what they are.

Two books, I'm Okay. You're Okay and Human Teaching for Human Learning, will be used in the Workshop. Other readings will be pursued, and we may well look to sources of practical experience in such as the Early Identification Program, Amherst public and private schools, and the U Mass School of Education.

A Dakin House Course (pending approval)

HUMAN GROWTH THROUGH THEATER

Kent Whittenburg, Mary Greene and Rosemary Quinn

Theater is one aspect of dealing with the human mind, and particularly in recent times, playwrights have been concerned with human weaknesses and dilemmas. Drama can be an excellent route to providing insights into one's own character through identification with a playwright's characters. This course will attempt to further the growth of individuals in the class and the class as a whole through the medium of drama. Several plays will be chosen on the basis of their presentation of human weaknesses and confusions and class members will be urged to prepare particularly appropriate scenes for presentations in class. The class will also be encouraged to bring to class situations which can be improvised. Improvisations might provide the starting point for writing original sketches and plays. The class will primarily consist of people with an interest in the theater who are willing to share and explore human problems stemming from other's work and our own experiments.

From this wide and somewhat vague basis, we hope to branch off in any number of directions. We feel a need to emphasize both an atmosphere conducive to original writings and the reawakening of the awareness of the body as an instrument of the actor and as an element of the characters and problems we concentrate on.

Meeting times to be arranged.

A Merrill House course
IF WE THINK BACK THROUGH OUR MOTHERS

Caroline Atkinson

Virginia Woolf suggested, in A Room of One's Own, that women writers in the nineteenth century had a difficult time of it because "they had no tradition behind them or one so short and partial that it was of little help. For we think back through our mothers if we are women." If we can assume this is true for women who write, is it also true for women who read literature, who turn to it for cultural and personal understanding? In this course, we will try to understand how, or even if, "we think back through our mothers" -- the women who preceded us -- to find our heritage in literature.

To answer this, we will need first to determine whom we can claim as "mothers." Are women who write the only ones capable of creating genuine women in literature, or are there men also who have transcended sexual limitations, creating women who are alive and whole -- more than stereotypes or symbols? We will read several works by major American writers -- ones who have helped to shape a common American literary heritage -- to begin searching for answers.

Possible selections are:

The Scarlet Letter by Nathaniel Hawthorne
Little Women by Louisa Mae Alcott
selected poems from Emily Dickinson
Washington Square by Henry James
My Antonia by Willa Cather
selected poems from Edna St. Vincent Millay
The Sun Also Rises by Ernest Hemingway
The Member of the Wedge by Carson McCullers
selected short stories by Flannery O'Connor
Lie Down In Darkness by William Styron
I Know Why the Caged Bird Sings by Maya Angelou
Franny and Zooey by J.D. Salinger
Who's Afraid of Virginia Woolf by Edward Albee

A Room of One's Own by Virginia Woolf (reference work)
Thinking about Women by Mary Ellman (reference work)

As a group, our primary concern will be more than strictly literary, although we will begin there. Finally our questions are personal and cultural, our subjects ourselves and our society; with care we may learn to share some of these questions, and some of ourselves.

If you are interested, please contact me in the Merrill House office during the first week of spring term (February 2-8).

A Merrill House Course
LONELINESS

Susan Bumagin

During the course of these last few months at Hampshire, I have found loneliness to be a common experience among those I have known. These feelings of alienation and aloneness are realistic aspects of the Hampshire community and more importantly, of life in general. I would like to explore some of the causes, effects, and significances of loneliness with its positive as well as negative considerations, with a small group of people.

The workshop will deal with the problems of social adjustment to our environmental condition, the relationship between loneliness and creativity, loneliness and love, barriers and constrictions which have been to a certain extent silently accepted.

The theme of loneliness is a timeless classic in literature, poetry, and song: sources such as Martin Buber, Dag Hammarskjold, Virginia Woolf, the Beatles, James Taylor. I suggest that we read together some of these works of literature, many of which have been meaningful and enriching for me.

**Readings:**
- *Letters to a Young Poet*, Rainer Maria Rilke (required)
- *Steppenwolf*, Herman Hesse
- *The Heart Is a Lonely Hunter*, Carson McCullers
- *Wind, Sand, and Stars*, St. Exupery
- *The Loneliness of the Long Distance Runner*, Alan Sillitoe

Of the many sociological/psychological studies which have been done on the subject, I propose:

- *Loneliness*, Clark Moustakas (required)
- *Escape From Freedom*, Erich Fromm
- *Paths of Loneliness*, Margaret Wood

**Limit:** 10 participants

A Dakin House Course

MEDITATION IN ACTION

Sam Gearhart

This workshop will function as an introduction to the practice of meditation in the circumstances of daily life. One short book, *Meditation in Action*, by Chogyam Trungpa, will be read. Participants will meet with me individually or in small groups throughout the term whenever they wish during hours to be arranged. There will be occasional meetings of the entire group to share and compare experiences.

Contact me in the bookshop, ext. 4732

A Dakin House Course
MOVEMENT WORKSHOP
Francis McClellan

This workshop will incorporate elements from Yoga, sensory awareness, and movement exploration. The workshop hopes to offer participants:

1. the opportunity to explore through kinesthetic responses and verbal and emotional stimuli - how their body movement is a reflection and a communicating element to others of who they are.

2. a means of personal growth through the processes of experiencing, observing, and evaluating their own responses and the responses of others.

3. an opportunity for an intensive study derived from class work or readings (in the form of a written or live presentation) of some aspects of non-verbal communication.

The workshop will meet twice a week for two-hour periods. There will also be individual meetings scheduled during the term. Enrollment is limited to 15 students.

School of Humanities and Arts Course
HA-155

POETRY FOR PERSONAL GROWTH
David Britton*

We will experience fantasies, simulations, role plays, sensory awakening, automatic writing, art work, music, and other structured personal growth activities as ways to deepen our experiences of selected poems. We will share poems that hold particular importance for us in our lives. The object of study will be our responses to these poems, not the poems themselves.

There will be one three-hour evening meeting per week

A Merrill House Course

* David Britton is a teacher and student of humanistic education at the School of Education, University of Massachusetts
POETS' WORKSHOP

Jonathan Wright and Paul Callahan

Three aims for now:

- Bring Poetry to Hampshire
- Investigate and experience work as a group of artists
- Beginning of a Hampshire artists' collaborative

* Bring Poetry to Hampshire and Hampshire to Poetry:

People, Events, presentations of poetry through reading. Reading aloud, group reading. A reading in late spring of our work together. We see this as mainly oral experience, to reintroduce poetry as a fun, inspiring, moving experience. To begin to make accessible the voices of artists, the language of people.

* As a group:

Bring our poetry our work our selves to a common ground: to explore and live that ground for each other. This is no map but rather something like a storm to watch for in the sky above the clearing.

Watch for:
- The pressing sense of time that disrupts good work.
- The sense that time exists only as a responsibility for making products.
- The nature the quality of the poetic experiences we have we feel we are.
- The needs we have and the demands we make Forces in us and around us that constrict us.

We don't want to move into totally non-sequential random experience but rather into a closer awareness of the processes of our experience.

This is only a beginning. We want to open a space, find some ways for ourselves and each other in our work. To form a source of common concern, support, honesty, and relationship that will let us.

* Collaborative - We hope that this workshop can be a center for many kinds of collaboration among artists at Hampshire.

The business of who: Please give us some samples of your work, and an answer in some form to the question: "How do you expect other writers, other people, to respond to your work?"

We will begin in Mid-February and meet several times a week through early May.

A Merrill House course
PROBLEMS IN CHILD DEVELOPMENT: PLAY AND FATHERHOOD

Louise Farnham

The seminar will begin by exploring the place of play in the life of the child, covering such topics as theories of the meaning and function of play, changes in play with increasing age, and sex differences in play preferences. Most of the reading will be articles and single chapters from a variety of sources, but a particularly important source will be Piaget's *Play, Dreams, and Imitation*.

Studying the use of semi-structured play as a means of assessing personality will lead to the second focus of the seminar, fatherhood. We will explore the effects of father absence and the impact of various styles of fathering upon the development of children. What has the role of the father been in our society and in other societies? What should it be in order to enhance the quality of life for both fathers and children? Our sources will include both social science literature and fiction.

The seminar will meet three hours each week; there will be one two-hour meeting of the group as a whole and the third hour will be a smaller tutorial. Students will be expected to observe children and also to write a short paper on a topic they find particularly interesting.

A School of Social Science Course
SS-168

KUNDALINI YOGA

Steve Josephs*

Kundalini Yoga is a system of yoga designed to raise energy from the base of the spine for the purpose of increasing awareness and raising the level of consciousness. It includes postures, breathing exercises, chanting, and meditation techniques.

One 1½ hour meeting per week plus an opportunity to attend other Kundalini Yoga classes in the five-college area.

A Merrill House course (pending approval)

*Steve Josephs is a doctoral candidate at the Center for the Study of Aesthetics in Education at the University of Massachusetts, and an experienced teacher of Kundalini Yoga.
PROSE FICTION WRITING WORKSHOP

Lee Harding

In this workshop I think our preoccupation should be in discovering the courage to venture towards vague solutions to our condition which we all sense, revere, dream about - isn't that, after all, what drives us as writers on into our craft? With the fear of risk abating, becoming comfortable with risk, we will allow ourselves to be exposed, actively feeling our relationships to life, affirming our persons, despite the impersonality around us. Let us all be lonely, comic, absurd, boring. Why are we writing? What are the strong feelings which drive us, in order to be free of them, to create? And then, how do we find a vehicle for them, so as not to kill them in translation?

Transposing experience, reality, into fiction, we want to discover a focus which gives it meaning through the unifying force of language: the word. There are many mechanical and conceptual elements of fiction which must be explored, but they are not our sources. We can think about and apply Ezra Pound's words: The "simplest method, discovered by the Romans or some earlier people, is to dig a good sewer at the start; and then turn your attention to architecture."

The group will function if everyone writes (I am thinking primarily in terms of short story), reads one another's work with care, and, as good critics do, causes improvement in the art he criticizes. We will bring to the group good and bad material from outside. I envision a 2-hour or so evening once a week, of about ten writers, ambling, sometimes, in a domain darker than sentence, syntax, and metaphor, leaving some of our baggage at home.

One two-hour (or so) meeting a week

A Merrill House course
R. D, LAING

David Vicario

R. D. Laing is a psychiatrist who has specifically concerned himself with the treatment and understanding of those whom society calls "schizophrenic". His thought is part of the existential trend in clinical psychology; he believes that "schizophrenics" are not victims of a genetically-caused or pathological illness, but are in fact reacting in an intelligible way to overwhelming psychological pressures in their family situations. He seeks out and describes the interpersonal mechanisms in a patient's family, some of which have induced the response called "madness". These mechanisms, however, seem to be present in all families to some degree, and are involved in most human interaction in our society. This implies that sanity and insanity are on a continuum. Important questions follow: What needs of an individual family or of a society are served by classifying certain members insane? Are whole families or whole societies insane?

The implications of these larger questions reflect and are reflected in our individual lives. Laing can provide a perspective and some models which we can bring to bear on our own concerns. We are all still in family situations, however veiled by the sense of independence we experience in college. We are involved in interacting with others in complicated ways that often require examination. The jump from Laing's psychiatry to our personal experience is not as big as it may seem.

I expect people in this workshop to read a lot; we will be reading most of what Laing has written. I am not someone who will "teach" the subject, and I am not a sensitivity group leader who can work with only the individual experiences of group members. We will have to find our meeting ground as a group in the material we have all read, at least for the first weeks.

Readings: Sanity, Madness and the Family (selections), The Politics of the Family, Knots, Self and Others (selections), The Politics of Experience, The Divided Self. Plus selections from other authors, clinical and impressionistic.

Limit: 12 members

Duration: Most of the term - at least nine weeks. Meet once a week for the first few weeks to have time to read. We can then work out more frequent meetings.

A Dakin House Course
READING THE BIBLE FOR FUN AND PROPHETS

Philip McKeen

Knowledge of the Old and New Testaments, with related problems of interpretation, historicity, and faith may be of interest to many who are not familiar with the "Holy Scriptures" of the West. The Bible is intrinsically interesting, yet puzzling, and its content bears enormous importance for persons concerned with art, music, literature, history and religion in Euro-American culture. The readings will be only samplings, but will attempt to introduce main themes and problems, from Genesis to Revelations.

The Covenant: Weekly meetings of the course preceded by one-to-one meetings of paired students 1) to insure knowledge (close reading) of the material and 2) to raise questions, theories, problems and observations for the whole group to hear and discuss. One absence will be tolerated during the course, but if a student misses two sessions, either meetings of the pair or the group, please do not plan to continue with the course.

Student groups will take turns preparing special materials for class sessions. At least one film will be shown. I wish to emphasize the "serious" nature of this course (which may serve as preparation for exams, or concentrations) and the desire for regular student participation and leadership. Thus the "covenant" - not to "scare off" potential participants, but to indicate that much is expected from them. I will not be available for "tutorial" or "private" sessions with students this term.

Time: 8:00 a.m.; possibly in the Kiva, for one hour once a week. Six sessions, starting the second week of classes, until spring vacation; four sessions after spring vacation; several "extra" sessions at my home on spring evenings.

Expenses for Students:

a) Two Revised Standard Version of the Bible at about $6.50
b) Two inexpensive commentaries at about $3.00
c) Any other books you may wish to purchase; try Lads Book Store in Amherst behind the Grace Episcopal Church, as well as Ouroboros.

A Merrill House course (pending approval)
SCIENCE AND EASTERN THOUGHT

The following set of three one-month modules may be taken either as a semester course (in which case it is called "Science and Eastern Thought," or else individually, mixed during the term with other modules from PBS or modular offerings from the World of Mathematics or DNS. Each module is self-contained and has no prerequisites. The course will meet two hours once and one hour once a week.

This seminar is offered within the Human Development Program.

THE I CHING

Lawrence Domash

The ancient Chinese "Book of Changes" is examined in relation to the ideas of cause and effect found in classical and modern quantum physics through a variety of readings. What is the principle of causality in the I Ching? How is the structure of hexagrams related to their meaning? Does our science include universal principles like Yin and Yang? The course begins with practical experience with using the I Ching as an oracle, and we may invite guest lecturers. The course will meet two hours once and one hour once a week.

School of Natural Science and Mathematics Course
NS182-1

THE PHYSIOLOGY OF YOGA AND MEDITATION

Lawrence Domash

The ancient Hindu literature about the human body, its nervous system and its evolution, including the ideas of asana, the chakras, prana, kundalini and the "seven states of consciousness" are compared directly with modern scientific data on physiological measurements of anxiety levels, blood chemistry, metabolism and electroencephalography of meditators. Included is material and class experimentation with alpha brain wave generation. (Those practicing or about to start transcendental meditation will find relevant information.)

School of Natural Science and Mathematics Course
NS182-2

WAYS OF KNOWING IN SCIENCE AND NONSCIENCE

Lawrence Domash

Different styles of thinking in the history of theoretical physics (Plato, Kepler, Einstein, Feynman) are compared with "nonscientific" modes of thought exemplified by Carlos Castaneda ("Teaching of Don Juan") and the Hindu Vedic descriptions of "direct cognition" of nature through subtle states of the nervous system. The course will meet two hours once and one hour once a week.

School of Natural Science and Mathematics Course
NS182-3
SEEING PHOTOGRAPHICALLY

Paul Margolis, Michael Stutz, Neil Weinberg

The development of the course will focus on two main concerns. First, an attempt to become visually more sensitive to our surrounding environment, through use of the photographic medium. Second, an attempt to express this sensitivity through an aesthetic (and verbal) appreciation of our own photography and that of others.

This course is open to anyone, regardless of level, so long as he or she has access to a camera. Because there are three of us teaching, the class will be able to cover a large range of different perspectives, on different levels, concurrently.

Limit: 20 students
Fee: 15 dollars (lab expenses)

A Dakin House Course

TAI CHI CHUAN

Master T. T. Liang*

The aim of this course will be to teach Tai Chi Chuan, an ancient and extraordinarily graceful Chinese form of movement meditation and self-defense. The practice of Tai Chi is designed to lead one to experience "the exquisite unity of refinement of the finity within and inclusion of the infinity without."

This course will meet throughout the spring term on Saturday afternoons and evenings in one hour classes of twelve students each. A prominent Tai Chi Chuan master, T. T. Liang, has agreed to come from Boston each weekend to teach this course.

Costs: $3 per session (less if College funds can be obtained to defray student costs)

Class size: No more than fifteen to eighteen from Hampshire. Other places have been reserved for people from other schools in the area.

* Master Liang is a well-known Tai Chi Chuan teacher now living in the Boston area.

A Merrill House course (pending approval)
WILLIAM FAULKNER

Charles Atkinson

From a reading of at least five or six of Faulkner's major novels - The Sound and the Fury, As I Lay Dying, Light in August, Absalom, Absalom, The Hamlet, Go Down Moses - we will try to learn something of Faulkner the artist, the South as a culture, and how the two have matured each other.

Organization:

The course will last for the full semester, and will be limited to 10 people.

We will decide as a group upon the specific readings and then distribute the responsibility for "presentation" of each book, giving everyone the experience of organizing a class.

Since I am concerned with the ways we learn (or don't learn) in groups, some time will be spent on noticing and understanding our own behavior as a class.

Each of us should at some point commit him or herself to writing - whether critical, fictional, or autobiographical - and then share that commitment with the group; this is an often neglected mode of communication at Hampshire.

If you are interested in the course, please see me in the Merrill House Office before February 9.

A Merrill House Course
WORKSHOP IN PICTURE-MAKING

Page Morris and Laura Evans

NOTE: The following workshop will not be offered this spring. Instead, its organizers are developing plans for one or more shorter-term introductory sessions on their approaches to picture-making and dreams and fantasy experience. Those interested in participating should leave their names in the Merrill House Office.

Picture-making of dream or fantasy images can be an unusually vivid and direct means of self expression and insight. The created image crystallized the dream, which tends to be slippery and misted, while still allowing emotions and thoughts to play around it. Often the picture is an extension rather than a duplication, of the dream image, thus showing how the dream has changed, how you have changed. In sharing our dream images, we can extend the process of self expression and understanding even further through reactions, comments, and perhaps visual dialogues with each other. We will keep journals of the dreams and fantasizes themselves and of our feelings and discoveries through the pictures. We may develop dialogues with outer groups as well, in particular the poetry group, and possibly the photography. Another possibility is work in movement as a source of fantasy images. We may also read some on creativity and the unconscious: Freud, Jung, Koestler, Maritain, Neumann, Reed.

Materials: anything you like. We have found tissue paper collage to be a good way of allowing the image to build itself, piece by piece, out of the subconscious, but painting and drawing work well too. If it is possible, dream pictures recorded in photographs would be interesting.

"These symbolic centers of Chagall’s pictures are unquestionably spontaneous products of his unconscious, not constructions of his ego. The consciousness that executes his painting follows the mood and inspiration of the unconscious. The unity and force of conviction in his pictures are an expression of the obedience with which he accepts the intention of his unconscious. Like a medium, undisturbed by the impressions and influences of the world around him, he follows the inner voice that speaks to him in symbols.

"But it is chiefly at night and under the moon, when the inwardness speaks and the world of the secret is unsealed, that the world comes to itself.

"The godhead speaks in colors and symbols. They are the core of the world of feeling and truth, a truth of the heart, the subterranean dream reality which, like a net of colored veins, runs through existence."

Erich Neumann on Marc Chagall

-22-
Workshop in Picture-Making

"It is not far, for the bird, from sage to man, it is not far
for images from the man to what he sees, from the nature of actual
things imagined. The value of each is the same. Matter, movement,
need, and desire are inseparable. The honor of being alive is worth
the effort of quickening life. Think thyself flower, fruit, and
heart of the tree since they bear the same color, since they are
one of the necessary signs of the presence."

Marc Chagall

WORKSHOP IN VISUAL EXPERIENCE

Elaine Mayes

This course is concerned with creative experience through still and motion picture
photography.

The course will follow an inquiry into personal vision using various mediums. The
student will attempt to gain awareness of the visual environment and his relation-
ship to it. Through the use of polaroid photography, video tape, film, found
photographs, games, sensory awareness problems, self documentation, and machine
printing, the student will concern himself with the experience of the visual image
as it relates to perception, emotion, fantasy, individuality, and culture. No
prior experience in still photography or film is required, and the darkroom will
not be used. The course is intended to relate to the human development curriculum
and to those students who may not wish extensive study of the techniques of film
and photography.

The class will meet twice a week for two-hour sessions, and there will be a Lab
fee of $11.00. Enrollment is limited to 16 students.

School of Humanities and Arts Course
HA-165
HUMAN DEVELOPMENT READING GROUPS

Fred Taubman

A potent method for achieving and understanding of any set of philosophical or theoretical ideas is for a small group to look fairly intensively at these ideas using some material as a vehicle to digest and catalyze discussion. If the group achieves some identity and responsibility for itself, a strong exchange of feelings and thoughts about the material will occur which can be of great benefit to the individual members of the group. This can stimulate further thought and understanding as a result of gaining insight from a different point of view, which itself is of value.

Therefore I would like to see the formation of such groups with the topic of human development their theme. The material a group looks at would be decided by the group itself as well as any other factors, such as numbers of meetings, etc. Some works that have already been suggested are: Myrdal's Confessions of a Disloyal European, Hammerskjold's Markings, Weston's Daybooks, and Slater's Pursuit of Loneliness. These examples should not connotate any limit to the type of material looked at. I would like to see some groups consider the use of some films as well as written material.

I think there are certain things about the make-up of the groups that are important. They should be small so the members can become secure and committed to each other. The male/female distribution is also important, in terms of the group membership and material looked at. These and other issues will have to be discussed at a general meeting before groups are formed.

I would appreciate any suggestions you might have, or questions about any of the previously mentioned ideas.

A Merrill House course (pending approval)
HAMPSHIRE COLLEGE

Schedule of Classes

SPRING TERM
1972

SYMBOLS KEY

LIBRARY (L)
L/3FC = 3rd Floor Classroom
L/CR = Conference Room
L/3Fw = 3rd Floor Woodshop
L/PC = Photo Classroom
L/3FDS = 3rd Floor Dance Studio

ACADEMIC BUILDING (AB)
AB/101-103 = Classrooms
AB/WLH = West Lecture Hall
AB/ELH = East Lecture Hall
AB/MLH = Main Lecture Hall

SCIENCE BUILDING (SB)
SB/3FS = 3rd Floor Studio
SB/1FSC = 1st Floor Science Classroom
SB/3F = 3rd Floor
SB/2FL = 2nd Floor Lab
SB/2F = 2nd Floor
SB/1FCR = 1st Floor Conference Room
Tutl = Tutorials
TBA = To Be Arranged
<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>INSTRUCTOR</th>
<th>ROOM</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Environmental Structures</td>
<td>Mansfield, R.</td>
<td>L/3FC</td>
<td>T 3-5, F 10-11</td>
</tr>
<tr>
<td>Three American Poets</td>
<td>Smith, D.</td>
<td>Mas I</td>
<td>T 1-3, W/F 9-11</td>
</tr>
<tr>
<td>Literature of the Caribbean</td>
<td>Marquez, R.</td>
<td>L/CR</td>
<td>T 1-2:30, Th 10-11:30</td>
</tr>
<tr>
<td>What Happens at the Movies?</td>
<td>Liebling, J.</td>
<td>AB/ELR</td>
<td>W 1-4</td>
</tr>
<tr>
<td>Evolution of English</td>
<td>Houle, S.</td>
<td>AB/103</td>
<td>T/Th 1-2:30</td>
</tr>
<tr>
<td>A Man: Albert Camus</td>
<td>Haden, J.</td>
<td>AB/104</td>
<td>T 1-3, F 8-10am</td>
</tr>
<tr>
<td>Man-Made Environment</td>
<td>Juster, Pope</td>
<td>SR/3FS</td>
<td>M/F 1-4</td>
</tr>
<tr>
<td>Puppet Workshop</td>
<td>Terry, E.</td>
<td>L/3FW</td>
<td>W/F 10-12</td>
</tr>
<tr>
<td>Still Photography</td>
<td>Mayes, E.</td>
<td>L/PC</td>
<td>T 10-11, Th 2-5</td>
</tr>
<tr>
<td>Movement Workshop</td>
<td>McClellan, F.</td>
<td>L/3FD</td>
<td>T 2:30-4, L/Kiva(W) 9-11, W/11-12</td>
</tr>
<tr>
<td>Music in the 20th Cent.</td>
<td>McClellan, R.</td>
<td>AB/108</td>
<td>T 1:30-3, F 10:30-12</td>
</tr>
<tr>
<td>Structures Materials</td>
<td>McClellan R.</td>
<td>AB/108</td>
<td>T/W 3-6</td>
</tr>
<tr>
<td>Workshop in Visual Exp.</td>
<td>Mayes, E.</td>
<td>SR/3FS(T)</td>
<td>T 2-5, L/PC (Th) 10-11</td>
</tr>
<tr>
<td>Apprentice Film Making</td>
<td>Liebling, J.</td>
<td>L/PC</td>
<td>M/W 9-12</td>
</tr>
<tr>
<td>Russia and the West</td>
<td>Hubbs, J.</td>
<td>AB/107</td>
<td>T 1-3, F 8-10am</td>
</tr>
<tr>
<td>Studio</td>
<td>Hoener, A.</td>
<td>L/Kiva</td>
<td>I T 1-3, F 10-12, II T 3-5, F 8-10am</td>
</tr>
<tr>
<td>American Writers &amp; Race</td>
<td>Terry, E.</td>
<td>AB/105</td>
<td>T 1-3</td>
</tr>
<tr>
<td>Dimensions of Consciousness</td>
<td>Boettiger, J.</td>
<td>AB/102</td>
<td>I T/Th 2-4, II W/F 10-12</td>
</tr>
<tr>
<td>Contemporary Sculpture</td>
<td>Mansfield, R.</td>
<td>L/3FC</td>
<td>T 1-3, F 9-10</td>
</tr>
<tr>
<td>Hampshire Graphic Design</td>
<td>Hoener, A.</td>
<td>L/3FC</td>
<td>W 11-12</td>
</tr>
<tr>
<td>DIVISION II</td>
<td>COURSE TITLE</td>
<td>INSTRUCTOR</td>
<td>ROOM</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>HA 200</td>
<td>Apprentice Film Making</td>
<td>Liebling, J.</td>
<td>L/PC</td>
</tr>
<tr>
<td>HA 220</td>
<td>Aspects of Existentialism</td>
<td>Haden, J.</td>
<td>AB/107</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 240</td>
<td>Graphic Design Apprentice</td>
<td>Hoener, A.</td>
<td>L/CR (T)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L/Kiva (W)</td>
</tr>
<tr>
<td>HA 245</td>
<td>The Irrational Enlightenment</td>
<td>Rubbs, J.</td>
<td>AB/104</td>
</tr>
<tr>
<td>HA 250</td>
<td>Problems Environ. Design</td>
<td>Juster, N.</td>
<td>SB/3FS</td>
</tr>
<tr>
<td>HA 255</td>
<td>Functional Sculpture</td>
<td>Mansfield, R.</td>
<td>L/3FC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 260</td>
<td>The Troubadours</td>
<td>Marquez, R.</td>
<td>SB/SC</td>
</tr>
<tr>
<td>HA 265</td>
<td>Theatre of Mixed Means</td>
<td>McClellan, F.</td>
<td>L/3FD5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 275</td>
<td>Ought Lit to be Taught?</td>
<td>Roberts, D.</td>
<td>AB/106</td>
</tr>
<tr>
<td>HA 270</td>
<td>Electronic Music</td>
<td>McClellan, R.</td>
<td>AB/101</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIVISION I</td>
<td>COURSE TITLE</td>
<td>INSTRUCTOR</td>
<td>ROOM</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>LC 105</td>
<td>Language Acquisition</td>
<td>Koplin, J.</td>
<td>AB/104</td>
</tr>
<tr>
<td>LC 112</td>
<td>Moral Discourse</td>
<td>Witherspoon, C.</td>
<td>AB/105</td>
</tr>
<tr>
<td>LC 114</td>
<td>Historical Theories of Language</td>
<td>Mitchell, S.</td>
<td>AB/106</td>
</tr>
<tr>
<td>LC 115</td>
<td>Retreat from the Word</td>
<td>Lyon, R.</td>
<td>AB/106</td>
</tr>
<tr>
<td>LC 116</td>
<td>Psychology of Comm.</td>
<td>Stillings, N.</td>
<td>AB/104</td>
</tr>
<tr>
<td>LC 118</td>
<td>Medium and the Message</td>
<td>Jussim, E.</td>
<td>AB/VLH</td>
</tr>
<tr>
<td>LC 122</td>
<td>Topics History of Logic</td>
<td>Marsh, W.</td>
<td>AB/207</td>
</tr>
<tr>
<td>LC 124</td>
<td>Clear Thinking: Whole Earth</td>
<td>Marsh, W.</td>
<td>AB/107</td>
</tr>
<tr>
<td>LC 126</td>
<td>Computers, Artificial Intelligence and Logic</td>
<td>LeTourenne, J.</td>
<td>SB/125</td>
</tr>
<tr>
<td>LC 128</td>
<td>Evolution of English</td>
<td>Houle, S.</td>
<td>AB/103</td>
</tr>
<tr>
<td>LC 130</td>
<td>What’s in a Language?</td>
<td>Stillings, N.</td>
<td>AB/107</td>
</tr>
<tr>
<td>LC 132</td>
<td>Cryptography and Cryptanalysis</td>
<td>Holmes</td>
<td>AB/106</td>
</tr>
<tr>
<td>LC 140</td>
<td>Human Language and Humane Scholarship</td>
<td>Rardin, R.</td>
<td>Mod K</td>
</tr>
<tr>
<td>LC 165</td>
<td>Truth</td>
<td>Witherspoon, C.</td>
<td>AB/105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIVISION II</th>
<th>COURSE TITLE</th>
<th>INSTRUCTOR</th>
<th>ROOM</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC 202</td>
<td>Formal Logic</td>
<td>LeTourneau, J.</td>
<td>SB/125</td>
<td>M 10:30-12 Th 12-1</td>
</tr>
<tr>
<td>LC 204</td>
<td>Politics of Language</td>
<td>Lillya, M.</td>
<td>AB/216</td>
<td>M 9-10:30 Th 1-2:30</td>
</tr>
<tr>
<td>LC 205</td>
<td>Introduction to Linguistics</td>
<td>Rardin, R.</td>
<td>AB/G10</td>
<td>M 9-10:30 Th 1-2:30</td>
</tr>
<tr>
<td>DIVISION I</td>
<td>COURSE TITLE</td>
<td>INSTRUCTOR</td>
<td>ROOM</td>
<td>TIME</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>------------</td>
<td>------</td>
<td>--------------</td>
</tr>
<tr>
<td>NS 105-01</td>
<td>De Rerum Natura: Human Nutrition</td>
<td>Miller, L.</td>
<td>SB/1FSC</td>
<td>T 8-10am, F 1-3</td>
</tr>
<tr>
<td>NS 105-02</td>
<td>De Rerum Natura: Natural History of Infectious Disease.</td>
<td>Miller, L.</td>
<td>&quot;</td>
<td>T 1-5 Lab Th 1-5 Lab</td>
</tr>
<tr>
<td>NS 105-03</td>
<td>De Rerum Natura: Life in a Compost Heap</td>
<td>Miller, L.</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 206</td>
<td>Immunology</td>
<td>Parker, D.</td>
<td>SB/209</td>
<td>T/Th 1-5</td>
</tr>
<tr>
<td>NS 207</td>
<td>Matter and Life</td>
<td>Parker, D.</td>
<td>SB/209</td>
<td>T 8-10am, F 1-3</td>
</tr>
</tbody>
</table>

---Classes for NS 123 Modules held in SB/125 and SB/SC Consult Instructor---

<table>
<thead>
<tr>
<th>DIVISION I</th>
<th>COURSE TITLE</th>
<th>INSTRUCTOR</th>
<th>ROOM</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS 123</td>
<td>World of Math.</td>
<td>Staff</td>
<td></td>
<td>T 10-12, F 3-5</td>
</tr>
<tr>
<td>NS 123-01</td>
<td>Infinitesimals</td>
<td>Marsh, W.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-02</td>
<td>How to Lie with Statistics</td>
<td>Kelly, Hoffman</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-03</td>
<td>Fine Art of Counting</td>
<td>Hoffman, K.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-04</td>
<td>Conic Sections and other Pretty Curves</td>
<td>Kelly, D.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-05</td>
<td>Computers, Artificial Intelligence &amp; Logic</td>
<td>LeTourneau, J.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-06</td>
<td>Automata Theory</td>
<td>LeTourneau, J.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-07</td>
<td>Piaget &amp; the Foundations of Math.</td>
<td>Marsh, W.</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-08</td>
<td>Data Analysis and Programming I &amp; II</td>
<td>Lave</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 123-09</td>
<td>Intro to Analysis</td>
<td>Lave</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 124</td>
<td>Calculus Workshop</td>
<td>Hoffman, Goldberg</td>
<td>AB/MLH</td>
<td>T/W 9-10, F 1-2</td>
</tr>
<tr>
<td>NS 126</td>
<td>Elem School Math.</td>
<td>LeTourneau, J.</td>
<td>AB/106</td>
<td>M 7-9, T 10-12</td>
</tr>
<tr>
<td>NS 228</td>
<td>Analysis</td>
<td>Kelly, D.</td>
<td>SB/125</td>
<td>M 7-9, T/Th 4-5</td>
</tr>
<tr>
<td>NS 235</td>
<td>Behavior Genetics</td>
<td>Miller, Farnham</td>
<td>SB/1FSC</td>
<td>M/W 1-3</td>
</tr>
<tr>
<td>NS 241-01</td>
<td>PES: Theory of Relativity</td>
<td>Gordon, C.</td>
<td>AB/107</td>
<td>T 8-10am, F 1-3</td>
</tr>
<tr>
<td>DIVISION</td>
<td>COURSE TITLE</td>
<td>INSTRUCTOR</td>
<td>ROOM</td>
<td>TIME</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------</td>
<td>----------------</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>NS 141-02</td>
<td>PES: Sound</td>
<td>Hafner, E.</td>
<td>AB/107</td>
<td>T 8-10am F 1-3</td>
</tr>
<tr>
<td>NS 141-03</td>
<td>PES: Chemical Equilibrium</td>
<td>Lowry, N.</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 141-04</td>
<td>PES: Extra-Terrestrial Communication</td>
<td>Gordon, C.</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 143</td>
<td>Basic Physics</td>
<td>Goldberg</td>
<td>SB/3FS</td>
<td>W 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domash</td>
<td>AB/106</td>
<td>F 1-3</td>
</tr>
<tr>
<td>NS 144</td>
<td>Plain Old Chemistry</td>
<td>Lowry, N.</td>
<td>SB/2FL</td>
<td>T 9-11 F 3-5</td>
</tr>
<tr>
<td>NS 145</td>
<td>Light Waves and Holography</td>
<td>Domash, L.</td>
<td>SB/305</td>
<td>T 2-3 F 3-5</td>
</tr>
<tr>
<td>NS 246</td>
<td>Organic Chemistry Lab</td>
<td>Lowry, N.</td>
<td>SB/2FL</td>
<td>M/W 1-3</td>
</tr>
<tr>
<td>NS 247</td>
<td>Theoretical Biophysics</td>
<td>Bernstein, H.</td>
<td>SB/3F</td>
<td>T 4-6 Th 10-12</td>
</tr>
<tr>
<td>NS 182-01</td>
<td>Science &amp; Eastern Thought: I Ching</td>
<td>Domash, L.</td>
<td>AB/EIH</td>
<td>M 7-9:30 Th 7-8:30</td>
</tr>
<tr>
<td>NS 182-02</td>
<td>Science &amp; Eastern Thought: Yoga</td>
<td>Domash, L.</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 182-03</td>
<td>Science &amp; Eastern Thought: Ways of Knowing in Science and Nonscience</td>
<td>Domash, L.</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>NS 209</td>
<td>Physical Basis for Mind</td>
<td>KriecKhaus</td>
<td>AB/108</td>
<td>M 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bruno</td>
<td>AB/106</td>
<td>W 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SB/SC</td>
<td>F 10-12</td>
</tr>
<tr>
<td>NS 211</td>
<td>Neuronal Biology of Memory</td>
<td>Greenstein</td>
<td>SB/CN</td>
<td>M 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bruno</td>
<td>AB/104</td>
<td>W 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SB/CN</td>
<td>F 10-12</td>
</tr>
<tr>
<td>NS 113</td>
<td>Botany</td>
<td>Bruno</td>
<td>AB/MLH</td>
<td>TBA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coppinger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NS 119</td>
<td>Plan for Hampshire's Wastes</td>
<td>Miller, L.</td>
<td>SB/SC</td>
<td>Th 9-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coley, Griggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIVISION I</td>
<td>COURSE TITLE</td>
<td>INSTRUCTOR</td>
<td>ROOM</td>
<td>TIME</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------</td>
<td>------------------</td>
<td>------------</td>
<td>------------------</td>
</tr>
<tr>
<td>SS 102</td>
<td>Comm. &amp; Public Policy</td>
<td>Rosenthal, Muller</td>
<td>L/CR (M) SB/1FCR (Th)</td>
<td>M 1:30-3:30 Th 9:30-11</td>
</tr>
<tr>
<td>SS 104</td>
<td>Comm. Empires</td>
<td>Linden, B.</td>
<td>AB/102</td>
<td>M 6-8, Th 8-10am</td>
</tr>
<tr>
<td>SS 106</td>
<td>Conflict Resolution in the International System</td>
<td>Turlington, B.</td>
<td>SB/116</td>
<td>M 3-5, Th 10-12</td>
</tr>
<tr>
<td>SS 113</td>
<td>The Family</td>
<td>Wilson, W.</td>
<td>AB/104</td>
<td>M 1-3, W 2-3</td>
</tr>
<tr>
<td>SS 116</td>
<td>From Old Left to New</td>
<td>G.azer, P.</td>
<td>AB/104</td>
<td>M 3-4, Th 9-11</td>
</tr>
<tr>
<td>SS 117</td>
<td>Politics of Education</td>
<td>Alpert, R.</td>
<td>SB/CR</td>
<td>M 3-5, Th 11-12</td>
</tr>
<tr>
<td>SS 119</td>
<td>The Lawyers</td>
<td>Mazor, L.</td>
<td>AB/105</td>
<td>M 7-9, Th 10-12</td>
</tr>
<tr>
<td>SS 123</td>
<td>Intellectuals &amp; Social Change</td>
<td>Koplin, J.</td>
<td>AB/106</td>
<td>M 1:30-3 Th 10-11:30</td>
</tr>
<tr>
<td>SS 126</td>
<td>Intro to Caribbean Probs.</td>
<td>Barnes, K.</td>
<td>AB/105</td>
<td>M 1-3</td>
</tr>
<tr>
<td>SS 127</td>
<td>Measures of Man</td>
<td>Stillings, N.</td>
<td>AB/LW</td>
<td>M 2-4, Th 9-11</td>
</tr>
<tr>
<td>SS 131</td>
<td>Intro to Social Theory: Marx and Beyond</td>
<td>Weaver, Bell</td>
<td>AB/107</td>
<td>M 1-2, Th 11-12</td>
</tr>
<tr>
<td>SS 138</td>
<td>Modern Econ. History of Women</td>
<td>Howard, P.</td>
<td>AB/103</td>
<td>T/W/Th 9-10</td>
</tr>
<tr>
<td>SS 142</td>
<td>Economics of Pollution</td>
<td>Howard, P.</td>
<td>AB/214</td>
<td>M 1-2, W 10-11</td>
</tr>
<tr>
<td>SS 146</td>
<td>Motives and Society</td>
<td>Birney, R.</td>
<td>AB/105</td>
<td>Th 8-10</td>
</tr>
<tr>
<td>SS 151</td>
<td>Political Econ of Holyoke</td>
<td>Howard, Wilson</td>
<td>AB/214</td>
<td>M 2-5 Lab-Th 10-12</td>
</tr>
<tr>
<td>SS 154</td>
<td>Population Growth and Social Change</td>
<td>Linden, B.</td>
<td>AB/206</td>
<td>M 12-1 W 8:30-10:30am</td>
</tr>
<tr>
<td>SS 159</td>
<td>Schizophrenia</td>
<td>Farnham, L.</td>
<td>AB/107</td>
<td>Th 9-11</td>
</tr>
<tr>
<td>SS 166</td>
<td>Social Control &amp; Dispute</td>
<td>Yngvesson, B.</td>
<td>AB/103</td>
<td>M 3-5, W 2-3</td>
</tr>
<tr>
<td>SS 171</td>
<td>Sociologists at Work</td>
<td>Linden, B.</td>
<td>AB/206</td>
<td>M 1:30-3:30 Th 12+1</td>
</tr>
<tr>
<td>SS 174</td>
<td>Symbolic Systems</td>
<td>Yngvesson, B.</td>
<td>AB/103</td>
<td>M 1-2:30 Th 10-12</td>
</tr>
</tbody>
</table>
SOCIAL SCIENCE—Spring 1972

<table>
<thead>
<tr>
<th>DIVISION I</th>
<th>COURSE TITLE</th>
<th>INSTRUCTOR</th>
<th>ROOM</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS 181</td>
<td>Tudor-Stuart England</td>
<td>Slater, M.</td>
<td>Mas-II</td>
<td>Th 10-12</td>
</tr>
<tr>
<td>SS 186</td>
<td>World Economy</td>
<td>Weaver, F.</td>
<td>AB/105</td>
<td>W 9-10:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+ Tute1.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIVISION II</th>
<th>COURSE TITLE</th>
<th>INSTRUCTOR</th>
<th>ROOM</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS 202</td>
<td>Behavior Genetics</td>
<td>Farnham, Miller</td>
<td>SB/1FSC</td>
<td>M/W 1-3</td>
</tr>
<tr>
<td>SS 204</td>
<td>Perspectives on Legal Behavior</td>
<td>Yngvesson, B.</td>
<td>AB/205</td>
<td>W 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F 12-1</td>
</tr>
<tr>
<td>SS 206</td>
<td>Political Woman in America</td>
<td>Hollander, Glazer</td>
<td>AB/217</td>
<td>M 1-3, Th 11-12</td>
</tr>
<tr>
<td>SS 208</td>
<td>Prisons</td>
<td>Matz, D.</td>
<td>AB/108</td>
<td>Th 9-11</td>
</tr>
<tr>
<td>SS 214</td>
<td>Problems in Philosophy of Law and Justice</td>
<td>Mazor, L.</td>
<td>AB/102</td>
<td>M 2-4, W 2-3</td>
</tr>
<tr>
<td>SS 216</td>
<td>Regional Integration and Economic Development</td>
<td>Barnes, K.</td>
<td>BB/303</td>
<td>Th 9-11</td>
</tr>
<tr>
<td>SS 218</td>
<td>Social and Economic History of Latin America</td>
<td>Weaver, F.</td>
<td>AB/G15</td>
<td>M 3-4:30 W 2-3</td>
</tr>
<tr>
<td>SS 222</td>
<td>Soviet Political Life</td>
<td>Hollander, G.</td>
<td>AB/103</td>
<td>M 10-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W 11-12</td>
</tr>
<tr>
<td>SS 217</td>
<td>Measures of Man</td>
<td>Stillings, N.</td>
<td>AB/WLH</td>
<td>M 2-4, Th 9-11</td>
</tr>
</tbody>
</table>


PRELIMINARY COURSE DESCRIPTIONS

SPRING 1972

FOR ACADEMIC COUNCIL APPROVAL
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Black Autobiography</td>
<td>Terry</td>
<td></td>
</tr>
<tr>
<td>English on Discovery</td>
<td>J. Habbe</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 109</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Graphic Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 109 (RA 209)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opera Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self and Soul; Ethics of Anaxagoras and Kierkegaard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gods, Beasts, and Men: The Beginnings and The End of Political Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 311 (RA 122)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The American Literary Landscape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 122</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The American Novel: The Politics of Art</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 122 (US 212)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dreams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 134 (RA 224)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Creative Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 135 (RA 225)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Creative Process in Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 136 (RA 228)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 134 (RA 234)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Non-Male Environment; Structure and Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 136</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibition of Crisis: Art since 1919</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 137 (RA 237)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventeenth-Century Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 138 (RA 238)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puppet Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 139 (RA 239)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anglo-Saxon England: An Introduction to Its Language and Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still Photography Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dance Lab I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 156</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I and II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 166 (RA 246)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice Course in Film Making</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 187 (RA 200)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music at Hampstead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 186 (RA 206)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Theatre of Crusetey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 197</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre as Event II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 206 (RA 200)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Clove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture, Materialism, and Identity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 207 (RA 207)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Intellectual and Social History of Spanish America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 211 (US 213)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CREATIVE MOVEMENT IN THE ELEMENTARY CLASSROOM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Workshop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvising Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA 214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In these course listings you will find a quite astonishing range of offerings for the Spring Term. Remember this at the outset as you begin to plan your studies for Division I: the courses in Basic Studies are not intended to serve as introductions to this or that subject matter, but as introductions to modes of inquiry.

The difference is so crucial that you will underestimate it only at the peril of promoting your own confusion. There is something like a Copernican revolution going on here; 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 whole phenomenon of Man.

There are observably different ways in which the artist and the humanist (as contrasted, say, with the scientists) approach their subjects of study, conscious of their problems, attack them, resolve them, expose them, or suppress 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 literary methods, the mechanics of analysis, the selection and validation of documentary data or the technique of argument, but the overriding concern will be to show you a working humanist in action up close. In the arts there is a much greater emphasis necessarily 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 that you have already studied. No recap of the course, or of any passages or material studied. No recap of the course, or of any passages or material studied. 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 moving away from the discussion table to some hands-on experience in the studio or out with field problems.

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 dialogue 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 the Arts to work together because we share the sense of Irish from about the good that "flows from the blending of rational thought and feeling. If the two functions are torn apart, thinking deteriorates into abstract intellectual activity, and feeling deteriorates into neurotic life-damaging passions."

HA 102  AMERICAN BLACK AUTOBIOGRAPHY

Eugene Terry

An examination of major autobiographies of the 19th and 20th centuries noting the classics from these works taken with their recurrent movement from despair to insight through attention to self, race, and humanity.

Examples of authors to be read: Frederick Douglass, Booker T. Washington, W. E. B. Du Bois, Langston Hughes, Richard Wright, Eldridge Cleaver, and Malcolm X.

This course has been accepted for listing by the Five College Black Studies Joint Committee. Involvements through the five college interchange program are welcome.

The class will meet twice a week for one two-hour session and one one-hour session. Enrollment is open.
"Gentlemen, I am tormented by questions; answer them for me."
—Notes from Underground

In this seminar we will read some of the major works of Dostoevsky and discuss them from several perspectives: historical, psychological, literary, and linguistic. We will familiarize ourselves with the social context in which Dostoevsky wrote and critically examine the literary techniques which he used to express the anxieties of a psyche caught in the melange of social and cultural change of Russia in the last half of the nineteenth century.

The seminar will include some lecturing, but it will be largely devoted to group discussion. We will meet together once a week for 2-3 hours. Sub-groups of 5-6 students will meet once a week with the instructor. Those who know Russian are particularly encouraged to take the course and undertake special tutorial work on original texts. Students will be expected to do a significant amount of writing.

Works to be read (with probable additions or substitutions):
Notes from the House of the Dead
Winter Notes on Summer Impressions
Notes from Underground
The Double
The Brothers Karamazov
The Gambler
The Idiot
The Idiot

Enrollment is open.
MA 109 (UA 209)  
RAMPARTER GRAPHIC DESIGN

Arthur Romer

This course will deal with the problems of the professional artist on two levels. On the first and more immediate level, we will concern ourselves with creating a Graphic Design Service. We will print and design posters for clients in the valley; and in so doing we will deal with the problems of financial organization, production schedules, and most importantly, successful graphic design. The students will design each poster and then print it.

We will explore the possibilities and flexibility of our press, using methods such as letterpress, paper printing, photographic plates, woodcuts, and silk screen. On a more abstract level, we will look at and discuss the work of well known graphic designers and commercial artists. We will read and discuss material concerning the subject of graphic design today.

Through this course we hope to achieve an understanding of successful graphic design and the situation of the graphic designer today.

The class will meet once a week for an hour, but students will be expected to spend large amounts of time working out of class with the instructor and with each other.

Enrollment is limited to 15 students.

MA 114  
ELECTRONIC MUSIC

Randall McClure and John Kilgore

This course consists of three one-month modules, concentrating on the operation of the RAMPARTER studio, the art synthesizer, recording techniques, editing techniques, and basic acoustics and electronics as they apply to electronic music.

These modules will be open to musicians and non-musicians alike, and students may register for any one of the three. It is suggested that all students planning to take one of the modules register for it during the registration period. Unless preference is indicated, we will draw lots to determine which module will be taken by the student.

The class will meet twice weekly for sixty-minute sessions plus five hours per week individual studio time. There is no prerequisite for this course, but limitations of studio time will restrict enrollment to 25 students with no more than 15 students per module.

*John Kilgore is a Division II student in the School of Humanities and Arts.
OUR MUSIC

James McElhinney

The style and history of music in America since 1900: we will perform, compose, listen to, and discuss many of the standard forms of our music:

Spirituals of the South
Reggae and Parler Music
Blues and Mississippi Delta Blues of Nova Scotia, Appalachia, and the Southwest
Swing
Be-Bop
Rock 'n Roll
Rock

We will end the class with projections of our music into the next century - the ascension of MUZAK and the value of decadent music.

The class will meet twice weekly for 1.5-hour sessions. Enrollment is open.

SELF AND SOUL

THE ETHICS OF ARISTOTLE AND KIERKEGAARD

Robert Wageman

Aristotle speaks of "states of character" while Kierkegaard describes "stages in life's way." What both recognize is that human possibilities are limited and arrange themselves into categories before the discerning eye of the philosopher. To think ethically is to attempt to sketch the range and shape of the lives men lead and to rank them as more or less appropriately known, as more or less in accord with the proper nature of man.

Aristotle speaks for Kierkegaard as well. When he says that man must strive every nerve to live in accord with the highest thing in him, but they stand off from one another as constantly to understand when they tell of what is highest in man and of what is lowest.

For Aristotle, the highest thing in man is the soul which is common to all and with which man is in unity; the soul which is unique to each individual and with which he comes to discipleship. "Dratting every nerve" thus comes to mean either the loss of self (for Aristotle) or its unconditional affirmation (for Kierkegaard). And upon reflection, upon long and difficult reflection, we find ourselves two with the same tensions and debates.

We will work our way with care and boldness some tedium through the Hegelian Ethics of Aristotle and the Complaining Student's Pocket Protection of Kierkegaard, discovering the origins of at least the theoretical grounds for their respective judgments of the lives of one in their psychological writings, for example, Aristotle's On the Soul and Kierkegaard's Sickness unto Death.

This course will meet twice weekly for two-hour sessions and is limited to 15 students.
Robert Haigher

In order to situate ourselves politically in a thoughtful manner, it is well to realize that, as historical epiphanies go, both the emergence and the ‘vortex of political theory lie behind us. Political philosophy begins with the city, the Greek poleis, a place for neither gods nor beasts but for men. According to Plato and Aristotle, a man who is little more than an animal is unsuited for life in the city; whereas the man who is little less than a god has no need of the life of the city. It is men whose lives fall with ordnary and no innovations between the medias of passion and the medias of thought who require the city as a place of light and speech to illuminate and to articulate their lives and to bring them into being.

From there our political path leads eventually to the denial of the primacy of the possibility of thought, and remains for only to calculate his power and his own immediate benefit. We will follow the rough outline of that path from wisdom to power, the path from the fundamental in-commensurability of the human to the radical privacy of the human.

Our principal readings will be: Plato, The Republic; Thomas More, Utopia; Machiavelli, The Prince; Thomas Hobbes, Leviathan; Karl Marx, Economic and Philosophic Manuscripts; and Thomas Paine, The Anti-Federalist. Our final aim will be to question both in theory and in practice whether it is responsible to speak of the end of political theory, or to let others speak of it, or to live as if the only appropriate or possible objects of political thought and speech are presently calculated and fully practicable benefits. However, this aim, if reached, will be the fruit of an arduous route through rewarding but wearying work.

This course will meet twice weekly for two-hour sessions and is limited to 16 students.

David Smith

“The land was ours before we were the land’s,” says Robert Frost, who also speaks of our “wagly realizing winter.” This course will explore the function of the specifically American setting in the work of a number of American writers and poets: Thoreau and Frost.

Neither a survey nor a course in one genre, the course will instead concentrate on four related sub-themes: the effect of literary examples are plentiful: Wilderness, Poetry, the garden, the people. Among each of these four clusters is a number of assumptions, attitudes, and myths, and a lot of good writing. Some likely examples: William Bradford, Captain John Smith, William Byrd, Thomas Jefferson, Clough, Hore, C. Thoreau, Northanger, Nathaniel, Nathalee,asts, Frost, Faulkner, Robert Bu, James Elchey.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students.
DREMS

John Neffiger

Fried's comment that "the interpretation of dreams is the royal road to a knowledge of the unconscious activities of the mind" is now a cultural commonplace. So too is the mind's understanding that such unconscious activities significantly influence—often in subtle or unconscious ways—the pattern of our conscious thoughts, feelings, and pursuits. So it is strange, then, that so many of us have little or no conscious access to our dreaming and the ways to what, in just this sense, Richard Fomie called "the forgotten language." Or that we assume that a serious preoccupation with dreams belongs exclusively or primarily to the realm of psychopathology and its medical remedies.

This workshop will draw from a variety of literary and film sources, from psychotherapeutic writings, as well as from the experience of its members, in an exploration of the nature, the meaning and significance of dreams. How, and why do we dream? In what sense do our dreams constitute a form of communication with ourselves and our world? How is our dreaming related to our development, to the changes in our personalities? How are dreams to be understood as symbols? What are the connections between the symbolic language of dreaming and the presence of symbol in myth, folklore, and religious experience?

Particular attention will be devoted to two complementary and highly suggestive approaches to dreams and dream work: Gestalt therapy and its ways with dream narrative and remembrance, and the analytic psychology of C. G. Jung, which sets dream experience in relation to archetypal mythic themes and the personal history of consciousness. Some attention will be given, too, to the Gestalt and analytic psychology work, to the connections between dreams and fantasy. We will also explore (more briefly) Freudian and contemporary psychanalytic approaches to dreaming; dream experience and interpretation in other-nonsodern—cultures; and psycho-physiological research on dreams and sleep.

Members of the workshop will keep journal accounts of their own dreams, and explore individually and together a variety of arts of gathering personal dream experience more reliably and usefully.

This workshop will be limited to sixteen students and will meet twice weekly for two-hour sessions.
MA 120 (MA 229)  THE CREATIVE PROCESS IN MUSIC
Randall McElrath

This course is designed as a basic composition course for beginners and as a course in twentieth-century techniques for more advanced composition students. As such, we will meet together once a week for two hours to experiment and share our ideas. The two groups will meet separately in two-hour tutorials designed to meet the specific needs of each.

For those who take the course as Division I, we will examine the process of composing music and create music using a variety of methods. Here the thrust of our work will be to demonstrate music composition as a natural manifestation of the innate creativity of man.

For those in Division II, the course is designed as Part IV of the series Technical Aspects of Music. In our separate sessions we will examine the compositional techniques of such twentieth-century composers as Debussy, Schoenberg, Ives, Weber, Bartok, Hindemith, and Cage. We will then compose music using some of these techniques.

Enrollment will be limited to 20 students. Prerequisites: Division I students - ability to read music, proficiency in singing or on an instrument, and previous exposure to musical theory.

MA 135 (MA 235) COLLECT WRITING
Sheila Wolfe, Francis Smith, Eugene Terry

This course will be open to students in all Divisions. It will be an open workshop in which students will be grouped in roughly comparable ability groups. The instructor will move from group to group working on different problems with each. Typical group concerns will be: revising writing for those who really have difficulty with written expression; writing a research paper; making writing and its uses in (a) taking reading notes; (b) taking lecture notes, and (c) writing a seminar report.

We will meet twice a week for two-hour sessions. Everyone will write at least one paper each week. Everyone will read many assigned examples of good writing, and we will discuss them. Everyone should come out of the course with the elements of a decent writing style and with the skill and discrimination to handle several kinds of writing.

Enrollment is open.
HA 136 THE MADE-MEAN ENVIRONMENT: STRUCTURE AND FORM
Norton Juster and Earl Pope

The Division I course offered in the Fall Term (HA 145) dealt with the processes and approaches to design. This Spring Term course will be concerned with structure and form—that is, the external determinants which give form to our environment. More specifically, it will deal with intuitive approaches to structure, the nature of building materials, and environmental systems. The material will be structured around design projects within a studio format.

Visual presentations, both two-dimensional and three-dimensional models, will be required but no prior technical knowledge or drawing skills are necessary.

Although this course is complementary to the Fall Term course, there is no prerequisite.

The class will be limited to 24 students and will meet twice a week for three-hour sessions.

HA 137 (BA 237) MODERNISM IN CRISIS;
ART SINCE 1950
Kenneth Scott

The course will look at the chronological development of art since 1950 to explore attempts to develop viable alternatives to the modernist tradition and the consequent intermixing of art and criticism. This is to be a comprehensive survey with readings taken from critical journals, anthologies, histories, and seminal theoretical works. Considerable discussion will be given to the art of the precursors, Marcel Duchamp and Yves Klein. We will also consider such topics as the changing roles of museums, galleries, and journals. Field trips may be arranged to New York and Boston.

The class will meet twice a week for two-hour sessions. Enrollment is open.
The seventeenth century was the period when, in the judgment of most scholars, our modern Western world was decisively founded, for better or worse. Before the opening of the century and its close, there occurred changes in men’s thinking and men’s practice such that the West was effectively launched into the modern age. It was the century of Galileo, Harvey, and Descartes; of Hobbes, Bacon, and Locke; of Paracelsus, Kepler, and Galileo; of Harvey, Newton, and Milton. It was an age of extremes, of excesses, of power. It was an age when men became almost hyperconscious about the very roots and methods of human thought. These are some of the reasons for knowing about this century.

Seventeenth-Century Studies will therefore attempt to deal with a wide variety of aspects of that era, both major and minor, commonly and not as commonly studied. Work toward any Hampshire Division I area can grow out of it.

This is neither a monolithic course nor a sequence of equal modules. It is a matrix, with a large number of components of many different sizes and shapes, within which you can move to diverse directions. The matrix will contain contributions from the entire Hampshire Community, and it is intended to be as open to the community as teachers and learners as possible. Most of it will be public, in the forms of lectures, concerts, films, demonstrations, and the like, and no one needs to be enrolled to participate in these.

Enrolling formally carries with it a commitment to participation on a scale comparable to that of a more conventional course, with work centering around a coordinating seminar (described below). It will be permissible for anyone who wishes to do so to enroll in both seminars, thus comprising two-thirds of his term’s work. The seminars are paralleled by the presentations which will form the other part of the program, and all those enrolled are expected to take full advantage of these presentations. At the end of the term, evaluation of students will be through portfolios which form a record of the various things they have done, read, studied, and attended throughout the term.

Seminar A:

Our concern in this seminar will be with the evolution of religious thought and its impact upon the literature of the seventeenth century. The focus will be on France, with occasional excursions into German and Spanish literature.

The seventeenth century is marked by a turn toward—exploration of man’s psyche or the source of values and reality, a source understood by the rise of Protestantism and its struggle with Catholicism. We will explore the ways in which this conflict reveals itself in the works of Calvin, Pascal, Molière, and Racine, and how it is in turn reflected in the literature of the period (e.g., de la Motte, Hulbert, Corneille, Racine, G. de Maussionay, and Calderon).

This seminar will meet once a week.

Seminar B:

This coordinating seminar centers on philosophy, science, and political events during the seventeenth century. It takes as its theme the idea of method in its transformations from Francis Bacon, Galileo, and Descartes to Locke, Bayle, and Leibniz, and the interrelations of methodologies with contemporary scientific and political developments. There will be intensive reading of selected source materials, and students will be expected to take full advantage of the parallel lectures and seminars on related men and ideas.

This seminar will meet once a week, for two hours.
The Puppet Workshop will continue the work begun during the Fall Term, bringing to performance the theater's first production. A script, a stage, lights, sets, and marionettes have been made during the Fall. These members of the group who have begun this work will be given preference for those jobs which will complete it.

New members will be expected to design and prepare a new work for the group's repertoire. Since a production involves the careful coordination of work by a number of people, the design for each puppet set must be worked out in detail prior to their making. The first part of the term will be spent, therefore, in script preparation and drawing up plans; the second part, in their execution.

Enrollment is limited to 12 Hampshire students (not counting old hands). Additional students will be accepted through the Free College Interchange program. The class will meet twice a week for two-hour sessions.

Sheila Brelsford

The fifth to the eleventh century was one of the most critical and dramatic periods in English history. After the Roman left Britain c. 410 A.D., the country was wide open to the invasions of Germanic tribes, whom the 8th-century historian Bede identified as the Angles, the Saxons, and the Jutes. These tribes brought their language and culture to a native population which had retained many features of Roman civilization. Some three centuries later, a new wave of invasions, this time by the Norsemen or Vikings, brought Scandinavian cultural influence to England.

The purpose of this course is to examine closely the rich and complex pattern of English culture during the Anglo-Saxon period. Topics of study will include the political and social structure of Anglo-Saxon society, warfare, the influence of the Church, education, and the formal and thematic features of Old English literature.

Readings will generally be primary sources, and literary texts will be read in the original language—Old English—that stage in English language history lasting from approximately 700-1100 A.D. Consequently, an ability to read Old English is a prerequisite for the course. Interested students should discuss their linguistic qualifications with the instructor. (There will be January Term 1973 course that could provide the prerequisite.)

Texts for the course are: Peter Hunter Blair, An Introduction to Anglo-Saxon England: The Forbes Chronicle; Aelfric's Colloquy; John C. Pope, Seven Old English Poems; Beowulf.

The class will meet twice weekly for 2-hour sessions and is limited to 16 students.
STILL PHOTOGRAPHY WORKSHOP

William Arnold, Jerry Linklater, Elaine Hayes

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

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

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

A $15.00 laboratory fee is charged for this course. The College will supply chemicals, laboratory supplies, and special materials and equipment. The student will provide his own film and paper.

The class will meet once a week for four hours plus lab time to be arranged. Enrollment is limited to 15 students (two sections of 15 students each).

DANCE LAB I

Francis McGlohan

This will be a class for people with little or no previous experience.

Dance is: Imagination acting in and through time and space. Expressing one’s emotion through rhythmic movement. Mind/body working harmoniously in space and in time. Taking one’s place in living space. Motion—of the instant and part of the continuum of flowing energy.

The class will meet for 1½ hours three times a week. Class work will involve experiences in technique, improvisation, individual and group exploration; and through films, discussions, concerts, and guest artists, I hope we will have an opportunity to discover living philosophies of dance and movement.

Enrollment is limited to 20 students.
I AND THOU
John Boettiger

This workshop will be a self-expressive inquiry into the nature and quality of intimate human relationships.

Mother and father and their children

Brothers and sisters and lovers

Friends

--these are the sorts of relationships we shall be exploring out of our own experience and through the ways and works of others.

Our principal interests will be in developing individual perceptions of relationships--the kind of casual and intuitive and conceptual awareness that promote human understanding; in knowing better the varieties of intimate experience; and in exploring the arts of intimacy and their applications--the nurturance and the tense ways we may be with another in love and friendship, the sorts of considerations that incline one relationship to faithfulness, another to stagnation, and another to self-destruction.

In selecting the course's membership, an effort will be made to bring together a variety of perspectives, including those of men and women of different ages. Similarly, materials for the course will be drawn from a variety of humanistic sources, including S. D. Laing, Bello Ray, and Virginia Satir, the literature of women's liberation, encounter and sensitivity training, and transactional analysis.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students.

APPRENTICE COURSE IN FILM MAKING
Jerry Liebling

Theories and techniques of film production will be developed through the relationship of apprentices to advanced students. Div I and II students will become part of the ongoing film production activity of Division II students. The broad range of film inquiry and investigation, as well as actual production techniques, will be advanced through collaborative effort.

The class will meet twice a week for 24-hour meetings and is limited to six Division I and six Division II students. There will be a fee of $15.00 for materials.
This course is a continuation of last term's "Workshop in Musical Performance." Meeting as a group once a week, we will listen to each other's performances, discussing them technically, historically, and aesthetically. Tutorial ensembles will account for the balance of the course; these ensembles range from string and wind groups to jazz and rock ensembles.

The class will meet once a week for 1.5 hours plus tutorial ensembles. Enrollment is unlimited.

Antonin Artaud's important and fascinating The Theatre and its Double (1938), a collection of essays on dramatic theory, is difficult to summarize; essentially, Artaud calls for a return to an atavistic theatre of gesture projecting collective archetypes and an rejection of the "old" psychological and narrative (realistic) theatre. Artaud, a playwright, poet, and actor as well as a theoretician, will be our starting point and the theory our touchstone. We will try to look at other dramatic theory and practice from Artaud's point of view, so the first playwrights we read will be some of Artaud's favorites: Bertold Brecht, Franz Kafka, and Brecht's. Other playwrights we will consider include Chekhov, Tolstoy, Strindberg, and Strindberg.

Artaud called for a dreamlike theatre of metaphysical cruelty, whose rituals of involvement are patterned after religious rites. In contrast to Artaud, we will consider Chekhov's realistic theatre of human cruelty whose secular rituals of involvement are those of everyday life. Chekhov was concerned to show "life as it is" rather than life as we see it in our dreams (or nightmares). Still, Chekhov and Artaud share a similar expressed objective—to shock us into a recognition of our situation so that we will do better. We will finish our reading and discussion with two contemporary playwrights who exemplify the similar aims and conflicting methods of Chekhov and Artaud: Miller and Genet.

Because of the amount of material to be covered, the course will be tightly structured. Each student will participate in the teaching of the course by giving at least one class presentation (the written form of which will be given our ahead of time) in addition to writing a paper. The class will meet twice a week for two-hour sessions. Enrollment is limited to 16 students.
Theatre as Event II

Tim Landfield and Gladam Schrock

This will be a continuation of the master course, begun in the Fall term, involving playwrights, directors, and actors, and will concentrate on the following:

- An analysis of invention. Imagination as opposed to rational thought. Intellectual paralysis: What is the authentic when the bird happens? A study of a healthy organism.


- Characteristic groups of people, locale, ethnicity, income. What constitutes tradition? The necessity of tradition to theatre. Is there theatre without a sense of generation? (This implies history and history implies the blend of honor.) Field studies of characteristic groups of persons, generating speech patterns, movements, signs of honor, native language, assessing their tenacity from intellectual metage and rational stupor.

- The most riddle of form versus content.

- The secular and the poetic: what are they and when do they mate?

- Mortality and a sense of time. A way to hear the pain.

- Human concept and human compassion. The nature of compassionate phenomenology. A sensible approach to a social contract. The rage of irony to where do we escaped?

- Toward a concept of human perdon. Whose ear do we speak to, whose lips do we touch?

1. Playwriting Workshop

This workshop will consist of a continuing refinement of playwriting craft, working extensively on details such as creating an integrated aesthetic universe; obtaining from stage antagonists, the hard reality of plotting; acceptable audacity and unacceptable brilliance; is language dead and why not; anger as a route to emotion; etc.

We will continue to work as rapidly and with as much vigor as the traffic will allow on full length plays, seeing them into production by acting and directing workshops, to be open to the public.

This workshop will meet twice weekly for two-hour sessions. Enrollment is limited to 15 students.

2. Direction Workshop

This is a continuation of the workshop offered in the Fall Term but with longer material, a more searching look at detail, and peeling the "event" together.

In each workshop we shall attempt to put more and more practical weight upon those definitions arrived at by the pain "THEATRE AS EVENT" course. That is, for instance, what can happen in terms of materializing honor on stage; what does one trust an audience; how to spot an acceptable protagonist; above vs. enlightenment; speak entity and carry a big script; gritty gritty of choosing techniques; how to flavor a French scene in five-rooms set; etc. Very little talk in the class. It will be practical work—All else is inside the four.

This workshop will meet once a week for a two-hour session. Enrollment is limited to 15 students.

1. A Tip Workshop

A tip is a continuation of the Fall Term workshop. Topics for consideration will be:

- To be or not to be: further study in characterization.

- The actor as director; the director as actor.

- Thorpe-line; how to sustain a role. The audacity and technique of demanding attention.

- Plot not to make a jockey of man's self, except to advantage—for the actor and for the audience.

- Aesthetic distance and aesthetic weights. Knowing what ball just one can play in.

We will be working on increasing lengths of scenes, short plays, some selected full plays—so many, depending upon the individual initiative taken.

The workshop will meet twice weekly for two-hour sessions. Enrollment is limited to 10.
THE CLOSER

Clayton H. Hobbs

The clover, who takes on various forms and names in Western literature, thrives in clover and therefore seems peculiarly adapted for surviving in a constructed ('abandoned') world: he is a central figure in many of the works of important modern writers from Dostoevsky to Burroughs. But he is by no means a modern invention and his history is long and fascinating.

Our primary objective in the course will be twofold—to trace the literature (and to some extent social) history of the clover up to the present and to examine his function in the plays, stories, and novels of one contemporary writer, Samuel Beckett. Although Beckett's works will be our center of interest, students will select works of other writers for class presentations and short papers.

The class will meet twice a week for two-hour sessions. Enrollment is limited to 10 students.
RA 212  CREATIVE MOVEMENT IN THE ELEMENTARY CLASSROOM

Francis McCallum

This seminar is an experiment in personal and inter-community education. Our work will involve two facets: (1) we will investigate and discuss concepts of movement education, child psychology, and affective learning; and (2) we will put theories of creative movement education into practice in pre-school and elementary classroom situations, working closely with the curriculum presented in the classrooms in which we participate.

Our concerns for the children we teach will involve:

Movement as another means of understanding and experiencing curriculum (i.e., language arts, math, science, visual arts, etc.)
Movement as a way of developing and experiencing self-concepts
Movement as a way of contacting one's environment
Movement as a way of contacting one's self
Movement as a way of developing the ability to listen to others and to oneself
Movement as a way of sharing a part of oneself
Movement as a way of making choices, and of following directions within the scope of one's personal preferences (and of finding out what those preferences are)
Movement as a way of working toward a total group effort

Although much of our practical work will be with children, we will also "practice" discover, and experience our ideas on ourselves, encouraging understanding of ourselves through movement, so we will encourage a child's awareness and experience.

This seminar will meet twice weekly for one 3-hour discussion/experience session and one 60-minute practice session. (Note: we will not begin our classroom practice until the third or fourth week. We will be assisted by a doctoral student from the Center for Aesthetic Education at the University of Mass.) In addition to the two weekly sessions, two one-hour technique classes will be offered weekly to those students enrolled in the seminar (in conjunction with the Performance Workshop).

Enrollment is limited to 15 students. An interview with the instructor is necessary prior to registration.

RA 213  PERFORMANCE WORKSHOP

Francis McCallum

This seminar will meet twice weekly for 1-hour sessions. Our time will be devoted to the learning and subsequent spring performance of two works: Suggestion, a jazz piece by Anna Soltes, and another group work as yet undetermined. We will learn these works from their laminated dance scores and will perform them in a joint concert with Smith and Mount Holyoke Colleges.

While no knowledge of labanotation is required for the course, students in the class will be expected to learn elements of labanotation so that they will participate in the scoring of the scores.

In addition to the twice weekly meetings, two one-hour technique classes will be offered weekly to those students enrolled in this seminar (in conjunction with the Creative Movement Workshop).

Enrollment is limited to 15 students.
NA 216  IMPROVISING MUSIC

James McElvaine

Instruction in choral, vocal, melodic, and rhythmic improvisations. The class will begin with basic chordal theory, including writing "lead sheets,"hosting both borrowed and original solos. These will be realized through two- or three-hour improvisation sessions with a student rhythm section. The class will progress through increasingly difficult chord changes, eventually discarding harmony in favor of pure melodic and rhythmic improvisations.

The class will meet three times per week: once for 1.5-hour discussion period and twice for 2-hour improvisation sessions.

Enrollment is open.

---

NA 216  RETURN TO THE PAST AND FUTURE: THE POSSIBILITY OF APPEAL

Robert A. Hey<br>

This course will be a student colloquium in the philosophy of religion and may be sketched as follows:

To characterize an age is to run a variety of risks, none of them as frightening, however, as the silent incomprehen-
sion which equates the current with the real. If what characterizes us, then, as modern and as western is the attempt to alter human fate, human necessities, through the technological control of our resources, natural and hu-
man, in what ways is this project called into question by our traditions, philosophical, literary, and religious.

Will our past allow us to live with our future; and if so, ought it? Again, do we have any appeal, beyond those of nostal-
gia and spiritual apathy, against the momentum of our characteristically modern designs and capacities; and how might we articulate those appeals? Between past and future, between yes and no, we pause to consider our alter-
natives.

Six guest speakers will address public lectures to this theme on six Sunday evenings during the Spring Term: February 11 and 25, March 11, April 8 and 22, and May 6. These lectures will form the core of the seminar.

Students enrolled in the course, limited to 16 in number, will be given at the outset a set of readings for each lecture, suggested by the lecturer. On Monday evenings following each of the six public lectures, the students will meet with the lecturer from 3:00-5:00 in order to discuss both his lecture and the recommended readings. Following each such discussion there will be an informal luncheon. Students should expect to prepare at least one week of seriousness and structure.

A tentative list of guest lecturers for this colloquium follows:

- Joseph H. Duffy, Professor of English Literature, University of Notre Dame
- E. A. Gomringer, Professor of Political Theory, University of Notre Dame
- Julian Marit, Professor of Religious Studies, University of Virginia
- Arthur M. Agass, Professor of Religious Studies, Harvard University
- William F. May, Professor of Religious Studies, Indiana University
- William Walsh O'Reedy, Tutor, St. John's College, Annapolis
THE LITERATURE OF SELF-DISCLOSURE

David Roberts

What motives cause a writer to recount his (or her) own life? What does the autobiographer assume his readers want to know? What is he willing to tell? What creates the peculiar fascination, for the reader, of writing that we know is both "true" and intimately personal? How well can we know an author through his memoir or diary?

At the heart of most good autobiographical writing lies the uniquely vulnerable act of self-disclosure. Yet the range of literary forms in which that disclosure takes, as well as the range of experiences that authors think pertinent to an explanation of their own lives, is immense. Through a study of several modes of literary approach (novel, fiction, poetry, diary, letters, in addition to autobiography) written out of a variety of cultural contexts (mostly modern), this course hopes to focus on the act of self-disclosure itself, as it is manifested in the written word.

Books will be chosen from among the following:

St. Augustine, Confessions
Rousseau, Confessions
Robert Graves, Goodbye to All That
C. S. Lewis, Surprised by Joy
Mary McCarthy, Paraguay Girlhood
Herman Melville, The Prisoner of Zee
Simone de Beauvoir, Memoirs of a Dutiful Daughter
Doris Lessing, The Golden Notebook
Sylvia Plath, Ariel (with Ted Hughes' commentaries)
Anna M. Jarvis, Diary
James Thurber, My Life and Hard Times
Melvin B. Nathanson
Richard Wright, Native Son
Eldridge Cleaver, Soul on Ice
George Jackson, Solitary Brother
Bill Haywood, Autobiography

Each student will also be expected to attempt some personal autobiographical writing.

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

PHOTOGRAPHY WORKSHOP

Elaine Hayes

This course will have a special and experimental approach to learning photography. In the tradition of an intensive workshop, the class will meet for one 4-hour session (9 a.m. to 1 p.m.) every two weeks.

The uniqueness of the course will be in its potential for experiencing the process of the medium with sufficient time for projects to be begun and completed during each meeting. A class meeting will include photographing, processing, discussion, collaboration, critique session, presentation, and the opportunity for everyone to be involved in a rich and thorough exchange of ideas. During the time between meetings, ideas generated in class will offerstimulation for further individual responses, and each student will be expected to work on his own until the next class.

Students must be willing to commit themselves to the entire 16 hours—working, staying together—so that great intensity and interaction can occur. Course content will emphasize using the medium as a means to personal expression and artistic statement.

Enrollment is limited to 15 students. RA-150 or its equivalent is a prerequisite, and a portfolio is required for admission. There will be a $15.00 lab fee.
MA 245  \ THE IRRATIONAL ENLIGHTENMENT
Joanna Hubbs

What is the relationship of the Age of Reason to Romanticism? This will be the central question in a seminar on France in the latter half of the eighteenth century. Our approach to the problem will be through an examination of the philosophical thought of the age as it is reflected in the novel. We will consider this emerging literary genre as a vehicle for the ideas of the philosophes and will examine the extent to which attempts to build a world view on the basis of rationalism and empiricism lead to irrational conclusions.

We will read works by Voltaire (Piron Letters), Prevost (Monseigneur Lescnos), Rousseau (Novelle Héloïse), Diderot (Manon Lescaut), La Mettrie (Lettre à un Roi), Lessing (Emilia Galotti), Voltaire (Aurélius), and Musset (Confessions of the Young Werther), and the sentimental (Collet, Stendhal) against a background of interpretations of Enlightenment thought: Becker, The Novels of the French Enlightenment; Castoria, The Philosophy of the Enlightenment; Coyle, The Enlightenment; and Crocker, An Age of Crisis: France and Europe in the 18th Century French Thought.

A reading knowledge of French would be helpful as would some general background in history or philosophy.

The class will meet twice a week for two-hour sessions. Enrollment is limited to 16.

MA 250 \ PROBLEMS IN ENVIRONMENTAL DESIGN: ISSUES AND IDEAS
Horton Jutner and Earl Pope

This course will investigate some of the important practical, technological, and philosophical problems confronting environmental designers today and the directions and possibilities for the future. The course will examine both the ideas and the practitioners that have influenced design, some of the historical background that establishes the context for their work, and the implications and effects of their work.

The work will be organized around a series of seminars on the "literature of form" as well as related field studies and critical investigations of existing projects.

Students will be responsible for extensive reading on the subjects chosen as well as the detailed preparation of at least one major seminar (including visual material) and several projects. The format and scope of the material studied will be mutually determined by the class and the instructors.

Class size is limited to 12 students and will meet twice a week for two-hour sessions. While there are no formal prerequisites, the course presupposes some background or prior concern for environmental studies. Admission to the class by approval of the instructors only.
STUDIO ART WORKSHOP

Arthur Roneer and Robert Mansfield

The major concern of this workshop will be to develop a critical aesthetic to reinforce the work produced in the studio. The students will develop their own courses of study in the areas of painting, sculpture, graphic design, or typography, etc., and meet as a group for regular critique sessions.

Field trips and visiting artists will be part of this program.

Students will be responsible for the purchase of all their studio materials.

The class will meet twice weekly for two-hour meetings. Enrollment is limited to 15.

BODY AND PSYCHE: A WORKSHOP IN MOVEMENT

Janet Adler-Beckiger

We are heavily conditioned to trust the verbal mode of expression and reception as if there were no other—to rely on the verbal memory as if the body held no memory of its own—to look for answers to our problems in our heads, as if our bodies possessed no hints of solution. We are not bodies. This course will be concerned with ways to connect our bodies occasionally with our psyche—to more fully realize the integrity of body and psyche. Such an integrity inherently exists in us all, though we are often unconscious of it.

Through intensive experience in movement we will actively search for bridges between what we do and how we feel. We will be in search of the small child within us, of our mother and father within us, of the powerful realm of polarities—the earth and the sky, the light and the dark—within us, of the shadow or the unknown within us. The discovery of such parts often brings new awareness of self, and new awareness can bring growth toward owning one’s experience, toward being responsible for one’s life, toward wholeness.

The constant medium of interpersonal and interpersonal work will be movement. In addition, we will be talking together, writing consistently, and reading in response to experience—all as catalysts to awaken the life of our bodies, to awaken ourselves.

Basic reading will be drawn from the work of Mary Whitehouse, Charlotte Selver, Alexander Lowen, Ashley Montagu, and Edward C. Whitmont.

Ten students will be admitted to the course which will meet twice a week for two-hour sessions. I will also offer an independent study program for people interested in similar work but on an individual basis. Because readiness for this work is crucial to the actual experience, I would like to ask any student interested in taking either the workshop or the independent study program to talk with me before registration.
AN INTRODUCTION TO RHEOTOLOGY
LC 192

ASSESSING PUBLIC COMMUNICATION PERFORMANCE
LC 193

BLACK COMMUNICATIONS
LC 194

LANGUAGE ACQUISITION
LC 195

CONVERSATION ANALYSIS
LC 196 (LC 203)

THEORIES OF LANGUAGE
LC 197

THE RETREAT FROM THE WORD
LC 198

KNOWLEDGE AND DOUBT: PHILOSOPHICAL PROBLEMS
LC 199

PRACTICAL MORAL ARBITRY AND ETHICAL THEORY
LC 200

TELEVISION PRODUCTION
LC 201

THOUGHT AND LANGUAGE
LC 202

PROBLEMS IN PHILOSOPHY OF THE SOCIAL SCIENCES
LC 203 (LC 204) (LC 205)

LANGUAGE PROBLEMS OF DEVELOPING NATIONS
LC 206 (LC 207)

GEOMETRY AND PROBABILITY MODELS FOR DATA REDUCTION
LC 208 (LC 209) (LC 210) (LC 211)

MODEL THEORY
LC 212

PEOPLE PROGRAMMING: A WORKSHOP ON
COMPUTER ASSISTED INSTRUCTION
LC 213

SCIENCE
LC 214

INTRODUCTION TO COGNITIVE PSYCHOLOGY
LC 215 (LC 216)

D. Kerr

A. Lenz, (R. Muller)

T. Masow

W. Stiggins, J. Kaplan

N. Marsh
LC 102

AN INTRODUCTION TO ROBOTICS

Robert J. Ackermann

Borrowing the alleged style of Hampshire College course descriptions, I
would see that this course might be titled "Is it possible that Bill
Jarah is a robot?" or slightly more accurately, "Is it possible that Bill
Jarah is a sophisticated robot?" Participants will examine issues in the
philosophy of psychology that are closely related to a battery of arguments
invented by various philosophers to establish the impossibility of computer
simulation of human intelligence. Bill, of course, is an obvious instance
of these arguments given the (perhaps gratuitous) assumption that he
is at least human.

As with most impossibility arguments that remain open (the impossibility
of constructing the angle with straightedge and compass without an awful lot
of luck is a closed argument) the two sides have different guessing about
the growth and direction of artificial intelligence. The philosophical
arguments point out that there seem to be some properties of human in-
telligence that are so qualitatively different from current computer simul-
tions of intelligence that the gap cannot be closed by larger computers or
more sophisticated programming. We will examine these arguments by read-
ing that Computers Can't Do (Grayson) as well as discussing some additional
philosophical arguments based on Godel's theorems. On the other side, we
will attempt to get a basic feel for the existing nonnumerative discoveries
made in programming related to intelligence by reading Genergies (Szasz
and Rapoport). These discoveries suggest that the properties of future
programs can perhaps not be predicted by a rough projection from what is
done at present. At the end of the course we may still have to accept
individual differences and simply vote on Bill instead of proving a result.
Participants are only guaranteed a deeper understanding of the issues
brought about in serious discussions of computer intelligence so that they
can defend their considered views in a more articulate fashion.

The course will meet twice a week, 2 hours each session.

Enrollment limit: 30

*Dr. Ackermann is Professor of Philosophy at the University of Massachusetts.
This course will be concerned with critical research and evaluation of
sources of public communications. We will probably restrict ourselves to
print and electronic media serving the eastern Massachusetts area, but the
range is open to discussion. Our purpose will be threefold:

1. To determine viable standards for judging mass media performance,

2. To apply these standards to sources of public communications in
our target area,

3. To publish our findings.

This course will take the form of a consumer-oriented research project
and as such will make use of research techniques employed in similar pro-
jects, such as survey research, content analysis, interviews with editors,
publishers, and station managers, and monitoring newspapers and radio and
TV stations over a period of time. Experience with these techniques is
not, however, a prerequisite.

Participants will be introduced to use of the computer in analyzing data
gathered in such ways; no programming ability will be assumed, and no great
advanced training will be developed.

One-time period of the course will be devoted to an examination of current
issues for alternative means of delivering public communications, with
special attention to cable television and satellite television.

The course will meet once a week for three hours at the outset and adapt
our meeting times and duration to meet our research needs.

Enrollment limit: 40

---

LC 104  BLACK COMMUNICATIONS

Kenneth Green, Deborah Peterson, Call (Cam) Whitaker

This will be a student-taught course focusing primarily on the dialect of
American English currently called Black English. It will include an examina-
tion of various theories about the origin of Black English, its structure,
as well as its use culturally. The course will also touch on the
problems faced by Black English speakers in the educational and economic
system in America.

Class participants will be expected to read and discuss major historical,
linguistic, and literary works in the field, such as:

- Daryl Bailey  
- J. L. Dellner  
- Frances Fomin  
- Langston Hughes  
- Dell Riyes  
- William Labov  
- Ronald Leager  
- Julius D. Ryser  

- "Jamaican Creole System"  
- "Black English"  
- Selected poems  
- "Language, Culture and Society"  
- "The Logic of Black English"  
- "Language and Its Structure"  

Audiovisual materials, guest lectures, and independent student projects
will contribute additional perspective to the subject.

Faculty consultants for the course will be Maji Lilley and/or Robert
Randin.

The course will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 12

*The instructors are all second year students at Hampshire College. The
faculty sponsor is Maji Lilley.
Almost all children acquire the language of their community on a regular schedule and within a relatively short period of time. We will spend most of this course examining what it is that the child does in this task. Special attention will be given to the descriptive material in such sources as Ruth Witek's *Language in the City*, moving on to Noam Chomsky's analyses of pre-school children, and finally to Carol Nemser's analysis of the continued development of language in the grade school years. There is no substitute for a thorough acquaintance with this work as assistance in avoiding inadequate answers to the question, "How does a child do it?" The only accurate answer at this time, however, is that "nobody really knows."

Each student who enrolls in the seminar will be encouraged to locate a child in the community whose language development can be observed during the term. This is not a requirement, but experience with this course during the past year has indicated that this concrete field observation of a child is the process of acquiring language is an invaluable aid to understanding the theoretical issues discussed during class sessions. This will be made available near the end of the term for those students to report on their work for the benefit of everyone.

The course will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 20

Do the ways in which people converse as well as the content of their conversations shed light on their relations, rankings, and what they are able to say to each other? Analysis of conversations has appeared recently as means to several different ends in investigations in philosophy, psychiatry, linguistics, and sociolinguistics, among other disciplines. I would like to focus on conversation from a sociolinguistic point of view, using conversations as a way of testing premises in social behavior and in the talk itself. We will do some readings in sociolinguistics, using ideas of Gumperz, Hymes, Defleur, and Cantwell. The main emphasis of the course will be on each member's videotaping or tape recording and analyzing conversations in natural settings, on finding the patterns the conversations reflect and contain. Our sources of conversations will be living groups, classrooms, and other situations in which we are fairly familiar. We will look for the ways conversations vary, both specially and to a small extent linguistically, according to varying situations: sex of group, sex, age, social position, distance or intimacy of the participants, and general social setting, for example. We will also look for patterns in the flow of conversations, and the social ways of keeping conversation going. No previous knowledge of linguistics is necessary for understanding the work, but some background in interaction theory would be helpful.

The class will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 20
This course is a survey of major historical linguistic theories and their impact on various literary and social practices.

After an initial introduction to early widespread linguistic concepts such as "nose magic" and "tongue," the course will move to a consideration of Plato, Quintilian, Leges, and other theorists who influenced both formal literary work and educational theory. The course will conclude with an investigation into the origins and effects of several persistent linguistic concepts, including universal grammar, roots, correctness, and decline.

Under the guidance of the instructor, students who enroll in this course will be asked to select some earlier literary, religious, or political document and to write a paper explaining its linguistic assumptions.

The course will meet twice a week. The first meeting will be for two hours and the second for one hour.

Enrollment limit: 16

This century has put language on trial. The adequacy of words to describe the world and our experience of the world is now questioned. The worth of words as the necessary means to intelligence or as a possible means of personal fulfillment is in doubt. Old claims for the importance of verbal discourse are being challenged by formidable rivals: visual images, the abstract languages of the sciences and mathematics, religious and aesthetic contemplation, mysticism, music and dance, modes of nonverbal communication within groups. These are ways of knowing and of communicating which bypass the verbal, or subsume it, and which are often said to be superior to it.

The seminar will consider several aspects of this "retreat from words" in order to determine some of the things words can and cannot do, their status with respect to consciousness, and their relation to reality.

Discussion will center on the ideas or works of a number of philosophers, critics, and poets. These may include William James, Sartre, Wittgenstein, Emerson, George Steiner, Dwight McDonald, Marshall McLuhan, Wallace Stevens. Students will be asked to help in drawing up a list of other whose works may be read.

This course can be used in preparation for the Division I examination in the School of Humanities and Arts.

There will be a one-hour class meeting per week plus group tutorials.

Enrollment limit: 10
Required readings:


Many of these works are undisputed classics. All of them are philosophically important, and all contain certain important contributions toward a satisfactory philosophical understanding of knowledge, certainty, and warranted belief. Those which we won’t read in their entirety, for example, Plato’s Republic and Hume’s Philosophical Papers, we’ll read large parts of.

Our discussions and my lectures will be focused mainly on passages from these works which bear on problems about what knowledge is, about the possibility of knowledge and of particular kinds of knowledge (knowledge about the past, for example, or about what another person is experiencing at a given moment), and about what we mean when we say that we are justified or justified, i.e., about what it is that makes certain of our true beliefs instances of knowledge. The main thing we’ll be doing is attempting to perceptually formulate and to solve philosophical problems. Fairly little attention will be given to the biographies and world views of the philosophers to be read, to the intellectual-historical settings of their thought, and to their discussions of problems not connected to problems of knowledge.

This seminar is a relatively intensive introduction to philosophy. Each participant will be expected to write at least three 3 to 5-page papers and two 12 to 15-page papers.

The course will meet three times a week, 1 hour each session.

Enrollment limit: 16

Priority for admission will be given those who have taken neither an L & C course nor a course in philosophy.
TELEVISION PRODUCTION

Stephen A. Gilford

Course description will be distributed separately in time for the November 3 meeting of the Academic Council.

LC 113

THEORY AND LANGUAGE

J. LeTourneau, N. Stillings, T. Usano, C. Winterpoon

Determining the nature and structure of thought is a problem that cuts across traditional disciplinary boundaries. This course brings together a logician, a psychologist, a linguist, and a philosopher to discuss the contributions of their fields to the understanding of human thought processes. The course will begin with a ten-week-long lecture series. Next, we will divide up into three modules lasting four weeks. This will be followed by a reading period of two weeks, during which each student will be expected to write a 5 to 10-page paper. Finally, we will have another four-week-long session divided up into three modules. Two of the modules will be offered in both sessions. It is expected that many students will use the course to begin work on Division I exams.

The modules are described briefly below.

The Kurt Godel Memorial Module on Logic (LeTourneau)

We will explore the uses and abuses of logic in common speech, propaganda, and in more structured disciplines like mathematics. Some efforts will be directed to theories of how children acquire logical skill. In addition we will look at the various attempts by logicians to codify the "proper principles of reasoning" and discuss the limitations that have been discovered to be inherent in this process of formalization.

This module will be given voice.

The Max Wertheimer Memorial Module of Problem Solving (Stillings)

In this module we will try to determine what goes on in a person's mind when he solves a problem, i.e., to formulate a psychological theory of problem solving. We will study several theories of problem solving and the experimental techniques which have been used to gather evidence for and against them. Theories of the94

103

121

123

141

156

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196
certain choices of interpretation" -- Erich Fromm. This module will examine the validity of this "new principle of relativism," as Fromm called it. The essential question we will need to answer is: To what extent does the structure of our language determine how we perceive the world? We will also consider the comparability of the Thurn hypothesis with certain modern developments in linguistic theory, which suggest that linguistic structure may have a large innate component.

This module will be given twice.

The F. P. Ramsey Memorial Module on Truth (Thompson)

The Concept of Truth: An Introduction to Philosophical Analysis

Of the desirable characteristics that our beliefs and thoughts may have, perhaps the most obvious is Believability. Almost everyone has in his stock of profound pronouncements some items about truth and truths--such things as "being true for me is all that matters," "whether it's true is irrelevant; the question is: does it work?" "There are no absolute truths." We'll take up these and some less familiar ideas in this module, where our business will be to investigate the notion of truth from a philosophical standpoint. Roughly the first third of our time will go into developing such a point of view, and for this purpose we'll work through W. V. Quine's "On What There Is" and K. R. Popper's "The Logic of Scientific Discovery." We'll then need and discuss important philosophical articles, some of which are included in Fishers, ed., Truth.

This module will be given only in the second set of modules.

The modules will meet twice a week, 2 hours each session; the lectures will be announced.

Enrollment limit: 60.
LANGUAGE PROBLEMS OF DEVELOPING NATIONS

Most of the developing nations in the world today face a complex set of social, economic, and political problems. Frequently at the root of these problems is the inadequate level of communication among segments of the nation due to lack of a common, well-developed language. This often results in the creation of a new caste system based on language, which severely limits implementation of the ideal of equality of opportunity within the nation. In India, for example, establishment of Hindi as the national language would mean that 40% of the total population would be placed at a distinct disadvantage in the competition for desirable jobs.

This course will explore the questions of (1) what characteristics a language must possess to be an adequate tool of communication within a nation, and (2) the nature of the people-language bond which makes governmental linguistic manipulation difficult. We will also examine various ways people in multi-lingual societies carry on necessary communication, cases where lack of communication hampers national progress, successful and unsuccessful means which have been tried to solve a nation's linguistic problems, etc.

While the course will cover both linguistic and sociological aspects of the subject, each student will have the option of concentrating work effort on one approach or on the other. Students interested in Israeli culture, for example, could examine either the processes by which ancient Hebrew was developed to serve the needs of a modern nation, or what problems exist in Israeli society due to linguistic differences.

Many of the readings for the course will be taken from Readings in the Sociology of Language, J.A. Fishman, ed.; Language Problems of Developing Nations, Fishman, Ferguson, Das Gupta, eds., and Social Linguistics, W. Bright, ed., among others.

Students electing to take this course as a Division II course will be expected to write a paper demonstrating Division II level competence in the linguistic aspects of the subject.

The class will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 20
Model theory was the last to appear of the four major parts of mathematical logic: the other three parts are set theory, proof theory, and recursive function theory. The major work in the field has been done since the late fifties and grew out of the work of Alfred Tarski, Abraham Robinson, and others on problems on the borderline of mathematical logic and modern abstract algebra. It is the only one of the four parts mentioned which has had substantial applications in other areas of mathematics.

This course will focus around two papers which delineate the beginning and the culmination of research on one question: in what ways can first-order theories be (nearly) categorical. We will require the necessary background and then read R. L. Vaught's "Decidability notes of complete theories" (1961) and J. T. Baldwin and J. V. Lachlan's "On strongly minimal sets" (1975). Any time left in the term will be spent on ultraproducts and non-standard analysis.

Students in the course should have had the equivalent of either a first course in modern algebra or a first course in mathematical logic.

The course will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 30

Variously called "investigative reporting," "unfair journalism," "sensationalism," and "scandal-mongering," (depending upon whose neck was being raked) this emphasis in reporting has been with us a long time. This course will address itself to the theory, practice, and reception of muckraking in America.

The readings will consist of social and philosophical justifications and condemnations of the practice, commertery on what can and cannot be considered legitimate muckraking, examples of muckraking from various historical periods, and assessments of the state of the art today. Throughout, our chief concern will be the effect of muckraking (or lack of effect) on American institutions and on the American public.

Students will be expected to prepare as a term project a case study of an example of muckraking. This would presumably trace such an example from the conditions which motivated the journalist's investigation, the investigation itself, problems involved with disseminating the information to the public, critical reaction, and pressures for change which may or may not have resulted. Those so inclined may decide to take more such themselves and use their experiences, critically considered, as such a case study.

The class will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 30
This course will provide an opportunity for students to spend a term working on a large scale computer program. Students in the course will be expected to write, either individually or as part of a team, a computer assisted instruction program in a language in which computer assisted instruction may be written. Each student (or team) will go through the steps of planning, programming, implementing, testing, and evaluating a substantial computer program.

This course will not teach any programming. Students must have one of the programming languages available on the IBM 360 time-sharing system before they begin the course. In addition to discussing the projects in programming, students will be asked to read and discuss materials on the theories of computer assisted instruction and to evaluate other people's efforts in this field. Computer assisted instruction was selected as the topic for the workshop because it does not require an extensive background in mathematics, which many computer applications do. Some previous knowledge of psychology or education will be helpful, but not required. Those interested in writing programs for children should be aware that they will have to find subjects to test their programs out on.

This is a Division II course and students will be expected to do most of their work outside of the classroom. The class will meet once a week for two hours to discuss progress and problems and the assigned reading.

Enrollment limit: 30

Mr. Lenz is a third-year student at Hampshire College. The faculty sponsor is Richard L. Muller.

This course will be concerned with the question of how the meanings of individual words combine to produce the meaning of a sentence. Linguists had largely ignored this question until the last decade, so the answers to it are necessarily tentative and incomplete. We will examine and compare the theories of meaning that have been proposed within the general framework of transformational grammar. Particular emphasis will be given to problems concerning the interpretation of quantifiers, negation, pronouns, and prepositions. We will attempt, for example, to find a systematic account of the ambiguity of such sentences as "Every man can't save cotton or save semen." If this account is to be sufficiently general to explain different but related cases (such as "Big, strong, white men don't sleep for eleven years"), then we must formulate a principle for determining how negation and other sentences such as the course will thus consist of attempting to discover such rules of interpretation for English. Various general theories will be judged according to their compatibility with the particular rules we formulate.

Readings will include many of the selections from Steinberg and Jakobovits, Semantics: An Interdisciplinary Reader.

There are no prerequisites, but some exposure to transformational grammar would be helpful.

The class will meet twice a week, 1 1/2 hours each session.

Enrollment limit: 30
This course is an intensive introduction to the experimental study of language, thought, memory and perception. The aims of the course are
1. An understanding of the metaphor that has dominated modern cognitive theory -- the view of man as an information processing system.
2. A thorough study of three research problems, illustrating the relationship between psychological theory and experiment. Some questions we might study are, is a memory anything more than a faded internal tape recording or film strip? How are the sound waves of speech converted into meanings? Why are problems with easy solutions sometimes very hard to solve?
3. The design, performance and analysis by the class of two or three experiments related to the three research problems.
4. A survey of the major results of cognitive psychology through assigned readings from textbooks and reviews.

Readings will be drawn from journals and from books such as P. H. Lindsay and D. A. Norman, Human Information Processing: An Introduction to Psychology; Ulric Neisser, Cognitive Psychology; Herbert Simon, The Sciences of the Artificial.

The course will be of particular interest to students working in experimental psychology, computer science, neuropsychology and linguistics. There will be two class meetings per week for 1½ hours each session. Roughly equal numbers of meetings will be devoted to lectures, discussions of readings on the topics or the survey, and the class experiments.

Enrollment limited to 50.
The School of Natural Science and Mathematics organizes itself so as to offer a relatively small number of courses, most of them with unlimited enrollment. We ask students to examine the course offerings as areas of possible interest to them, and to enroll with the expectation that their special needs can be met. Our teaching staff is composed of scientists whose breadth of background lends to a flexible treatment of their instructional tasks. They devise modular units within courses; they work in small teams, comprising no development and direction of School activities; and they support a variety of modes of teaching (lectures, recitation, problem workshops, laboratory research projects, field studies) with special emphasis on the independent effort of students.

Students should register for courses by number, with the expectation that enrollment in specific activities or modular units will occur later. While many courses are open to any student in the college, students should be aware not only of the courses to be covered in a course or program, but also of the level at which it is intended to operate. In order to engage in certain activities, they may be expected to have passed a Division I examination in the School. This question, and all others related to a student's status in the course, should be dealt with in consultation with the director of the course before the beginning of the term.

During our first two years of operation we have evolved some major areas of interest, which are listed by the list of programs which follows. Each program is to be regarded as a general heading, once or less fixed for the time being, under which a variety of activities related to that heading are planned. Students should register for the course number of a program, but should also consult bulletins of the programs, shortly before the term begins, for details on program content and its teaching staff. We have also attempted to construct program elements of interest to students in other Schools as well. Students are encouraged to incorporate such units into inter-School programs of their own devising.

In addition to the major programs we also offer some courses which either are of service to a number of major programs or are not in any compelling way related to one of them in spirit or emphasis. These are listed separately.
Students may expect to encounter problems in mathematics and mathematical reasoning in a wide range of studies. Hampshire's mathematical community provides short- and long-range support to many of the College's courses and programs and creates an atmosphere in which mathematics is done, shared, and enjoyed.

Course number US 123 is offered as a convenience to students wishing to formalize a commitment to mathematical activity during a given term. The nature of that activity is subject to great variation. Many of the activities of the program are expected to develop during the term as particular needs and interests are identified. The Math Room (US 123) bulletin board will provide an up-to-date listing of current and upcoming seminars, symposiums, lectures, classes, problems, and proposals.

The following activities are planned for the spring semester:

**Math For People Who Count - An Experiment** (Kenneth Istraian)

Over the past 300 years, mathematicians, statisticians, and — more recently — sociologists, businessmen, etc., have run into a surprising number of situations in which they need to count something. A beautiful collection of tricks and strategies has evolved to cope with these problems to the point where the field of Combinatorics (as it is called) is now coming into its own as one of the newest branches of mathematics. It is not yet a standard component of the math curriculum at most schools, but several new textbooks have been produced recently and there is a growing awareness of the subject in many schools. I would propose spending the first half of the spring semester exploring some of the finer aspects of combinatorics to see if others find the subject as intriguing as I do. The problems tend to be indescribable in this small a space, but typical results have applications in:

- Game Theory
- Maximum and minimum flows on transport networks
- Graph theory
- Map coloring problems

There are no mathematical prerequisites for this course, but a certain delight in fooling and manipulating numbers and other mathematical objects would be helpful.

---

**The Mathematics of Basic Physics**

A series of seminar presentations of the mathematics associated with quantum mechanics. (See US 130, Quantum Mechanics for the Willians.)

Students in US 130 need not register for US 223 to participate in the seminar.

**The Book Seminar**

Many important mathematical objects lend themselves to semi-independent study. The following forum will be tried: in consultation with each other and a staff member, small study groups (about five students) will select a text for joint study, set a syllabus, and meet together regularly both with and without the instructor.

The following topics may be handled effectively in this manner:

- Topics in the History of Mathematics
- Topics in the Foundations of Mathematics
- Probability
- Differential Equations
- Linear Algebra
- Advanced Calculus
- Number Theory

**The Primal Flow/Levi Theorems**

A theorem is presented at 5:37 on each prime-numbered class day.

- Independent group study in the World of Mathematics will, we hope, involve students in planning, preparation, and presentation of support materials for courses, special lectures, etc.,
- devising and testing instructional projects,
- working on the Hampshire College Summer Studies in Natural Science and Mathematics, and
- teaching and tutoring at Hampshire and elsewhere in the World of Mathematics.

**Faculty/Student Problem Seminar**
The course is a set of core lectures, full-term activities, and mini-lab modules designed for Division I students who wish to take a core course in physics and for Division II students mainly concentrating in physics. Certain bridging disciplines (biophysics, history and philosophy of science, and electronics) are also to be found here. There is also overlap with "Earth and Universe" course, through cross-listing of modules and joint lectures.

Essentially for students whose interests in science are uncertain or undeveloped, our aim is to provide variety in topics and approaches. Modules are particularly useful for this purpose, and also for the sake of inventing and developing new topics. Students may enter or leave modules at appropriate times, under guidance of their advisers.

Time-Lapse Activities

Lectures: Forming the core of the course, there is a weekly sequence of hour-long lectures by faculty, students and visitors. Topics of especially broad interest are introduced in such a way as to stimulate further study and discussion. The lectures also occasionally provide incentive for ad hoc modules, as described below. All students in the course attend all lectures.

Basic Physics: Quantum Mechanics for the Illiterate. This is the first term in a revolutionary sequence of three elementary physics courses. The central concepts of quantum mechanics, in full mathematical glory, are exposed. Nevertheless, the mathematical background of students can be very disparate (as it in fact was in the first class, taught in Spring 1972). The most useful mathematical ideas are complex arithmetic, vector spaces and linear algebra, and calculus up to elementary differential equations. Students entering the physics sequence are expected to have contacted these ideas, either in the Calculus workshop or in independent study. (Herbert Barozzen and staff). Taught spring term only. Two hours twice a week.

Electronics for the People: An entirely practical examination of common electronic devices used in radio, television, audio systems and computers. Students learn to construct simple electronic devices from supplies in lab form. Following that, they study diagnosis and repair of more complex devices. Finally, they design and build their own systems at their own cost. They develop an appreciation of the technology, and, take pride in the students who service their.

Course 130 (ES 130) PHYSICAL SCIENCE

The course is a set of core lectures, full-term activities, and mini-lab modules designed for Division I students who wish to take a core course in physics and for Division II students mainly concentrating in physics. Certain bridging disciplines (biophysics, history and philosophy of science, and electronics) are also to be found here. There is also overlap with "Earth and Universe" course, through cross-listing of modules and joint lectures.

Essentially for students whose interests in science are uncertain or undeveloped, our aim is to provide variety in topics and approaches. Modules are particularly useful for this purpose, and also for the sake of inventing and developing new topics. Students may enter or leave modules at appropriate times, under guidance of their advisers.

Time-Lapse Activities

Lectures: Forming the core of the course, there is a weekly sequence of hour-long lectures by faculty, students and visitors. Topics of especially broad interest are introduced in such a way as to stimulate further study and discussion. The lectures also occasionally provide incentive for ad hoc modules, as described below. All students in the course attend all lectures.

Basic Physics: Quantum Mechanics for the Illiterate. This is the first term in a revolutionary sequence of three elementary physics courses. The central concepts of quantum mechanics, in full mathematical glory, are exposed. Nevertheless, the mathematical background of students can be very disparate (as it in fact was in the first class, taught in Spring 1972). The most useful mathematical ideas are complex arithmetic, vector spaces and linear algebra, and calculus up to elementary differential equations. Students entering the physics sequence are expected to have contacted these ideas, either in the Calculus workshop or in independent study. (Herbert Barozzen and staff). Taught spring term only. Two hours twice a week.

Electronics for the People: An entirely practical examination of common electronic devices used in radio, television, audio systems and computers. Students learn to construct simple electronic devices from supplies in lab form. Following that, they study diagnosis and repair of more complex devices. Finally, they design and build their own systems at their own cost. They develop an appreciation of the technology, and, take pride in the students who service their.

Course 130 (ES 130) PHYSICAL SCIENCE (cont.)

The course is a set of core lectures, full-term activities, and mini-lab modules designed for Division I students who wish to take a core course in physics and for Division II students mainly concentrating in physics. Certain bridging disciplines (biophysics, history and philosophy of science, and electronics) are also to be found here. There is also overlap with "Earth and Universe" course, through cross-listing of modules and joint lectures.

Essentially for students whose interests in science are uncertain or undeveloped, our aim is to provide variety in topics and approaches. Modules are particularly useful for this purpose, and also for the sake of inventing and developing new topics. Students may enter or leave modules at appropriate times, under guidance of their advisers.

Time-Lapse Activities

Lectures: Forming the core of the course, there is a weekly sequence of hour-long lectures by faculty, students and visitors. Topics of especially broad interest are introduced in such a way as to stimulate further study and discussion. The lectures also occasionally provide incentive for ad hoc modules, as described below. All students in the course attend all lectures.

Basic Physics: Quantum Mechanics for the Illiterate. This is the first term in a revolutionary sequence of three elementary physics courses. The central concepts of quantum mechanics, in full mathematical glory, are exposed. Nevertheless, the mathematical background of students can be very disparate (as it in fact was in the first class, taught in Spring 1972). The most useful mathematical ideas are complex arithmetic, vector spaces and linear algebra, and calculus up to elementary differential equations. Students entering the physics sequence are expected to have contacted these ideas, either in the Calculus workshop or in independent study. (Herbert Barozzen and staff). Taught spring term only. Two hours twice a week.

Electronics for the People: An entirely practical examination of common electronic devices used in radio, television, audio systems and computers. Students learn to construct simple electronic devices from supplies in lab form. Following that, they study diagnosis and repair of more complex devices. Finally, they design and build their own systems at their own cost. They develop an appreciation of the technology, and, take pride in the students who service their.

Course 130 (ES 130) PHYSICAL SCIENCE (cont.)

The course is a set of core lectures, full-term activities, and mini-lab modules designed for Division I students who wish to take a core course in physics and for Division II students mainly concentrating in physics. Certain bridging disciplines (biophysics, history and philosophy of science, and electronics) are also to be found here. There is also overlap with "Earth and Universe" course, through cross-listing of modules and joint lectures.

Essentially for students whose interests in science are uncertain or undeveloped, our aim is to provide variety in topics and approaches. Modules are particularly useful for this purpose, and also for the sake of inventing and developing new topics. Students may enter or leave modules at appropriate times, under guidance of their advisers.

Time-Lapse Activities

Lectures: Forming the core of the course, there is a weekly sequence of hour-long lectures by faculty, students and visitors. Topics of especially broad interest are introduced in such a way as to stimulate further study and discussion. The lectures also occasionally provide incentive for ad hoc modules, as described below. All students in the course attend all lectures.

Basic Physics: Quantum Mechanics for the Illiterate. This is the first term in a revolutionary sequence of three elementary physics courses. The central concepts of quantum mechanics, in full mathematical glory, are exposed. Nevertheless, the mathematical background of students can be very disparate (as it in fact was in the first class, taught in Spring 1972). The most useful mathematical ideas are complex arithmetic, vector spaces and linear algebra, and calculus up to elementary differential equations. Students entering the physics sequence are expected to have contacted these ideas, either in the Calculus workshop or in independent study. (Herbert Barozzen and staff). Taught spring term only. Two hours twice a week.

Electronics for the People: An entirely practical examination of common electronic devices used in radio, television, audio systems and computers. Students learn to construct simple electronic devices from supplies in lab form. Following that, they study diagnosis and repair of more complex devices. Finally, they design and build their own systems at their own cost. They develop an appreciation of the technology, and, take pride in the students who service their.
remote theory, as originally conceived, could at one and the same time win acceptance and be judged a failure.

1. Structural Chemistry: From Chemical Structure to Biological Function. While based in historical example, this case study will elucidate the logic of organic chemistry as a kind of chess game. Time permitting, we will examine some of the following examples: the relationship between the origins of organic chemistry, the rise of the chemical dye industry and its impact on world economy and the balance of European power; the relationship between structural chemistry and the notion of spontaneous generation; the relationship between structural chemistry and molecular tailoring -- the rational creation of wonder-drugs; and the relationship between structural chemistry and modern genetics -- molecular biology.

While independent of each other, the modules are closely related and may be taken together for a full term of work. Students may enter whenever a module begins. (Stanley Goldberg). Three hours per week.

Special Relativity (see HS 135, Earth and Universe)

Waves: A sequence of three independent modules devoted to the concept of wave motion: its theory and its applications.

1. Conducting Models of Wave Motion. A library of 40 programs is available for study of the mathematical theory of waves, and for simulating physical phenomena such as interference, wave propagation, normal modes of vibration, and dispersion. Students expand the library as the module progresses.

2. Sound Waves. Laboratory exercises in acoustics and electronic reproduction of sound, with applications to problems in perception and aesthetics. Students have access to synthesis and peripheral equipment for production and performance of electronic music.

3. Light Waves. A laboratory in optics, with emphasis on applications of lasers.

These modules are not cumulative in their demands on students. In particular, neither the second nor the third depends heavily on the theory in the first, although it is naturally best for students to engage in the whole sequence as a term-long activity. (Everett Riddle). One hour per week, sections: three hours per week, lab.

The Structure of Life. During this six-week seminar we will discuss biological structures, their symmetries and patterns, and the ways in which they are created during the growth of animals. D'Arcy Thompson's classic book "On Growth and Form" will supply us with numerous examples from nature. Topics to be discussed include: soap-bubbles and the shape of cells, the honeycomb of bees, snowflakes, and the skeletons of single-celled animals, sea-shells and ram's horns, and structural analysis of skeletons. (Eric Newman).
Course: The course will examine the origin, evolution, and structure of the universe. To be given at Mount Holyoke College.

Requirements: One year of calculus and one year of science; no astronomy prerequisite. Second semester. Professor Dennis.

Introduction to Astronomy and Astrophysics. For astronomy majors or others interested in a quantitative introductory course. A description of our present knowledge of the universe and the means by which this knowledge has been obtained. The course considers the properties of the solar system, individual and multiple stars, interstellar space, our galactic system, and external galaxies. Two ninety-minute lectures and one two-hour laboratory per week. (This is the course ASTC 22 offered by the Five-Colleges Department; Professor Manchester.)

Development of Astronomy. The progress of astronomy is traced from prehistoric times to the space age. Emphasis is placed upon the development of important ideas in the field and upon the relation of astronomy to other cultural trends. Supplemented by occasional use of the planetarium and the departmental telescopes. Two ninety-minute lectures per week. Some basic knowledge of astronomy will be assumed. (This is the course ASTC 34 offered by the Five-College Department.) Professors K. Gordon and Seitzer.

Techniques of Modern Astronomy. An introduction to modern methods of astronomical observation and data reduction. Specific techniques of optical astronomy, radio astronomy, and space astronomy will be discussed and analyzed. Laboratory experiments and field observations will also be performed by students during the semester.

Requirements: Knowledge of basic physics (especially electromagnetism) and astronomy. Elective for Sophomores. Second semester. (This is the course ASTC 38 offered by the Five-College Department.) Professor Naugles.


Requirements: Astrophysics I. (This is the course ASTC 44 offered by the Five-College Department.) Professor Van Blerkom.

Department of Biology and Chemistry

BE HENDERSON, Director

The biologist wants to understand life, but life, as such, does not exist; nobody has ever seen it. What we call "life" is a certain quality, the sum of certain reactions of systems of matter, as the smile is a quality of reaction of the lips. I cannot see the girl in my right arm and her smile in my left hand and study the two independently. Similarly, we cannot separate life from matter and what we can only study is matter and its reactions. But if we study this matter and its reactions, we study life itself.

Robert Oppenheimer

The meaning of life

The adopt this point of view as a framework for the course. The organization of cells is such that each of the life processes, such as respiration or metabolism or reproduction, can be studied in isolation from the others, often in systems which are clearly not living. Thus we offer in SRS a series of units, or "minicourses," each of approximately six weeks' duration and each dealing with a specific topic in biology. For this spring semester, most, but not all, of the minicourses in SRS center around Neurobiology. They explore a variety of organisms, use different experimental techniques, and present different points of view. Each is guided by an instructor who provides an experience reflecting his or her own scientific life style: field trip, intensive laboratory work, or abstract theory. Minicourses are designed for Division I or II students, or both.

The course is accompanied by a series of weekly discussions led by the teaching staff. These meetings will center around the themes of EVOLUTION and provide, among other things, opportunity for argument on controversial matters related to the work of the course, and bring unity to the topics discussed in minicourses.

Each unit (minicourse) is designed to be more or less self-contained; a student may participate only in those that interest him. During the registration period, the student signs up for SRS, not an individual minicourse. The first core meeting will be devoted to descriptions and registration for the first set of minicourses. One does not sign up for the second set of minicourses until four weeks into the term when descriptions of the 2nd set of minicourses will be available.

The term is divided into two periods. The following are possible topics to be covered in one or both of the two periods:

- Evolution of Eukaryotic Cells - Miller
- Evolution of the Central Nervous System - Kriegbaum
- Vision - Neural
- Sexual Adaptations or Life Without Oxygen - Miller
- Evolution of Behavior - Kriegbaum and Oppenheimer
- How Nucleus Work - Woodhall
- Evolution of Plants - Woodhall
- Biophysics of Nerve (embryos - Newman and Woodhall)
- Animal Physiology - Woodhall
- Neurological Cycle and the Pill - Xinman
- Embryology Lab (full term) - Newman
- Spring Botany - Hearn
Governmental agencies regularly make decisions of enormous economic, social and environmental consequence. How wisely these decisions are made depends in part on the quality of information available to those who make them. Yet the structure of the decision-making process may tend to encourage the presentation of partial or distorted information. Vested interests and promotional bias among leaders of government and industry have often led to multi-billion dollar projects which are of questionable value and may have detrimental environmental effects. This situation has created a need for more participation among citizens, lawyers and other citizens to act as adversaries in presenting to decision-makers the costs of such programs and in suggesting alternative courses in which priorities could be shifted more toward the public interest.

We will spend the semester first in defining and describing the concept of adversary science as a technique of technology assessment. This will include readings from a recently compiled bibliography on technology assessment (first month). Next we shall go in depth discussing the decision-making process and the role of adversary science in NASA’s proposed space shuttle, a program which is estimated to cost tens of billions of dollars (second month). During this time students will embark on projects of their own choice either in teams or as individuals and report on these during the third month. These projects would include analyzing reports and taking field trips to Washington, Boston or other places, while playing an activist role in some issues. Examples of possible projects are energy and power, food additives, sewage treatment, medical technology, communications technology, pollution control technology, space program priorities, and new weapon systems. (Some of these might involve some other faculty members as well.) These students who have participated in this course in the fall can continue to work on their projects throughout the spring term.

A Wednesday night lecture series on Science and Public Policy will bring to the campus group of distinguished visitors whose experience and qualifications bear on the questions of the course. They will deliver lectures, lead discussions and contribute to our planning for the future of the course.

Projects -- Each student picks one
1. Forestry management or a PI C Corp for Hampshire students (R.P.C.). This summer-long project will concern itself with forest improvement and conservation practices of a natural resource (timber). Students will implement a field studies project done by Jon Sonis and Jeff Stopp on a timber lot in Nantucket. Pruning, calling of large genetically sound trees, hauling logs to the saw mill will provide plenty of manual labor, but are designed to teach the student to apply the ecological knowledge to the economic problems of the forest industry. 1 day/week
2. A study of the ecological distribution of red maples (Acer Rubrum). Red maple occurs in lowland bogs and upland forests and little work has been done on the ecological distribution of this species. We will consider various sampling methods while learning how an ecologist goes about studying the distribution of a species. 1 afternoon/week
3. An interdisciplinary study of a coastal salt marsh (Ralph German). See Ralph's course proposal.
4-6. Environmental action projects under the supervision of conservation groups in the Valley. Details to be announced.
7. Wild Canids of New England (Emily Groves)

An as yet unclassified dog-like creature has appeared in New England in the past 30 to 40 years and is seen still the number of this so-called "hay-dog" is increasing. Some work has been done with these animals in caninity involving both behavioral and hybridization studies, but little, if anything is known about the natural habitat of this creature. What type of cover do they live in? How large of a territory do they have? What do they eat?

We will do some library research on this animal and try to collect all possible literature concerning it, enabling us to find out about the history of the "hay-dog" in New England. There will also be field work to study the habitat of the "hay-dog." The field work will involve both day and overnight outings. Some serious students could possibly spend a longer time in the field during spring vacation. This will depend on our findings earlier in the term.

This project will not only give you some knowledge about a little-known animal but also supply you with many of the techniques necessary for studying the natural history of another animal.

8. Fresh Water Biology (Anna Sears)

A study of the Sudbury Reservoirs. A complete ecological survey of these reservoirs will be done, analyzing oxygen productivity and successional events in the benthos of these reservoirs.

9. Swamps (Michael James)

We will do a survey of the plant species in a northern New England swamp. From this the student will learn to identify the local plants and to use the different ecological sampling methods. 1 day/week

10. Other projects may be added as need and interests develop.

HB 190

ANATOMY II: Genetics as Patient

SS 120

John Foster, Robert van der Lippa, Jacqueline Slater, Directors

In the fall semester Human Biology and the Sociology of Medicine and Health Care were amended zero or less apparently. In this semester we will move into the area where these fields overlap. The program will consist of a series of units, varying from the heavily biological to the heavily sociological and political. It will be drawn from the joint supervision of faculty and students with strong professional interests in biochemistry, medicine, sociology, and public health. Students will work in teams on these units. Each team will have a responsibility to 1) gather input data by interview, questionnaire, laboratory analysis or library research, 2) develop a bibliography of readings for the unit, 3) create a file of material suitable for continuing work by future students, 4) report the results of their efforts back to the rest of the students. Units will take a variety of forms, of which the following are illustrative:

- Examination in detail of a local health care delivery system
- Case studies of significant public health problems or diseases
- Medical Mysteries
- Diagnostic screening projects, on campus or elsewhere
- Laboratory studies

"Grand Rounds" will be held once a week to report on progress, present a case, listen to a speaker, or debate a topic of general interest. Detailed descriptions of units and procedures will be available shortly before the semester begins. Lecture/CGP one hour twice a week plus two hours twice a week tutorial/ lab/project.
This is a highly modular course. The modules will consist of:

1. "Getting into APL" -- The basics of the language, getting to know your operators, using your tools to some advantage, i.e., typical data analytic problems, statistics and their development in terms of APL.

2. "Linear Algebra or Finite Dimensional Vector Spaces as a Way of Life" -- The basics of vector spaces with emphasis on the geometry of vector spaces. Basics include independence, dependence, bases, dimension, orthogonalization, inner products, subspaces, projections, etc.

3. "Data Reduction for Fun, Profit and Understanding" -- Lacs as points in an individual space, as points in variable space; the geometry of data reduction, inner products as correlations and other subjects. Facing data reduction using APL. Problems, problems -- students may use own data.

4. "Geometry in APL/Advanced APL" -- Using APL to accomplish data reduction, advanced programming for standard data reducing techniques -- means, variances, correlations, regression, analysis of variance, factor analysis, principal component analysis, projections, etc.

5. "Probability Modeling" -- the usual basic probability models -- binomial, hypergeometric, multinomial, Poisson, exponential, uniform; models as the intrinsic part of exploratory data analysis; modeling as a smoothing procedure when data is sparse. Independence and randomness as the baseline of inference. X- or barchor charts.

Students are not necessarily expected to participate in all five sections. Students are expected to be responsible for going well beyond the core lectures' material in terms of their understanding and ability to apply the ideas presented. We will spend a good deal of our time participating in directing students' semi-independent activities.

There are a number of aspects of elementary math education I feel need to be covered in a workshop such as this, which can be roughly broken down into three categories:

1. Mathematical. What kinds of mathematics are being and should be taught? We will discuss in detail the basic concepts of modern elementary mathematics, such as set theory, geometry, number, etc., making sure we understand them and how they and the way they are taught came to occupy the central position in the curriculum.

2. Pedagogical. What are we really trying to do in the teaching of mathematics and how can we do it most effectively? A lot of time will be spent on these questions. We will play around with commonplace rules, attribute blocks, go boards and other aids teaching aids.

3. General. It is impossible to consider the teaching of mathematics in isolation from the broader problem of education. What constitutes a decent education? How does mathematics fit in? Does one teach the same kind of mathematics to the same way to the underprivileged as to the overprivileged? How do children develop, and are there different techniques and subjects which are more appropriate at different stages in their development?

We now have a classroom in Youse TV to use as a resource center, experimental classroom and teachers workshop. This room is now empty. Of the assignments for the class will be to collect cheap materials which can be used for a variety of elementary school science activities and to furnish a classroom that is cheap, practical and stimulating to work in. We must avoid the trap of believing an open looking classroom is necessarily being taught openly. We will read some of Piaget's exponents on learning theory to see if and how well these theories are applied in science education today. Full time course, meets two times a week, two hour classes.
SEPARATE COURSES

Division II
32 2.312/2

ANALYSIS
David Kelly

3 5 7 11 13 17 19
While relating the facts of limits, our analysis will be applied to the
foundations of the calculus (which are expected to have been)
and its extension to functions of onemore variables, to the theory of
approximations (including power series and trigonometric series), and to
the solution of several important differential equations. We'll do
imaginary numbers, too.

The class will meet for four hours each week and participants will be
expected to assist in conducting the Calculus Problem Sessions.

32 184 (30A) THE CALCULUS WORKSHOP (Taming Infinity)
David Kelly

Offered each term, the lectures, classes, and problem sections of the
Calculus Workshop are designed to serve a variety of needs and to
accommodate students with a wide range of backgrounds. For some, the
techniques of the calculus will provide a powerful tool for investiga-
tions in the sciences; others may be more interested in the conceptual
development of the calculus. We expect to provide a working knowledge
of the calculus in one semester.

The Calculus Lecture Series (1 hour/week) will focus on the central
themes of the calculus: mathematical, historical, philosophical, and
technological.

The Calculus Classes (2 hours/week) will introduce the student to the
art of doing calculus; these sections are anticipated in the fall— one
for students a little nervous about beginning college mathematics. These
sections will be repeated in the spring and a continuing section will be
offered.

The Calculus Problem Sections will enlist the assistance of experienced math
students to help calculus students acquire proficiency with the tools of the
subject.

35 153 BIOLICAL AND CLINICAL BASES OF SEX DIFFERENCES
55 111
Nasha Grzegorzecki, Louise Farbrook

There is much current feeling that sex roles are predominantly determined by
social and environmental factors. Yet there are obvious biological factors,
such as hormones, that influence the formation of sex-typed behaviors. We
are going to try to deflate these biological factors from the social factors
by asking the following questions:

First, does the reproductive system directly influence psychological
states? In other words, are the differences between the sexes directly
related to the physiology of the male and female reproductive systems
rather than to the attitudes about the systems? To investigate this
problem, we will study the genetics of sex determination and will re-
view the male and female endocrine systems. Of particular interest will
be possible physiological effects of hormone changes in these systems.

Second, are there differences between male and female brains? Recent
evidence suggests that sex hormones influence the shaping of neural
networks in the central nervous system. In exploring this problem we
will review experiments in which the injection of hormones into animals
at crucial stages of development results in sex reversal; we shall also
study a related problem in humans -- the phenomenon of the transman.
Finally, we will study six differences in infant responses to stimuli,
differences that appear to be innate.

While the emphasis of the course as described above is clearly biological,
particular attention will be given to psychosocial and cultural influences
which interact with the biological substrates.

This course will meet twice a week for two hours.
The study of behavioral genetics will focus upon the origins of individual differences in important human characteristics such as intellect and personality. Race and social class will be discussed as genetic constructs. The course will be concerned with the interrelations of heredity and environment in determining behavior, although the contribution of heredity will be emphasized. Analogies of human traits will be studied in other organisms as well; for example, genetic aspects of insect behavior will be discussed as they relate to individual differences in insect behavior.

Basic readings will be found in such sources as Dobzhansky's *Mating and Mating*, Carter's *Human Heredity*, and Fuller and Thompson's *Behavior Genetics*. The reading materials will also include research articles and theoretical papers by such contributors as Vandenbergh, Gottesman, Rosenthal, and Kety, and readings from Honore's *Genetics, Behavior and Research*. The principal goal of the course is to attain familiarity with the tools and the progress made in applying basic concepts from genetics to social science problems. The course also aims to integrate material from the behavioral sciences, particularly psychology, into relations to concepts from the biological sciences by means of the methods, designs, and concepts of genetics. The course will be jointly taught by a member of the School of Natural Science and Mathematics and a member of the School of Social Science.

The class will meet twice weekly for two hours each meeting. All the students will be expected to participate in discussions but also to present their work orally or as a paper to the class. The class is designed primarily for Division II students.

---

**NS 211 PHYSICAL CHEMISTRY**

**Division II**

John Held

A detailed knowledge of the principles of chemical equilbriums lies at the heart of branches of natural sciences as diverse as oceanic edaphology, the conditions of explosive algae growth in ponds, and how diamonds high in the earth's interior. A large part of the course will deal with implications of the 2nd Law of Thermodynamics -- the general law of entropy. An experiment that perpetual motion is impossible -- including its implications for the relationship between energy consumption and environmental protection. (Twice a week, 1 hour each.)

---

**NS 108/119**

**TOPICS IN ORGANIC CHEMISTRY**

Henry Leroy

We will deal with organic and/or physical phenomena from an organic chemist's point of view. Possible topics might include stereochemistry, symmetry in organic molecules, biochemistry. The text Terriss and Boyd, *Organic Chemistry* will be used, as well as extensive outside reading materials.

There will be two sections, one for Div. II students and one section for Div. I students. No previous experience in chemistry is necessary for the Division I section.
SEPARATE COURSES

35 293  SEMINAR IN THE HISTORY OF NINETEENTH CENTURY SCIENCE
Stanley Goldberg

This seminar is open to students who are doing or have done Division II work in Natural Science or its equivalent. We will examine the general features of nineteenth century science and the transition from "natural philosophy" -- the spirit of the idle rich -- to "science," as an integral institution of modern society. In addition, each student in the seminar will be expected to produce a major piece of work and lead at least one session of the seminar on the basis of that work.

Because of the nature of the seminar, enrollment is limited to twelve students.

SCHOOL OF SOCIAL SCIENCE

ANTHROPOLOGICAL PERSPECTIVES ON DEATH AND CULTURE
SS 103
F. Nihan

BIOLOGICAL AND CULTURAL Bases OF SEX DIFFERENCES
SS 111 SS 153
H. Greenstein and L. Farnham

CULTURE AND POVERTY
SS 112
D. Troppman

SEMINAR IN CONSTITUTIONAL LAW: THE FIRST AMENDMENT
SS 114
B. Carroll

THINKING ABOUT THE UNthinkable: ENCOUNTER WITH THE HOLOCAUST PART II
SS 118 SS 219
Sponsored by the School of Social Science

GOODS, INEQUITY, AND PAIN: THE BEGINNINGS AND THE END OF POLITICAL THEORY
SS 122 (MA 122)
D. Nisberg

INEQUALITY
SS 124
J. Kaplan, D. Linden, and F. Vansant

WAR, THE ADVENTURE
SS 125
L. Farnham

PROBLEMS IN PHILOSOPHY OF THE SOCIAL SCIENCES
SS 126 SS 228
(LC 129 LC 203)
M. Kedrova

LOVE IN THE WESTERN WORLD
SS 132
M. Paulkner

GEOMETRY AND PROBABILITY Models FOR DATA REDUCTION
SS 136 SS 226
(LC 164 LC 207)
(ON 103 (ON 203)
J. Le Bourroux and M. Scharland

SCIENCE AND PUBLIC POLICY
SS 139 SS 231
ON 108 (ON 208)
B. O'Leary

THE CULTURAL LIFE STYLES OF MINORITIES AS A FACTOR IN SCHOOL PERFORMANCE
SS 141
G. Joseph
SCHOOL OF SOCIAL SCIENCE

THE PERSON - A DEVELOPMENTAL APPROACH
S3 344
T. Hoekan

THE POLITICAL NOVEL: THE POLITICS OF ART
S3 212 (MA 122)
H. J. Linton

THE SELF IN SOCIETY
S3 152
M. Faulkner

WOMEN AND THE AMERICAN EXPERIENCE: A POLITICAL AND SOCIAL HISTORY
S3 153 S3 213
F. Glazer, G. Reillanger, M. Sister and F. Kleindienst

THE TWENTIETH CENTURY CARIBBEAN
S3 156 S3 217
A. Phillips

SOCIETY OF FILM
S3 157
S. Linden

MODERN PSYCHOLOGY
S3 191
B. Birney

BEHAVIOR GENETICS
S3 202 (MA 218 )
L. Faraham and L. Miller

COMMUNITY AND MEANING IN COMMUNITY
S3 203
J. Meister, S. Turlington and B. Goldstein

CULTURE, NATIONALISM, AND IDENTITY
S3 207 (MA 207)
K. Marques, P. McKeon and L. Cilick

MUPW BIOLOGY II: COMMUNITY AS PATIENT
S3 229 (MB 220)
J. Foster, R. von der Lippe, and J. Elster

INTRODUCTION TO COGNITIVE PSYCHOLOGY
S3 211 (LC 213)
J. Kaplan and M. Stillings

LEARNING IN EARLY CHILDHOOD
S3 213
M. Cole

PROBLEMS IN THE PHILOSOPHY OF LAW AND JUSTICE
S3 214
L. Mazor

SCHOOL OF SOCIAL SCIENCE

METHODS IN CURRICULA BUILDING: DEVELOPMENT OF CURRICULA WITH A MULTI-ETHNIC, CROSS CULTURAL BASE
S3 217
G. Joseph

PLANNING AND NON-PLANNING
S3 219
R. Linden, R. Rosenberg and J. Reintick

PROFESSIONS
S3 221
L. Mazor and R. von der Lippe

SOCIAL PROBLEMS AND PUBLIC POLICY: READING AND FIELD WORK
S3 223
R. Alpert

SPECIAL PROBLEMS IN SOCIAL SERVICE FIELD WORK
S3 226
W. Williams

THE INTELLECTUAL AND SOCIAL HISTORY OF SPANISH AMERICA
S3 225 (MA 211)
R. Marques and P. Weaver

TUQUI STUART ENGLAND: A CASE STUDY APPROACH TO HISTORICAL PROBLEMS
S3 226
M. Elster
Most of us in the School of Social Science are trying to offer courses that focus on problems of enduring concern and that emphasize the value of approaching such problems from a variety of disciplinary perspectives. We know that there is no single all-encompassing social science, but we do approach our work with the conviction that understanding human problems and acting on them intelligently requires something in addition to good sense and good intentions. So whether you find yourself studying poverty, communications, war, death, inequality, or love, we trust that you will come away from the course with fresh insight into how complex all human situations are and how much better they can be understood by honest efforts at disciplined inquiry.

Division II courses are intended to be generative: Ideally they convert you from passive receiver to active semi-independent learner. Having demonstrated in an exam that you have acquired that basic skill, you’re ready for the more intensive and comprehensive study offered in Division II courses.

ANTHROPOLOGICAL PERSPECTIVES ON DEATH AND CULTURE

Philip Pelham

Early pioneers in anthropology (Tylor, Frazer, Van Gennep, Hocart) were fascinated by the customs which “natives” followed when a member of their group died. Indeed, this final rite de passage still remains one of the mysteries which invites scholars from a wide range of disciplines to touch on it, and which encourages anthropologists to think in comparative ways: “What do the Zulus or the Todas or the Balinese do— and why?” Starting with an examination of some theories about religion and death, we will study the work of contemporary anthropologists who have touched on the ceremonies surrounding death, and the attendant beliefs and myths. We will also consider recent writing about death in the “modern” world: literary, ethical, and social-scientific, including medical and psychological views. We shall also view films and make efforts to engage in field work locally on mortuary customs, beliefs and rituals. The initial materials are to be examined together, then students will be expected to conduct independent research and report on it.

The course will have two hours of lecture/discussion, one hour for tutorials and 1½ hours for films.

Enrollment is limited to 50.
There is much current feeling that sex roles are predominantly determined by social and environmental factors. Yet there are obvious biological factors, such as hormones, that influence the formation of sex-typed behaviors. We are going to try to delimit these biological factors from the social factors by asking the following questions.

First, does the reproductive system directly influence psychological states? In other words, are the differences between the sexes directly related to the physiology of the male and female reproductive systems rather than to the attitudes about the systems? To investigate this problem, we will study the genetics of sex determination and will review the male and female endocrine systems. Of particular interest will be possible psychological effects of hormone changes in these systems.

Second, are there differences between male and female brains? Recent evidence suggests that sex hormones influence the shaping of neural circuits in the central nervous system. In exploring this problem we will review experiments in which the injection of hormones into embryos at crucial stages of development results in sex reversal; we shall also study a related problem in humans—the phenomenon of the transsexual. Finally, we will study sex differences in infant responses to stimuli, differences that appear to be innate.

While the emphasis of the course as described above is closely biological, particular attention will be given to psychoanalytic and cultural influences which interact with the biological substrate.

This course will meet twice a week for two hours.

Enrollment is limited to 30.

It has been suggested that "poverty in modern nations is not only a state of economic deprivation, of deterioration, or of the absence of something, it is also something positive in the sense that it has a structure, a rationale, and defense mechanisms without which the poor could hardly 'stay on.' In short, it is a way of life, remarkably stable and persistent, passed down from generation to generation along family line. The culture of poverty has its own modalities and distinctive mental and psychological consequences for its members. It is a dynamic factor which affects participation in the larger national culture and becomes a substereotype of its own" (Gorer, Landis).

This statement suggests that the poor as a group, irrespective of national or ethnic background, have a distinct culture of their own: They share a particular complex of understandings and strategies for dealing with each other, on the one hand, and with those who are not poor, on the other. The statement suggests that this culture is valued and is self-reinforcing; and it implies that cultural factors are at least as important as, for example, economic factors, in maintaining the conditions of poverty.

Is this a valid perspective on poverty, and what are its implications? What alternatives might be proposed to this view? In this course we will examine these problems using ethnographic and sociological studies (such as Deno, Louis' 1969, Civil, Clark's Black Cheyenne, Rett's Urban Negro, Lockheed's Tally's Corridor), as well as novels, autobiographies, and other reports. A key work for the course will be Valentine's Culture and Poverty.

Students taking this course should plan for a field-work time commitment that is approximately equivalent to another course.

This course is coordinated with Michael Cole's course, Learning in Early Childhood. Students wishing to enroll in both courses should speak to the instructors. The course will meet twice a week for 3½ hours plus field work tutorials.

Enrollment is limited to 15 students plus students from Michael Cole's course.
Many controversies have arisen involving alleged violations of the First Amendment of the Constitution. Conflicts concerning freedom and establishment of religion (e.g., school prayer, busing to parochial schools, Sunday closing laws) freedom of assembly (e.g., the Communists, the Weathermen, the Black Panthers), freedom of press (e.g., obscenity and pornography, libel and slander), and freedom of speech (e.g., labor picketing, demonstrations to prevent speech, public versus private speech) have become virtually commonplace.

The First Amendment is explicit in its command that "Congress shall make no law ..." abridging the freedoms of speech, press, religion and assembly. Yet in the face of this prohibition many laws have been passed restricting the Constitutionally protected freedoms. For example, federal laws prohibit the distribution of pornography through the United States mails; and many states prohibit their youth from possessing pornography. The First Amendment, however, makes no age distinctions and does guarantee a free press, thus setting the stage for Constitutional litigation. Similarly, in the face of what appears to be the absolute right of free speech, the Supreme Court has held that one may not shout "fire!" in a crowded theater.

This seminar will examine some of these controversies surrounding the First Amendment. Supreme Court opinions will be read, supplemented with some secondary source materials, to learn just what the First Amendment means to the members of the Court. Syllabi will be placed upon class analysts and discussion of these opinions and decisions. From this, we should obtain understanding of some of the complexities confronting American society today.

The seminar will meet once each week, but additional meetings will be scheduled as appropriate. If possible, a trip to the Supreme Court will be undertaken in conjunction with an issue being studied.

Enrollment is limited to 16.

This course is a continuation of Encounter with the Holocaust from the first semester (see Fall catalog). Having dealt with historical antecedents and the nature of the destruction itself, we shall examine the effects of the Holocaust on participants, survivors, Jews, Gentiles; those who lived through it and those of us born later. We shall examine the question of Jewish resistance to the Nazi threat and the response of nations, America included, to the genocide. The question of how much our leaders did or did not know about the Final Solution will be looked at very closely. We shall also consider the Church as collaborator or resister. A wide range of literature on the Holocaust will be covered to be followed by the philosophic and theological problems and response of a post-Holocaust world to the unprecedented destruction. Finally we shall examine the extent to which the modern world has inherited the legacy of the Holocaust.

The class is a national pilot project in teaching the Holocaust in the university. It is taught by a consortium of five-colleges and outside faculty and coordinated by the student planners, Rabbi Teichtel, Landor and Leonard Cline, Dean of the School of Social Science, will serve as moderators.

Students wishing to join the course should be advised that there will be only a small number of available places. Interested students should make an appointment for an interview with Dean Cline before registering. Students accepted will be expected to have a good familiarity with the syllabus and at least a few of the books used in the first semester, most notably the eight hundred page plus book, The Destruction of the European Jews, by Saul Hilberg.

The course will meet twice a week for two hours each session.
The course will begin with a discussion of the classical literature on stratification and mobility theories, focusing in part on recent studies of education. Two to three week modules will then be formed for the study of six general populations: The Rich, White Collar, Blue Collar, and Everyone Else.

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

Enrollment is open.

What types of people are likely to seek stress by challenging nature, by engaging in dangerous sports, by intense competition? Why do some individuals seek danger, or difficult problems, or in other ways promote one's personal feelings of stress? What social arrangements are made which promote and facilitate stress-seeking behavior? How is stress-seeking behavior controlled and regulated by society? What does stress mean psychologically? Are there sex differences in stress-seeking?

This seminar will be concerned with such questions as an attempt to understand the motivations and phenomenology of fliers, sky divers, mountaineers, explorers, sailors, and other adventurers. In preparation for this psychological analysis, the seminar would achieve some understanding of the physiological response to stress and of assessment of human motives.

Materials for the course could include such works as Hale's The Street of Life, Kellor and Malinowski's Drums Under Color, Psychological Research in English, James Wilson's Sentiment and Destiny, Wilfred Bynoe's The Spirit of Adventure, Klansun's Why Nun Takes Chance and The Quest for Self-Control, as well as articles from the psychological literature and biographical accounts of adventurers.

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

Enrollment is limited to 20.
"Oh, the monster!" exclaimed the Reverend Doctor Sollott, "he has made a subject for science of the only friend he had in the world."

Peacock, Copper's Castle
(cited by A. J. Ayer)

The particular problem in the philosophy of the social sciences which we will consider centers around their relation to the physical sciences, in light of their taking as objects of study, purposive human action. It will be necessary and useful to start by considering some questions for philosophy of science in general, primarily concerning the nature of explanation and the relation between explanation, prediction, and causal laws. We will also discuss the notions of "description," "theory," and "model," and some suggestions as to how these fit into the idea of scientific explanation.

After all too little time on this, we will go on to discuss explanation in history and in psychology, the role of theory in such explanations, and the problems raised for considering such theories as scientific explanations by the notion of "causal laws." We will be led to consider the alternative approaches of "Verstehen" and etiological explanation, the latter in some detail with respect to the notion of purpose and function.

Should we make some progress with these considerations, we will spend some time on a couple of interesting difficulties for the social sciences: the problem of values, frameworks, and objectivity; and the problem of the relation between social facts and individuals.

This course will involve extensive difficult readings -- so far I'm pretty sure I'll want to use May Brodbeck's Readings in the Philosophy of Social Sciences and probably several supplementary works -- and group discussion.

Division I students will be better prepared for this course if they have already had some experience with studies in social science. The course will meet twice a week for 15 hours each session.

Enrollment is limited to 15.
This is a highly modular course. The modules will consist of:

1. "Casting into APL" -- The basics of the language, getting to know your operators, using your skills to some advantage, i.e., typical data analytic problems, statistics and their development in terms of APL.

2. "Linear Algebra or Finite Dimensional Vector Spaces as a Way of Life" -- The basics of vector spaces with emphasis on the geometry of vector spaces. Basics include independence, dependence, bases, dimension, orthogonality, inner products, subspaces, projections, etc.

3. "Data Reduction for Fun, Profit and Understanding" -- Data as points in individual space, as points in variable space, the geometry of data reduction, inner products as correlations and other subjects. Using data reduction using APL. Problems, problems...students may use own data.

4. "Geometry in APL/Advanced APL" -- Using APL to accomplish data reduction, advanced programming for standard data reducing techniques -- means, variances, correlations, regressions, analysis of variance, factor analysis, principal component analysis, projections, etc.

5. "Probability: Modeling" -- The usual basic probability models: binomial, hypergeometric, multinomial, Poisson, exponential, uniform; models as the limit case of exploratory data analysis: modeling as a smoothing procedure when data is sparse. Independence and randomness as the baseline of inference. Some Markov chains.

Students are not necessarily expected to participate in all five sections. Students are expected to be responsible for going beyond the core lectures' material in terms of their understanding and ability to apply the ideas presented. We will spend a good deal of our time participating in/directing students' semi-independent activities.
SS 144  THE HENSO: A DEVELOPMENTAL APPROACH

Thomas Holman

An introduction to developmental psychology with an emphasis on key concepts, theories of development, and the stages of growth from birth to maturity. In dealing with key concepts we will focus on such things as socialisation, growth and maturation, modelling effects, the nature/nurture controversy, etc. Theories would include Erik Erikson (Freudian), Piaget (cognition), Sears and Raimondi (learning). The emphasis on stages would focus on the definition of childhood, adolescence and adulthood and some of the tasks involved at these stages.

The course is to be divided into three or four areas. One would be a key lecture held once a week; the second would be a list of assigned readings; the third would be a weekly tutorial session in smaller groups; the fourth could be independent research on a topic of choice, depending on the individual students motivation. It would not be absolutely necessary for the areas of the course to overlap as much as it is to complement each other, the assignment would most likely come in the tutorial sessions.

Enrollment is unlimited.

SS 149 HAU 123  THE POLITICAL UNIVEL: THE POLITICS OF ART

N. J. Lunin

A theoretical exploration of certain political values, ideas, and movements by means of analysis of selected novels.

Three interrelated themes will pervade the course: (1) What is Politics? (2) What is Art? (3) What is the relationship between the two?

One colloquium-style session per week will be supplemented by individual tutorial meetings. There will be a term paper required. There will be two short papers -- one longer than the other; each allowing a maximum of individual choice and flexibility.

The following conceptual scheme and list of books describe the course’s approach:

I. The Politics of Introspection

Bermama, The Diary of a Country Priest; Silone, Bread and Wine;
Pasternak, Doctor Zhivago.

II. The Politics of Ambition

Foster, A Passage to India; Ashby, Man of the People; Fuentes,
South of the Nightingale.

III. The Politics of Instrumentation

Worrall, All the Kings Men; Wright, Native Son; Decew, The Book of Delilah.

Enrollment is limited to 20.
This course will focus on what sociology, in contrast to other disciplines, has to offer as a way of looking at the world -- sociology as a set of perspectives that can be used to understand and make sense out of human behavior. We will look at a concrete application of this perspective by looking at the concepts of "self" and "identity" by assuming that, sociologically, selves and identities are created, maintained and transformed in the course of social interaction, rather than "existing" as autonomous "things." We will read a number of theoretical discussions of social and personal identity, interwoven with empirical studies of identity creation, maintenance and change; for example, theoretical writings on adult socialization will be paired with studies of socialization to careers such as medicine and muse. In addition, students will be expected to read several case studies -- autobiography, memoirs -- which deal with the ways in which individuals subjectively experience and interpret personal change in the course of their lives. The class will meet once a week for two hours; tutorials will also be arranged.

Enrollment is limited to 20.

SS 153 SS 335 WOMEN AND THE AMERICAN EXPERIENCE: A POLITICAL AND SOCIAL HISTORY

Pernita Glatzer, Gayle Hollanders, Périne Slager and Patti Kleinbaum

The course will analyze the principal elements of the American women's political and social heritage. It is conceived of as an inter-disciplinary effort to establish a core for a women's studies program. The emphasis will be on developing approaches to understanding the functioning of the social system through the perspective of the female experience. Major areas of concentration will include: the family and society; the Western political tradition and the psychology of power; marginality, protest, and political change.

Scholarly analyses, biography and autobiography, fiction, archival materials, writings of the women's movement, as well as files will comprise the course for study. This wide range of materials is intended to encourage the uncovering of new sources for ourselves and others who wish to explore these topics independently or in other courses.

The format will include large lecture presentations followed by jointly taught smaller seminars. One or two optional modules on topics of special interest, such as women in literature, will be available. A women's symposium and student-led discussion groups will supplement the above.

Enrollment is open to women and men, and Five-College participation is especially encouraged.
The contemporary Caribbean is essentially an area in transition. Internal and external stimuli - the First World War, Great Depression, riots of 1930's, Royal Commissions, Second World War, decolonisation, Castro - have jolted the societies but there is no consensus about new forms.

The course will focus on the following areas:

(a) Constitutional and political developments. The phenomenon of dependence will be assessed and examined in light of the role of the U.S., Britain, France and the Netherlands in the area. An assessment of decolonisation will allow for a comparative evaluation of independent states. Assistant, incorporation into the metropolis in the case of France. The rise and fall of the West Indian Federation will also be considered. Other questions include the role of ideologies, race, theology and mass-based political parties on the political process.

(b) Economic trends. We will review a series of strategies of development ranging from the Puerto Rican model through the Cuban model. The Caribbean Free Trade Area (CARIFTA) is emerging as a significant attempt at regional cooperation despite metropolitan connections and the presence of multinational corporations. Special attention will be paid to sugar, bananas, bauxite and tourism.

(c) Social and cultural perspectives. Attention will focus on the multi-racial societies of the Caribbean, population pressures, migration, the cultural renaissance, and the search for identity.

Books will include: Beckford, G., Excesses of Poverty: Jamaica and the New Caribbean; Lewis, C., The Growth of the Western West Indies; Dwyer, F., Black Intellectuals Come to Power; Proctor, B., The U.S. in the Caribbean; Beckford, G., Been, Freed Not More Than Your Father?

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

Enrollment is unlimited.

This course will deal with the social history of the film industry: constant analysis as a methodological tool; films as "sociological data"; and the general problem of movies as reflecting or generating cultural change. Three weeks will be spent on each of the above areas, and students will be required to present papers and lead discussions in three of these four areas.

Students should expect to produce approximately 40-50 pages of writing for the course, at least one paper will be assigned on problems of consensus analysis.

This course will meet once a week for 1½ hours plus an hour tutorial to be arranged.

Enrollment is limited to 20.
The course will combine Keller Plan teaching techniques with a core lecture series to acquaint the student with major research areas in modern psychology. The aim will be to introduce fundamental problems of human behavior, basic methodologies now in use, as well as illustrate applications to current social problem areas.

The basic format will be two one-hour lectures, several hours during the week when self-testing will be available, and occasional discussion group meetings.

Enrollment is unlimited.

The study of behavioral genetics will focus upon the origins of individual differences in important human characteristics such as intelligence and personality. Race and social class will be discussed as genetic constructs. The course will be concerned with the interaction of heredity and environment in determining behavior, although the contribution of heredity will be emphasized. Analyses of human traits will be studied in other organisms as well; for example, genetic aspects of infraspecies learning will be discussed as they relate to individual differences in intelligence in humans.

Basic readings will be found in such sources as Dobzhansky's Mankind Evolving, Carter's Human Heredity, and Fuller and Thompson's Behavioral Genetics. The reading materials will also include research articles and theoretical papers by such contributors as Vandenberg, Gottesman, Norenzayan, and Katz, and readings from Bronow, Linsey, and Thissen's Behavioral Genetics: Method and Research.

The principal goal of the course is to attain familiarity with the tools and the progress made in applying basic concepts from genetics to social science problems. The course also aims to integrate material from the behavioral sciences, particularly psychology, with reference to concepts from the biological sciences by means of the methods, designs, and concepts of genetics. The course is taught by a member of the School of Natural Science and Mathematics and a member of the School of Social Science.

The class will meet twice weekly for two hours each meeting. All the students will be expected not only to participate in discussions but also to present their work orally or as a paper in the class. The class is designed primarily for Division II students.

Enrollment is unlimited.
The aim of this course is to bring students in contact with the theoretical concepts of community and their practical use and applications, such as, community as a social structure; community as a process of interpersonal relationships; community as a life style; and community as a focus for social change. Within the realm of these perspectives we hope to deal with questions that arise from both the readings and the students' own experiential knowledge. How does one define the term community? How does a group define itself as a community? How does one become committed to a community; and what is the meaning of "The College as a community"?

The course will emphasize both the theoretical and historical development of the concept, through the study of actual communities. The spectrum of the possibilities for study is great, ranging from intentional communities (e.g. communes), to the unincorporated urban community; from the "isolated" communities of the past to the "planned" communities of the suburbs, and the educational communities of schools and colleges.

Through the comparison of these communities we will attempt to form answers to the questions we have raised and give students the insights to apply the theoretical definitions to themselves and to a community of which they are a part.

Enrollment is unlimited.
SS 209 (HS 200)  HUMAN BIOLOGY II:  COMMUNITY AS PATIENT

John Foster, Robert von der Lippe, and Jacqueline Slater

In the fall semester Human Biology and the Sociology of Medicine and Health Care were examined more or less separately. In this semester we will move into the area where these fields overlap. The program will consist of a series of units, varying from the heavily biological to the heavily sociological and political. It will be done under the joint supervision of faculty and students with strong professional interests in biochemistry, medicine, sociology, and public health. Students will work in teams on these units. Each team will have a responsibility to: (1) gather input data by interviewing, questionnaire, or library research, (2) develop a bibliography of readings for the unit, (3) create a file of material suitable for continuing work by future students, (4) report the results of their efforts back to the rest of the students. Teams will take a variety of forms, of which the following are illustrative:

- Examination in detail of a local health care delivery system.
- Case studies of significant public health problems or diseases.
- Medical mysteries.
- Diagnostic screening projects, on campus or elsewhere.
- Laboratory studies.

More detailed descriptions of units and procedures will be available shortly before the semester begins.

The course will meet one hour twice a week for lecture/CPC and two hours for tutorials/lab/projects.

Enrollment is unlimited.

SS 211 (LC 213) INTRODUCTION TO COGNITIVE PSYCHOLOGY

James Stalpin and Ret Stellings

This course is an intensive introduction to the experimental study of language, thought, memory and perception. The aim of the course is:

1. An understanding of the metaphor that has dominated modern cognitive theory -- the view of man as an information processing system.
2. A thorough study of three research problems, illustrating the relationship between psychological theory and experiment. Some questions we might study are, Is memory anything more than a faded internal tape recording or film strip? How are the sound waves of speech converted into meanings? Why are problems with easy solutions sometimes very hard to solve?
3. The design, performance and analysis by the class of two or three experiments related to the three research problems.
4. A survey of the major results of cognitive psychology through assigned readings from textbooks and reviews.

Readings will be drawn from journals and from books such as R. H. Lindsay and D. A. Norman, Human Information Processing: An Introduction to Psychology, First Edition, Cognitive Psychology; Herbert Simon, The Sciences of the Artificial.

The course will be of particular interest to students working in experimental psychology, computer science, neurobiology and linguistics. There will be two class meetings per week for 1 1/2 hours each session. Roughly equal numbers of meetings will be devoted to lectures, discussions of readings on the topics of the survey, and the class experiments.

Enrollment limited to 50.
This course will be open to nine students and will consist of the following components:

- Seminars and tutorials on the Hampshire campus commencing on Sunday, February 18 and meeting at times scheduled jointly by myself and the students. These sessions will introduce students to basic concepts of cognitive psychology and the application of these ideas to understanding cognitive development.

- A one month practicum based at Rockefeller University in New York. During this month students will spend their time doing research under my guidance and the immediate supervision of a trained specialist in early childhood language. The research will be done in educational settings (a Head Start nursery school) and will concern the situational constraints on the manifestation of intellectual skills. Students will carry out both observational and experimental work.

The course is intended primarily for Division II concentrations, but other applicants will be considered. During their time in New York, students will live in an apartment access from Rockefeller campus where they may cook their meals if they choose. Payment for the apartment has been arranged, but students are responsible for daily maintenance costs.

In order to facilitate the arrangement of students' schedules, Michael Sutherland will coordinate a class in introductory statistics and data analysis with my course to supplement students' experience with real-life research while providing a flexible format in terms of timing. To complete their schedules, students should seek other courses with flexible scheduling possibilities* and independent study possibilities. I am willing to offer independent study, as well as the practice, in such areas as learning theory, culture and cognition, theories of compensatory education.

*Some courses which can be coordinated with this one include: Natural Science modular "West" course; UC electronic music course: EN110, Culture and Poverty, EN111, Modern Psychology, EN112: PSYCHOLOGY.

What is the nature of law? What is the meaning of justice? These two questions have figured in the works of most of the major philosophers from Plato in the pre-Socratic period. This course will explore their ideas and seek to determine the significance of them for a number of topics of current concern.

A principal object of the course will be to examine the difference one's philosophical position makes in the resolution of practical problems. This emphasis will be reflected in the manner in which the course will be taught.

After an introductory exploration of the history of legal philosophy, members of the class will be asked to select the work of a particular philosopher for intensive study. During most of the remainder of the term each student will speak on behalf of that philosopher in general class debates on a series of issues, including civil disobedience, equality, the sanctity of life, the growth of the law, the capacities of international law to contribute to world order, the relationship of law and language, the impact of science and technology upon law, and the limits of the legal order.

No previous work in philosophy or law is presupposed.

Materials for the course will include: Friedrich, Philosophy of Law in Historical Perspective, Harr, The Concept of Law, Fuller, The Morality of Law, and problem materials prepared by the instructor.

The class will meet once a week for two hours, plus an hour weekly tutorial to be arranged.

Enrollment is unlimited.
METHODS IN COMPARATIVE EDUCATION
DEVELOPMENT OF CURRICULA WITH A MULTI-ETNIC, CROSS CULTURAL BASE

Glória I. Joseph

Work in this course will be focused on developing curricula for the public schools, private and parochial schools can use them as well, that will provide the students with a broadened perspective of the critical issues in society today. Academics will not be separated from critical social issues. Curricula should be intellectually liberating, challenging and exciting at all levels (K thru 12). Curricula will be developed on the assumption that learning takes place best not through the coercive lecture, reading assignments and exams, but through the increasing involvement of the student through the process of inquiry.

Existing curricula in math, science, social studies, reading, literature, etc. will be studied in order to make appropriate modifications and innovations. The majority of class time will be spent in actually planning and writing such curricula. It will be necessary to begin with an understanding of what is meant by a multi-ethnic cross-cultural approach to education. (The terms have been abused so frequently that we may have to coin a new term to express our intentions.)

An interdisciplinary approach will be utilized in building the curricula. The class will meet two hours a week in the classroom and a third hour will be spent in the "field".

Class size is limited to 20 students. Open to Division III students unless a student has had a previous education course or equivalent experience.

SS 219

PLANNING AND NON-PLANNING

Barbara Lindem, Germaine Rosenchel and Johanna Kesnick

This seminar will be concerned with the planning processes in the United States and in a few European countries, by focusing on several case illustrations from both a legal and sociological point of view.

The first few weeks of the course will be spent in gaining an overview of the problems in regional and city planning, basing this in part on P. Bowden's "After the Planners: Visions of the Last Landscape"; various HUD reports ("Housing and Urban Development by Neighborhood," "Housing Construction Statistics," etc.); Bobbitt's "The Striving City;" Silver's "The Housing Environment and Family Life;" Frieden's "Urban Planning and Social Policy;" and some of Abetz's works.

Two modules of these weeks each will then be given sequentially:

1. Legal aspects of planning (problems of ownership and control, legal limitations and loopholes, roles of local, state and federal governments, financing problems). Each student (or teams of students) will prepare a summary of specific cases, one case dealing with the United States, and one with another country.

2. Behavioral research and environmental design (and non-contributions of social scientists / or hoped-for contributions / to planning and design processes.) Again, presentations from each student will be made illustrating the use of or need for behavioral information, using cross-cultural cases.

Two required field trips will be made (Derryville, New Hampshire; Roanoke Virginia). An optional field trip might be made to Disneyland (Florida or California - either would suffice)

The final three weeks of the term will be devoted to evaluations and critiques of student studies, and discussion of the cases.

The course will meet once a week for 11/2 hours with a second weekly meeting to be arranged.

Enrollment is unlimited.
Who becomes a lawyer in America today and why? When does one decide to study medicine and how is the choice made as to which specialty to enter? Where does professional power come from? Do doctors and lawyers care about society? When they do, why do they? When they don’t, why don’t they. In all these questions, what role does society play, or the professional school, or the professional associations? All these questions will be addressed in this course and where it is impossible to answer then we will suggest methods and approaches which may help. The course will study the professions from the sociological perspective, focusing upon law and medicine as specific cases. Questions of definition and the socialization process will serve as guidelines to study the rights and responsibilities of the professions -- the freedom and/or control that is or needs to be exercised -- and what the future of the professions may be. Efforts will be made to study and spend field work time both in professionalizing institutions as well as with the observation of the professions in practice.

Readings will include: 
Elliot Freidson, Profession of Medicine: Ervin Goffen, The Wall Street Lawyer; Howard H. Volcker and Donald L. Hills, Professionalis-
tion; Elton Mayo, Professional Power and American Society; Baudruf, "The Professions" Fall, 1965; Jerome Folken, Lawyers on Their Own; and Mayer's, The Lawyers.

The class will meet twice weekly for two hours each.

Enrollment is unlimited.
SPECIAL PROBLEMS IN SOCIAL SERVICE FIELD WORK

Whitley Wilson

The purpose of this course is to provide students interested in social services an opportunity to explore some theoretical and conceptual frameworks of such work. Specifically, the course is for students who want to enlarge their understanding of social service field experience.

The course will be devoted to individual or small group tutorials supplemented by classes. Class sessions will consider such topics as:

- relationships - how to help without hurting
- viewing an agency - as a consumer, as provider
- community organization and disorganization
- research for the beginning social scientist

Individual readings and papers will be arranged. The course is limited to 12 students who should meet with the instructor prior to enrollment. Class hours are to be arranged.

SPECIAL ACTIVITY

A CASE STUDY APPROACH TO HISTORICAL PROBLEMS

Marion Slater

This course is an attempt to introduce a relatively new approach, which has already been used successfully in other disciplines, to the study of history. The overwhelming goal of the course is to help students develop critical facility as well as substantive knowledge of historical problems, using England in this period as a particularly good case study. The course will be an intensive study of sixteenth and early seventeenth century England with special emphasis on sociological developments.

The semester will be divided into two six-week phases. During the first six week period the material will be offered in the form of "personalized instruction", an approach which is intended to allow each student to proceed at his/her own pace. Successful completion of this phase allows the student to proceed to the problem-oriented seminar of the last six weeks with a firm background of factual knowledge of the period. In addition, there will be a series of weekly essays (essays, paper, etc.) during the first half of the term which will provide additional information and material. The small group seminars will focus on the problem of Parthianism from a variety of angles, depending on group interest; e.g., Parthianism as a Revolutionary ideology, Parthianism and the Rise of Science, Parthianism and the Family, etc. The seminar reading assignments will reflect these interests in terms of substance and will differ in quality from the narrative, chronological studies which will be used in the first part of the course. Each student should expect to offer a paper based on the seminar work.

The course will meet once a week for two hours. Enrollment is unlimited.
HAMPIONE COLLEGE

Second Supplement to Course Bulletin, Spring Term 1972

The following new courses, approved by the Curriculum Policy Committee and the Executive Committee, are offered for Spring Term 1972. Please check this supplement and supplement #1 before registering for any courses. If you do not have a copy of supplement #1, a copy may be picked up in the Registrar's Office.

New students will get the instructor's signature on their registration form. Returning students should enroll during the drop/add period beginning Wednesday, February 2.

SOCIAL SCIENCE:

Additions: SS-166, Social Control and Dispute Settlement - Barbara Yngvesson. See supplement #1 for description.

SS-174, Symbolic Systems - Barbara Yngvesson. See supplement #1 for description.

SS-204, Perspective on Legal Behavior: Law as a Cultural System - Barbara Yngvesson. See supplement #1 for description.

HUMANITIES AND ARTS:

Deletions: HA-187, Thomas Jefferson - Francis Smith

HA-245, Science, Art, and Metaphysics in the Enlightenment - Stanley Goldberg and Joanna Hubbs


HA-245, The Irrational Enlightenment - Joanna Hubbs. See supplement #1 for description.

NATURAL SCIENCE AND MATHEMATICS:


Additions: NS-105/NS-205, De Rerum Natura - see supplement #1 for the listing of the proposed minicourses.

NS-113/NS-213, Botany - Raymond Coppinger, Merle Bruno, Kenneth Hoffman

This course is designed to give the student a practical view of what's going on in the forests around him. We will spend the first part of the course studying basic plant and tree classification and physiology. With this background we will attempt, among other things, to answer questions such as the following:

How are forests formed?
What constitutes the history of a forest?
Why do certain plants thrive only in specific areas?
What determines the edibility of plants?
What are some of the methods utilized in forestry management and why are they used?
Why can only God make a tree?

Because of our easy access to the forest, we will be able to investigate the various relationships among the plants and trees that inhabit the area. We will test our skill at
Supplement #2 to Course Bulletin, Spring Term 1972/page 2

Course NS-113/NS-213, Botany: (CONT)

plant and tree identification in the field and will investigate related topics such as the politics
of forestry.

Preliminary course curriculum: basic plant physiology (Bruno); history of a
forest (Coppinger); plant identification - primarily non-Latin nomenclature (Hoffman); forest
management (Coppinger); and politics of forestry (Coppinger).

There will be selected readings picked by the three instructors. This class
will meet twice a week, with field sessions to be arranged. Times: Monday 1-5 and Thursday,
10-12.

NS-119, A Plan for Hampshire’s Wastes - Lissy Coley*, Thomas Griggs*, and
Lynn Miller.

The ultimate goal of this course is to design and implement a composting and re-
cycling system for treatment of Hampshire’s refuse. We would like to examine the chemical,
economic, microbial, and social aspects of waste disposal here at the College.

At the beginning of the semester reading will enable the participants to understand
presently operating systems which are salvaging and composting refuse. This will give us some
basis for practical application of waste treatment ideas here on campus. Instruction will be avail-
able for those students interested in learning laboratory techniques and economic analysis for use
in the course. Small scale experiments will be arranged for determination of the optimum condi-
tions available for composting at Hampshire.

Once information and data collection has begun, the participants will cooperatively
draw up a plan for disposal of Hampshire refuse. As part of the process, we shall examine costs
and benefits as a problem in economics. Finally, we will partially or fully implement our plan,
depending on financial resources.

The students will do individual or group projects in their specific areas of
interest, with class meetings being used as an opportunity to discuss progress, possibilities, and
directions of the project. No previous science background is necessary for enrollment in the
course. Laboratory work and experiments in the area of waste decomposition and microbiological
activity in a compost pile will be possible under the direction of Lynn Miller, and economic aspects
of the course will be developed with help from Margaret Howard. This course was designed by
Thomas Griggs and Lissy Coley who will be in charge of the day-to-day conduct of it.

Time: Thursday, 9-12.

*Thomas Griggs and Lissy Coley are second-year students.

NS-109/NS-209, Experimental Psychology - Edward Krieckhaus* and Merle Bruno
NS-111/NS-211, Neurobiology of Memory - Masha Greenstein* and Merle Bruno

For the first six weeks the two courses will meet jointly. Then the groups will
separate. There will generally be two two-hour sessions per week. Occasionally a third session
Courses NS-109/NS-209 and NS-111/NS-211 (CONT)

will be scheduled. All interested students should come for the first meeting (10:00 a.m., Wednesday, February 2, Room 106, Academic Building) so that a suitable meeting time and place can be arranged.

The following is a summary of what subjects will be discussed:

February: philosophy (mind-body problem); psychological research techniques; review of cell structure and function (DNA--RNA--protein) histochimical and cytological techniques; gross anatomy of the vertebrate brain studied from an evolutionary point of view; organization of the central, peripheral and autonomic nervous systems.

March: generalized vertebrate neuron; fine structure and function of the neuron and its organelles; propagation of the nerve impulse; ultrastructure of chemical and electrical synapses; nature of neurotransmission.

**Experimental Psychology:**

March: biology of mind.
April: biology of mind.
May: biology of mind.

**Neurobiology of Memory:**

March: neuronal membrane -- a study in detail of its fine structures; the role of the outer coat of the membrane in information storage; structure and function of neurotubules and enurofibers.

April: mechanism of axoplasmic transport; neuronal specificity during development, i.e., electrical, chemical and mechanical theories of how neural pathways form; discussion of the possible role of glycomacromolecules in interneuronal recognition; memory: electrophysiological and anatomical theories; hippocampus and memory; memory: biochemical--macromolecular theories; discussion of the role of nucleic acids.

May: DNA, RNA, proteins and mucoids (glycoproteins and gangliosides) in learning and memory.

*Edward Kriekhaus is an Associate Professor of Psychology at the University of Massachusetts.*

*Masha Greenstein received her doctorate at Yale University and has done post-doctoral work at Albert Einstein School of Medicine.*
Minicourse Schedule

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Title</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>Human Nutrition</td>
<td>Miller</td>
</tr>
<tr>
<td></td>
<td>Nerve-Muscle Systems</td>
<td>Bruno</td>
</tr>
<tr>
<td></td>
<td>Milieu Interieur</td>
<td>Foster</td>
</tr>
<tr>
<td></td>
<td>Matter and Life</td>
<td>Parker</td>
</tr>
<tr>
<td>5-8</td>
<td>Natural History of Infectious Disease</td>
<td>Miller</td>
</tr>
<tr>
<td></td>
<td>Cytological Housekeeping</td>
<td>Foster</td>
</tr>
<tr>
<td></td>
<td>Invertebrate Nervous Systems</td>
<td>Bruno</td>
</tr>
<tr>
<td>9-12</td>
<td>Life in a Compost Heap</td>
<td>Miller</td>
</tr>
<tr>
<td></td>
<td>Integration Mechanisms in Plants</td>
<td>Bruno</td>
</tr>
<tr>
<td></td>
<td>Immunology</td>
<td>Parker</td>
</tr>
</tbody>
</table>

Course descriptions for the first set of minicourses (weeks 1-4) are given below.

Minicourses are scheduled to meet Tuesday and Thursday afternoons, the hours to be arranged with individual instructors. In addition, discussion sessions for the entire class are scheduled for Tuesday, 8-10 a.m. and Friday, 1-3 p.m. The Tuesday sessions will be devoted to lecture and discussion of integration and organization in biological systems, beginning with the molecular level and progressing to the level of the ecosystem. The Friday sessions will take up a variety of special topics derived from the minicourses. Topics for the first four weeks are as follows:

2/4    | C. Hopkins Cafe Mg                | Parker     |
2/18   | Vitamin C                          | Miller     |
2/10   | Why L instead of D?               | Parker     |
2/25   | Neurumuscular Junctions           | Bruno      |
3/3    | Cyclic AMP                         | Foster     |

It is our hope that students will participate actively in the discussion sessions and that they will assume some of the responsibility for developing additional topics after the first four weeks.

Minicourse I - Nerve-Muscle System:

Coordinated movement in animals occurs as a result of information which is transmitted through the nervous system to muscles. Electricity is generated when these systems are active and we can gain insight into how they work by measuring that electricity as well as by observing the movement of the muscles. We will use some of these measuring techniques to study basic principles of nerve and muscle activity in several simple examples and will read and discuss pertinent literature.

Minicourse II - Milieu Interieur:

"Milieu Interieur" was a term coined 100 years ago by Claude Bernard, who was one of the first to recognize that higher organisms have elaborate mechanisms to maintain their
Minicourse II - Milieu Interieur: (CONT)

Internal environment constant, so that their cells could be more or less independent of their external surroundings. This minicourse will examine some of these mechanisms, such as:

- control of pH - interplay between lungs, blood and kidneys
- fluid balance - control of electrolyte and water content of cells, membranes and osmotic pressure
- absorption, secretion, and excretion - control of blood sugar, urea and ammonia.

I hope we can spend a fair amount of time in the laboratory where the first task will be to become familiar with the properties of buffers. We can use ourselves as guinea pigs to look at many of the control mechanisms, as well as other unsuspecting species.

Christensen, H. N., pH and Dissociation (programmed text).

Minicourse III - Human Nutrition:

Members of this course will read several sorts of literature about nutrition. We will read and discuss a standard college text on this subject while comparing this material with more popular literature (Adelle Davis, Francis Lappe, Roger Williams, etc.) as well as with some of the primary literature on Human Nutrition.

Class members will be asked to divide into small groups (4-8 members) to prepare comparisons of some special diet or diets with the standard text as a reference. For example, several students interested in Zen macrobiotic diets would analyze these diets for protein and vitamin sufficiency. Student groups might also investigate the original sources for insight about specific subjects. For example, some students might analyze the "minimum daily requirements" for vitamins as established in several countries.

We will not have any formal laboratory in this course, although students may work in groups or independently on projects of their own devising. I intend to work on a plan for a nutritional survey of Helayoke children and would welcome the assistance of others.

P. M. Lappe, Diet for a Small Planet, Ballantine Books, Inc. N. Y. 1971
L. Pauling, Vitamin C and the Common Cold, W. H. Freeman, San Francisco, 1970
R. J. Williams, Nutrition Against Disease, Environmental Prevention, Pitman Pub. Corp. N. Y. 1971
Your own favorite diet or cook book.
Minicourse IV - Matter and Life:

Recent advances in biology have led to an understanding of basic life processes in terms of the chemistry of small molecules, proteins, and nucleic acids. Biological specificity can be explained in terms of coordinated weak chemical interactions between the active sites of proteins and the groups of the molecules with which they interact; both the astounding stability of the inheritance of genetic information and the inescapable small variations which have led to the incredible diversity of living systems have their basis in the chemistry of DNA.

These concepts form a basis for understanding the higher levels of biological organization from cell structure to ecology. They also enable an approach to the previously imintelligible problem of the origin of life on earth.

This course also might be called biochemistry in a nutshell.
HAMPShIRE COLLEGE

Supplement to Course Bulletin, Spring 1972

The following changes have been made in the course offerings for Spring, 1972. Please check this listing carefully before registering for any courses.

SOCIAL SCIENCE:

Additions:

SS-166, Social Control and Dispute Settlement - Barbara Yngvesson

Man has devised a wide variety of methods of social control, ranging from the most subtle form, barely distinguishable from day-to-day social interaction, to highly structured and formalized regulatory mechanisms. Social control behavior has been investigated by both sociologists and anthropologists, in our own society and cross-culturally. While the sociological literature covers a wide range of social control data, anthropologists have been particularly interested in dispute settlement, investigating settlement procedures, remedy agents (such as adjudicators, negotiators, arbitrators, go-betweens), and the kinds of social factors that might be linked with dispute settlement forms.

Using some of the available literature as background material, it will be the aim of this seminar to investigate mechanisms of social control, and some of the alternative dispute settlement forms available in the Amherst-Northampton-Springfield area. For example, we might look at settlement mechanisms such as courts of various kinds, direct action confrontations (boycotts, sit-ins) (depending on availability), welfare agency procedures, intra-community procedures utilizing mediation, etc.

The course will be heavily oriented towards field-work in the community. Class meetings will be devoted to lectures (on background material regarding dispute settlement and ways in which this can be structured, and the relation of this to group values and forms of social organization) and discussion, and will be aimed at developing a meaningful framework within which the projects can be related.

Times: Monday 3-5 and Wednesday 2-3

SS-174, Symbolic Systems - Barbara Yngvesson

Man is a symbol-creating animal who uses this capacity to structure the environment (natural and social) within which he operates. Social interaction can be viewed as a process of communication through systems of symbols: The most obvious of these is language, but there are others, such as religious systems, systems of exchange of women in marriage, systems of legal norms and practices, etc. These symbolic systems are meaningful to persons sharing the same culture, but must be decoded if they are to be understood by an outsider. One of the problems anthropologists have to face in studying and attempting to understand the behavior or people in other societies -- or in sub-groups of our own society -- is that of translating alien symbolic systems into terms which are understandable to outsiders, and which will allow for a variety of systems to be compared. Comparison, with a view ultimately to isolating cultural patterns and processes which are universal, is one of the goals of anthropology.

In this course we will investigate the "meaning" underlying symbolic behavior by focusing on three areas of social life (religion, law, and marriage practices), using materials from Africa, Central America, and North America. Our problem will be to investigate whether common themes,
styles, or forms of behavior can be found cross-culturally, underlying the diverse systems of
symbols within which behavior is coded. We will be particularly interested in the problem of
comparing cultural patterns and processes in so-called "primitive", or less economically
developed societies, with those in economically developed societies such as the United States.
In this kind of comparison the translation problem is particularly acute, since the symbolic
systems dealt with may be highly diverse and may give the appearance of discontinuities in form
and process where in fact they are none.

Texts for the course will include: Spradley and McCurdy, Conformity and Conflict: Read-
ings in Cultural Anthropology; Spradley, You Owe Yourself a Drunk; and Douglas, Purity and
Danger.

Students will be expected to complete your field or library research projects as part of the course
requirements.

Times: Monday 1-2:30 and Thursdays 10-12

SS-204, Perspective on Legal Behavior: Law as a Cultural System - Barbara Yngvesson

What is a legal system? How can its boundaries be defined? What can the structure of
a group's "legal world" tell us about other aspects of its social life? (i.e. How are "legal
world" and "social world" related?) Given a particular legal system what rules of the game per-
tain within and across the boundaries of this system? These are some of the questions that might
be raised when law is investigated from the perspective of an anthropologist. In this course the
anthropological perspective will be focused particularly on ethnic groups in plural societies (such
as our own), and on the problem of how the boundaries separating these groups are defined and
maintained. Specifically, we will be interested in the question of multiple legal systems (within
the bounds of what is considered one nation) and of relations within and across the boundaries of
these systems.

A contrast to this approach to law and legal pluralism will be provided by guest lecturers
from other disciplines, including a lawyer and a humanist.

An aim of the course is to work towards developing theories regarding the place of law in
culture and society. It is hoped that a multi-faceted approach to law will provide us with some new
ideas regarding the relationship of legal phenomena to social phenomena by placing "law" in a
different perspective than that from which it is usually viewed.

The course will be conducted through lectures, films, field visits and discussion. Field
and/or library research projects will be required.

Times: Wednesday 10-12, and Friday 12-1

Time Change:

SS-117, Politics of Education will meet Monday 3-5, Thursday 11-12.

HUMANITIES AND ARTS:

Deletions:

HA-187, Thomas Jefferson - Francis Smith - has been dropped.
HA-245, Science, Art, and Metaphysics in the Enlightenment - Joanna Hubbs and
Stanley Goldberg - has been dropped.
Supplement to Course Bulletin, Spring 1972/page 3

HUMANITIES AND ARTS: (cont)

Time Changes:

HA-112, What Happens at the Movies?, will meet Wednesday 1:30-4:30.
HA-159, Structures and Materials of Music, will meet Tuesday 3-4, Wednesday 3-4, and Friday 9-10.
HA-175, Russia and the West, will meet Tuesday 1-3, and Friday 8-10.

Additions:

HA-109/HA-209, Hampshire Graphic Design - Arthur Hoener and Thomas Corey*

This course will deal with the problems of the commercial artist on two levels. On the first and most immediate level, we will concern ourselves with running a Graphic Design Service. We will print and design posters for clients in the valley, and in so doing we will deal with the problems of financial organization, production schedules, and most importantly, successful graphic design. The students will design each poster and then print it.

We will explore the possibilities and flexibility of our press using methods such as letterpress, paper printing, photographic plates, woodcuts, and silkscreen. On a more abstract level, we will look at and discuss the work of well known graphic designers and commercial arts. We will read and discuss material concerning the subject of graphic design today.

Through this course we hope to achieve an understanding of successful graphic design, an the situation of the graphic designer in business today.

The class will meet once a week for an hour but students will be expected to spend large amounts of time working out of class with Hoener, Corey, and each other.

Time: Wednesday 11-12.

*Thomas Corey, a Division II student in Humanities and Arts, will share the teaching responsibilities with Mr. Hoener.

HA-245, The Irrational! Enlightenment - Joanna Hubbs

What is the relationship of the Age of Reason to Romanticism? This will be the central question in a seminar on France in the latter half of the eighteenth century. Our approach to the problem will be through an examination of the philosophical thought of the age as it is reflected in the novel. We will consider this emerging literary genre as a vehicle for the ideas of the philosophes and will examine the extent to which attempts to build a world view on the basis of rationalism and empiricism lead to irrational conclusions.

We will read works by Diderot (Jacques le fataliste, Rameau's Nephew), Richardson (Pamela), Marivaux (La vie de Marianne), Rousseau (Confessions, or La Nouvelle Heloise), Saint-Pierre (Paul and Virginia), Laclos (Liaisons dangereuses), Sade (Justine), and Goethe (Faust, The Sorrows of the Young Werther) against a background of interpretations of Enlightenment thought, C. Becker, The Heavenly City of the Eighteenth Century Philosophers; E. Cassirer, The Philosophy of the Enlightenment; F. Gay, The Enlightenment: An Interpretation; P. Hazard, European Thought in the Eighteenth Century; L. Crocker, An Age of Crisis: Man and World in Eighteenth Century French Thought.

Time: Tuesday 3-5 and Friday 10-12.
Supplement to Course Bulletin, Spring 1972/page 4

NATURAL SCIENCE AND MATHEMATICS:

Deletion:

NS-230, Science, Art, and Metaphysics in the Enlightenment - Joanna Hubbs and Stanley Goldberg - has been dropped.

Time Changes:

NS-123, World of Mathematics, will meet Tuesday 10-12, Wednesday 1-2, Friday 1-2. All modules in this program meet at the above times.

NS-124, Calculus Workshop, will meet Tuesday 9-10, Wednesday 9-10, Friday 1-2, or Tuesday 9-10, Wednesday 1-2, Friday 1-2.

NS-126, Elementary School Mathematics, will meet Monday evenings for two hours and Tuesday 10-12.

NS-141, Perspectives in Experimental Science, Courtney Gordon will teach both her Modules on Tuesday 10-12 and Friday 2-3.

Additions:

NS-105/NS-205, De Rerum Natura - List of Proposed Minicourses:

- Nerve-Muscle Systems
- Neurophysiology of Invertebrate Central Nervous Systems
- Integration Mechanisms in Plants
- Cytological Housekeeping (How cells keep things in or out, move things around and control what goes on inside.)
- Milieu Intérieur
  (A study of how organisms work to maintain a constant internal environment.)
- Human Nutrition
- Natural History of Infectious Disease
- Life in a Compost Heap
- Immunology
  (Offered as either a semester-long course or a set of three modules. Students may take a single module if they wish.)

Students need not sign up for specific minicourses at this time, but can register for the program by registering for NS-105 or NS-205. More detailed minicourse descriptions and a schedule will be distributed shortly before the course begins.
January Term at Hampshire College offers a deliberate change of pace from the Fall and Spring Terms — it is a unique opportunity to focus on a single topic for a full month. Students may design individual projects or select from among a remarkable range of courses. Both projects and courses may take a variety of forms: the study of a specific subject in depth, practical work or training, field work and travel, learning a skill or craft, collaborative study of a particular topic from different perspectives. It is worth noting that any qualified member of the Hampshire community may teach a course; courses have been offered this year by both students and staff, as well as by the regular faculty.

Judging from Hampshire's first-year experience, January Term means several things: for those who stay, the campus is smaller and more intimate; people are busy, but seem more informal; for those who leave on projects or courses, the change of scene is important for their own rhythms; for everyone, the premium on self-direction increases — yet the most common complaint is that the month is too short.

Whether choosing a course or particularly a project, each student should spend time planning the month with his or her adviser; these conversations may be crucial to the successful use of that time.

Whatever a student's choice for January, he or she will be asked to evaluate the experience at the term's end. The central criterion for this evaluation remains what it was in The Making of a College: what would be expected would be as much honesty about his Midwinter Term experience and his own part in it as the student could manage: his motivations to do what he did and how they appeared after the fact; how he felt about how he did the things he did; what, if anything, they meant as part of the process of his life; what his choice and his response to it added up to. This evaluation is a private interchange between the student and his advisor or supervisor; it will be part of a student's permanent file only if he wishes to make it so. In practice, much of the activity of January Term has found its way into Divisional examinations.

An overwhelming majority of students and faculty at Hampshire found the first January Term a good and valuable experience; we hope you find the second one more so.

Carolyn Atkinson
January Term Coordinator
<table>
<thead>
<tr>
<th>Title and Instructor</th>
<th>Registration Number</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indians</td>
<td>JT 110</td>
<td>4</td>
</tr>
<tr>
<td>Kenneth Hoffman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archeology</td>
<td>JT 112</td>
<td>5</td>
</tr>
<tr>
<td>Robert Mansfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art, Artists, Museums, Monuments</td>
<td>JT 116</td>
<td>6</td>
</tr>
<tr>
<td>Jerome Liebling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning Alchemy</td>
<td>JT 118</td>
<td>7</td>
</tr>
<tr>
<td>Nancy Lowry, Joanna Hubbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Oral Tradition</td>
<td>JT 114</td>
<td>8</td>
</tr>
<tr>
<td>Eugene Terry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children of the World</td>
<td>JT 120</td>
<td>9</td>
</tr>
<tr>
<td>Courtney Gordon, Louise Farnham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discovering &quot;Herstory&quot;</td>
<td>JT 124</td>
<td>10</td>
</tr>
<tr>
<td>Margaret Howard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics, Economies, and Economists</td>
<td>JT 126</td>
<td>11</td>
</tr>
<tr>
<td>Frederick Wever</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Fact&quot; and &quot;Fiction&quot;: Where the Truth Lies</td>
<td>JT 130</td>
<td>12</td>
</tr>
<tr>
<td>Charles Atkinson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Studies in the Caribbean</td>
<td>JT 122</td>
<td>13</td>
</tr>
<tr>
<td>Knolly Barnes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genius and Geniuses</td>
<td>JT 126</td>
<td>14</td>
</tr>
<tr>
<td>Steven Shuk, Robert Bell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great Texts in Western Spirituality</td>
<td>JT 132</td>
<td>15</td>
</tr>
<tr>
<td>Sheila Houle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingmar Bergman: A Festival and Four Mini-Workshops</td>
<td>JT 136</td>
<td>16</td>
</tr>
<tr>
<td>John Baettiger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectuals and Social Change</td>
<td>JT 138</td>
<td>17</td>
</tr>
<tr>
<td>James Koglin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent Life in the Universe</td>
<td>JT 140</td>
<td>18</td>
</tr>
<tr>
<td>Herbert Bernstein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title and Instructor</td>
<td>Registration Number</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>------</td>
</tr>
<tr>
<td>Intensive Workshop in Modern Dance</td>
<td>JT 142</td>
<td>19</td>
</tr>
<tr>
<td>Francia McClellan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to the Recorder</td>
<td>JT 134</td>
<td>20</td>
</tr>
<tr>
<td>James Haden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journey into Nightmare or the Gothic Novel</td>
<td>JT 144</td>
<td>21</td>
</tr>
<tr>
<td>Its Predecessors and Progeny</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linda Sorensen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kayak Trip to the Southwest</td>
<td>JT 145</td>
<td>22</td>
</tr>
<tr>
<td>D.D. Campbell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make a Movie</td>
<td>JT 148</td>
<td>23</td>
</tr>
<tr>
<td>Elaine Hayes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measures of Man</td>
<td>JT 150</td>
<td>24</td>
</tr>
<tr>
<td>Neil Stillings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men and Children</td>
<td>JT 152</td>
<td>25</td>
</tr>
<tr>
<td>J.J. LeTourneau</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Mini-Expedition</td>
<td>JT 170</td>
<td>26</td>
</tr>
<tr>
<td>David Roberts, Ed Ward</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Improvisation</td>
<td>JT 154</td>
<td>27</td>
</tr>
<tr>
<td>Randall McClellan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The New Man</td>
<td>JT 156</td>
<td>28</td>
</tr>
<tr>
<td>Robert Marquez</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old and New Models of American Politics</td>
<td>JT 192</td>
<td>29</td>
</tr>
<tr>
<td>Richard Alpert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Origin of Man and Dogs</td>
<td>JT 158</td>
<td>30</td>
</tr>
<tr>
<td>Raymond Coppinger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population and Social Policy: The Politics of Nation Moving</td>
<td>JT 160</td>
<td>31</td>
</tr>
<tr>
<td>Stephen Salyer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Rad and the Black: A Global Setting for Amherst Rocks</td>
<td>JT 162</td>
<td>32</td>
</tr>
<tr>
<td>Anne Gilbert, Susan Posner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Rights of Children</td>
<td>JT 164</td>
<td>33</td>
</tr>
<tr>
<td>Lester Maizr</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title and Instructor</td>
<td>Registration Number</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
<td>------</td>
</tr>
<tr>
<td>Seminar on Analytic and Projected Study of the Hampshire Academic Program</td>
<td>JT 166</td>
<td>34</td>
</tr>
<tr>
<td>Ernst Borinski, Neil Stillings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Seminar on Dostoevsky</td>
<td>JT 172</td>
<td>35</td>
</tr>
<tr>
<td>Robert Radin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>String, Trees and Languages</td>
<td>JT 174</td>
<td>36</td>
</tr>
<tr>
<td>William Marsh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundials</td>
<td>JT 168</td>
<td>37</td>
</tr>
<tr>
<td>T.W., Moore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanning</td>
<td>JT 176</td>
<td>38</td>
</tr>
<tr>
<td>Marie Bruno</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre Workshop</td>
<td>JT 178</td>
<td>39</td>
</tr>
<tr>
<td>Timothy Landfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Vaklovsky Affair</td>
<td>JT 180</td>
<td>40</td>
</tr>
<tr>
<td>Stanley Goldberg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Who's Come a Long Way, Baby?&quot; or The Second Sex in Academe and the Professions</td>
<td>JT 182</td>
<td>41</td>
</tr>
<tr>
<td>Miriam Slater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witchcraft</td>
<td>JT 184</td>
<td>43</td>
</tr>
<tr>
<td>David Smith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Women's Movement</td>
<td>JT 186</td>
<td>44</td>
</tr>
<tr>
<td>Sharon Roberts, Gayle LaTourneau</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Workshop in Handbuilding with Clay</td>
<td>JT 188</td>
<td>45</td>
</tr>
<tr>
<td>Barbara Linden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Workshop in the Performance of Medieval and Renaissance Music</td>
<td>JT 190</td>
<td>46</td>
</tr>
<tr>
<td>Raymond Rosenstock</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This will be an informal seminar. We will spend roughly the first week in developing a common background knowledge of the history and current problems of American Indians. For the rest of the month, each of us will pursue the topic he or she finds most interesting. This might be the history of one specific tribe, the current status of the Red Power movement, Indian religions, etc. During this period we will meet approximately three times a week to share and discuss what we learn. In addition, we will schedule a number of films relating to Indians, and will probably have several guest speakers. At some point we will make a trip to New York to visit the Haye Foundation Museum of American Indians. In addition, we might make a few trips locally to get some sense of the Indian traditions in this area.

Enrollment: 14

Special Costs: None
Arcology

Robert Mansfield

As a foundation for a civilization that will replace the polluted, machine-mad, dehumanized world that is degenerating before our eyes, the arcological idea refreshes us with a vision of natural order.

The concept of arcology is a unity of architecture and ecology. Architecture, the art and science of structure; ecology, the general study of the relations of all living organisms to their environment and to each other.

The arcological philosophy created, professed, and fostered by Paolo Soleri advocates: "A physical system that justly consents and fosters the high compression of things, energies, logistics, information, performances, thinking, doing, living, learning, playing into urban-human integrals that are the essential, critical, vibrant phenomenon of life at its most lively and compassionate; the state of grace (esthetogenesis) possible for a socially and individually healthy man on an ecologically healthy earth."

The arccological commitment addresses itself to...

- The sheltering of an exploding population
- The ecological debacle
- The problem of waste affluence
- The problem of pollution
- Land, air, and water conservation
- Desagregating people, things and performances
- Survival

The student will determine the nature of his or her project after consultation with me. The first three weeks of the January Term will be used for field research with the last week being used for comparing experiences and projects back at Hampshire.

A possible project for the January Term-- to go to Arizona to live, work and study with Paolo Soleri at the Cosanti Foundation.

Enrollment: 10

Special Costs: Individual
During the month of January, the group will visit with painters, sculptors, photographers, architects, in their studios and galleries. There will be visits to important museums to meet with curators and view public collections.

Boston, New York, Philadelphia, and Washington will be the principal cities visited, but a specific itinerary will be determined by the interests of the group.

Two or three days of each week will be spent travelling and visiting the cities, artists, and museums. It is essential that the students as individuals or as a group be able to arrange for transportation and lodging during the periods off campus.

Enrollment: 10
Special Costs: Individual expenses for transportation and lodging
Beginning Alchemy

Nancy Lowry and Joanna Hubbs

Alchemy through the ages has had a profound effect on people, their thoughts and activities. In this course, we will study the relationship of alchemy to other fields of human endeavor.

In the first part of the course, we will read and discuss together one or two historical surveys of alchemy, and also a few other selections such as Jonson's "The Alchemist." Then each student will read, report, and discuss according to his or her own interests. Possible topics would be psychology and alchemy, alchemy and religion, the transition from alchemy to chemistry, the relationship between magic and alchemy.

Enrollment: 28
Special Costs: None
Black Oral Tradition
Eugene Terry

I will act as coordinator and/or advisor for a small group of students who will collect from sources they know (family, friends, etc.) any materials that might constitute a part of American Black culture — language, songs, stories, family and personal histories. After initial discussions on techniques of collecting and the types of materials desired, the students will go to their sources with tape recorders and notebooks, collect what they can, return to the campus where the materials will be jointly edited, transcribed, and, depending upon the success of the collecting, published for campus distribution.

The methods the students will use are those of the collector of folklore, but their collections will not be limited to those things generally covered by that term. A better term is oral tradition. Though large amounts have been gathered in such sources as the Journal of American Folklore, books on Negro folklore, and the work of The Federal Writer’s Project which resulted in books like B. A. Botkin’s Lay My Burden Down, such a collection would test the vitality of the oral traditions among Hampshire students. Further, the act of collecting from sources close to home, recognizing the value of the material and taking pride in it can be of great value to the student aside from the practice of a method of inquiry in the field.

Those students who started projects last January Term may complete them this time.

Enrollment: 10

Special Costs: None
Children of the World

Courtney Gordon and Louisa Farnham

Child-rearing methods have differed not only throughout the ages, but very widely across the world today. We will study the way children are brought up in various cultures and attempt to see how the methods affect the adult cultures to which these children belong.

Whenever possible, we will gain our knowledge directly such as by visiting local nursery schools or discussing the subject with experts in the field. The class will help decide the books to be read and the orientation of the course. Possible books include:

- *Chrysanthemum and the Sword* by Ruth Benedict
- *The Children of the Dream* by Bruno Bettelheim
- *The Worlds of Childhood* by Urie Bronfenbrenner
- *US and USSR* by Selma Fraiberg
- *The Magic Years* by Mary Montessori
- *Summerhill* by Alexander Noll
- *Baby and Child Care* by Benjamin Spock
- *Six Cultures* by Beatrice Whiting

Class format: 4 two-hour classes per week plus field trips

Enrollment: 20

Special Costs: some transportation money
Discovering "Herstory"

Margaret Howard

The history of women, particularly that part of history made up of daily events rather than notable individuals, lies buried.

During January Term, I would like to bring together a group of people interested in attempting the considerable task of unearthing some of this history. Possible sources range from novels to commission reports, letters to union documents, oral histories to publications of Women's Bureau.

The valley had considerable resources for discovering women's history. Students who wish to spend some or all of their time in some other area with access to a major library would also be welcome in the course, perhaps as a semi-independent study, and should see me before the end of fall term.

I hope that this course will produce at least a beginning bibliography of sources on the history, particularly the social and economic history, of women. I would expect each person to contribute to such a bibliography, perhaps each focussing on a single topic or type of source material.

Some students from this course might wish to act as assistants in my Economic History of Women course during spring term.

Students should have read Eleanor Flexner, Century of Struggle (in paper), by the first class.

Enrollment: 14

Special Costs: Individual travel expenses for those wishing to investigate sources in Boston, New York, etc.
Economics, Economies, and Economists

Frederick Weaver

How can we possibly begin to think systematically about issues like unemployment, inflation, balance-of-payments deficits, poverty amidst affluence, monopoly power, etc. when our industrial society is so large and complex? In this January Term course, we will read Daniel Sui's new book, which I consider to be the best introduction to the analytical tools economists use to approach such problems. The book is clearly written, conveys considerable knowledge about our economy and society, and emphasizes economic theory's usefulness (and limitations) in addressing human concerns rather than its abstract elegance and logical beauty. Completion of this course will satisfy the prerequisite requirements for admission to virtually all undergraduate economics courses at the other four campuses in the Valley.

Enrollment: 14

Special Costs: None
"Fact and "Fiction": Where the Truth Lies

Charles Atkinson

The Crucible (Arthur Miller), The Confessions of Nat Turner (William Styron), All the King's Men (Robert Penn Warren) are in some way related respectively to the Salem witch trials, the slave rebellion of Nat Turner, the career of Huey T. Long. But the nature of their kinship is not clear. Character and event are recorded and interpreted in historical documents aimed at accurate explanation. What happens then, when the event, or a historical record of it, is transformed into literature, with its own claims of authenticity? What happens to the history? to the literature? to the original event? How was the record of human life understood by a historian? by a writer? Put more directly, what can two versions of the truth tell us — and obscure from us — about what matters in a life?

The examples are numerous of literature corresponding to specific historical event: Melville, Fitzgerald, Sinclair, Steinbeck, Heller, have all struggled with the translation. As a class we will select 4 or 5 of these topical pairs (documents and literature) to pursue together; my only constraint is that for reasons of time and continuity, they should be drawn from American culture.

In the end, as a matter of course, we will discover where the truth lies.

Enrollment: 10

Special Costs: None
Field Studies in the Caribbean

Knolly Barnes

Trip to Grenada and St. Lucia

The Caribbean Studies Program plans a trip to the islands of Grenada and St. Lucia during the January Term. A student making the trip will be expected to participate in an orientation program designed to better acquaint him with the social, economic, and cultural character of the territory.

On the islands, students will be involved in a work program suited to their individual interests and capabilities and the host island's needs (e.g., assistance in elementary or secondary schools, libraries, etc.) and will be given the opportunity of living with a Caribbean family during their stay.

The trip should therefore provide an excellent opportunity for first-hand experience of living and working conditions in the island and at the same time permit the students to better appraise and appreciate cultures outside their own.

Projects to Individual Islands

A student or group of students wishing to pursue a specified project in the Caribbean may also be accommodated. Likelihood of accommodation is greatest for special projects involving the islands of Jamaica, Barbados, and Trinidad (the three islands having campuses of the University of the West Indies), St. Kitts, St. Lucia, and Grenada.

Students desirous of pursuing special projects should get in touch with the course coordinator as soon as possible to determine whether their projects can be accommodated and to obtain assistance in the planning of the projects and establishing the necessary contacts in the islands.

Enrollment: No maximum

Special Costs: Approximately $400
Genius and Geniuses

Steven Shok and Robert Bell

During January, we would like to examine the nature of genius. In order to do this, we propose to look at two "geniuses" drawn from very different fields. Because of our backgrounds, we suggest Marx and Newton. Through a study of their lives in relation to their work, we will attempt to decide just what genius is, and what common characteristics those who are universally labelled geniuses share.

We will begin with an examination of the life and writings of Marx. After a brief discussion of the historical setting in which Marx found himself, we will proceed to look at his childhood experiences, his life and writings in his early twenties, before he became a "Marxist" himself, contrasting styles of thought present in his writings, the controversies within the First International, and his relations with his friends and political associates. We will read some of the early writings in Easton and Guddat's collection of the work of the Young Marx, excerpts from Capital, The Eighteenth Brumaire, and the Manifesto, as well as selections from Marx's letters and from some biographies.

It seems appropriate to begin a study of Isaac Newton with an examination of the young boy Isaac. The biography of Newton by Frank Manuel supplies an interesting if not instructive Freudian analysis of the unusual set of circumstances in which Newton lived his early life. With this background, we can move on and follow Newton through his academic career at Cambridge. Concurrently, we will trace the state of scientific thought at this time which ultimately became Newtonian thought. We will look at selections from Newton's Principia and some of his other works on Natural Philosophy. Newton was immediately and reverently recognized by his scientific contemporaries as well as by the common man. In his lifetime, he was identified with the great and the good. We hope to elucidate the greatness and make sense out of a life which is, more accurately, very enigmatic.

Enrollment: 14

Special Costs: None.
Great Texts in Western Spirituality

Sheila Hulse

The reading material for this course will be a selection of great devotional (rather than theological in the specialized sense of the term) literature in the Western Christian tradition. Texts will range from such medieval works as Thomas A. Kempis' Imitation of Christ to contemporary works. Students will be invited to suggest texts in this area that they have wanted an opportunity to read.

Enrollment: 14

Special Costs: None
Ingmar Bergman: A Festival and Four Mini-Workshops

John Boettiger

We will bring to Hampshire in January, for public showing and for intensive workshop review, most of the major films written and directed by Ingmar Bergman. No one in the world of films had devoted himself as creatively and unsparedly to the exploration of the darker sides of the human psyche, and few have as seriously explored through film the dimensions of personal religious experience in a culture for which the institutional ground of religion has crumbled.

Four week-long workshops will be offered, each limited to about twelve participants, and each devoted to a careful exploration of two of Bergman’s films. With the films available for workshop screening, and in most cases with the screen plays available for reading, members of the workshops will explore the nature of Bergman’s art, the human drama portrayed, and their own personal responses to the films. Psychologically, Bergman’s films tend to be heavy experiences: the inner worlds he opens to us are dark and tumultuous ones, perhaps especially so as we glimpse in them recognitions of our own. Consequently, we’ll be taking special care for balance: to see that the workshops allow access to significant experience without overwhelming ourselves in the process. Workshops will meet every day, Monday through Thursday, in morning and afternoon sessions.

The calendar of workshops is noted below. Students are free to register for all four, for one, or for any combination that suits their plans and inclinations. Those who register for less than the entire sequence of four workshops, and who thus will be combining their work on Bergman with other January projects or courses, should bear in mind that the Bergman workshops will engage substantial time and energy during the weeks committed to them.

Workshop I: January 3-7
The Seventh Seal
Wild Strawberries

Workshop II: January 10-14
Through a Glass
Winter Light

Workshop III: January 17-21
The Silence
Persona

Workshop IV: January 24-28
Hour of the Wolf
Shame

Enrollment: 12 per workshop
Special Costs: None
I am by most definitions included in the category "intellectual," and you have elected to spend four years in an environment where intellectual development is given primary focus. The world outside the campus is going through increasingly rapid and often violent social change. What should our role be with respect to this world? What are our responsibilities?

We will examine a number of possible answers to this question, not all possible answers by any means. I am most competent to represent the arguments from the perspective of a radical analysis of the current scene. The following suggested readings will reflect this bias; but, I assume that the members of the class will add to and delete items from the list as we work together during the first meetings of the class.

Noam Chomsky, Knowledge and Power: Intellectuals and the Welfare - Welfare State

*Noam Chomsky, Problems of Knowledge and Freedom

Kolakowski, Leszek, "Intellectuals and the Communist Movement" in: Toward a Marxist Humanism: Essays on the Left Today


J. C. Darot, "Intellectuals and Revolution: Interview with Jean-Paul Sartre"

Jean-Paul Sartre, "Dirty Hands"

Gabriel Kolko, "Epilogue: On Reason and Radicalism" in: The Roots of American Foreign Policy

Staughton Lynd, "Intellectuals, the University and the Movement"

* the printed version of the Bertrand Russell lectures delivered in Britain a couple of years ago and due for publication this fall.

Please stop by my office (G7) for a brief discussion before you register.

Enrollment: 14

Special costs: None
Intelligent Life in the Universe

Herbert Bernstein

The course will be based on the developments of recent biological and astronomical theory. One major resource is the book by Shklovskii and Sagan which the Whole Earth catalog says will "methodically blow your mind."

As with many big questions the informed opinion on the existence of extraterrestrial intelligence has fluctuated throughout history. Currently, the scientific answers are optimistic -- perhaps they over-rate the chances of having life on other worlds.

The course will have at least one introductory lecture (for class members and general public), and will eventually investigate specific topics.

Do our current theories of life's origin imply there should be life on, say, Jupiter?

Do our theories imply that other intelligent life has either chosen not to communicate or exterminated itself?

How can we possibly ever communicate with what may be radically different beings, and what does intelligent mean as applied to them?

Enrollment: 20

Special Costs: None
Intensive Workshop in Modern Dance

Francia McClellan

Smith College and Hampshire College will combine efforts this January. We plan to bring a guest "dance artist-choreographer" to the campuses, who will conduct daily classes in technique and daily rehearsals of a work to be performed at the end of the January Term. There will also be opportunity for individual choreographic efforts, evaluation, and performance. If you are interested in dance, this month offers a unique opportunity to concentrate on this area.

Note: If you are interested, please see Francia McClellan for permission and advising before January Term registration.

Enrollment: 10

Special Costs: None
Introduction to the Recorder

James Hadon

The recorder is a musical instrument of ancient and honorable ancestry stretching back beyond the Middle Ages. It is a type of flute, and in fact until about 1750 it was the main form of flute used in Western music. There is, therefore, a considerable authentic literature of Renaissance and Baroque music written for it by both major and minor composers. It is made in six different sizes, so that it is possible to have a variety of blends of pitch and tone quality.

It is an instrument which is rather easy to learn to play well enough to make satisfying music (though it is hard to become a virtuoso on it), hence it was formerly very widely played by amateurs. A month of intensive work should give anyone devoid of an absolutely tin ear a good basic command, so that he can have a great deal of fun and satisfaction in group playing.

Prior knowledge of music is not essential, though it obviously speeds up the learning process. Depending on how many people sign up, I will give either individual lessons daily or lessons to groups of two, three, or four, or any combination thereof that fits the range of initial experience that people bring. Starting as soon as enough have a basic grasp (which should be about a week), there will be group playing of appropriate Renaissance and Baroque music. A typical day will consist of a lesson, individual practice, and consort playing.

If you already have a recorder, check it out in advance with me; if you plan to take the course and don't have an instrument, consult with me before buying anything. Workable plastic instruments in three of the six sizes are available, and it is best to start out on one of them.

*Enrollment should see me before Christmas vacation to help determine how lessons will proceed.

Enrollment: 14

Special Costs: An instrument, if you do not have one
What is a Gothic novel? An oft asked question which will now be answered in the reverse. A Gothic novel is not a book about the architecture of great cathedrals or invading Germanic tribes. It is also not a form of boring old books. Gothic novels are old if books dating from the 19th century warrant the description and they contain a fair quota of mad monks and monsters, dark dungeons, and virtuous virgins (these may bore some). However, they are also a serious and important form of literature which have made a fair-sized contribution to the development of the modern novel.

An understanding of the previous hypothesis will be attempted in this course using a five-fold approach. First, we will explore where the Gothic novel breaks with the narrative tradition of the 18th century. We will do this by first reading some works typical of this tradition such as: Clarissa, Pamela or Moll Flanders. Then we will begin to explore works typical of the Gothic Transition -- The Castle of Otranto, Vathek, Frankenstein, The Monk, Melmoth the Wanderer, The Devil's Elixir, Dracula, The Vampire, Wuthering Heights, Jane Eyre and The Tenant of Wildfell Hall.

The next area to be discovered will be the contemporary novels -- The Mysteries of Udolpho, Castle Rackrent -- and satires -- Northanger Abbey, Nethergrave Abbey and Crockett Castle -- of this genre of literature.

Most of the aforementioned books are of English and European origin. Next the course will briefly delve into the American Gothic. Books like Pierre, The House of Seven Gables and stories by Poe, such as "The Fall of the House of Usher," will be discussed. Another item that all of these listed books have in common is that with a few exceptions (Jane Austen, the Bronte sisters and Mrs. Radcliffe) they are all written by men.

Therefore, the fifth segment of this course will deal with the modern Gothic novels which are entirely written by women. Part of the raison d'être for this course is to discover why and where this transition in viewpoint takes place. Some samples of modern Gothic novels are: Theodora, The Master of Blacktowel, Sons of Wolf, Lyonesse Abbey, Maulwever Hall, Revenant and The Camelot Cipher (Saffire).

Certainly not all of the books listed will be read, but this course will nevertheless be intended as a strenuous and stimulating literary seminar. As the title implies it is not for the weak of heart or the weak of thumb.

Enrollment: 14

Special Costs: None
Kayak Trip to the Southwest

Sandy Campbell

I would like to take 8 to 12 students kayaking in desert canyons in the Southwest. Several canyons each offer the possibility of 5 to 10 day trips. The group would combine one or two longish trips with several days spent at a base camp. The Outdoors Program van will be available for transportation. Two different regions are attractive: the southern border states for their relatively mild weather, and Utah, where desert rivers remain open for boating even though the weather is cold. I am particularly interested in travel in cold conditions in kayaks and hope to tie in things we learn on this trip with future trips to Alaska.

Proposed Timetable:

Jan 5 Meet at Hampshire, pack
Jan 6-8 Drive to base camp
Jan 9-14 Paddling at and near base camp
Jan 15-22 Canyon trip. For example Vernal, Utah to Moab, Utah on the Green and Colorado Rivers; total distance about 200 miles, some rapids of moderate difficulty
Jan 23-25 Return to Hampshire

Equipment: The Outdoors Program can supply some boats, and will pay for gas and oil for the van. Students will need their own packs, sleeping bags, and the like. Students will also be expected to pay for their own food and waterproof bags.

Enrollment: 8-12, by permission of the instructor only

Special Costs: $50-$75 (includes food)
Make a Movie

Elaine Hayes

The students will spend January as members of a 16mm documentary film production crew. Each person will assume specific roles and will work from conception to completion on a film which will tell the story of a person, place, event, or situation somewhere in the Amherst vicinity. The group (film making team) will decide what specific project to undertake and will write the script, prepare a budget, shoot, record sound, and edit (including AB roll and final print) the film. There will be positions for a director, an assistant director, a producer, two camera men (or women), a sound crew, and an editor.

Enrollment: 9; those persons with previous film experience admitted first

Special Costs: None
Measures of Man
Neil Stillings

Measures of Man is an extension of the course of the same name which began this fall. The course will continue in the spring as well. The course runs a full year because some of the students choose to undertake projects which cannot be completed in a semester.

The student chooses his own work in the course from a set of opportunities which range from readings on a topic such as intelligence testing to participation in a field project such as studying the use of tests in a local elementary school. Through this choice the student can introduce himself to independent study at a level which he feels he can manage.

Class meetings are devoted to developing an understanding of the problems and functions of human judgment through the study of psychological testing and opinion research. Several class meetings are devoted to taking and examining particular psychological tests. Some of the study projects arise from this aspect of the course.

It is hoped that the members of the class will develop a sophisticated and creative approach to the problems of evaluation at Hampshire. Study projects can focus on some aspect of human evaluation at Hampshire.

New students joining the course in January will benefit from the experience of the students who have completed part of their work, and will in some cases be able to join in student projects which have already begun. The work in the course may be at either the Division I or the Division II level.

Enrollment: 14
Special Costs: None
In spite of current concern for better and richer human interactions on all levels there are still many areas of awareness which have received little attention. One area is the interaction of men and young children. During the month, those interested in this subject will come together to explore the concept of fatherhood (and childhood) as presented in various works of literature, to study some of the literature of child development (especially as it relates to the interaction of parents and children), to read some of the literature of the women's movement (especially that which demands a re-definition of roles), to talk about the concept of maleness within our competitive society, but more centrally than any readings, to spend a great deal of time with young children in various environments and various circumstances and then to explore how we feel about this interaction.

Enrollment: 14

Special Costs: None
A Mini-Expedition

David Roberts and Ed Nard

A ten-day climbing and hiking trip to the Crestones in the Sangre de Cristo range in Colorado. Depending on available transportation, students will either meet at Hampshire and drive out west, or arrange their own transportation and meet in Denver. The trip itself will operate out of a tent base camp around 11,000 feet, and attempt peaks up to 14,000 feet. Depending on the experience of the students and on snow and weather conditions, the climbs may include technical routes. However, no particular experience is a prerequisite to signing up. Instruction in basic winter mountaineering will be given during the trip. Outdoors Program supplies tents, sleeping bags, technical gear, capsules, mittens, stoves, etc. Students supply boots and warm clothing.

Enrollment: 8-II students, by permission of the instructors only

Special Costs: (excluding transportation) approx. $25, plus needed equipment
Music Improvisation

Randall McClellan

This course is designed to develop our ability to listen to and respond to a musical gesture. Some reading and realizing of aleatoric scores will be involved, but the course leans primarily toward direct manipulation of musical sound in an effort to develop our ability to react spontaneously. Also involved will be the editing of taped sounds to create concrete compositions.

Prerequisite: at least an intermediate level of competency of a musical instrument.

Class will meet every day for one-and-a-half hours.

Enrollment: 14

Special Costs: None
The New Man

Robert Marquez

A course of readings and discussion of the works of a number of contemporary Third World thinkers — Fanon, Guevara, Mami, Mao, George Jackson, Nkrumah, etc. —, focusing on the nature of and contradictions of pre-revolutionary and post-revolutionary culture and their implications. We will consider questions of ethics, "objectivity," "legitimacy," change and control, "individual choice" and "inevitability," biography and revolution.

Enrollment: 14

Special Costs: None
Old and New Models of American Politics
Richard Alpert

The aim of this course is to identify and analyze the conceptual models which political scientists have developed or borrowed from other disciplines to analyze American politics. We will then attempt to assess how well these models explain the development of major public policies.

Some of the models we will look at are: the pluralist model, the power elite model, the interest-group model, etc. New conceptual models will also be analyzed such as a corporate model and a bureaucratic model.

Enrollment: 5
Special Costs: None
Man and dogs share not only their homes and cities, but have adapted to their present environment by the same process of evolution, called neoteny. In this process, "the young features of the ancestor have been retained in the adult stage of the descendant." During January, I will be preparing two publications based on the prediction that the fertilization (neoteny) of human and dog anatomy is an artifact of extending the juvenile dependency period to provide the genetic bases for social behavior.

I would like to have a group of students who would work with me on two aspects of the neotony theory.

1. Preparation of available material and design of experiments which would support or reject the theory.

2. Exploration of literary techniques for presenting the material to the scientific and nonscientific community.

The student taking this course would be involved in an intense study of evolutionary processes and would delve into the philosophy of scientific investigation and scientific writing.

Enrollment: 14

Special Costs: None
We can all tick off a list of injustices in this country that could be corrected by more sensitive and better engineered social policy. But it is tough to activate enough groups at once in this divided nation of ours to make political institutions respond meaningfully. In this course I want to explore how "population policy" could be used in the United States to promote more rapid social and political change. For this purpose, we will define population policy to include such measures as affect the status of women, the rights of children, and the family structure, in addition to the usual questions of abortion, contraception, sex education, immigration, and the density of population. Also some attempt will be made to analyze the impact population has on environmental pollution.

There is an unusually fine opportunity to explore the process of "nation moving" in 1972, and population policy offers a good case to study. There is a national commission on the subject due to report to the President, the Congress, and the American people in March, just as the Presidential primaries begin. In addition, some 33 senators have introduced a bill in the Congress calling for a national goal of "population stabilization." Members of the Population Commission, relevant members of Congress, and representatives of various groups with special interest in the subject (lobbies, minority group spokesmen, women's rights leaders, etc.) will be visiting Hampshire during the month to meet with the class. We will be interested in the methods they use to gain public support (polemics, media usage, etc.) as well as in the substance of their ideas.

The questions we will try to answer during January will include:

-- What is the experience of other nations (particularly emphasis on Sweden) in dealing with population growth?

-- What are the proper elements of a "population policy" for the United States and what are their effects on growth?

-- What groups stand to gain from the various elements of a policy and which to lose?

-- How can a nation as diverse as the United States gain a consensus for new national policies and directions?
The Red and the Black: A Global Setting for Amherst Rocks

Anne Gilbert and Susan Posner

Geologic thought at present is concerned mainly with the theories of the New Global Tectonics, the repetition of global events through geologic time, including sea-floor spreading and continental drift, and the building of mountain ranges by continental or sea-floor-continent collisions and the subduction of sea-floor crust underneath continental margins. We would like to take a look at the rocks around Amherst, after a bit of introduction to rocks and minerals, structure, and some orientation around the geologic time scale. With the help of some geologic texts and recent papers on Amherst geology and on the highly abstract theories of the New Global Tectonics, and hopefully with a couple of field trips (pray for no snow), we should be able to reconstruct at least part of the geologic history of the area, and test some of the new hypotheses against what's really here.

Enrollment: 10

Special Costs: minimal travel expenses
The Rights of Children

Lester Mazor

"Children should have 'rights as full human beings,' no different from those of adults: they should be able to vote, make contracts, and presumably commit felonies, just as adults do. On the contrary, runs another argument, they should have very special rights and immunities because they are children; their rights should fit their 'stage of growth.' Some say that the oppressive society of adults has so damaged the children that we must now provide them with remedial atten-
tion; on the contrary, say others, the best thing we adults can do is to get off their backs."

This statement by Paul Goodman from his introduction to a recent book entitled, Children's Rights outlines the terms of the argument that is beginning to shape up over the latest in the waves of concern for equality and individual rights. The children's rights movement is gathering force in the wake of the movements for the liberation of workers, blacks and women. During January, I would like to work with a group of students in exploring a number of aspects of children's rights. Part of the seminar will be devoted to an examination of the rights of children in their relationship with their parents, including the problem of physical and psychological abuse of children, control by parents over the child's education, employment, place of living, and life style in general. The second part of the course will deal with the rights of students, including their claims to freedom of expres-
sion, freedom from interference in their personal style of dress and appearance, and the right to participate in the formation of policy affecting their education.

In general, I would like to examine the relationship between existing legal norms and changing cultural attitudes about the status of chil-
dren in society. For individual projects, we can examine the func-
tioning of the juvenile court locally, look into the rights which students have in nearby school systems, and take a sampling of atti-
tudes of various members of the community about the relationship of parent and child and school and student.

While we will be attempting to deepen our knowledge about the details of these matters, I don't want to lose sight of the larger question whether an approach to these relationships in terms of "rights" is a promising one.

Enrollment: 14

Special Costs: None

-33-
Seminar on Analytical and Projected Study of the Hampshire Academic Program

Ernst Borinski, Neil Stillings

The seminar will try to investigate how the academic program contributes to the intellectual, scholarly, personal and professional developments of students and faculty.

It will be examined how the Hampshire program relates to the contemporary trends in higher education.

Inter-collegiate, inter-university and international dimensions of the program will be brought into focus. A significant area of inquiry will deal with the participation of faculty, staff and students in the development of the college and specifically in the development of the academic program. The ultimate purpose of the seminar will be to set up a programmatic design and a model which will stimulate a continuous development of new dimensions of the promising academic endeavors of Hampshire with readiness to discard previous old forms and content which call for change.

Interested members of the faculty and staff are especially encouraged to attend.

Enrollment: 10

Special Costs: None
A Seminar on Dostoevsky

Robert Rardin

"Gentlemen, I am tormented by questions; answer them for me."
—Notes from Underground

Devils, hermits, idiots, prostitutes, princes, revolutionaries, saints—human beings in all their majesty and perversity are the subject of this seminar. We will read and discuss the major works of Dostoevsky, seeking to enter a world where joy and pain, love and hate, good and evil, reason and madness, hope and despair drive us to ultimate questions about the nature of man and the purpose of life. Answers will be few.

(Students who know Russian well are encouraged to do special tutorial work with the instructor on the original texts.)

Enrollment: 14

Special Costs: None
String, Trees and Languages

William Marsh

This course is an introduction to mathematics covering a series of related topics in logic and algebra with applications in the language sciences. The course will consist of individual and group work on exercises and problems of a difficulty appropriate to the individual student supplemented by ten lecture-demonstrations, probably entitled:

1. Sets and Strings
2. Sets of Strings
3. Set Theory in Mathematics
4. Trees
5. Context-Free Languages
6. Abstract Machines on Strings
7. Abstract Machines on Trees
8. More on Context-Free Languages
9. Algebra
10. More Algebra

While the titles may sound forbidding, the material is accessible to students with no college mathematics background. Division I students will be able to get examination questions from the course for their examinations.

More advanced students may take the course and will be asked to read Hopcroft and Ullman's Formal Languages and Their Relation to Automata.

Enrollment: 14

Special Costs: None
Sundials

T. W. Moore

Sundials are found among the artifacts of many early cultures and have intrigued such artists as Hans Holbein and Henry Moore.

We will analyze sundials, starting with the simplest possible model of the solar system, and carry our analysis through increasingly higher levels of sophistication as long as time and energy permit.

It is hoped that each participant will design and build a sundial, perhaps using the physics shop facilities at Mount Holyoke College.

People with a tolerance for trigonometry, or a background in astronomy or design would be particularly welcome.

Enrollment: 14

Special Costs: None

* A Mount Holyoke College faculty member
Tanning

Merle Bruno

Tanning animal hide is one of woman's and man's earliest sources of body covering and protection. Man's present use of animal fibers have generally all but replaced these. Even though leather clothing has become popular recently, people are still very much removed from its sources and preparation.

Tanning techniques are varied depending on the materials available, the desired product, and the amount of work one wants to do. Tanning agents used include squashed brain, chromate salts, oak gall extracts, urine and others I don't know about.

I have never tanned leather and would like to experiment with some of the problems and chemistry, as well as to explore the history of tanning. I do know a bit about different kinds of leathers and about designing and making leather goods using simple handmade tools. People who aren't interested in tanning can work on designing and fashioning things from factory finished leather. Students who wish to do this will have to pay for their own materials, but I think we can get some fairly good prices on leather.

Enrollment: no limit

Special Costs: less than $10
Theatre Workshop

Timothy Landfield

The month of January provides an excellent opportunity to prepare a
dramatic production of some kind -- whether it be a Shakespearean
play, an original play, a musical, or any combination of these -- for
a February performance.

Our goal, however, should be forming a cohesive group of individuals
who are concerned about making the theatre experience at Hampshirr an
imaginative and inventive one. Our product would be a result of close,
personal interaction on a very real level and not a theatrical one.
We would be creating a more humanistic approach to repertory theatre.
We will explore the concepts of improvisational theatre, doing group
and individual improvisations as well as other theatre exercises --
including a daily movement class.

It's possible that some of the material we produce from our improvisa-
tions will be used for Snecky Kugel's television series. This
would include writing for and working with video equipment.

During the middle of the month, we might go to New York to see some
Broadway shows.

Enrollment: 10-15, interview with the instructor necessary prior to
registration

Special Costs: Expenses for trip to New York
The Velikovsky Affair

Stanley Goldberg

In the early 1950's, Immanuel Velikovsky proposed a cataclysmic theory of evolution which purported to explain, among other things, the creation of the earth, the evolution of earth history, and the evolution of animal forms.

The theory used not only the geological record as basic data, but also myths and folk tales. The theory raised a storm of controversy including questioning of the basic data, the use of folk material, the accuracy of Velikovsky's physics, Velikovsky's qualifications, etc. Velikovsky was essentially read out of the scientific community. In fact, it is not uncommon to find that the mention of Velikovsky's name to a scientist brings accusations of being anti-scientific.

We will devote the month of January to first, an intensive study of Velikovsky's writings and then to the writings of his critics and allies. Our aim is not to vindicate Velikovsky's theory, but to use the historical material of the encounter to gain some insight into the workings of the social institution of science.

Enrollment: No maximum

Special Costs: None
"Who's Come a Long Way, Baby?"
or The Second Sex in Academe and the Professions
Miriam Slater

There is a great range of opinion concerning the "is and ought" of female education and career patterns. In the discussion, the hard facts concerning the actual condition of women students and professionals in contemporary America are sometimes ignored. This course will be given as a series of seminars devoted to the intensive examination of the available evidence, so that those taking the course may be able to move from polemic to greater factual certainty concerning such questions as:

Why is it that relatively few college educated women proceed to graduate work and the professions?

Why do certain careers seem to elude women and yet others, such as primary school teaching, have high concentrations of women?

How many women are engaged in which careers?

What is the situation of women students at other institutions of higher learning?

To what extent are marriage and a career mutually exclusive?

What contributions can institutions and individuals make toward expanding educational and career opportunities for women who want them?

We will invite some women in the professions as guest speakers so that they may share their academic and career experiences with the group.

Although we shall use additional material according to the interests of the students, the following books and articles should offer a good basis for discussion and further work.

Anne Alexander, "Who's Come a Long Way, Baby!", The Johns Hopkins Magazine, April, 1970

Jessie Bernard, Academic Women

"Who's Come a Long Way, Baby?"

Habel Newcomer, The History of Higher Education
U.S. Department of Labor, Handbook of Women Workers, Bulletin 294

Yale Alumni Magazine, April, 1970, devoted to "Coeducation and the New Woman."

E. Wight Bakke, "Graduate Education for Women at Yale," in Ventures, Fall, 1969

Alice Rossi, will probably have her new book, Academic Women on the Move, in print by January.

Enrollment: 14

Special Costs: None
Witchcraft

David Smith

I remember, O fire
How thy flames once enkindled my flesh,
Among writhing witches caught close in thy flame,
How tortured for having beheld what is secret.
But to those who saw what we had seen
Yea, the fire was naught!

This course will meet four times a week at home. In the first week, the subject will be "What Happened at Salem?", and we will examine the question with the aid of Chad Hansen's Witchcraft at Salem (history), Erikson's The Wayward Puritans (a study in sociology of deviance), Hawthorne's Young Goodman Brown (fiction), and Miller's The Crucible (drama and film).

In the second week, the topic is African Witchcraft. We will concentrate on Evans Pritchard, Witchcraft among the Azande, with readings and discussion drawn additionally from Max Horkheimer's perspective and Sorcery, a collection of papers on the sociology, psychology, and anthropology of the subject.

The third week will be occupied with a study of The Inquisitorial Mind, or "who says you're a witch?" Here the emphasis will be partly historical, partly social-psychological, partly legal. What forces in a society create the atmosphere of a witch-hunt or Inquisition?

In the final week of January, we'll examine the theories of Thomas Szasz in The Manufacture of Madness. Szasz, a psychiatrist, argues persuasively that we treat mental patients in public institutions like witches. Along with this discussion we will read One Flew Over the Cuckoo's Nest, by Ken Kesey.

We will supplement the course with films about witchcraft, possible field trips, and class interviews with actual witches. If you have a special interest you would like to pursue and deepen (for example, the theme of witchcraft in literature, or the relation of witchcraft to healing and religious ecstasy, or the folklore of witchcraft, or other themes) you will be encouraged.

Enrollment: 14. Interview with the instructor necessary prior to registration.

Special costs: possible small expenses for optional field trips.
The Women's Movement

Sharon Roberts and Gayle Letourneau

The purpose of this course will be to develop a sense of sisterhood and an understanding of the women's liberation movement in a support group situation. This will be accomplished through a process of creating mutual trust and confidence and through reading a wide range of literature. The course will be open only to women in order to discover a wholly feminine identity.

Some topics of discussion could be:

- Human Liberation
- Myth of Rape
- Women and Capitalism
- Lesbianism
- Women in Literature (love-sex traditions)
- Why Exclude Men?
- Women and Children
- Abortion and Birth Control
- Historical Attitudes Toward Women
- Patriarchy

Some possible readings:

- The Female Eunuch, Greer Green
- Sexual Politics, Millett
- The Prisoner of Sex, Moller
- Sisterhood is Powerful
- Masculine Feminine
- SCUM
- The Origins of the Family, Private Property and the State, Selected poems, articles and pamphlets


Enrollment: 10 women

Special Costs: None
A Workshop in Handbuilding with Clay

Barbara Linden

This is a pottery workshop for people who have never worked in clay before, and for those who have -- but who wish to encounter it in new ways.

We will be concentrating on individual creative expression and experience with clay, not on formal technique per se. We will be making pots and non-pots, statements and non-statements. Some will be exercises only; others will be fired and kept. Forms, ideas, ways of interacting and materials from the environment will be incorporated into the workshop, in order to explore as many personal and group creations as possible.

Members will be able to continue clay work and exploration after January without depending on the availability of special equipment. The Workshop will not include throwing on the wheel, but will provide much experience in clay handling and forming that would be a good background for those wishing to investigate wheel work.

The course will be given by Barbara Linden and Flo Rosenstock. Ms. Rosenstock teaches pottery in New York, and will at the campus for most of January.

Enrollment: 8

Special Costs: $15-$25 per student, for materials and firing charges
Individual and group instruction in sight-singing and on violas de gamba and krumhorns will be offered. (James Media will be offering instruction on recorders.) A Collegium Musicum -- voices and instruments -- will be formed. We will read through much Renaissance and Medieval music, to study in a practical way the problems of early performance practice. We may polish some music for occasional recitals. Also, several small choruses will meet regularly for "one-on-a-part" or "two-on-a-part" readings of madrigals and motets. (Students interested only in the chorus will have time for another course as well.)

Several instruments (gambas, recorders, krumhorns) will be available for rental to students during January, and a large music collection will be provided.

It is anticipated that this course will include students with prior musical experience as well as those whose interest in developing musical skills is just beginning. It is also hoped that the workshop activities will involve students and faculty from the wider college community, so that local musicians can get to know each other, and musical get-togethers can continue throughout the year. The Collegium will meet mornings for group work, leaving the afternoon free for individual practice; the choral group will meet afternoons.

The workshop will be led by Ray Rosenstock, a visiting instructor from New York City. In order to plan for the group, please see Barbara Linden, who will be coordinating the workshop until Mr. Rosenstock arrives, to indicate your interest and your concentration -- on singing, playing, or both.

Enrollment: Collegium - 10-12
Choral group - 10-12

Special Costs: $15-$25 for Xerographing of music and instrument rental

*Not a Hampshire community member
JANUARY TERM INSTRUCTORS

Richard W. Alpert is Assistant Professor of Political Science and
Evaluator of Model Cities in Holyoke, Mass. His B.A. is from Hobart
College, where he held a Rotary Club International Fellowship and a
New York State Regents Scholarship. He received his M.A. and Ph.D.
from Harvard in urban politics. At Harvard he held a Woodrow Wilson
fellowship and a Harvard Dissertation Fellowship. Most recently he
has served on the research staff of the Urban Institute in Washington,
D.C.

Charles Atkinson is Assistant Master of Merrill House. He graduated
from Amherst College in 1966 and entered the Peace Corps, where he
and his wife Carolyn served for two years as high school English
teachers in the Philippines. He is enrolled in the Ph.D. program in
English and American Studies at Indiana University, and has completed
an M.A. equivalent in that program. Before coming to Hampshire in
1969 he taught English at Brookline (Mass.) High School.

Knolly Barnes is an economist from Jamaica who has taught at the Uni-
versity of the West Indies in Jamaica. His special field is economic
integration in the Caribbean.

Robert Bell, a Hampshire Fellow, spent three years at Amherst College
majoring in sociology. His main area of concentration is social and
political theory. At Hampshire, he is doing independent work on the
writings of Max Weber and has assisted Professor Ernst Bormann in
planning and teaching Sociology of and for the Future.

Herbert J. Bernstein, Assistant Professor of Physics, has a B.A.
from Columbia University, where he was a National Merit Scholar, and
an M.S. and Ph.D. from the University of California at San Diego,
where he was a National Science Foundation Graduate Fellow. He has
been a visiting scientist at Brookhaven National Laboratory, a mem-
ber of the Institute for Advanced Studies at Princeton University,
and a visiting professor at the Institute for Theoretical Physics
in Belgium. Mr. Bernstein has written on subjects ranging from
relativistic dynamics to technological forecasting.

John Boettiger, Assistant Professor of History, is a graduate of
Amherst College and later studied at Columbia University as a
President's Fellow and Burgess Honorary Fellow. Mr. Boettiger has
been a consultant to the RAND Corporation, served in the Office of
the Assistant Secretary of State for International Organization
Affairs, and in 1965-66 was a member of the Social Science Depart-
ment of the RAND Corporation in Santa Monica, California. During
1966-67 Mr. Boettiger was a member of the political science and
American Studies faculties of Amherst College. He is the editor of
Vietnam and American Foreign Policy, published in 1968. He joined the
planning staff of Hampshire College in 1967 and has had particular
responsibility for the design and supervision of the Human Develop-
ment curriculum and the Hampshire Fellows Program.
Ernst Borinski is Visiting Professor of Sociology. In Germany, he studied at the universities of Halle, Munich, and Berlin and, in the late 1920's to early 1930's was a lawyer in the Court of Appeals at Erfurt, and a judge in the lower court at Koblenz. Mr. Borinski also holds an M.A. from the University of Chicago and a Ph.D. from the University of Pittsburgh, where he concentrated on the sociology of law. He has taught at Tougaloo College in Mississippi since 1947.

Marie S. Bruno, Assistant Professor of Biology, received a B.S. from Syracuse University and an M.A. from Harvard, where she is completing her Ph.D. Miss Bruno has been a teaching fellow at Harvard and a research associate at Yale. Her work on crustaceans and vertebrate sensory neurophysiology has been supported by the National Institute of Health and by the Grass Foundation. Miss Bruno is also author of three teachers' guides for elementary science studies.

D. O. Campbell, the Outdoors Program Instructor, graduated from Dartmouth in 1967. He has been active in kayak paddling in the east since 1965 and is currently assistant chairman of the National Whitewater Slalom Committee. He has taught at the Colorado Rocky Mountain School for three summers, running the boating program there. At Hampshire, he is responsible for kayaking, boat building and design, cross country skiing and miscellaneous administrative work.

Raymond P. Coopinger, Associate Professor of Biology, attended Iowa State College and holds a B.A. in American literature from Boston University. Mr. Coopinger has an M.A. in zoology from the University of Massachusetts and was awarded a Four-College Cooperative Ph.D. in biology in June, 1968. He has worked at the Woods Hole Oceanographic Institution, the Smithsonian Astrophysical Observatory in Cambridge, the Massachusetts Audubon Society, the United States Fish and Wildlife Service in Amherst, the Beebe Tropical Research Station in Trinidad, W.I., and the Organization for Tropical Studies in Costa Rica. At Amherst College he was a teaching assistant from 1965-68, and until 1970 a post-doctoral research associate in biology. He has published scientific papers on the behavior and reproduction of birds, and has been active in wildlife preservation efforts.
Louise J. Farnham, Associate Professor of Psychology, has a B.A. and Ph.D. from the University of Minnesota, where she also held teaching and research assistantships in the Institute of Child Development. Mrs. Farnham has worked in child guidance and mental hygiene clinics in Minnesota and California, and has taught psychology at Yale University, San Francisco State College, and Stanford University. She has also served as a research psychologist to the Family Law Project at the University of California at Berkeley, and held a post-doctoral fellowship at the Stanford University School of Medicine, Department of Psychiatry, from 1968-70.

Anne Gilbert, a Hampshire Fellow, spent the past three years at Middlebury College. There she majored in Geology, taking courses in Global Tectonics, Petrology, Mineralogy, Structure, and Oceanography. She has also worked for four months at Woods Hole Oceanographic Institute as a Research Assistant. She is doing her independent study this year on trace metal levels in Lake Champlain.

Stanley Goldberg, Associate Professor of History of Science, received a B.S. from Antioch College and an M.A.T. and Ph.D. from Harvard. He taught at Antioch from 1965 to 1971, and spent two years as senior lecturer at the School of Education of the University of Zambia. Mr. Goldberg's special interest is in the history of science.

Courtney P. Gordon, Assistant Professor of Astronomy, received her B.A. from Vassar College in physics and her M.A. and Ph.D. in astronomy from the University of Michigan. Mrs. Gordon held a summer job at the Royal Greenwich Observatory and worked at the University of Michigan as a research assistant and as a teaching fellow. From 1967 to 1970 she worked as research associate and then as assistant scientist at the National Radio Astronomy Observatory in Charlottesville. Her articles have appeared in the Astronomical Journal and the publication of The Astronomical Society of the Pacific.

James C. Haden, Professor of Philosophy, has a B.S. from Haverford College, and an M.A. and Ph.D. from Yale University. He has taught philosophy at the University of South Carolina and at Yale, where he served from 1956 to 1961 as Chairman of the Directed Studies Program in the liberal arts. He was Chairman of the Department of Philosophy at Oakland University, and, during 1969-70 a visiting professor at Wesleyan University. Mr. Haden's special interests include the history of philosophy, the history of science, Plato, Kant, and Hume. He has published essays in the history of science and translations of Kant and Cassirer.
Kenneth R. Hoffman, Assistant Professor of Mathematics, received a B.A. in mathematics and physics from the College of Wooster in Ohio, and an M.A. from Harvard University, where he served for two years as a teaching fellow and also held a Danforth Fellowship. Mr. Hoffman taught mathematics at Talladega College under the Woodrow Wilson Intern Program in 1965-66, and returned there in 1967. He served as Chairman of the Department of Mathematics at Talladega in 1969-70.

Sheila Houle, Assistant Professor of English, holds a B.A. from Mundaring College in Chicago, an M.A. from the University of Minnesota, and a Ph.D. in English language and literature from the University of Iowa, where she was an NDEA Fellow from 1964 to 1967. She taught English and linguistics at Clarke College from 1960 to 1964 and was Chairman of the English Department at Clarke from 1967 to 1970. She is a member of the Committee on English Departments in Liberal Arts Colleges and was a founder and mid-western diector of the Iowa Association of Small College Departments of English. From 1954 until 1970 she was a member of the Sisters of Charity of the Blessed Virgin Mary, from which she has now received dispensation of her obligations.

Margaret D. Howard, Assistant Professor of Economics, received a B.A. from Wellesley College, an M.S. from the London School of Economics, and a Master of Philosophy degree from Yale University, where she is completing her Ph.D. work. Miss Howard has served as a research assistant for the Cleveland Regional Planning Commission and the Economic Development Administration of the U.S. Department of Commerce. She was a lecturer at Dalhousie University in Halifax during the summer of 1969. Her special interests are in labor economics and in the economic history of women.

Joanna Hubbs is Assistant Professor of History. She received a B.A. from the University of Missouri and an M.A. in Russian history from the University of Washington in 1967, where she also did doctoral research. Mrs. Hubbs, a former Woodrow Wilson and NDEA Fellow, is fluent in French, German, Russian, Polish and Italian.

James Koplin, Associate Professor of Psychology, received his B.A., M.A., and Ph.D. from the University of Minnesota. Mr. Koplin has taught at the University of Minnesota and at Vanderbilt University. He is the author of a wide range of articles in professional journals, and co-editor of Developments in Psycholinguistic Research (1968). His special interests are psycholinguistics and cognitive psychology.

Timothy A. Landfield, a Hampshire Fellow, spent two years at Amherst College studying political science, anthropology and sociology. He was involved in various dance and drama productions as extracurricular activities. He spent his junior year at Smith College studying acting and dance. He choreographed and danced in several concerts as well as sang and acted in major productions. He is currently doing independent study work in The Performing Arts, and will be receiving a degree from Hampshire College.
Gayle LeTourneau received her A.B. degree in English literature from the University of California in Berkeley in 1965. She is currently studying for the Master of Fine Arts degree in poetry at the University of Massachusetts. Ms. LeTourneau writes poetry and has had her works printed in several publications. She has been active in women's liberation since 1968.

J. J. LeTourneau, Assistant Professor of Mathematics, received his B.S. from the University of Washington and his Ph.D. in logic and the methodology of science from the University of California at Berkeley. He came to Hampshire from Fisk University, where he was Assistant Professor of Mathematics. He has taught at the University of California at Berkeley and was a mathematics consultant to the Berkeley Public Schools. Mr. LeTourneau has held four National Science Foundation graduate fellowships, as well as a fellowship at the University of California. His interests include model theory, recursive function theory, decision theory, automata theory, linguistics, computer languages, and the philosophy of mathematics.

Jerome Liebling, Professor of Film Studies, taught art for twenty years at the University of Minnesota. His award-winning films include "Art and Seeing" (first Annual Screen Producers Guild Award to University Films) and "Row-Row" (from the San Francisco International Film Festival, the Educational Film Library Association, the London Film Festival, and others). Mr. Liebling has had photographic exhibitions at the New York Museum of Modern Art and the Walker Art Center in Minneapolis; published articles and collections of photographs and a book entitled The Face of Minneapolis; and has received a Certificate of Recognition for Photographic Excellence from the National Urban League for photography in the exhibition, "America's Many Faces."

Barbara Linden, Assistant Professor of Sociology, received a B.A. from Syracuse University and a Ph.D. from Columbia University. A recipient of NIH and Ford Foundation fellowships, Mrs. Linden served as assistant professor in the general studies division at Columbia from 1968 to 1970 and was also an architects' consultant for problems of college housing at the University. Her academic interests include urban studies, urban planning, and the sociology of education.
Nancy M. Lowry, Assistant Professor of Chemistry, has a B.A. from Smith College, was a teaching fellow at Radcliffe College, and earned her Ph.D. from M.I.T. Mrs. Lowry has served as a research associate at M.I.T., Amherst, and Smith, has taught at Smith and the Cooley Dickinson Hospital School of Nursing in Northampton, and has published articles in the Journal of Organic Chemistry and the Journal of the American Chemical Society. Her special research interests are in the synthesis and properties of unsaturated conjugated hydrocarbons and the stereochemistry of free radicals. In addition, she is interested in the scientist's and educator's role in approaching problems that affect the general public welfare, such as those in environmental science.

Robert A. Mansfield, Assistant Professor of Art, attended the Minneapolis School of Art and received his B.A. from Saint Cloud State College in Minnesota and an M.F.A. in Sculpture and Painting from the University of Massachusetts. He has taught at the University of Massachusetts and at Smith College. His interests are in sculpture, painting, and film.

Robert Marquez, Assistant Professor of Hispanic American Literature, received his B.A. from Brandeis University and his A. from Harvard University, where he is currently a candidate for a Ph.D. in Latin American literature. As a Fulbright Fellow in 1966-67, Mr. Marquez taught at the Centro Cultural Peruano-Norte Americana in Peru. He has taught in the summer schools at Harvard and the Brandeis Upward Bound Program; worked for the World University Service in Peru and Venezuela; and served as Area Coordinator of the Migrant Education Program of Middlesex County, Mass. He has written articles and translations for Folio and a bilingual anthology of the poetry of Nicholas Guillen. Works in progress include an "anthology-in-translation" of the revolutionary poets of Latin America.

William E. Marsh, Assistant Professor of Mathematics, received his B.A., M.A., and Ph.D. from Dartmouth College where he was also an NDEA Fellow. He came to Hampshire from Talladega College in Alabama, where he was Chairman of the Mathematics Department. He has taught at Dartmouth and held research positions at Cornell University and the University of California at Berkeley. His interests include number theory, recursive functions, and the foundations of mathematics and linguistics.

T.M. Moore, Associate Professor at Mount Holyoke College, is the acting chairman of their Physics Department. He received his B.S. degree from the California Institute of Technology, and his Ph.D. from the University of California at Berkeley. He has been associated with the General Electric Research Laboratory in Schenectady, New York. His current research interest is in ferromagnetic whiskers.
Elaine Mayes is Assistant Professor of Fine and Photography. She received her B.A. in art from Stanford University in 1958, did graduate study in painting and photography at the San Francisco Art Institute (where she also taught), and was Assistant Professor of Film and Photography at the University of Minnesota. Her photographs have appeared in Sports Illustrated, Saturday Evening Post, Modern Photography, and the Washington Post, among other publications. She has exhibited at many places, including the San Francisco Art Institute, Minnesota Institute of Arts, The Museum of Modern Art in New York, and Focus Gallery in San Francisco. Her book, When I Dance, is a collection of photographs of high school dance students.

Lester J. Mazor, Henry R. Luce Professor of Law, received a B.A. from Stanford University in history in 1957, and an LL.B. from Stanford in 1960. During 1960-61 he served as Law Clerk to the Hon. Warren E. Burger. He has taught at the universities of Virginia, Stanford, and Utah law schools; published articles and book reviews in law journals; and served as Chairman of the Association of American Law Schools Committee on Teaching Law Outside of Law Schools, as well as on the Association's Project in Law School Curriculum. His special concerns include the limits of the legal process and the role and status of women in society.

B. Randall McClellan, Assistant Professor of Music, has a B.M. and M.M. in composition from the University of Cincinnati, and received his Ph.D. from the University of Rochester in 1969. He taught musical theory and composition at West Chester State College, where he was also director of the electronic music studio, and has held a teaching fellowship at the Eastman School of Music.

Francis Roxin McClellan, Assistant Professor of Dance, received a B.A. from the Juilliard School of Music, and was a member of the Joan Kerr Dance Company and the Anna Sokolow Dance Company. Mrs. McClellan has studied with Joan Kerr, The National Ballet School of Canada, Louis Horst, and Jose Limon, and with Martha and Maja Yoga.

Susan Posner, a Hampshire Fellow, spent the past three years at the Massachusetts Institute of Technology. There she studied primarily in the fields of geology, biology, anthropology and history. She is currently doing independent study in the History of Science, comparing ancient Chinese science with modern western science; she is also very interested in methods of teaching science.
Robert B. Rardin, II, Assistant Professor of Linguistics, received a B.A. from Swarthmore College in 1967 and is a candidate for the Ph.D. in Linguistics at M.I.T. Mr. Rardin has held a National Merit Scholarship, a Danforth Graduate Fellowship, and a Woodrow Wilson Teaching Fellowship. He has traveled widely in Europe, especially in the Soviet Union and in Scandinavia. He speaks six languages, has published an article on Finnish vowel harmony, and has taught "Russian for Scientists" at M.I.T. Mr. Rardin is also interested in international affairs and peace work.

David S. Roberts, Assistant Professor of Literature and Director of The Outdoors Program, received his B.A. from Harvard College in 1955 and M.A. from the University of Denver, where he also received a Ph.D. Mr. Roberts was a field assistant for the University of Colorado's Institute for Arctic and Alpine Research and an instructor for the Colorado Outward Bound School, teaching mountain climbing and wilderness skills. He has written numerous articles for mountaineering journals and in 1968 published The Mountain of My Paar, a book about mountain climbing. More recently he published Deborah: A Wilderness Narrative. He has taught English for a summer at the University of Alaska and for a year at the University of Denver.

Sharon Roberts graduated from the University of Denver with a B.A. in 1965 and a M.A. in 1970. Her major field was English with an emphasis on writing; she taught there for two years. Since then, she has spent her time studying Victorian literature and dance. This past summer at the Aspen Institute in Colorado, she developed an active interest in women's liberation and now plans to give much of her time to that cause.

Raymond Rosenstock received his M.A. degree in music from New York University, and is now completing doctoral work at the City University of New York. His musical interests center on the early Renaissance through the Baroque periods. In addition to private instruction in the recorder and early instruments, he has taught at the Greenwich House Music School, Queensborough College in New York, and Fordham University. For the last four years, he has directed a choral group and the Westside Consort, which performs Medieval, Renaissance and Baroque music on ancient instruments.

Stephen Salzer is a senior at Davidson College in Davidson, North Carolina. He is a member of the President's Commission on Population Control, and is President and founder of the Ohio Leadership Dynamics Institute, Inc., a foundation which places students in business and government as part of their academic experience.
Steven Shak, a Hampshire Fellow, came to Hampshire after three years at Amherst College, where he majored in chemistry. His independent study project at Hampshire is an intensive study of Newton's Principia in the context of the history of science.

Linda Scranan is presently a Senior Fellow at Hampshire College. Her previous undergraduate work was pursued at the Santa Cruz campus of the University of California. Her sophomore year she interrupted her studies at Santa Cruz to become the first exchange student to Sarah Lawrence College in New York. Upon her return to Cowell College, she began pursuing a double major in history and politics. During her college career, Linda has maintained a special interest in literature, believing this to be a necessary supplement to her academic program.

Niam Slater is Assistant Professor of History and Master of Dakin House. The college's second residence complex, Mrs. Slater received a B.A. from Douglass College in 1963 and a Ph.D. from Princeton University in 1971. At Princeton she held the first Woodrow Wilson Fellowship, designed to allow a married woman with children to attend graduate school half-time. She was also awarded a Princeton University Fellowship and, as an undergraduate, the Douglass Prize for potentiality as a teacher. Her academic interests include English history of the 16th and 17th centuries and the history of the pre-industrial family.

David E. Smith is Professor of English and Master of Merrill House, the first Hampshire residence complex. He received his B.A. from Middlebury College, and M.A. and Ph.D. in American Studies in 1962 from Minnesota. His study, John Brown in America, has been published by Indiana University Press. From 1961 to 1970 Mr. Smith was Professor of English at Indiana University. He has held graduate and research fellowships from Minnesota, Indiana, the Yale Divinity School, the Society for Religion in Higher Education, and the American Philosophical Society. His interests include colonial American writing, sixteenth-century American literature, American Intellectual and religious history.

Neil A. Stillings is Assistant Professor of Psychology in the School of Social Science and the Program of Language and Communications. He received a B.A. from Amherst College in 1966, and is working toward a Ph.D. in psychology from Stanford University. A former NEA and NSF Fellow, Mr. Stillings' current research involves the semantics of natural language.
Eugene Terry, Assistant Professor of Literature, has a B.A. and M.A. from Howard University, and is completing a Ph.D. at the University of Massachusetts. Mr. Terry has taught English at Southern University in Baton Rouge, Johnson Smith University in Charlotte, Grambling College in Louisiana, and at Saint Augustine's College in Raleigh, where he was acting head of the English Department. He also served as a graduate assistant in English at the University of Massachusetts, and taught last year at Holyoke Community College. His special interests include the study of folk heroes and black literature. He has also done work with marionettes.

Ed Ward graduated from the University of Minnesota in 1969 with a B.A. in History. He came to the University of Massachusetts as a graduate student in the School of Education, and is now working in the Hampshire College Outdoors Program. His primary area of interest in the Outdoors Program is mountaineering and rock climbing.

Frederick S. Weaver, Assistant Professor of Economics, has a B.A. from The University of California at Berkeley and a Ph.D. from Cornell University, where he specialized in international economics, econometrics, economic theory, and Latin American economic development. He did field research in Chile under a grant from the Foreign Area Fellowship Program, and was assistant professor of economics at the University of California at Santa Cruz before coming to Hampshire.
Hampshire College

Central Records

Course Descriptions

Fall Term 1972
Amherst,
Massachusetts
Hampshire College

Course Descriptions
Fall Term 1972
Amherst, Massachusetts
**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Dates and Calendar</td>
<td>5</td>
</tr>
<tr>
<td>School of Humanities and Arts</td>
<td>6</td>
</tr>
<tr>
<td>School of Language and Communication</td>
<td>61</td>
</tr>
<tr>
<td>School of Natural Science and Mathematics</td>
<td>62</td>
</tr>
<tr>
<td>School of Social Science</td>
<td>77</td>
</tr>
<tr>
<td>Program in Foreign Studies</td>
<td>113</td>
</tr>
<tr>
<td>The Human Development Program</td>
<td>115</td>
</tr>
<tr>
<td>Faculty</td>
<td>116</td>
</tr>
</tbody>
</table>
REGISTRATION DATES AND CALENDAR

Registration Period for Fall Term
Wednesday, September 7 - Tuesday, September 12

Discussions with Advisers and Instructors
Wednesday, September 7 - Friday, September 8

Sign up for courses with Instructors
Monday, September 11 - Thursday, September 12

Fall Term courses begin
Thursday, September 14

Drop-Add Period
Thursday, September 14 - Friday, September 22

Last day to register for Five College Interchange Friday, September 22

Thanksgiving Recess
Saturday, November 18 - Sunday, November 26

Pre-registration for Spring Term
Monday, November 27 - Friday, December 1

Last Day of Classes
Thursday, December 21

Winter Recess
Friday, December 22 - Tuesday, January 2
<table>
<thead>
<tr>
<th>School of Humanities and Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seminar on Dostoevsky</strong></td>
</tr>
<tr>
<td><strong>HA 101</strong> (LC 113)</td>
</tr>
<tr>
<td><strong>The Rise of Cuban National Consciousness</strong></td>
</tr>
<tr>
<td><strong>HA 105</strong></td>
</tr>
<tr>
<td><strong>The Cultural History of the Caribbean</strong></td>
</tr>
<tr>
<td><strong>HA 106</strong></td>
</tr>
<tr>
<td><strong>Film Workshop I</strong></td>
</tr>
<tr>
<td><strong>HA 110</strong></td>
</tr>
<tr>
<td><strong>A Man: George Orwell</strong></td>
</tr>
<tr>
<td><strong>HA 111</strong></td>
</tr>
<tr>
<td><strong>Drawing and Painting Studio</strong></td>
</tr>
<tr>
<td><strong>HA 113</strong></td>
</tr>
<tr>
<td><strong>Myth and History</strong></td>
</tr>
<tr>
<td><strong>HA 117</strong></td>
</tr>
<tr>
<td><strong>Eighteenth-Century England: Selected Works</strong></td>
</tr>
<tr>
<td><strong>HA 125</strong></td>
</tr>
<tr>
<td><strong>Evolution of English</strong></td>
</tr>
<tr>
<td><strong>HA 127</strong> (LC 132)</td>
</tr>
<tr>
<td><strong>Lyric Poetry: The Main English Tradition</strong></td>
</tr>
<tr>
<td><strong>HA 133</strong></td>
</tr>
<tr>
<td><strong>Puppet Workshop</strong></td>
</tr>
<tr>
<td><strong>HA 139</strong> (HA 239)</td>
</tr>
<tr>
<td><strong>Athens, Jerusalem, Rome: Alternatives to Modern Self-Assertion</strong></td>
</tr>
<tr>
<td><strong>HA 142</strong></td>
</tr>
<tr>
<td><strong>Music in World Culture: Anthropology of Music, Part I</strong></td>
</tr>
<tr>
<td><strong>HA 144</strong></td>
</tr>
<tr>
<td><strong>The Making and Understanding of Human Environment: Approaches to Design</strong></td>
</tr>
<tr>
<td><strong>HA 145</strong></td>
</tr>
<tr>
<td><strong>Greek Life and Thought to 300 B.C.</strong></td>
</tr>
<tr>
<td><strong>HA 146</strong></td>
</tr>
<tr>
<td>Course Description</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>STILL PHOTOGRAPHY WORKSHOP</td>
</tr>
<tr>
<td>DANCE LAB II</td>
</tr>
<tr>
<td>DANCE LAB I</td>
</tr>
<tr>
<td>THE CULTURE OF CLASSICAL CHINA</td>
</tr>
<tr>
<td>I AND YIN-YANG</td>
</tr>
<tr>
<td>RELIGIOUS EXPERIENCE</td>
</tr>
<tr>
<td>AUGUSTINE AND CAMUS: TWO MODELS OF FAITHFULNESS</td>
</tr>
<tr>
<td>READING POETRY</td>
</tr>
<tr>
<td>HOW RACH DID IT: TECHNICAL ASPECTS OF MUSIC</td>
</tr>
<tr>
<td>WORKSHOP IN CONTEMPORARY MUSIC PERFORMANCE</td>
</tr>
<tr>
<td>AESTHETICS OF MUSICAL PERFORMANCE</td>
</tr>
<tr>
<td>BODY AND PSYCHE: A WORKSHOP IN MOVEMENT</td>
</tr>
<tr>
<td>DESIGN WORKSHOP</td>
</tr>
<tr>
<td>THE THEATRE OF CRUELTY</td>
</tr>
<tr>
<td>THEATRE AS EVENT I</td>
</tr>
<tr>
<td>THE AMERICAN LITERARY LANDSCAPE</td>
</tr>
<tr>
<td>Courseamonotes: A Seminar on Medieval Studies</td>
</tr>
<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Film Workshop II</td>
</tr>
<tr>
<td>The Epic</td>
</tr>
<tr>
<td>Photography Workshop</td>
</tr>
<tr>
<td>Plato's Earlier Dialogues</td>
</tr>
<tr>
<td>The Irrational Enlightenment</td>
</tr>
<tr>
<td>Problems in Environmental Design</td>
</tr>
<tr>
<td>Studio Art Workshop</td>
</tr>
<tr>
<td>Literature and the Black Aesthetic</td>
</tr>
<tr>
<td>Contemporary Sculpture Workshop</td>
</tr>
<tr>
<td>Myth and Modern Fiction</td>
</tr>
</tbody>
</table>
SCHOOL OF HUMANITIES AND ARTS

CURRICULUM STATEMENT: FALL 1972

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

The difference is so critical that you will underestimate it only at the peril of promoting your own confusion. There is something like a Copernican revolution going on here—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 whole phenomenon of Man.

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

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. In the arts there is a much greater emphasis 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 terms—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 "mentor" 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.
Those of you entering Division II courses will find that they are
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 the Arts to work together
because we share the sense of Erich Fromm about the good that
"flows from the blending of rational thought and feeling. If the
two functions are torn apart, thinking deteriorates into schizoid
intellectual activity, and feeling deteriorates into neurotic
life-damaging passion."
HA 103 (LC 113)  SEMINAR ON DOSTOEVSKY

Robert Hardin and Joanna Hubbs

"Gentlemen, I am tormented by questions; answer them for me."
—Notes from Underground

In this seminar we will read some of the major works of Dostoevsky and discuss them from several perspectives: historical, psychological, literary, and linguistic. We will familiarize ourselves with the social context in which Dostoevsky wrote and critically examine the literary techniques which he used to express the agony of a psyche caught in the maelstrom of social and cultural change of Russia in the last half of the nineteenth century.

The seminar will include some lecturing, but it will be largely devoted to group discussion. We will meet together once a week for 2-3 hours. Sub-groups of 5-6 students will meet once a week with the instructors. Those who know Russian are particularly encouraged to take the course and undertake special tutorial work on original texts. Students will be expected to do a significant amount of writing.

Works to be read (with probable additions or substitutions):
Notes from the House of the Dead
Winter Notes on Summer Impressions
Notes from Underground
The Double
The Brother, Karamazov
The Possessed
The Pushkin Speech

Enrollment is open.
THE RISE OF CUBAN NATIONAL CONSCIOUSNESS

Robert Marques

This seminar will aim at a study of the course and nature of the revolution in Cuba: its past, the background against which it took place, and its national and continental significance. We will begin by examining its roots in the Ten Years' War with Spain (1868-1878) and in the revolutionary movement that culminated in the Spanish-Cuban-American War of 1895-98. Our interest will focus on the legacy it owes to the thinking of men like Antonio Maceo and José Martí.

We will move on to focus on pre-revolutionary Cuba, the rise and importance of the July 26 Movement, with its leader Fidel Castro, and on the various stages—political, ideological, economic—that the revolution has gone through since its triumph in 1959.

We will be paying particular attention to the role of the United States in Cuban history. In addition, we will be concerned with how Cubans look at their history and their revolution and the effect that revolution has had on the culture and world view of the island nation and throughout Latin America.

Our readings will cut across the disciplines—History, Politics, Sociology, Literature—and will include works in both English and Spanish. Course enrollment, however, will not be limited to the Spanish reader.

The course will meet twice a week for 1½-hour sessions. Enrollment is limited to 16 students.
Beginning with Columbus’ arrival in the New World, this seminar, following the course of Caribbean history, will examine some of the specific ways in which the major language groups—Spanish, French, English—have been shaped by and have struggled against common historical experiences: the original violation of the Conquest, slavery, colonization, cultural imperialism.

The fact that the area is made up of populations who are all, in some sense, “foreigners” has had a profound effect on the ethos of the Caribbean. In consequence, we will be pondering the issue of identity and historical self-consciousness as it affects the cultural integrity of the islands, and in particular as it influences the rise of nationalism in the Caribbean.

The course will meet twice a week for 14-hour sessions. There is no foreign language requirement. Enrollment is limited to 15 students.

Ha 110  FILM WORKSHOP I  Jerome Liebling

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

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

The past 75 years have seen the motion picture rise to the position of an international language. It has transcended the bounds of entertainment to provide everlasting documentation of the world, its people and events. It has given added scope and incisiveness to every area of human activity. Our image and understanding of the world more often are gained through film and photographs than personal experience. The aesthetics and techniques of a medium so broad in implication should be understood by all.

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

Enrollment is limited to 12 students. The class will meet twice a week for one three-hour session and one two-hour session.
HA 111

A MAN: GEORGE ORWELL

James Haden

Orwell was a man very much part of those dark times which extended from the first World War through the second. He is most widely known through the novel Animal Farm and the novel 1984, but he left a large body of other work, including social commentary such as The Road to Wigan Pier, several volumes of fine essays, novels, and books about his own experiences such as Down and Out in Paris and London and Homage to Catalonia.

Through all of his work he was struggling to develop and maintain honesty and sensitivity to personal and social concerns. He is, therefore, a man who should not be divorced from his writing, nor the writing divorced from him. The course aims to include the major part of his work, studied in such a way that we are able to get some insight into the totality of the man himself, as an individual but as an extremely human being.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students.

HA 113

DRAWING AND PAINTING STUDIO

Arthur Hooper

This course will explore the creative and technical aspects of drawing and painting. Of major concern will be the relationship between the drawn image and how that graphic representation may or may not relate to the painted form. Slide talks will be given to explore how the great modern masters approached their work.

Figure drawing will be one of the concerns of this studio course.

The students will be responsible for all their art supplies. The class will meet for five hours per week—one two-hour and one three-hour meeting. Enrollment will be limited to 18 students.
MA 117

MYTH AND HISTORY

Joanna Hubbs

This is a course concerned with the nature of historical perception. We will begin with a consideration of the nature of myth, reading both original sources and interpretations of the significance of myth by Jung, Freud, Eliade, Campbell, and Levi-Strauss. The course will then concern itself with the evolution of historical consciousness in the West. Starting with Herodotus, we will consider the nature of historical perception through the Middle Ages to the end of the nineteenth century.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students.

MA 125

EIGHTEENTH-CENTURY ENGLAND: SELECTED WORKS

David Roberts

This will be a course primarily in literature, dealing with a limited number of major works by various men, none of them necessarily representative or even aware of each other. Although I hope students will begin to look for connections, for lines of sympathy or antagonism among the works, the course will be only tentative in its attempt to find cultural unity in eighteenth-century England. The emphasis will be rather on engaging each artist or work in depth and in isolation.

The class will meet about four hours per week. Enrollment is limited to 16 students.

Reading list:

(Background:) Donald Greene, The Age of Enquiry
Defoe, Robinson Crusoe
Fielding, Joseph Andrews
Swift, Gulliver's Travels
Gay, The Beggar's Opera
Boswell, Life of Johnson (abridged)
Burke and Paine on the French Revolution
Pope, "Essay on Man" and either "Essay on Man" or "Dunciad"
Cook, Voyages of Discovery
HA 133  
**LYRIC POETRY: THE MAIN ENGLISH TRADITION**

David Roberts

An intensive study of the shorter poems of eight major English poets between the Renaissance and the early twentieth century: Spenser, Donne, Milton, Burns, Keats, Tennyson, Browning, and Newman. The course will be organized as one semi-lecture per week followed by two discussion periods (i.e., three one-hour meetings per week).

Enrollment is limited to 16 students.

---

HA 139 (HA 239)  
**PUPPET WORKSHOP**

Eugene Terry

The workshop will be concerned with the designing and preparing of a marionette production to be performed during the Spring Term. The play has not been chosen, but will be announced before registration.

Since the planning will involve the careful coordination of work by a number of people to achieve a unified scale and style, the design for each marionette and each part of the set must be worked out in detail prior to their making. The first part of the term, therefore, will be spent drawing up these plans; the second part, in their execution.

Enrollment is limited to 16 Hampshire students. Additional students will be accepted through the Five-College Interchange program. The class will meet twice a week for two-hour sessions.
Men tell stories with their lives, stories whose concern with beginnings and endings, plot, and focus stand to deny that those stories are senseless, told by idiots. Every human life involves a passage from the many to the one, from the many lives one might live, the many persons one might become, to the one life one lives, the one person one is becoming. The question here is whether, in this process of human coming-to-be, always a coming-to-be-someone, in-particular, one can know what one is doing. If all of the human possibilities which one confronts represent only opinions regarding the human, what would it mean to claim that human becoming is a passage from opinion to knowledge?

This course will reflect upon several deeply-rooted and ranging claims to wisdom in human becoming. The peculiarly modern claim seems to be that human becoming is the creation of what is unique. Thus one can know only what one himself makes, which is to say that one knows what one is doing when one's life flows from one's own decisions, radically understood. One's posture toward one's life is that of a craftsman toward material to be crafted. Contrastingly, the claims of our common past, the claims of reason, faith, and tradition, suggest that human becoming is the discovery of what is common. We will reflect upon each of these claims in turn. Next generally, then, the question prescinding this course will be whether human coming-to-be is a matter of creation or discovery. Some of those whose writings we will surely look at are: Hannah Arendt, D. S. Carné-Rosa, Martin Heidegger, Hans Jonas, Sören Kierkegaard, Joseph Pieper, and Leo Strauss.

The course will meet twice weekly in two-hour sessions. Enrollment is limited to 16 students.
This course is divided into five units and deals with the music of some major world cultures: the music of the American Indian; the music of West Africa (tracing it in its transition to Black Rural America then to White Rural America); music of the Sinic cultures, Japan, China, and Korea; the music of India and Java; and finally, the contemporary American scene where we will examine Rock as a manifestation of our own culture and as a synthesis of several world musics.

In each unit we will consider the prominent features of the culture, the process of creating music, how the cultural values of the society are reinforced through its music, and analysis of the musical components per se.

This course is designed as the complement to *Music as a Social Activity*. The class will meet twice a week for 1½-hour sessions. Enrollment is limited to 25 students.
This course deals with the perception, awareness, analysis, and design of human environment—the ways in which human activities and needs find expression in forms and patterns that reflect and shape their lives. We will be concerned with a developed sensitivity to surroundings, an understanding of place, and the sense of the individual as an effective force in creating or altering his own environment.

This is primarily a workshop course. Using direct investigation, research, and design projects of a non-technical nature to confront and expose environmental problems and to understand the approaches and creative processes through which environment is made. The subject of these investigations will include:

1. How man sees and perceives his environment.
2. The identification of human needs, the functional and emotional concerns of environmental design—problem seeking and problem definition.
3. The vocabulary of environmental design—visual thinking and visual communication.
4. Environmental problems today—our legacy from the past and directions for the future.
5. The scale of human environment—teacup to megalopolis.
6. Creative synthesis—the leap to form. The translation of ideas, analysis, program and technical parameters into environment.

Much of the work will require visual presentations and analysis; however, no prior technical knowledge or drawing skills will be necessary. (Ability to use a camera would be helpful.) The student must provide his own drawing tools. Projects and papers will be due throughout the term. This course demands both time and commitment.

The class will be divided into two sections that will meet simultaneously. There will be two three-hour meetings per week plus odd day sessions for field trips, special services, and problems (to be mutually determined). Enrollment is limited to 24 (12 per section).
MA 146  CRETIC LIFE AND THOUGHT TO 300 B.C.

James Haden

This is a comprehensive survey of the evolution of Greek culture from early times to the point at which it is transformed into Hellenistic culture as opposed to Hellenic, not long after the deaths of Aristotle and Alexander.

The readings will include materials from Homer and Herodotus, from tragic and comic drama, from Herodotus and Thucydides. Special attention will be paid to the rise of philosophy and its relationships with all aspects of Greek culture: religion, political institutions, science, and the arts.

The class will meet twice a week for two-hour meetings. Enrollment is limited to 16 students.

MA 150  STILL PHOTOGRAPHY WORKSHOP

Elaine Hayes

The photograph as Art and Communication--its production and implications.

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

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

A $15.00 laboratory fee is charged for this course. The College will supply chemicals, laboratory supplies, and special materials and equipment. The student will provide his own film and paper.

The class will meet once a week for four hours plus lab time to be arranged. Enrollment is limited to 26 students (2 sections, 12 students each).
DANCE LAB II

Francis McClellan

This lab will cover the intermediate and advanced students. Permission of the instructor is required. The class may be divided into two sections, depending upon the technical competency of the participants.

Dance is: Imagination acting in and through time and space.
Expressing one's emotion through rhythmic movement.
Mind/body working harmoniously in space and in time.
Taking one's place in living space.
Motion--of the instant and part of the continuum of flowing energy.

Each section will meet for 1 ½ hours, four times a week. (The more advanced students in Dance Lab II will, in addition, be expected to participate in a bi-monthly choreography seminar.) Class work will involve experiences in technique, improvisation, individual and group exploration; and through films, discussions, concerts, and guest artists, we hope to have an opportunity to discover living philosophies of dance and movement. The choreography seminar will provide avenues for dance/performance events at Hampshire.

Enrollment is limited to 30.

DANCE LAB I

Francis McClellan

This will be a class for people with little or no previous experience.

Dance is: Imagination acting in and through time and space.
Expressing one's emotion through rhythmic movement.
Mind/body working harmoniously in space and in time.
Taking one's place in living space.
Motion--of the instant and part of the continuum of flowing energy.

The class will meet for 1 ½ hours four times a week. Class work will involve experiences in technique, improvisation, individual and group exploration; and through films, discussions, concerts, and guest artists, I hope we will have an opportunity to discover living philosophies of dance and movement.

Enrollment is limited to 30.
HA 158 (MA 258)  WORKSHOP IN CONTEMPORARY MUSIC PERFORMANCE

Randall McIlrath

In this course we will perform representative compositions of 20th-century literature beginning with post-impressionism through more recent Avant-Garde, chance music, and improvisation techniques. Included in the course will be some analysis as well as discussion of the aesthetics behind the music. Compositions selected will depend on the instrumentation of the class, but it is certain that most of the major trends of the modern period will be represented.

The course will culminate with a recital of these compositions. Admission to this course is open to instrumentalists, vocalists, and conductors by audition.

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

HA 162  THE CULTURE OF CLASSICAL CHINA

Francis Smith

This will be a lecture-discussion course with a maximum enrollment of 30 students.

In this course we will try to learn to read cultural history, using pre-modern China as an example. The intention is not to provide future historians with an introductory survey course on China, but rather to show non-historians some of the intellectual and aesthetic pleasures of reading the history of a complex culture.

Some heavy reading assignments should be expected. Everyone will write several papers on various aspects of East Asian cultural history--i.e., on the art, science, philosophy, law, and religion of the area. The teacher will alternate lectures and open discussions in about a 3:1 ratio. Part of the point will be to learn better how to use a lecture to learn and how to handle a discussion of history.

The class will meet twice a week for ninety-minute sessions.
I AND THOU

John Boettiger

This course will be a self-reflective inquiry into the nature and quality of intimate human relationships.

Mothers and fathers and their children

Husbands and wives and lovers

Friends

--these are the sorts of relationships we shall be exploring out of our own experience and through the ways and works of others.

Our principal interests will be in developing individual perceptions of relationships—the kind of sensory and intuitive and conceptual awarenesses that promote human understanding; in knowing better the varieties of intimate experience; and in exploring the arts of intimacy and their spoliation—the nurturant and the toxic ways we may be with another in love and friendship, the sorts of considerations that incline one relationship to fruitfulness, another to stagnation, and another to self-destruction.

In selecting the course's membership, an effort will be made to bring together a variety of perspectives, including those of men and women of different ages. Similarly, materials for the course will be drawn from a variety of humanistic disciplines, including literature, psychology, and film.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students. (If interest suggests, two workshops, each with a maximum enrollment of 16, will be formed.)
RELIGIOUS EXPERIENCE
John Boettiger

An inquiry into the dimensions-the sources, the characteristic imagery, the unfolding-of religious consciousness. The seminar will draw upon classical psychological sources (Jung, Freud, William James), and will explore the ground for a comparative perspective on the nature of mystical experience, both Western and Eastern. But if there is a central theme or style that is likely to pervade our work, it is that of story. For religious consciousness has to do essentially with the experience, the discovery and invention of a personal story that draws an individual life into love and into its own integrity. So we will dwell upon stories in search of insight. Our works may be drawn from a variety of sources-Christian parables, Hasidic tales, stories out of the traditions of Sufism and Zen Buddhism, biography and autobiography.

The class will meet twice weekly for two-hour sessions. Enrollment is limited to 16 students.

AUGUSTINE AND CAMUS: TWO MODELS OF FAITHFULNESS
Robert Magher

Augustine and Camus share a common landscape—the shores of North Africa at a moment when it seems that the threads of human civilization are unravelling. Stripped of cultural fabric and mask, man stands naked in his fate and becomes a question to himself. Camus' Caligula puts it with stark and telling simplicity: "Men die and they are not happy." This insight, a truth which few men, says Camus, follow to its core, ignites and consumes the writings of Augustine and Camus, which pursue the question of human blessedness. Both men deny the obvious, track the terrible, and celebrate the beautiful.

As we read, with demanding reach and care, in the writings of both men, we will see their steps cross and pause astride and, on occasion, confront each other uncomprehendingly. Reflections on time and life-time and life-story lead to reflections on faithfulness, violation, and judgment. Personal confession, autobiography, serve as a hardly Cartesian orifice from which the historical visions of Augustine and Camus spread out into the past and into the future and touch. Philosophy, theology, autobiography, and history converge when these two men converse beneath the blazing North African sun to do "man's work" which is, says Camus, "nothing but this slow trek to rediscover, through the decor of art, those two or three great and simple images in whose presence his heart first opened."

The class will meet twice weekly for two-hour sessions with occasional evening gatherings to read dramatically several of Camus' plays. Enrollment is limited to 16 students.
HA 174  READING POETRY

Sheila Houle

This course is designed to develop or enhance our ability to read and enjoy poetry. During the term we will read poems of various forms and times from Shakespeare to Theodore Roethke. In addition to the written word, our study will include the living word spoken by poets reading their own work and sung by contemporary lyricists, such as Bob Dylan and Jethro Tull.

In workshop fashion we will share our analyses and interpretations of the poems through discussions and the reading of papers. These experiences are designed to develop the ability to communicate our understanding of poetry.

Enrollment limited to 16 Division I students. Second-year students will be accepted by permission of instructor only. There will be two two-hour sessions per week.

HA 185 (NA 285)  HOW BACH DID IT:

TECHNICAL ASPECTS OF MUSIC

Randall McGeilman

Johann Sebastian Bach stands as a unique figure in the history of Western music. Culminating a 500-year evolution in polyphonic composition, he codified the harmonic practice of his time, and in so doing, his style became the basis for the music of the next 200 years. What is the secret of his style? What is the nature of his harmonic-polyphonic language?

For one term we will try to become "J.S." In an attempt to gain insight into Bach's style, we will try to think as he thought, compose as he composed. The essence of his style is crystallized in his 373 chorales and in his Two-Part Inventions. We will study these aspects of his work through analysis, draw the basic principles from our study, and attempt to compose a chorale and an invention on those principles. Our texts shall be the Riemenschneider edition of the Bach Chorales and the Two-Part Inventions.

The class will meet three times weekly for one-hour periods. This course constitutes Part III of a series in the technical aspects of music. Prerequisites: ability to read music and a familiarity with the fundamentals of music.
HA 186 (MA 286) WORKSHOP IN CONTEMPORARY MUSIC PERFORMANCE
James McElwain

In this course we will perform representative compositions of twentieth-century literature, beginning with post-impressionism through more recent avant-garde, chance music, and improvisation techniques. Included in the course will be some analysis as well as discussion of the aesthetics behind the music. Compositions selected will depend on the instrumentation of the class, but it is certain that most of the major trends of the modern period will be represented.

The course will culminate with a recital of these compositions. Admission to this course is open to instrumentalists, vocalists, and conductors by audition.

The class will meet twice a week for two-hour sessions.

HA 189 AESTHETICS OF MUSICAL PERFORMANCE
James McElwain

This course will examine the techniques of performance—the mechanics and craft of musical gesture, discussing the perception of music (including ethnic, psycho-acoustical, and temporal considerations) and the perception of the two distinct energies of playing and composing. For instance, the energies peculiar to each instrumental group will be studied: the particular Zen of wind instruments, the tribal dynamics of percussion, the sensuous voice, the objective synthesis of electronics. And the projection of these energies when playing traditional music, contemporary music, popular music, and unpolular music will be discussed as well. The gestures of improvisation will be examined from all theoretical and dynamic perspectives. The coincidental and incidental vibrations we call harmony will be compared to the spontaneous vibrations of melody and the temporal vibrations of rhythm.

The class will meet twice a week for two-hour sessions.
HA 193

BODY AND PSYCHE:
A WORKSHOP IN MOVEMENT

Janet Adler Beattiger

We are heavily conditioned to trust the verbal mode of expression and reception as if there were no other—to rely on the verbal memory as if the body held no memory of its own—to look for answers to our problems in our heads, as if our bodies possessed no hint of solution. We are our bodies. This course will be concerned with ways to connect our bodies consciously with our psyches—to more fully realize the integrity of body and psyche. Such an integrity inherently exists in us all, though we are often unconscious of it.

Through intensive experience in movement we will actively search for bridges between what we do and how we feel. We will be in search of the small child within us, of our mother and father within us, of the powerful realm of polarities—the earth and the sky, the light and the dark—within us, of the shadow or the unknown within us. The discovery of such parts often brings new awareness of self, and new awareness can bring growth toward owning one’s experience, toward being responsible for one’s life, toward wholeness.

The constant medium of intrapersonal and interpersonal work will be movement. In addition, we will be talking much together, writing consistently, and reading in response to experience—all as catalysts to reawaken the life of our bodies, to reawaken ourselves.

Basic reading will be drawn from the work of Mary Whitehouse, Charlotte Sulzer, Wilhelm Reich, Alexander Lowen, Ashley Montagu.

Sixteen students will be admitted to the course. We will meet twice a week for two-hour sessions.
HA 194  DESIGN WORKSHOP

Robert Mansfield

This workshop is designed to introduce the student to the process of visual thinking. As a studio course, Design Workshop is directed toward giving the student exposure to a wide variety of design ideas, principles, and applications. Both two- and three-dimensional design concepts will be investigated as they apply to the student's work in the course.

Areas of concern will include light, color, materials, methods, relief painting, sculpture, functional design, and many other possibilities.

Classes will meet twice weekly for 2½-hour sessions. These sessions will include slide lectures, films, demonstrations, critique sessions, and individual work on projects. Students enrolled in Design Workshop will keep a portfolio of their work which will become an evaluation of their work in the course as defined by them.

It will be necessary for each student to have a camera—an Instamatic will do fine.

Class enrollment is limited to 15 students.
Clayton Hubbs

Antonin Artaud's important and fascinating The Theatre and Its Double (1938), a collection of essays on dramatic theory, is difficult to summarize; essentially, Artaud calls for a return to an atavistic theatre of gesture projecting collective archetypes and a rejection of the "old" psychological and narrative (realistic) theatre. Artaud, a playwright, poet, and actor as well as a theoretician, will be our starting point and his theory our touchstone. We will try to look at other dramatic theory and practice from Artaud's point of view, so the first playwrights we read will be some of Artaud's favorites: Euripides, Seneca, John Ford, Webster, Tournier, Buchner, Jarry, and Strindberg.

Artaud called for a dreamlike theatre of metaphysical cruelty whose rituals of involvement are patterned after religious rites. In contrast to Artaud, we will consider Chekhov's realistic theatre of human cruelty whose secular rituals of noninvolvement are those of everyday life. Chekhov was concerned to show "life as it is" rather than life as we see it in our dreams (or nightmares). Still, Chekhov and Artaud share a similar expressed objective—to shock us into a recognition of our situation so that we will do better. We will finish our reading and discussion with two contemporary playwrights who exemplify the similar aims and conflicting methods of Chekhov and Artaud: Pinter and Genet.

Because of the amount of material to be covered, the course will be tightly structured. Each student will participate in the teaching of the course by giving at least one class presentation (the written form of which will be given out ahead of time) in addition to writing a paper. The class will meet twice a week for two-hour sessions. Enrollment is limited to 16 students.
This is a master course in theatre which will meet twice monthly for three-hour sessions. The purpose is to arrive at working definitions which each separate discipline will build upon in practice. Actors, playwrights, and directors will study together in this course, and then pursue their separate interests in workshops and personally initiated activities. Areas of attention will be:

- The nature of present culture. A review of the odds against a performing art. A study of apprehensions, disbelief, and the general breakup of social forms. Why theatre can’t exist without form and requires a chemistry of trust. Mobile society: has it a use for art?
- The dramatic moment. The implicit compact entered upon by performer and audience. The need to invest; the will to believe. The event as inherently infectious.
- Convention and acceptability. The myth of being unique.
- Learning to lie well enough to speak the truth.
- An understanding of fable. Continent linear time, the harrack of theatre.
- Strictures inherent in drama. A sense of history in an age of momentary arrogance.
- The nature of risk. Vulnerability as the prime source of security.
- The event as microcosm.

We will work specifically at those definitions, always practically and with a product in mind. Directors, actors, and playwrights will all generate from this common inquiry. Subdivided under this course will be three full workshops:

**Playwrighting Workshop**

The intent is to promote maximum growth among a maximum of talented writers. During one week per month (Schroack’s ‘on campus’ week) the playwrights will meet for two two-hour sessions, attacking specific problems of dramatic writing, reading original scripts, and studying technique. There is expected from those who enroll...
serious, disciplined engagement. Enrollment will be at the discretion of the instructor with up to twelve students. Material to be discussed should be sent to Mr. Schrock in advance.

Mr. Schrock will also work personally with playwrights on a close one-to-one basis during the 'on campus' week. Other contact will be expected by mail throughout the winter, with scripts sent upon completion (or semi-completion) for study, help, and prodding at his home address (South Bristol, Maine). Our hope is to produce and develop as many student-written plays as possible in the other two workshops.

Directing Workshop

This workshop is for students wanting to work primarily as directors but is also for actors and playwrights wishing to broaden their technical understanding.

The directing workshop will meet with Mr. Schrock for one three-hour period during his 'on campus' week. We will study under strict working conditions the mounting of plays, the re-direction of scenes done during the preceding month, mounting new scenes cold, and working at very detailed craft technique.

As an ongoing Directing Workshop activity, the directors will direct those scenes and those plays which interest them (as schedules allow) and will meet once a week with Tim Landfield during the month to further define the craft and to work mutually at specific problems: blocking, intent, movement, evocation, audience intelligence, how to determine a style, pace, etc. The main body of work, of course, will be the individual’s "doing of the art," the mounting of the product dependent upon his own initiative. Special scenes will be brought to the monthly workshop with Mr. Schrock—scenes with particular problems/qualities/interests.

It will be understood that all persons involved in Theatre as Event shall be fair game for acting in scenes. Also considered, of course, will be any other students on campus who express interest even though involved primarily in some other academic pursuit.

Acting Workshop

This workshop will meet twice weekly for two-hour sessions with Tim Landfield throughout the term and will meet for one three-hour session with Mr. Schrock during his 'on campus' week. Topics will include:

- The nature of characterization and private resource.
- Exploration of personal potential.
- Transformation: from script to actor to product.
- Trust/risk - on stage, with audience, personally.
- Acting exercises, improvisation, movement.
- Explicit scene work. This will constitute the backbone of the course—the doing of the craft in a concrete setting, using good literature. Specific craft problems will be worked on, mounted, brought to class. We will also examine closely the nature of problematic scenes: creating an intention, implicit behavior, "contacting" on stage, movement, relation to set, embodying a fixed emotion in variant ways, arriving at a style, human intelligence and the human body, playing for peers, etc.

A maximum amount of student initiative will be expected, plus a maximum amount of activity. It is expected that the acting and directing workshops will intermix, perhaps extensively. Depending on interest, there may be a special workshop held each two weeks, combining actors and directors. Playwrights also are encouraged to take part in workshops other than their own.

During the 'on campus' week, Gladden Schrock will work with the actors re-directing scenes, working on technique, and getting at a total refinement of the craft.
HA 201  THE AMERICAN LITERARY LANDSCAPE

David Smith

"The land was ours before we were the land's," says Robert Frost, who also speaks of our "vaguely realizing westward." This course will examine the function of the specifically American setting in the work of a number of American writers from the Puritans through Faulkner and Frost.

Neither a survey nor a course in one genre, the course will instead concentrate on four related sub-themes for which literary examples are plentiful: wilderness, virgin land, the garden, property. Around each of these ideas cluster a number of assumptions, attitudes, and myths, and a lot of good writing. Some likely examples: William Bradford, Captain John Smith, William Byrd, Thomas Jefferson, Crevecoeur, Cooper, Thoreau, Hawthorne, Mark Twain, Frost, Faulkner, Robert Lowell, James Dickey.

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

HA 205  CANTERBURY PILGRIMAGE

A SEMINAR IN MEDIEVAL STUDIES

Sheila Howes

This course will explore the many roads of 14th-century English culture—the history of the times, the art and music, and especially the literature. We will travel this road in the company of the master of journey-literature, Geoffrey Chaucer and a West Midlands contemporary of his, the unknown author of Sir Gawain and the Green Knight, a marvelous tale of King Arthur's knight and his journey. We will also travel the by-roads of religious and secular lyrics and will stop for a mystery play and a morality.

The pilgrims making this pilgrimage will have an opportunity to explore on their own the further reaches of the main highway or to go off on a by-road that intrigues them. In the true Canterbury tradition, each pilgrim will be invited to share his tale with the others.

Enrollment is limited to 20 students. There will be two 1½-hour sessions per week.
RA 206  

FILM WORKSHOP II

Elaine Hayes

A workshop to help the student continue to develop his use of film toward the development of a personal vision.

Specific areas of concern:
The film as a tool for environmental and social change.
Aspects of the experimental film, its aesthetics, energy, personal vision.
Expanded cinema—new movements in film aesthetics.

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

There will be a lab fee of $25.00. The class will meet once a week for four hours. Enrollment is limited to 10.

---

RA 208  

THE EPIC

Stephen Mitchell

One of the dominant literary forms of the Western World is the epic. It has influenced literary theory, linguistic and philosophical research, questions of aesthetics, and some scientific research. This course will center about the epic as a literary form, attempting to explain its slow charm and continuing, if subversive, influence. We will read in English all of Homer; the first half of Virgil's Aenid; Dante's Inferno, with selections from the Parnassus and Paradiso; Boswell; and all of Milton's Paradise Lost; as well as passages on theory from Fielding and Aristotle. In addition to the reading, each student will be expected to write at least one paper and to take a final examination.

The class will meet twice weekly for two-hour periods.
HA 225  PHOTOGRAPHY WORKSHOP

Jerome Liebling

A workshop to help the student continue to develop his creative potential and extend the scope of his conceptions in dealing with photography as:

- Personal confrontation
- Aesthetic impressions
- Social awareness

Through lectures, field work, and seminars, the student will attempt to integrate his 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 student 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 twice a week for one two-hour meeting and one three-hour meeting. Enrollment is limited to 12 students.

HA 230  PLATO'S EARLIER DIALOGUES

James Haden

The richness and subtlety of Plato's philosophical artistry exhibited in his dialogues are never-ending. Unfortunately, academic treatments of them tend to abstract certain doctrinal bones which lend themselves to system-building or to refutation, depending on the abstracter's outlook. Yet it seems juster to Plato to say, with J. H. Finley, Jr., that in a mind like his "ideas are not distilled and separated off from emotion and the senses, as if these impeded thought; rather, it works and moves as the consciousness itself seems to do, simultaneously entertaining ideas, sensitive impressions, moral tones, feelings of attraction or dislike, all inseparably bound together and speaking as one."

This is especially true of the dialogues from the first half of Plato's philosophical career, which probably culminated in The Republic. I don't propose to deal in this course with that book, since it is very long and complex and is also likely to be encountered in other courses. Instead, I want to make a close textual study, with the attitude described by Finley in mind, of several of the shorter dialogues, such as the Crito, Hippias, and Philebus, and two or three of the somewhat longer masterpieces like the Gorgias, Phaedo, Protagoras, and Symposium.

The class will meet twice weekly for two-hour sessions.
What is the relationship of the Age of Reason to Romanticism? This will be the central question in a seminar on France in the latter half of the eighteenth century. Our approach to the problem will be through an examination of the philosophical thought of the age as it is reflected in the novel. We will consider this emerging literary genre as a vehicle for the ideas of the philosophes and will examine the extent to which attempts to build a world view on the basis of rationalism and empiricism lead to irrational conclusions.

We will read works by Montesquieu (Persian Letters), Prevost (Monon Lescaut), Rousseau (Houelle Belotte), Diderot (Rameau’s Nephew, Jacques the Fatalist), LaFon (L’Alchimie Dangereuse), de Sade (Justine), Goethe (Faust, Sorrows of the Young Werther), and Chateaubriand (René, Atala) against a background of interpretations of Enlightenment thought: Becker, The Heavenly City of the 18th Century Philosophers; Cassirer, The Philosophy of the Enlightenment; Cey, The Enlightenment: An Interpretation; and Crocker, An Age of Crisis: Men and World in 18th Century French Thought.

Reading knowledge of French would be helpful as would some general background in history or philosophy.

The class will meet twice a week for two-hour sessions.
PROBLEMS IN ENVIRONMENTAL DESIGN

Horton Juster and Earl Pope

This is a new experimental pilot program employing a difference operational format from most courses. Students will work on projects in collaboration with professionals and outside consultants.

This course will concern itself with research and/or design studies of some of the basic problems in or relating to the making of environment. Each term one or more of these problems will be investigated in depth with the object of:

1. Engaging the student in the full range of professional environmental design concerns:
   A. To define and extend their interests.
   B. To increase their understanding of the scope and complexity of environmental problems.
   C. To assist them in developing methods of approaching and analysing environmental problems.
   D. To develop skills in conceptualizing, developing, and communicating ideas.

2. Developing significant and meaningful material in the field of environment that will be of value to both the community and the profession at large.

Some projected areas for investigation are:

2. The Making of a College - Studies of the relation of form and idea.
3. Perception and Play - The objectives and design of recreation spaces.
4. Prefabrication and the systems approach to environment.
5. The mobile environment.
6. The market place.
7. Implications of technology on environment.
8. Demountable, expendable, expendable, and temporary environments.
9. Experimental learning environments.

While the precise subject matter of the course may not be determined in advance, it could include any of the above or other problems of similar scope and value. The choice of projects will be determined mutually by the students and the faculty.

The course will be conducted as an ongoing, continuously operating studio dealing with specific realistic problems. It will require the regular productive presence of all enrolled students. We will attempt to operate as nearly like a professional studio as is possible.

Permission of the instructors is needed. Since this is a studio course, the students must be regularly present in the drafting room for consultation. The class will meet twice weekly for two-hour sessions. Enrollment is limited to 12 students.
BA 280  

STUDIO ART WORKSHOP

Arthur Roemer

The major concern of this workshop will be to develop a critical aesthetic to reinforce the work produced in the studio. The students will develop their own course of study in the areas of painting, sculpture, graphic design, or typography, etc., and meet as a group for regular critique sessions.

Field trips and visiting artists will be part of this program.

Students will be responsible for the purchase of all of their studio materials.

The class will meet twice weekly for two-hour meetings. Course enrollment is limited to 16 students.

---

BA 290  

LITERATURE AND THE BLACK AESTHETIC

Eugene Terry

This course, which takes its title from that of an essay by Addison Gayle, will closely examine critical essays which express a need for and attempt to define a Black aesthetic. We shall apply the explicit and implicit theories found in these critical statements to literary works—plays this term—written by Black authors. We shall be able to better understand what informs the evolved literature of the Black Aesthetic, how these works differ from those of earlier Black writers who are frequently castigated by the adherents of the movement, and possibly discover literary forebears.

The principal critical text is Gayle's anthology, The Black Aesthetic. It will be supplemented by earlier and more current essays and a number of plays.

Enrollment is limited to 15 Hampshire students; additional students will be accepted through the Five-College Interchange program. The class will meet twice weekly for one two-hour session and one one-hour session.
HA 296  CONTEMPORARY SCULPTURE WORKSHOP:
THE PROCESS, THE PRODUCT

Robert Munsfield

This studio course is designed to give the student exposure to
the creative processes that are incorporated and confronted in
the making of contemporary sculpture.

Experimentation with materials, methods, concepts, and applica-
tions will be of primary concern to this workshop. Contemporary
sculpture will be confronted and discussed through individual
presentation, field trips, group critiques, and practical in-
volvement.

As a means of establishing a visual awareness of space, the direc-
tion of this course will relate to contemporary sculpture through
design theory, art, technology, color, and individual confronta-
tion.

The class will meet twice weekly for two-hour sessions. Enroll-
ment is limited to 12 students.
A course dealing with modern literary uses of myth. For example, T. S. Eliot in his review of *Ulysses* stressed Joyce’s use of myth as an external ordering principle to give form and unity to the “immense panorama of futility and anarchy which is contemporary history.” It could be that Eliot’s statement is more applicable to Eliot than to Joyce; at any rate, this is an example of the kind of general questions we will deal with in our reading of some representative works of fiction by Lawrence, Mann, Hesse, Kafka, and Joyce.

Early in the course we will explore, in reference to the literature, the nature of myth and its mysterious power (its relation to magic, religion, ritual, dream, neurosis), try to determine how it gets into and relates to literature, and attempt to acquire at least a rudimentary grammar of myth. The emphasis in our collateral readings (including Freud, Jung, and Neumann) will be on the psychological dimension of myth.

The reading list is a long one, and each of the works will make its own difficult demands. Students are therefore encouraged to do some work in advance and to expect to be busy. In addition to an oral presentation (the written version of which will be made available to the class ahead of time), there will be a paper on a major work not on the reading list. The class will meet twice a week for two-hour sessions.
SCHOOL OF LANGUAGE AND COMMUNICATION

LANGUAGE ACQUISITION
LC 105
T. Watsow

STRINGS, TREES, AND LANGUAGES
LC 106 (NS 123)
U. Marsah
J. LeTourenne

EXPERIENCE AND THE SELF
LC 107
C. Witherstomp

INTERPERSONAL COMMUNICATION
LC 111 (NS 107)
N. Stillings
J. Talmam

SEMINAR ON DOSTOEVSKY
LC 113 (NA 103)
J. Hubba
R. Rardin

EVOLUTION OF ENGLISH
LC 128 (NA 127)
S. Houle

POLITICAL COMMUNICATION
LC 121 (LC 225) (SS 147 SS 248)
C. Hollander

COMPUTER SYSTEMS, LANGUAGES AND APPLICATION
LC 137 (LC 237) (NS 123 NS 223)
J. LeTourene
R. Mitchell
A. Lants et. al.

LANGUAGE PROBLEMS OF DEVELOPING NATIONS
LC 139 (LC 239) (SS 133 SS 233)
H. Lilligs

HUMAN LANGUAGE AND HUMAN SCHOLARSHIP: EDWARD SAPIR (1884-1939) AND IRWIN CHOMSKY (1928- )
LC 140
R. Rardin

INTRODUCTION TO THE PHILOSOPHY OF LANGUAGE
LC 141 (LC 561)
C. Witherstomp

THE VARIETY OF SYMBOLS
LC 142
W. Marsah
N. Stillings

MASS MEDIA AS SOCIAL INSTITUTIONS
LC 143
D. Furr
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism as Public Dialogue: A Workshop</td>
<td>D. Kerr</td>
</tr>
<tr>
<td>in Writing and Information Gathering</td>
<td></td>
</tr>
<tr>
<td>FORMAL LOGIC</td>
<td>J. LeTourneau</td>
</tr>
<tr>
<td>LC 202 (NS 123 NS 223)</td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION TO LINGUISTICS</td>
<td>R. Rardin</td>
</tr>
<tr>
<td>LC 205</td>
<td></td>
</tr>
<tr>
<td>Decoding the Speech Stream Data ↔ Theory</td>
<td>J. Koplin</td>
</tr>
<tr>
<td>LC 215</td>
<td></td>
</tr>
<tr>
<td>Cognitive Development: Seminar and Practice</td>
<td>M. Gale</td>
</tr>
<tr>
<td>LC 226 (NS 236)</td>
<td>M. Stillings</td>
</tr>
<tr>
<td>Introduction to Linguistics</td>
<td>T. Wasow</td>
</tr>
<tr>
<td>LC 227</td>
<td></td>
</tr>
<tr>
<td>Conversation Analysis</td>
<td>J. Talman</td>
</tr>
<tr>
<td>LC 228</td>
<td></td>
</tr>
</tbody>
</table>
The descriptions of the Language and Communication courses offered for the Fall Term 1972 are, for the most part, self-explanatory. Students entering the College this term should read general descriptions of Language and Communication curricular planning in the Catalog, or should ask for a planning bulletin at the Language and Communication Office.

Two things should perhaps be emphasized. First, the courses you read descriptions of now will be supplemented by half a dozen more, offered by faculty who are not yet appointed. Some of these, we expect, will deal with issues in the mass media and in public communication.

Second, these courses have no limit on enrollment. You may be sure that you will not be 'closed out' of a course because of heavy enrollments. If very many people do enroll in a course, additional faculty will assist, or (alternatively) advanced students may work with the faculty member in leading the course. We will make every effort to preserve courses with very small enrollments.

Students enrolling in Division I courses are encouraged to read the Language and Communication examination policy procedure statement early; copies are available from the Language and Communication office, or from the chairman of the examination committee, Christopher Witherspoon.

Those planning a concentration in Language and Communication or which will involve an IAC faculty member in a major way are similarly encouraged to get in touch early with the faculty whose interests seem helpful.
Almost all children acquire the language of their community on a regular schedule and within a relatively short period of time. We will spend most of this course examining what it is that the child does in this task. Special attention will be given to the descriptive material in such sources as Ruth Weir's *Language in the Crib*, moving on to Roger Brown's studies of pre-school children, and finally to Carol Chomsky's analysis of the continued development of language in the grade school years. There is no substitute for a thorough acquaintance with this work as assistance in avoiding inadequate answers to the question, "How does a child do it?" The only accurate answer at this time, however, is that "nobody really knows."

Each student who enrolls in the seminar will be encouraged to locate a child in the community whose language development can be observed during the term. This is not a requirement, but experienced with this course during the past year has indicated that this concrete field observation of a child in the process of acquiring language was an invaluable aid to understanding the theoretical issues discussed during class sessions. Time will be made available near the end of the term for these students to report on their work for the benefit of everyone.

The course will meet twice a week, 1½ hours each session.
While the beauty and intellectual power of mathematics can be conveyed by a variety of introductory courses, most students prefer to study a part of mathematics which is useful in their understanding of other subjects. The calculus has been the most common choice, although more recently probability theory and linear algebra have proved to be very appealing, especially to students in the social and biological sciences. Hampshire offers all three of these options. This course presents a series of related topics in algebra and logic which are interesting purely as mathematics and, in addition, have applications in what might be called the language sciences: linguistics, computer science, and parts of cognitive psychology and analytic philosophy. The "new math" terminology of sets, functions and relations will be introduced and used to formulate mathematical models of computers; several classes of languages will be studied; finally, a preview of modern algebra and mathematical logic will be given.

Four one hour classes per week.
This is a first course in philosophy. It could also be titled "Our Knowledge of the Internal World"; "The Prisoner of Mescalito"; "Consciousness: its objects, its subjects, its varieties"; "Me and My World, or How to Talk to Yourself, or what to do till the Solipsist Leaves (that old devil Solipsist in your heart)"; or conceivably even "Introduction to Philosophy".

The aim of the course will be to develop an appreciation of a number of important problems of philosophy, both traditional and contemporary; some knowledge of important "solutions" to these problems and theories arising from them; some familiarity with various techniques used in formulating and answering philosophical questions; and a more satisfactory and articulate understanding of a number of philosophically problematic concepts - both very general ones such as consciousness, objectivity and perception, and e.g., dissociation, feeling doubtful about something, having a toothache, descriptions of one's color experience at a given moment, anger.

For people who want to think out sustained arguments and to develop positions in detail, tutorials will be available and encouraged. For those who don't care to write much but wish to read, think, and talk, there will be weekly discussion groups. For those who wish to read a bit but mainly to soak up material from lectures and the instructor's comments, there are many introductory philosophy courses elsewhere in the Valley.

Readings will include selections from traditional philosophers, including Descartes, Hume and Kant; recent and contemporary philosophers, e.g., Husserl, James, Russell, Saussure and Wittgenstein; psychologists and physiologists; novelists and poets; and Castaneda, Lilly, Laing, and other shamans and Great Minds of our time.

Two 1.5 hour discussions per week plus one 2 hour tutorial or discussion every other week.
LC 111 (SS 107)  INTERPERSONAL COMMUNICATION

Neil Stillings
Janet Tallman

TOPICS AND MATERIALS

Social psychology and sociology of face-to-face interaction. The work of Erving Goffman will be the major source here. In addition we will introduce cross-cultural material and experimental studies which have begun to appear recently.

The study of gestural communication. Two major areas here are human territoriality and body motion communication. In the first area the readings will be drawn from books by Hall and Sussman and the many papers which have appeared recently in the journals. In the second area we will read papers by Ekman, Birdwhistell, Scheflen and others.

Special topics. There are a number of special topics which will be included in the course or offered to students as options, e.g. Emily interaction, organizational communication, small group processes.

METHODS

Besides reading and discussion the class will conduct a set of exercises in the field, and we hope to bring in two or three guest speakers.

Two 2 hour meetings per week.
These two passages—the opening lines of Beowulf followed by the first lines of the Prologue to The Canterbury Tales—may not look like samples of our native language but they are! They represent two major phases in the evolution of English, known as Old English and Middle English. In this course we will study the origins of our language and the ways it has changed from the time of the Beowulf poet - the sounds (we will learn to pronounce Old and Middle English so we can read the literature out loud), the way sentences are put together, the changes in meanings of words. We will look briefly at those forces outside language which affect some of these changes—political, military, social, even geographic influences, borrowings from other languages and so on. Most important, we will be studying those older stages of Modern English primarily through the literature of each period. Thus we'll not only have authentic examples of the language but also have an opportunity to read these texts in the original version.

Enrollment is limited to 16 students and there will be three one-hour sessions per week.

This course is a prerequisite for Spring Term course in Anglo-Saxon culture.
The course will be concerned with how the nature of a political system, its values and institutionalized norms of behavior, affects the use of communication as a means to, and instrument of, power.

Topics to be included are:

Content - The Symbols and Myths of Politics

Structure and Form - Mass Impersonal and Face-to-Face Modes

and Patterns of Combining

Purposes and Function: Ways in which Communication Supports, or Contributes to Changes in, a Political Culture (legitimation of power, creation of political identity or community, conversion, mobilization, interest articulation, and so on).

Regulation: Problems of Freedom and Constraint

Audience Response: How People Use Communications Channels and their Opinions about Them

Effects: Persuasibility and Human Resistance

The course will be both cross-cultural and comparative with respect to type of political system. Material on the Soviet Union, China, Nazi Germany, "developing" nations and the United States will be emphasized.

The course will meet twice a week for a total of three hours.
The course will consist of a core program plus a set of elective labs. The core material will cover APL and FORTRAN IV. APL will be taught very extensively and thoroughly, so that the students will attain a high degree of proficiency which should allow them to apply the language with ease to problems that they may wish to solve in the future. A variety of teaching approaches (e.g., independent study, class lecture, group discussion) will be available. After mastering APL, the students will learn FORTRAN so that they may begin to see how programming languages can not only look different, but also how they are often designed for different applications. (On the SMAS Time-Sharing System, for example, APL has very limited facilities for dealing with a large data base, while FORTRAN can deal with extremely large data bases.)

The labs will be offered on a variety of subjects. They will be designed to teach the student more about computers and computing systems, allow him or her to constructively use the languages being taught in the core, and introduce him/her to an application language. Topics for some of the labs will include: "Computer Hardware", "Simulation and Simulation Languages", "Computer Assisted Instruction", "The Use of Computers in Statistical Studies", "Abstract Models of Computers", "Artificial Intelligence".

Depending on the laboratory or laboratories which the student enrolls in, the course can be used as a basis for an examination in any applicable School or the Program in Language and Communication. All students will leave the course with a "fluent" knowledge of at least one programming language, and an understanding of how to apply it.

Faculty and upper division students will work jointly in preparing materials, problems, programs, and instruction in this course. An analogous course, possibly with different application topics, is contemplated for the Spring term.

Descriptions of some of the laboratories follow:

THE USE OF COMPUTERS IN STATISTICAL STUDIES
Barbara Manchester

The use of computers can remove a lot of the drudgery from statistical analysis of data.

No prior knowledge of statistics will be assumed and the lab will concentrate at first on developing an intuitive understanding of statistical statements. As the lab progresses emphasis will shift to analysis of data sets, involving use of system library programs as well as program writing. Students with data sets arising from projects connected with other courses will be encouraged to discuss problems and methods of analysis.

(continued)
HARDWARE
Stephen Mitchell

The function of this laboratory is to investigate in a systematic manner various facets of computer hardware and its peripheral devices. At the end of the term, the student should have a good grasp of the functioning of major hardware components and their relation to software systems. Among other topics, we will discuss registers, codes, transfer rates, numerical bases, cycles, and I/O devices.

SIMULATION AND SIMULATION LANGUAGES LABORATORY
Larry Wolf

This lab will introduce students to the use of digital computers for studying systems through simulation procedures. Examples will be chosen from a variety of everyday situations (e.g., estimating the flow of people in the dining hall or the flow of blood in a person’s body). We will cover the principles of simulation by “walking through” the examples and translating them into APL or FORTRAN (which will be taught in the Core). The simulation language GPSS (General Purpose Simulation System) will also be introduced once the basic approaches are understood. We will discuss the design and structure of simulation languages and see how GPSS meets these needs.

Core: Two two-hour meetings
Labs: Two one-hour meetings

The distribution of class time will shift from the core to the labs as the term progresses.

Mr. Lantz is a Division II student at Hampshire College
Mrs. Rambly is a student at the University of Massachusetts.
Mr. Wolf, a Hampshire Fellow (1971-72), will be a graduate student in computer science at the University of Massachusetts.
Most of the developing nations in the world today face a complex set of social, economic and political problems. Frequently at the root of these problems is the inadequate level of communication among segments of the nation due to lack of a common, well-developed language. This often results in the creation of a new caste system based on language, which severely limits implementation of the ideal of equality of opportunity within the nation. In India, for example, establishment of Hindi as the national language would mean that 40% of the total population would be placed at a distinct disadvantage in the competition for desirable jobs.

This course will explore the questions of (1) what characteristics a language must possess to be an adequate tool of communication within a nation, and (2) the nature of the people-language bond which makes governmental linguistic manipulation difficult. We will also examine various ways people in multilingual societies carry on necessary communication, cases where lack of communication hampers national progress, successful and unsuccessful means which have been tried to solve a nation's linguistic problems, etc.

While the course will cover both linguistic and sociological aspects of the subject, each student will have the option of concentrating more effort on one approach than on the other. Students interested in Israeli culture, for example, could examine either the processes by which ancient Hebrew was developed to serve the needs of a modern nation, or what problems exist in Israeli society due to linguistic differences.

Many of the readings for the course will be taken from Readings in the Sociology of Language, J.A. Fishman, ed., Language Problems of Developing Nations, Fishman, Ferguson, Das Gupta, ed., and Social Linguistics, W. Bright, ed., among others.

1½ hours twice a week.
Edward Sapir and Noam Chomsky have made brilliant contributions in this century to the study of linguistics. Sapir's book *Language* - and his research in American Indian languages - remain central to modern linguistics. Chomsky's work on the theoretical foundations of linguistics caused a conceptual revolution in the field, with shock waves extending to other social sciences, particularly psychology.

Sapir and Chomsky have done more than study the structure of language; however, their intellectual genius has always been informed by social conscience.

In addition to being a linguist, Sapir was an anthropologist, poet, and critic. He was passionately concerned about the quality of life. In an essay written after the first world war Sapir wrote, for example: "A genuine culture refuses to consider the individual as a mere cog....The major activities of the individual must directly satisfy his own creative and emotional impulses, the individual must directly satisfy his own creative and emotional impulses, the individual must directly satisfy his own creative and emotional impulses; he must always be something more than means to an end. The great cultural fallacy of industrialism, as developed up to the present time, is that in harnessing the majority of mankind to its machines."

In the same intellectual tradition, Chomsky has divided his time between linguistics and social criticism: "Any person who is paying serious attention to the contemporary scene must face a serious dilemma. On the one hand, he wants to accept the role of a responsible and sane citizen which, to me, entails a willingness to commit himself to bring about large-scale changes in American society. At the same time, he wants to make his own contribution to contemporary culture, whatever it may be, as a scientist, as a scholar, as an artist. It is not so obvious that these roles are reconcilable....and if either is abandoned it can be done only at significant personal and social cost."

This seminar will explore the 'dilemma' to which Chomsky refers. We will seek to integrate the works of these two scholars, to understand the connection between their linguistic work and their social concern.


Three one-hour meetings per week.
INTRODUCTION TO THE PHILOSOPHY OF LANGUAGE

Christopher Witherspoon

Problems having to do with (a) the philosophical analysis of communication acts and situations, linguistic and non-linguistic; (b) semantics, primarily semantics of natural languages; (c) relations between philosophy and linguistics. Readings will include Austin, How to Do Things with Words; Searle, Speech Acts; Quine, Word and Object; Strawson, ed., Philosophical Logic; and a number of articles and excerpts from larger works.

This course is not intended for people who expect philosophy courses to stimulate their glands or to transform their vision of the world, or for people who are unwilling to read and write extensively and carefully. Some background in logic, philosophy or linguistics would be useful, but nothing of the sort will be required.

Two lectures/discussions plus (optional) section meeting per week. Tutorial every third week.

THE VARIETY OF SYMBOLS

William Marsh
Neil Stilling
and possibly others

From myth to mathematics symbols permeate human life. We live in terms of meanings which are created, manipulated and communicated through symbols. Language is the most prominent and most studied symbolic structure, and concepts drawn from the study of language in philosophy and linguistics have been a central part of most attempts at a systematic theory of signs or representations general enough to include our use of symbols in logical thinking, rhetoric, art, myth, ritual and dream. We will study several such theories which attempt to discern both what is common and what is genuinely unique to these various symbolic activities. The theories contain food for both thought and criticism, since each contains insights and none is adequate. Short readings will be drawn from several sources, and we will read in entirety:

Philosophy in a New Key by Susanne K. Langer,
Art and Illusion by E. H. Gombrich, and
The Image by Kenneth1 Boulding.

The value of the theories lies not in their application to specific symbolic activities, which does not usually lead very far, but rather in their attempts to illuminate the nature of symbols and the distinctions among various types of symbols. That is, in their attempts to provide a broad perspective on human nature.

Two 2 hour meetings per week.
The focus of this course will be the structure and function of mass media in America, particularly the interrelationships among the media and other social institutions. We will explore the philosophical bases of the press, the political and social influences affecting media policies, and efforts made to determine the influence of mass media on its consumers.

During the second half of the course we will concentrate on critical analyses of current controversies about media performance. During this period students will prepare and conduct full-scale debates, similar to PBS's "The Advocates," on topics such as:

- Government secrecy vs. the public's right to know
- Pornography and violence
- Media access for minorities
- The Holocaust influence
- Truth and fairness in the mass media
- The effects of the "new technology"

---and others

**READINGS:**

- William Fulbright, *The Pentagon Propaganda Machine*
- Walter Lippmann, *Essays in the Public Philosophy*
- James S. Reston, *The Artillery of the Press*

And others

The class will meet for 90 minutes twice a week.
This workshop is designed to help students improve their existing writing skills and to assist them in developing new ones. Principles of communication theory will be examined and applied to written communication, particularly reporting for the mass media.

The main thrust of the workshop will be toward training in gathering, analyzing, and effectively communicating information to specific audiences. While expository writing will be emphasized, editorial writing and narration will also be covered.

In addition to readings in communication theory, reporting in the national press will be analyzed.

Members of the workshop are expected to produce publishable material. Students will be encouraged to submit their work to *Citizen* and other five-college publications in addition to local papers and other appropriate publications.

A major project for the workshop will be in-depth reporting of the November election in a near-by community.

The workshop will meet twice a week for 90 minutes the first month and once a week plus tutorials thereafter.
Work in logic during the twentieth century has been and continues to be one of the exciting chapters of both mathematics and philosophy. This subject has grown naturally from a descriptive study of "proper reasoning" to an abstract discipline within its own right. In recent years applications of logic have extended beyond the true parent fields to new areas of computer science, linguistics and cognitive psychology.

In addition to studying some of these applications the course is intended to accomplish a detailed survey of the major results obtained in logic during this century. Work to be studied includes propositional languages, a study of both the syntax and semantics of first-order languages (including the completeness and incompleteness theorems of Gödel and an introduction to model theory), the formalization of the notion of algorithm and an introduction to recursive function theory and finally some mention of contemporary work concerning the independence of various statements from the common axioms of set theory.

Three class hours per week. Either three 1 hour meetings per week or two 1½ hour meetings per week.
"In the beginning was the Word..." We have always been moved by the power of language, the communicative magic which seems to be our most characteristically human feature. Only recently, however, has our fascination with language led to serious thought about it. Linguistics is one of the youngest sciences, so an introduction is necessarily an exploration of both the foundations and the frontiers of the discipline.

This course will introduce students to the basic elements of modern linguistic theory. The fundamental concepts of phonology, syntax, and semantics will be presented within the framework of generative (transformational) grammar. These concepts will be developed as we describe the sound system and sentence structure of English. We will extend them to a general theory of language, a universal model which attempts to account for human linguistic competence.

In this course we will spend much of our time playing with words and sentences. We will observe, for example, that the superficially similar words reusable and unusable require different abstract underlying structures. We will seek to account for the fundamental semantic difference between the sentences John is eager to please (where John is interpreted as the deep-structure subject) and John is easy to please (where John is interpreted as the deep-structure object). We will try to explain how English speakers differentiate the homophonous sentences This baby has red marks and This baby has read Marx. We will investigate the ambiguity of modal verbs in sentences like Mary must go to school (assertion/obligation) and Sally won't talk (prediction/volition).

The course will involve lectures, discussions, and individual projects. Readings will include some major linguistic papers on English, and students will be encouraged to undertake independent linguistic research on English or any other languages they may know.

Two 75 minute classes per week.
Speech is made up of a basic inventory of sound units (phonemes). These units are somehow represented in the air stream that separates the speaker and listener. We will examine the nature of this code and the attempts that have been made at decoding. In the process answers to such questions as these will emerge:

1. How are we able to talk and understand at the rate contained in normal speech?
2. Why is a voice typewriter so hard to build?
3. Why do speakers of an unfamiliar language appear to be talking so fast?
4. What is the specific form of the mapping of the phoneme units in terms of the physical signal?

The research strategies developed in this area are novel and important. We will examine them in detail and discuss their relevance for other aspects of the psychology of language and the study of perception in general. The interplay of experimental results and theoretical formulations is also important. This currently takes the form of a motor theory of speech perception. The status of the theory will be evaluated for this specific domain and also in terms of its implications for general theoretical progress in psychology.

There will be two 1½ hour class sessions per week -- some lectures, a number of demonstrations, a few experiments (involving design, collection and analysis of data, interpretation), and possibly a field trip to Haskins Laboratory in New Haven.
It has been said that man's most distinctively human feature is language. Scholars have long been fascinated by the way in which we convey meanings through sound, and their writings on the subject are fantastically diverse—ranging from speculations regarding the magical powers of certain words to programs for machine translation. However, it is only in the last 15 years or so that a serious attempt has been made to describe systematically and rigorously what it means to "know a language."

After sampling briefly some of the most interesting ideas which have been put forward concerning language, this course will examine more carefully the recent developments alluded to above (which go under the title of "generative" or "transformational" grammar). Because these developments are so recent, it will be possible to discuss problems which are on the frontiers of current research and to relate these problems to the fundamental questions generative grammar is trying to answer.

We will see how the system of rules relating sounds and meanings in a given language reflect the innate structure of the human mind. This will be done in large part by playing with words and sentences. We will observe, for example, that the sentence John has instructions to leave has two possible meanings and, further, that these meanings differ both syntactically and with respect to stress. We will see that this correlation of sound, structure, and meaning is not accidental, and that it in fact reflects a universal principle regarding the ordering of the rules of stress assignment relative to the rules of syntax.

The course will involve lectures, discussions, and a good deal of reading. Students will be encouraged to undertake original research.

The class will meet twice a week for 90 minutes each time.
Conversation Analysis is a new area recently being developed by philosophers, linguists, and sociolinguists. Even though research has just begun, the complexity of the dynamics of linguistic behavior in conversation has early become obvious and problematic.

In this course I would like us to examine some of the aspects of conversation analysis that earlier research has discovered and to add our own findings to that body of research. We will concentrate on informal conversation in a natural setting and trace through shared values of the group under observation, dynamics of group interaction reflected by linguistic behavior, and the patterns inherent in the flow of language. Each student will be responsible for his own piece of individual research, gathering data from a setting with which he is familiar and from informants he knows personally. While examining existing writing in conversation analysis and sociolinguistics, we will turn to the data we have individually taped and transcribed and apply our reading to that data. Our reading will include articles from Gumperz, Bernstein, Ervin-Tripp, Fishman, Hymes and others.

The class will meet twice a week for an hour and a half each time.
<table>
<thead>
<tr>
<th>Course Code (Credits)</th>
<th>Title</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS 123 (MS 223)</td>
<td>THE WORLD OF MATHEMATICS</td>
<td>David Kelly, Director</td>
</tr>
<tr>
<td>NS 130 (MS 230)</td>
<td>PERSPECTIVES IN EXPERIMENTAL AND THEORETICAL SCIENCE</td>
<td>Everett Hafer, Director</td>
</tr>
<tr>
<td>NS 140 (MS 240)</td>
<td>DE RERUM NATURA</td>
<td>Raymond Coppinger, Director</td>
</tr>
<tr>
<td>NS 160 (MS 260)</td>
<td>HUMAN BIOLOGY</td>
<td>John Foster, Director</td>
</tr>
<tr>
<td>NS 170</td>
<td>MANKIND EVOLVING</td>
<td>Stanley Goldberg, Director</td>
</tr>
<tr>
<td>NS 180</td>
<td>SCIENCE AND PUBLIC POLICY</td>
<td>Herbert Bernstein, Director</td>
</tr>
<tr>
<td>NS 191 (SS 177)</td>
<td>THE NUTRITIONAL ECOLOGY OF MAN</td>
<td>Lynn Miller, Director</td>
</tr>
</tbody>
</table>
SCHOOL OF NATURAL SCIENCE AND MATHEMATICS

Curriculum Statement: Fall 1972

The School of Natural Science and Mathematics organizes itself so as to offer a relatively small number of courses with unlimited enrollment. We ask students to examine the course offerings as areas of possible interest to them, and to enroll with the expectation that their special needs can be met. Our teaching staff is composed of scientists whose breadth of background leads to a flexible treatment of their instructional tasks. They devise modular units within courses; they work in small teams, cooperating on development and direction of School activities; and they support a variety of modes of teaching (lectures, seminars, problem workshops, laboratory research projects, field studies) with special emphasis on the independent effort of students.

Any student in the College may register for any course in the School. (Enrollment in specific activities within the course will take place later.) Students should be aware not only of the areas to be covered in the course, but also of the level at which it will operate. In order to engage in certain activities, they may be expected to have passed a Division I examination in the School. This question, and all others related to a student's status in the course, should be dealt with in consultation with the director of the course before the beginning of the term.

During our first two years of operation, we have evolved seven major areas of interest, now represented by courses in the list that follows. Each of them is to be regarded as a general heading, more or less fixed for the near future, under which the activities of a given term are planned. A student registered for one of these courses should, before the term begins, consult late bulletins of the School for information on the program and its teaching staff. Students are encouraged to construct their own programs and concentrations with inter-School associations well in mind.
MS 123 (NS 223) THE WORLD OF MATHEMATICS

David Kelly, Director

Students may expect to encounter problems in mathematics and 
mathematization in a wide range of studies. Hampshire's math-
ematical community provides short- and long-range support to many 
of the College's courses and programs and creates an atmosphere 
in which mathematics is done, shared, and enjoyed.

Course number MS 123 is offered as a convenience to students 
who wish to formalize a commitment to mathematical activity during 
a given term. The nature of that activity is subject to great 
variation. Many of the activities of the program are expected to 
develop during the term as particular needs and interests are 
identified. The Math Room (68 125) bulletin board will provide 
an up-to-date listing of current and upcoming seminars, mini-
courses, lectures, classes, problems, and proposals.

The following activities are planned for 1972-73:

The Calculus Workshop (Taming Infinity)

Offered each term, the lectures, classes, and problem seminars of 
the Calculus Workshop are designed to serve a variety of needs and 
to accommodate students with a wide range of backgrounds. For 
some, the techniques of the calculus will provide a powerful tool 
for investigations in the sciences; others may be more interested 
in the conceptual development of the calculus.

The Calculus Lecture Series (1 hour/week) will focus on the central 
themes of the calculus, mathematical, historical, philosophical, 
and technological.

The Calculus Classes (2 hours/week) will introduce the student to 
the art of doing calculus; two sections are anticipated in the 
Fall—one for students a little nervous about beginning college 
mathematics. These sections will be repeated in the Spring and a 
continuing section will be offered.

The Calculus Problem Seminars will enlist the assistance of experi-
enced math students to help calculus students acquire proficiency 
with the tools of the subject.

An Introduction to Linearity (Living with Lines)

With applications and models drawn from the social sciences, alge-
bras and geometry come together in this introduction to linear 
algebra.
Strings, Trees, and Languages (Cross-listing LC 106)

Formal Logic (Cross-listing LC 202)

Topics in Statistics

Algebra

This study comprises a systematic introduction to the theory of groups, rings, and fields, with some attention to the historical evolution of these concepts and their applications. This activity will normally be pursued by students who have passed their Division I examination in Natural Science and Mathematics.

The Book Seminars

Many important mathematical subjects lend themselves to semi-independent study. The following format will be tried: in consultation with each other and a staff member, small study groups (about five students) will select a text for joint study, set a syllabus, and meet together regularly with and without the instructor.

The following topics may be handled effectively in this manner:

- Topics in the History of Mathematics
- Topics in the Foundations of Mathematics
- Topics in Applied Mathematics
- Probability
- Differential Equations
- Linear Algebra
- Advanced Calculus
- Number Theory

Computer Systems, Languages and Application (Cross-listing LC 137 LC 237)

Computer Science

A student-run service designed to make programming assistance readily available to faculty, classes, and students of Hampshire.

Mathematics at the Crocker Farm School

Faculty/Student Problem Seminar

The Prime Time 17:17 Theorems

A theorem is presented at 5:17 on each prime-numbered class day.
Independent and small group studies in the World of Mathematics will, we hope, involve students in:

- planning, preparation, and presentation of support materials for courses, special lectures, etc.,
- devising and testing instructional projects,
- working on the Hampshire College Summer Studies in Natural Science and Mathematics, and
- teaching and tutoring at Hampshire and elsewhere in the World of Mathematics.
NS 130 (NS 230) PERSPECTIVES IN EXPERIMENTAL AND THEORETICAL SCIENCE

Everett Hafner, Director

The course is a set of month-long modules and full-term activities designed to give close contact with the physical sciences (astronomy, chemistry, geology, and physics). Certain bridging disciplines (biophysics, history and philosophy of science, and technology) are also to be found here.

We have several aims for the course. It is directed mainly toward the needs of students whose interests in science are uncertain or undeveloped. Our modules provide a sufficient variety of topics and approaches for students to discover their places in the work of the School. The modules also give us opportunities to develop new topics, to engage a large fraction of the faculty in contact with new students, and to attract other members of the Five-College community.

A set of approximately twelve modules will be announced for the Fall Term. A student normally participates in three successive modular units in order to complete the course. Since the modules are not sequential, and have no prerequisites, they can be taken in any order. A student may, with the approval of the adviser, enroll in only one or two of the modules during the term.

The course also offers term-long activities designed for students with fairly strong commitments to the study of science. Activities for the Fall will include:

Air Pollution and Lasers
A seminar-workshop wherein we learn
- what makes and constitutes air pollution,
- what makes a laser tick, and
- how the latter can be used to detect and measure the former.

Students (and the professor) will study the theory of laser action, and its application to measurement of air quality through the use of fluorescence and scattering.

Electricity and Magnetism
An advanced study of theoretical and experimental aspects of electromagnetics. Prerequisite is the Spring Term study of Basic Physics, or its equivalent.
The Physics and Chemistry of Photography

A study of physical principles basic to the photographic process. There will be two one-hour lectures per week; each student will spend at least three additional hours in darkroom-related work. Topics under study will include:

- optical characteristics of lenses,
- light measurement and exposure,
- film and paper characteristics,
- developer-film relationships,
- control and discipline in photography.

Our goal is to be a sense of style and integrity, arrived at from mastery of technique. Enrollment will be limited to 16 participants, but auditing may be possible.

Electronics for the People

An entirely practical examination of common electronic devices used in radio, television, audio systems and computers. Students will learn to disassemble, reconstruct and repair such devices. In so doing, they will develop an appreciation of the technology involved, as well as liberation from the modern army of technicians whose services tend to be expensive, unreliable, and scarce.

Multi-Media Presentations of Science

The work will consist of planning and executing projects in explanation of ideas in science and mathematics, using the tools of animation in film and television.

Organic Chemistry in 3-D

A study of three-dimensional aspects of carbon compounds, covering the various forms of isomerism and related reactions and properties. Open to all students, regardless of background in chemistry.

Introduction to Astronomy and Astrophysics

For students interested in a quantitative beginning. A description of our present knowledge of the universe and the means by which we have attained it. Properties of the solar system, individual and multiple stars, interstellar matter, the Milky Way and other galaxies. Two lectures and one lab per week. (This is the course ASTR 22 offered by the Five-Colleges Department.)
Topics of Current Astronomical Research

The aims and results of space research and exploration, recent developments in stellar evolution, cosmology, and radio astronomy. No mathematical preparation beyond algebra and elementary trigonometry is required. But students should have some basic knowledge of astronomy. Two lectures per week. (This is the course ASTPC 31 offered by the Five-College Department.)

Astronomical Observation

An introduction to the techniques of gathering and analyzing astronomical data. Calibration of photographs; photometry; spectroscopy; stellar temperatures, masses and radii; radio techniques; telescope design; astronomical distance scales. Two lectures and one lab per week. Students should have knowledge of basic physics and astronomy. (This is the course ASTPC 37 offered by the Five-College Department.)

Astrophysics I

Equilibrium configurations and the physical state of stellar interiors; polytrope models; interaction of radiation and matter; radiative and convective equilibrium; opacity. Two lectures per week. Students should have a background in electromagnetic theory and modern physics. (This is the course ASTPC 43 offered by the Five-College Department.)

Science Teaching in Elementary Schools

Children have questions about their world, and they constantly form theories based on the facts they have. Children's science looks strange to adults, whose science in turn looks strange to children. Can we introduce a child to the world without destroying his own? Indeed, can we understand his view well enough to recognize his growth? We face these questions and others by working with materials designed for children, and with children in local classrooms. We shall also review a representative literature on the subject.

The Art and Science of Sound

Beginning with Pythagoras, scientists and mathematicians have found sensual pleasure and intellectual reward in the study of musical sound. We live now on the threshold of a golden age in which the power of new technologies (integrated circuits, fast computers, waveform synthesizers, magnetic recording) give the composer an extraordinary range of flexible tools. Our aim is to explore this new world in lab and studio, to examine its roots in classical physics, and to experiment with its possibilities in the creation and analysis of original sounds. Students will have access to a large inventory of electronic instruments, which they will learn to use as scientific and artistic resources.
NS 130 (NS 230)

Origin of the Earth

A critical review of contemporary models, based on evidence from astronomy, geology, chemistry, and physics. We know that the earth is still an actively evolving planet. The study of on-going processes gives us clues about its past and its probable future. We shall point to areas of the subject where knowledge is incomplete, as well as to those where consensus has been reached.

Trace Elements in the Environment

The work will center around the atomic absorption spectrometer as a research tool for the study of mercury, lead, cadmium, thallium, selenium, uranium now known to surround us in small but potentially dangerous concentrations. Each student will plan and carry out an investigation of some part of the problem. Results, techniques and difficulties will be discussed in a weekly seminar.

Physical Chemistry

A study of concepts that go to the heart of such problems as the metabolism of animals, equilibria of nitrate-phosphate systems in lakes and streams, and the composition of the moon. We shall deal mainly with the concept of chemical equilibrium, and with implications of the Second Law of Thermodynamics. Wherever possible, we shall apply the theory to problems of special interest to the group.

Basic Physics

Several concepts have been proposed as the basis of this course, including studies of quantum mechanics, energy, analogous physical structures as illustrated by various examples of oscillators, and the historical concepts of simple symmetries. This course is real physics, and the more mathematical background its participants have, the better; nevertheless it is a first course in physics and the nature of previous exposure is expected to be quite nonhomogeneous. A detailed description of the course will be available prior to registration for the Fall Term.

Organic Chemistry

A term-long Division II course. Beginning or continuing students of organic chemistry will spend six hours in lab each week. Detailed information on the experiments we will be doing will be available prior to Fall Term registration.
Director: Raymond Coppinger

The biologist wants to understand life, but life, as such, does not exist; nobody has ever seen it. What we call "life" is a certain quality, the sum of certain reactions of systems of matter, as the smile is a quality of reaction of the lips. I cannot take the girl in my right arm and her smile in my left hand and study the two independently. Similarly, we cannot separate life from matter and what we can only study is matter and its reactions. But if we study this matter and its reactions, we study life itself.

- A. Szent-Gyorgi, The Nature of Life

We adopt this point of view as a framework for the course. The organization of cells is such that each of the life processes, such as respiration or metabolism or reproduction, can be studied in isolation from the others, often in systems which are clearly not living. Thus we offer in DEN a series of units, or "mini-courses," each of approximately four weeks' duration, each dealing with a specific topic in biology. They employ a variety of organisms, use different experimental techniques, and present different points of view. Each is guided by an instructor who provides an experience reflecting his or her own scientific life style: field trips to collect life material, intensive laboratory work, or abstract theory. Each unit is designed to be more or less self-contained; a student may participate only in those that interest him. But students should be well aware of prerequisites that some units carry.

The course is accompanied by a series of weekly discussions led by the teaching staff. These meetings provide, among other things, opportunity for argument on controversial matters related to the work of the course. They also bring unity to what would otherwise be a loose collection of topics.

We divide the term into three periods, with the following assignment of topics for the fall of 1972:

**Period I**

The Lives of Yeast
Survey of Animal Behavior
Ornithology: Identification and Field Work
Period IV (cont)

Fresh Water Biology
Development of Nervous Systems
Plant Growth and Development
Entomology
Soil Ecology

Period V

Bean Bag Genetics
Theories of Animal Behavior
Zoology: Anatomy and Physiology
Simple Nervous Systems
Comparative Ecosystems
Physiology
Enzymes

Period VI

Fresh Water Biology: Physical Properties
Genetics of Evolution
Advanced Animal Behavior
Zoology: Behavior
Chemical Ecology
Natural History of the Caribbean
Energy Production
MS 160 (MS 260)  HUMAN BIOLOGY

Director:  John Foster

The human condition can be described in a variety of ways: biological, psychological, sociological, cultural and political. Each of these points of view contributes to and is informed by the others. We therefore do not pretend to be able to treat the question of human biology in isolation. We regard our course as a contribution to a College-wide effort toward developing a Program in Social Biology, covering all aspects of health and illness in human beings.

We see human biology as a composite of the following elements:

Serious study of biology and related disciplines of science applicable to Man as an organism.

Reading of research papers on selected topics, both as sources of information and as examples of the scientific process at work.

Learning medicine as an applied science based on physiological and biochemical principles.

Working with a practicing physician on clinical diagnostic procedures in the laboratory, and discussing their importance in treatment of disease.

Studying the significance of health and illness to individuals and communities.

Examining problems in delivery of health care.

Understanding the fundamentals of human nutrition.

Thorough study of any of these elements is a course in itself. We propose to select a sequence of topics, each of which combines two or more elements, discussed by representatives of several disciplines whose intersection produces a strong focus on the problem.

The course constitutes an introduction to biology for students with little previous background, while at the same time placing that study in a wide context. A student can expect to find a range of choices allowing him to pursue topics of special interest to him. Serious students of science will find opportunities for deeper study, and for participation in the design and operation of the course.
The College is developing an interdisciplinary program in Human Development, to which the School of Natural Science and Mathematics contributes a series of lectures and seminars.

The theme of the Program in the Fall Term of 1972 will be "The Freedom and Dignity of Man." Our course will give students the opportunity to study the scientific aspects of human development in any of the following contexts:

**The History of Neurobiology and Man**
A survey of the development of Man's attitudes toward himself, as colored by scientific revolutions and by recent advances in biology.

**Biosocial Human Adaptation**
A comparative study, offered in collaboration with the School of Social Science (SS 128).

**Martyrs to Soviet Science**
The history of interactions between science and political authority in the Soviet Union, with emphasis on controversy in the field of genetics.

**Raymond Russell**
The autobiographical account of one man's struggle for fulfillment in mathematics, philosophy, and social justice.
The Sciences having long seen their votaries labouring for the benefit of mankind without reward, put up their petition to Jupiter for a more equitable distribution of riches and honour. A synod of the celestials was therefore convened, in which it was resolved that Patronage should descent to the assistance of the Sciences.

- Samuel Johnson, 
*Rasselas*, No. 91 (1751)

SALVIATI: The constant activity which you Venetians display in your famous arsenal suggests to the studious mind a large field for investigation, especially that part of the work which involves mechanics.

- Galileo, *Two New Sciences* (1638)

Our course is designed to examine, among other things, the two views expressed by Johnson and Galileo: the inevitable dependence of science on public support and the inevitable links between science and its military uses. These problems have a long and intricate history. But it is especially paradoxical in our time that science is an object of fear and contempt, while occupying a central place in the complex technology that holds society together. It is also remarkable, in such a setting, that public understanding of science has never been so dreadfully inadequate to the decisions before us. Thus we all face a large question. Can democracy survive in a culture that breeds a technological elite?

We shall bring to the campus a group of distinguished visitors whose expertise and qualifications bear on the questions of the course. They will deliver lectures, lead discussions, and contribute to our planning for the future of the course.
The aims of this course are:

1. To educate people about why their bodies need food, what kinds of food they need, and how they use what they get.

2. To help people to understand the importance of food to their health, to realize that good nutrition is essential for growth and maintenance of the body and mind, and to see that diet is an important part of preventative and therapeutic medicine.

3. To make people aware that good nutrition involves much more than knowing that foods are best for them, but also depends on the means of food production and distribution, on income, on culture, on family habits and upbringing, on taste and on advertising.

4. To see the long range effects of the amount, content, and quality of foods on the development and behavior of individuals, on the life style and survival of communities, on the use of the land and its resources, and on the history and evolution of man.

5. To teach people how to go about finding information, to observe and talk about problems, to handle materials critically, and to work together.

The course will include lecture-discussion classes for one hour a week, led by Lynn Miller, on problems of practical nutrition ranging from biochemical individuality to processed foods. Discussion sections led by the three student leaders will meet one hour a week, with articles and chapters assigned for reading and discussion. Emphasis will be placed on group projects for which five hours a week are scheduled. Possibilities for projects include surveys of commodity foods, of minority nutrition problems, of attitudes toward food, investigations of FDA nutritional labelling of foods, of the bodily need and use of each vitamin, of natural foods, and of legislation concerning food processing, fertilizers, advertising, and food enrichment. In addition, each week one of the three groups will plan and prepare a nutritious meal for the class; the other two groups will evaluate the nutritional content of the food. Several outside speakers will be invited to speak to the class and, when appropriate, to the whole community.

*Claudia Hong, Ellen Kiley, and Martha Schultz are Division III, II, and I students respectively in the School of Natural Science and Mathematics.
SCHOOL OF SOCIAL SCIENCE

INTERPERSONAL COMMUNICATION
SS 107 (GC 111)
J. Tallman and R. Stillings

ECONOMIC ANALYSIS AND MODERN CAPITALISM
SS 108
F. Weaver

DEVIANCE AND DISORGANIZATION
SS 109
R. von der Lippe

POLITICAL JUSTICE
SS 115
L. Hazar

THINKING ABOUT THE UNTHINKABLE: AN ENCOUNTER WITH THE HOLOCAUST
SS 118
Sponsored by the School of Social Science

A SYMPOSIUM ON POST-WAR AMERICA
SS 121
P. Glaser

INTELLECTUALS AND SOCIAL CHANGE
SS 123
J. Koplin

BIO-SOCIAL HUMAN ADAPTATION: CASE STUDIES
SS 128 (NS 170)
P. McKeen and R. Coppinger

METHODS AND MORALS
SS 129
L. Farnham, B. Linden, and P. McKeen

LANGUAGE PROBLEMS OF DEVELOPING NATIONS
SS 133 (SS 233)
(MC 139 LC 139)
M. Lillya

SIGMUND FREUD AND THE ORIGINS OF PSYCHOANALYTIC THEORY
SS 135
L. Farnham

SOCIOMETRY OF HEALTH AND ILLNESS
SS 138
R. von der Lippe

THE ECONOMICS OF POLLUTION
SS 142
M. Howard

POLITICAL COMMUNICATION
SS 147 (SS 248)
(MC 131 LC 231)
G. Hollander
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Instructor/Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTOPIAS</td>
<td>R. Turlington</td>
</tr>
<tr>
<td>THE HISTORY OF THE FAMILY</td>
<td>M. Slater</td>
</tr>
<tr>
<td>SOCIAL CONTROL AND DISPUTE SETTLEMENT</td>
<td>B. Yegvesson</td>
</tr>
<tr>
<td>THE GOOD SOCIETY</td>
<td>M. Lonine</td>
</tr>
<tr>
<td>ANTHROPOLOGY AS PERSONAL KNOWLEDGE</td>
<td>L. Click</td>
</tr>
<tr>
<td>HISTORY AND PHILOSOPHY OF EDUCATION FOR MINORITY GROUPS IN AMERICA</td>
<td>G. Joseph</td>
</tr>
<tr>
<td>THE POLICE</td>
<td>B. Linden and L. Mazor</td>
</tr>
<tr>
<td>DATA ANALYSIS, STATISTICS, AND PROBABILITY MODELS</td>
<td>M. Sutherland</td>
</tr>
<tr>
<td>PERSPECTIVES ON MADNESS: ISSUES IN THE SOCIOLOGY OF MENTAL ILLNESS</td>
<td>J. Neister</td>
</tr>
<tr>
<td>THE NUTRITIONAL ECOLOGY OF MAN</td>
<td>L. Miller, et al.</td>
</tr>
<tr>
<td>THE SELF AS A SOCIAL PROBLEM</td>
<td>M. Faulkner</td>
</tr>
<tr>
<td>CONTEMPORARY SOCIAL MOVEMENTS: RADICALS AND REFORMERS</td>
<td>F. Glazer</td>
</tr>
<tr>
<td>THE ECONOMY AND THE STATE IN AMERICA</td>
<td>M. Howard</td>
</tr>
<tr>
<td>COMPARATIVE HEALTH SYSTEMS</td>
<td>R. von der Lippe</td>
</tr>
<tr>
<td>REVOLUTIONARY PATHS TO THE MODERN WORLD</td>
<td>F. Weaver</td>
</tr>
</tbody>
</table>
SCHOOL OF SOCIAL SCIENCE

CONSTITUTIONAL LAW: JUDICIAL REVIEW AND SEPARATION OF POWERS
SS 234
B. Carroll

COGNITIVE DEVELOPMENT: SEMINAR AND PRACTICUM
SS 238 (LC 226)
M. Cole and
N. Stillings

URBAN POLITICS AND SOCIAL CHANGE
SS 238
R. Alpert

WHY WORK?
SS 240
M. Howard and
B. Linden

MOTIVES AND SOCIETY
SS 248
R. Birney

PEOPLES OF INDONESIA: PROBLEMS IN ETHNOLOGY
SS 252
P. McKeen

SYMBOLIC SYSTEMS
SS 274
B. Yngvesson

FACULTIES, ADMINISTRATIONS, AND STUDENTS: SOCIOLOGICAL PERSPECTIVES
ON THE UNIVERSITY
SS 275
M. Faulkner

WOMEN AND CHILDREN FIRST: THE LEGAL PROCESS ON THE FRONTIER OF CHANGE
SS 176
L. Meier

DEViants, ASSESSORS, AND TEABTERS
SS 277
T. Holman

THE ROLE AND PURPOSE OF ALTERNATIVE SCHOOLS
SS 278
G. Joseph

SEMINAR IN UNDERGRADUATE EDUCATION
SS 279
F. Patterson
SCHOOL OF SOCIAL SCIENCE

Curriculum Statement: Fall 1972

The courses offered for the Fall of 1972 by the School of Social Science reflect growing involvement between the disciplines, including those beyond the School. We have added faculty in subjects being staffed in more than one School and the potential for participation in college-wide program continues to grow. Students seeking instruction in the application of quantitative methods to their work in social science will find a new set of resources for the study of basic concepts, and will find new ways of solving problems in the behavioral sciences will be greatly strengthened.

In a similar way the expansion of opportunities for direct experience with the subject matters of social science at an expanding network of field sites should provide new resources for students interested in education, economics, urban problems, politics, and developmental psychology. Of particular interest should be the new two-semester course in cross-cultural research, particularly those bearing on moral and ethical questions of investigation. Students who know they will be in cultures or sub-cultures quite different from their own, whether in the U.S., Caribbean, or elsewhere should give careful thought to this modular course being taught by Professors Farnham, Linden, and McKeen.

There will be a number of new course designs being tested by School faculty. Including the first trial of the Holocaust course which was designed by a small group of Hampshire students under the guidance of Rabbi Lander of Smith College. Professor Glazer will lead a group of students whose "team project" is to create and carry out a month-long series of public presentations bearing on the decade of the 1940's in the U.S. The aim is to test for the effect such project goals have on sustaining the preparatory scholarship. Professor McKeen is joining Professor Copping of the School of Natural Science in joining to test the use of extensive film materials in the exploration of the central concept of adaptation for various forms of life including human. Professor Slater intends to test new materials designed to emphasize self-pacing in the pursuit of course topics, and Professor Cole is testing a course format of course topics, and Professor Cole is testing a course format.
The balance between disciplinary studies and program studies will continue as courses will be provided for programs in Law, Black Studies, Health and Society, Human Development, and Education, as well as advanced work in eight social science disciplines. We remain one year short of tipping the balance in favor of Division II courses, but students planning concentrations will find ample basic instruction on a Five-College basis.

The emphases among the Social Science faculty continue to be upon social processes, social innovation and change, inter-cultural relationships, power processes, and distribution systems, as well as the development, growth, and function of cognitive processes in human experience. The expression of these factors in social settings available to us provides the basis of experiencing them directly so that they may be fully appreciated for study.
ECONOMIC ANALYSIS AND MODERN CAPITALISM

Frederick Weaver

Economists frequently disagree about the extent and type of economic policy and regulation most appropriate for the smooth and humane operation of the American economy. In this course we will study the three most important strands of economic analysis: how markets work to allocate economic resources and the role of individuals' production and consumption decisions; the ability of the federal government to influence the over-all level of economic activity to avoid inflation and recession; and more systemic conceptions of the economy as a basic part of greater society with profound implications for qualitative aspects of social life. We will investigate these theories with some attention to the respective historical periods of capitalist development in which they were initially formulated, but our primary emphasis will be on the organization and functioning of modern American capitalism and the contribution different types of analysis make towards understanding current economic and social problems. Among the books we will read: M. Friedson, Capitalism and Freedom; W. W. Heller, New Dimensions of Political Economy; F. Baran and P. Sweezy, Monopoly Capital; W. K. Tash, The Political Economy of the Black Ghetto; and J. R. Galbraith, The New Industrial Society.

This course will serve as the introductory course prerequisite for upper division economics courses in the other four Valley colleges.

The course will meet twice a week for an hour and a half each meeting.

DEVIANCIE AND DISORGANIZATION

Robert von der Lippe

The course will address the concepts of normality and deviance. Topics of common social deviance and disorganization such as crime, drug use, homosexuality, and delinquency will be studied. Questions of definition, social response, and the perspective of the deviant person will be considered.
POLITICAL JUSTICE
Lester Mazor

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

We will begin by examining the roles of the parties, attorneys, witnesses,
judge and jurors in a conventional trial on a matter which is not highly
charged with political consequence or emotion. The bulk of the course
will consist of close study of a number of notable political trials and
of the myths which arise from them. Examples of the kinds of trials I
have in mind are the Scopes and Yarasiewicz case, the trial of the Chicago 8,
the Rosenberg case, the trials of the Merrigans, and the Angela Davis
case. Several trials in the Soviet Union will also be examined to provide
a basis for comparison across national and cultural boundaries. What
political ends were sought and obtained and whether justice was done will
be persistent questions.

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

The course will meet twice a week for an hour and a half each meeting.
THINKING ABOUT THE UNTHINKABLE: 
AN ENCOUNTER WITH THE HOLOCAUST

Sponsored by the School of Social Science

holocaust - n.1. Wholesale destruction and loss of 
life, especially by fire. 2. A sacrificial offering that is wholly consumed 
by fire. 

The destruction of six million Jews and countless other innocents 
during World War II was a uniquely and profoundly tragic event in 
Jewish and human history. Never before was man witness to the 
systematic attempt to annihilate an entire people. Never before was 
brutality witnessed with such indifference. Its effects were 
widespread. Some of these were immediately evident while others are 
still in the process of working themselves out in the world conscience 
and in the human psyche. They continue to affect relations between 
nations, peoples, and religions. They influence the actions, beliefs 
and values of individuals. They are present in all of our lives.
The present generation of students is notably post-Holocaust one 
for whom that event is remote and unreal and seen as the philosopher 
has said "but through the glass darkly". This despite the fact that 
it impinges on their lives and their world. Knowledge and study of 
the event has been confined to scholars and a limited number of others. 
It is the purpose of this course to try to learn about the Holocaust, 
to try to understand that which seems to defy understanding, to try 
to face its effects and to try to respond in personal and communal 
terms. Towards that end we hope to utilize materials which have 
already been written as well as newer insights derived from a variety 
of academic disciplines. In particular, we hope to use the per- 
spectives and tools of History, Political Science, Sociology and 
Psychology in our attempt to gain some understanding of the Holocaust. 
We plan also to make special use of the arts in our attempt to con- 
front this profoundly tragic happening.
SS 121
A SYMPOSIUM ON POST-WAR AMERICA

Penina Glazer

The post-World War II decade provided the cultural and political milieu into which most current undergraduates were born. This is a decade which saw the U.S. drop the first atomic bomb, emerge after the war as the leading world power, and engage in a cold war with the Soviet Union. It was also a period of political witchhunts and trials, the rise of the third world anti-colonial movements and changes in art, theatre, and philosophy.

To better understand this part of our history and roots I would like to work with a group of students (and cooperating faculty) to present an intellectual and artistic symposium on the decade from 1941-1955 for the benefit of the entire community.

The "course" would consist of reading, viewing films, and studying the period in an attempt to formulate the conception of the program. Speakers, films, performances, exhibits, and workshops will be scheduled. Students will take responsibility for arranging and chairing sessions on a specific facet of the period: political trials, changing life styles, existentialism, the decline of the left.

This is a Division I course in which I would like to include four or five Division II students to serve as section leaders.

The course will meet once a week for an hour and a half plus two one hour tutorials.
I am by most definitions included in the category "intellectual." You have elected to spend four years in an environment where intellectual development is given primary focus. The world outside the campus is going through increasingly rapid and often violent social change. What should our role be with respect to this world? What are our responsibilities?

We will examine a number of possible answers to this question, not all possible answers by any means. I am most competent to represent the arguments from the perspective of a radical analysis of the current scene. The following suggested readings will reflect this bias; but, I assume that the members of the class will add to and delete items from this list as we work together during the first meetings of the class.


The class will meet twice a week using a group discussion format. Smaller tutorial sessions will be arranged as needed.
The course will focus on understanding human evolution and behavior, taking account of two critical variables: nature and culture. We will be asking how a scientist tries to sort out the biological and socio-cultural dimensions in the human species, and will look at several case-studies to examine this relationship between human groups and their environment and culture. Specifically, we will study in detail the Bajau of Indonesia and the Eskimos of the Arctic.

A sub-theme will be an attempt to use films extensively, showing that they are not "value-free", but invested with a "vision of reality" by the filmers, producers, and editors. We hypothesize that ethnographic films are at least as much an indicator of the problems and pre-occupations in the culture of the film-makers as in the culture being filmed. We expect to view and discuss several dozen films.

We will also examine a number of "pop-antrop" books, such as those of Ardrey and Morris, which purport to 'explain' human behavior, and ask not only what criticisms of their theses are appropriate, but why these books are written and read with such enthusiasm in our contemporary culture.

The course will meet once a week for two hours plus an hour tutorial.

We will pursue two general themes: an investigation of social science methods and logic, and the relations between social science sciences and ethical problems. Each of the three faculty members will give presentations on methodological techniques (experiments, surveys, field work, participant observation), including bias. Descriptions and rationales for each method, the relations between hypotheses and research design, and case analyses of illustrative works. With these presentations and readings as background, the course will then focus on related ethical and moral problems.

Students will plan research designs which will then be evaluated by the class in terms of both methodological and moral considerations. Some of these proposals will be selected for testing by those participating in the course. We will also divide into small groups organized around specific problem areas (i.e. prejudice, IQ and personality testing, kinship relations, etc.) in order to investigate the variety of methods used to study them.

The course will meet for an hour and a half twice a week.
This seminar will be concerned with the relationships between the origins and development of psychoanalytic theory and Freud's personal history. Freud's relationships with his family and his colleagues, his achievements, aspirations, and disappointments will be studied as they related to the development of psychoanalysis as a theory of personality.

Reading for the seminar will include Ernest Jones' *The Life and Work of Sigmund Freud*, autobiographical material and letters, and various theoretical works as well as case histories. Theoretical concepts to be emphasized include terms from Freud's dynamic, topographical, and economic descriptions of mental processes; for example, repression, anxiety, instinct, psychosexual development, and mental "structures" such as ego, id, and superego.

The seminar is to trace the relationships between the personal history of one man and the nature and timing of his contributions to the intellectual life of his era and to Western intellectual history. The seminar should provide a basic familiarity with the origins of psychoanalytic theory.

The course will meet twice a week for two hours each meeting.
SOCILOGY OF HEALTH AND ILLNESS

Robert von der Lippe

The aim of the course will be to view health, illness and the healing professions and institutions from a sociological perspective. Traditionally questions of health and illness have been discussed and studied in the biological sciences and in psychology. In the last decade, however, the social sciences in general have been consulted by medical institutions for their views on various aspects of health as they concern the ongoing processes of modern industrialized societies. Sociology's interests in the area are as broad as the discipline of sociology itself since it is felt that the perspectives and skills of the sociologist have relevance for many areas of health and illness.

The extent to which social factors may play a part in the creation of health, illness and in the recovery process are general concerns of the course. Questions considered in more intensive detail may concern such subjects as the relationship of time to the healing process, the social aspects of death and dying, the social and social psychological factors in mental illness and its treatment, the use of computers and data processing equipment in the delivery of modern medical care, hereditary aspects of health and illness, medical care delivery systems, the social aspects of public health and preventive medicine, the social science contributions to epidemiology, and finally, the concern of social scientists with regard to pestilence and plague. The course concludes with a brief look at certain future trends in medicine and the delivery of medical care and with sociology's interest in those trends. Readings for the course will include: Rone Baboe, Mirage of Health; Hans Zinsser, Rats, Lice and History; David Sudnow, Passing On, The Social Organization of Dying; David Mechanic, Mental Health and Social Policy; Roberts K. Wilson, The Sociology of Health, Burton Rougeche, Eleven Blue Men and others.
The reduction of pollution is a costly process, and every society must in one manner or another decide how much pollution it will have. Our economy, for a variety of reasons, has a strong bias towards a high and growing level of pollution.

We will first, using models of the economy and of economic decision-making derived from standard economic theory, learn ways to analyze such questions as growth and pollution, the inability of the market and the private property system to control pollution, the impact of water pollution control measures of various sorts on industries and municipalities, the distribution of costs of pollution and pollution control, and population growth and pollution.

Secondly, we will investigate the ways in which decisions regarding pollution and its control have been and are being made. We will examine the role of business interest, other private interests, the "public interest" of regulatory agencies, law, and the institution of private property.

This course will attempt to introduce students to key principles of economic theory and the theory of political economy, and to the use of such theory in dealing with a particular social issue.
UTOPIAS
Barbara Turlington

This will be a study of ideal and experimental communities in theory and practice, from Plato's Republic to the contemporary commune movement.

From the time of classical Greece, people have been aware that society shapes the individual as much as the individual shapes society. The variety of writing about possible forms of society is immense, as is the number of experiments in establishing intentional communities. Over a hundred socialist communities were formed in America during the 19th century; estimates of current communal experiments in this country range from one to two thousand.

The classical utopian writers (Plato, More, Bellamy) tend to assume that people can become "good" in a good society. B. F. Skinner, in Walden Two, pushes this idea to the point of the assumption that all of a person's attitudes and behavior can be controlled by the "conditioning" provided by the environment. The antiutopian novels of Huxley, Zamyatin, and Orwell present the effects of total control by the state.

Each of these writings raises important questions about human nature and how it is shaped by society, and about theories of training the young within certain types of communities. Does the form of a society make the individual good or bad, and if so, how? Is societal organization compatible with individual freedom? How much do the means chosen by society to achieve its objectives influence individual development? What are the chances of success of "intentional communities" outside the mainstream of society? What are the effects on the individuals who join them?

Students in this seminar should be able to begin to develop their own standards by which to judge actual societies and to decide on improvements they want to work for. They will have a chance to study the writings of utopian thinkers and their critics and to examine experiments in communal living in this country, both those of the 19th century and those of today, including a visit to one of the communes in this area. Individual projects will permit further reading on such topics as education, the place of women, family relationships, work, urban planning, or theories of freedom and their relation to utopian thought.

The class will meet twice a week.
SS 165  THE HISTORY OF THE FAMILY
Miriam Slater

This course will focus on the development of the family in the early modern period of Western Europe (16th and 17th centuries). Since changes in family structure, relationships, and values take place at different rates over time and have little respect for arbitrary chronological categories, these dates are meant to provide a starting point and emphasis for the work of the course rather than a time limit. Historical studies of Western European and Colonial American family life will be used as the substantive material of the course. It will, however, be interdisciplinary in approach because we will employ the conceptual tools of the behavioral sciences in formulating questions and in analyzing the historical material. In keeping with the interdisciplinary nature of the course some literary sources may be utilized but these will be chosen on the basis of what they can contribute to an understanding of historical development. Collateral readings in the social sciences will be assigned according to the interests and levels of achievement of the students.

The course will examine the following problems:

The Structure of the Family
The Functions of the Family
The Patriarchal Family - Relationships
Marriage
Children
Hypothetical Model of the Traditional Family

The course will meet once a week for two hours, plus tutorials.
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 deviants) 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 course will meet twice a week for one two hour meeting and an hour meeting.
The purpose of the course is to try to provide some insights into the complexities (the problem and the possibilities) of "The Good Society" by examining the existential condition of the black man (Everyman) in the United States. We shall explore certain realities from political, artistic, sociological, economic, psychological, governmental, international, and personal points of view and of departure.

We shall read (not necessarily in the following order): Leroi Jones, Dutchman and The Slave; Grier and Cobb, Black Rage; The Autobiography of Malcolm X; M. L. King, Jr., Where Do We Go From Here: Chaos or Community; Report of the National Advisory Commission on Civil Disorders (FBI Report); Richard Wright, Native Son; Ralph Ellison, Invisible Man; Frantz Fanon, Wretched of the Earth; William Styron, The Confessions of Nat Turner; William Styron’s Nat Turner—Ten Black Writers Respond; Cornelio Pelizzari and Hamilton, Black Power; Charles H. Turner, Crisis in Black and White; John O. Killens, Cotillion.

In addition to books, other experiences (such as films, trips, guests, etc.) can be arranged—hopefully on student initiative. One project in any form and medium will be required for the term. Two short analytical reports also will be required. A midterm "progress report" will be given by each person during one of the sessions about midterm.

The course will meet once a week for two to three hours. Each participant is urged to meet fortnightly or so with me on a tutorial basis to discuss course matters, projects, etc. Maximum enrollment: 16.
SS 168 ANTHROPOLOGY AS PERSONAL KNOWLEDGE

Leonard Glick

Michael Polanyi maintains that scientific knowledge is not a separate but rather an intensified form of human knowledge: the result of consciously extended and integrated perception of the world around us. Moreover, all knowledge is personal, in that the essential element - integration - takes place in the mind of one person. Supplanting this perspective, historians have shown repeatedly that ideas are rooted in social, economic, and cultural contexts, and that systems of knowledge must be understood in relation to particular historical circumstances.

In this course we'll consider anthropology to include all efforts by heirs of the European cultural heritage to understand the various peoples they have been encountering since the Age of Discovery. Our goal will be to learn something about the observers as well as the observed. In a sense we can hardly do otherwise, for what we encounter in books are not the Navaho, the Nandi, or the Nambicora, but European perceptions of these people. We'll try to combine personal and historical perspectives, therefore, in an effort to understand how anthropology emerged as a discipline and how ethnographic interpretation developed in relation to the premises and purposes of the ethnographers. Of particular importance to us will be records of personal encounter, in which anthropologists try to describe their own experiences with other people. But we'll also try to read between the lines in "objective" ethnographies - especially those of earlier and perhaps less self-conscious generations.

The course will meet once a week for two hours plus an hour tutorial.

SS 169 HISTORY AND PHILOSOPHY OF EDUCATION FOR MINORITY GROUPS IN AMERICA

Gloria Joseph

The course is designed to provide an awareness of the overall social, economic, and political realities affecting education today. It further intends to illustrate the urgency that education be an ever-changing concept and necessarily functional to meet the unique needs of the Black, Puerto Rican and Chicano Communities. In addition to regular class meetings, students will visit and interview "educators" who espouse a specific philosophy of education.

Topics to be covered include:
1. The Traditional Role of Philosophies of Education in American Society
2. Introduction to Black Educational Philosophies
3. Is There a Need for a Black Philosophy of Education?
4. Mis-education of Minorities
5. Black Education as an Arm of the Liberation Struggle

The class will meet once a week for two hours.
This course will be taught jointly by a sociologist and a lawyer interested in studying the police as an agency of social control and as an occupational group. We are particularly interested in the ways in which the daily condition of work affect the uses of police power. The principal focus will be on the police in modern American society, but to maintain perspective we will also consider the police in several other countries.

Topics to be explored in the course include the public image of the police and popular attitudes toward the extent and exercise of police authority; training, formal organization of the police structure, and informal social processes of police work; police-community relations; controls over police behavior; and the effect of a police career on the life of the police officer.

The class will undertake a series of research exercises designed to provide some understanding of the methods of legal and sociological research. In addition to this field work and the assigned reading for the course, guests with experience of police work from a variety of perspectives will meet with the class and an effort will be made to involve members of local police forces in the course.

The course will meet once a week for two and a half hours.

This course will cover basic statistics and statistical inference, the ways and hows of basic probability theory (or theories if one is formal about such things) and some philosophy of data analysis.

There will be a chance to use and further develop the computing programs and facilities of the College. Students will be encouraged to use data from other courses or other outside sources as raw material.

The course will meet twice a week for one hour plus an hour lab once a week.
I approach mental illness as a social phenomenon that transcends the individual psychosis or "hang up." I consider it as both a meaningful subjective experience and a type of behavior that has its cause and its very definition in a social context. Traditional psychodynamic and psychiatric positions have tended to ignore the social context and the variations associated with historical change, social class and race, and cultural diversity. One of the liveliest issues today concerns the nature of mental illness itself, while the definition of what is mental health is a perennial problem.

During the course we will be comparing three major perspectives -- the psychiatric-medical model; the sociological contributions of deviance and role theory, and the phenomenological-existential revisions of R. D. Laing. We may, for example, examine the problem of schizophrenia from each of these perspectives.

The role of the family -- its internal dynamics -- the significance of social class, and the role of mental institutions will be emphasized in terms of causes, symptoms, diagnosis and treatment of "disturbed" individuals. The experience of being mad will involve us in some first person accounts and will raise the question of meaning in madness.

Finally, a persistent theme of the course will be the problem of conceptualizing mental health and mental illness, of defining the "same society."

The course will meet twice a week for two hours.

This course will examine some of the ways in which the self is created, maintained and transformed in the process of social interaction. Some of the readings will consist of theoretical discussions of social and personal identity, while others will cover empirical studies of identity-creating processes. Possible readings include:

- Berger and Luckmann, The Social Construction of Reality
- Strauss, Mirrors and Masks
- Goffman, The Presentation of Self in Everyday Life
- Brix and Wheeler, Socialization after Childhood
- Edgerton, The Cloak of Competence
- Neulcom, Personality and Social Change
- Scheff, Being Mentally III
- Neulcom et al., Persistence and Change

The class will meet twice a week for one and a half hours.
Radicals and reformers are an ongoing part of American society. Who are these people? What motivates them to commit time, energy, and money to the advancement of a social idea?

The thrust of this course will be an attempt to analyze the inter-relationship of personal biography, history, and social structure as it manifests itself in particular social movements. Students will be placed in a variety of organizations which are dedicated to aspects of social reform. Such groups might include CIO, religious organizations, the Women's Center, community action groups. Students will work with these groups as participant observers, will study the literature on that movement, as well as field work methods. The material gathered will be incorporated into an analytical paper which will be shared with other members of the class.

The course will be taught in conjunction with Sociology 230A (Subcultures and Social Movements) at Smith College. The meetings will rotate between Hampshire and Smith.

The course will meet once a week for two hours plus a tutorial.
THE ECONOMY AND THE STATE IN AMERICA
Margaret Howard

In this course, we will examine several ways in which the American (federal) government is deeply involved in the operation of the American economy, and the effects of this government involvement. We will probably cover the following four topics:

1. The level of economic activity: analysis of unemployment and inflation, and government policies towards these.

2. The impact of taxation on the distribution of income: taxation and the rich; the negative income tax.

3. Regulation of corporations.


Some class meetings will be used to introduce various concepts of economic theory useful for dealing with such questions. Students will be expected to read fairly deeply in one topic of interest, to take some responsibility for seminar discussion of their area of interest and to write an essay on their topic.

The course will be the equivalent of a one semester introductory course in economics.

COMPARATIVE HEALTH SYSTEMS
Robert von der Lippe

The delivery of health care is provided in a variety of ways by modern societies. Studies of the organization of health care systems in the United States, Sweden, Great Britain, Russia, and Japan will be used for comparative purposes.

Criteria for judging health systems' effectiveness will be developed and students will be expected to consider the systems for their accessibility, quality of care, degree of use, and internal organization. Some reading on organizational theory will accompany the systems analysis.
The first historical route to modernization, pioneered by England and other liberal capitalist nations, entailed a revolutionary transformation of previous political and social forms. These successes, however, led to the decline of capitalism's revolutionary character, and in the last half of the 19th Century Germany and Japan industrialized by absorbing capitalist relations and processes into a society dominated by traditional feudal and military elements exercising control through a centralized, bureaucratic state.

By the beginning of the 20th Century, global hegemony by the industrialized nations of Europe, Japan, and North America again changed the content of industrialization; even conservative capitalism appears no longer viable, and it is the anti-capitalist revolutions (e.g., Russia and China) which establish the modern path to industrialization.

Organized by this general conception, we will study the revolutionary (or not) bases of industrialization in England, Germany and Japan, Russia, and China and take a quick look at the French Revolution, the U.S. Civil War, and the peasant-oriented revolutions of Mexico, Viet Nam, Algeria, and Cuba.

The goal of the course is to understand better the historical roots of the struggles and conflicts of the contemporary world. Clearly this is an ambitious undertaking; it will involve considerable reading and a short research paper on a subject chosen by the student. We will next twice a week and read works by Eric Hobsbawm, Barrington Moore, Karl Marx, Alexander Gerschenkron, Eric Wolf, Leon Trotsky, and others.
The separation of powers doctrine is one of America's unique contributions to government. It was conceived as a method to check abuses and concentrations of power, and was intended to insure a system of checks and balances by each branch of the government upon the other.

Recently, however, the entire concept has been subjected to intensive questioning. Charges and countercharges about usurpations of power have become commonplace, raising to the forefront the applicability of the doctrine to the problems confronting the nation today.

Our recent history is replete with examples of the push and shove of the constitutional separation. Perhaps the most sensational came as a result of President Nixon's decision to send troops into Cambodia in May, 1970, which some argued created a constitutional crisis. Senator Fulbright strongly asserted that the President had exceeded his constitutional powers, that he had usurped the congressional prerogatives. The President asserted that the Constitution clearly authorized him, as commander-in-chief, to take appropriate action to defend our national interests, and that the Constitution did not require him to consult the Senate. The Cooper-Church Amendment was among the Senate's responses to the President's position.

Similarly, the Senate's rejection of two of the President's nominees to the Supreme Court raised substantial questions -- at least in the mind of the President -- about the propriety, constitutionality, and wisdom of the Senate veto. The role of the Senate in the selection process of members of another branch, as well as that of the President in nominating those members, came under rigorous scrutiny, and again the charges of usurpation arose.

Whether or not the Constitution permits busing to achieve school integration is currently a subject of much debate. Some Senators are pushing for various Constitutional amendments on the subject, the President has replaced Governor Wallace as the politician in the school bus door, and the Courts generally have condemned the use of busing. Under the American system, the Supreme Court usually would be confronted with the resolution. But with the President's recent proposal to exclude the Court from consideration of busing issues, Reconstruction II is underway, the potential direct conflict between
the executive and the judiciary is at hand, and the role of the legislature in determining the appellate jurisdiction of the Court becomes pivotal.

This course will examine the basis of the differences, the constitutional doctrine of separation of powers. Using the Federalist Papers to establish the framework, Supreme Court decisions will be studied to determine the role of each branch of government in relation to the others. The course will conclude with a critical analysis of the utility of applying an 18th Century concept to the 1970's.

There will be one two hour meeting a week with additional sessions to be arranged.
COGNITIVE DEVELOPMENT:
SEMINAR AND PRACTICUM

Michael Cole and Sall Stillings

Seminar

The study of the development of language and thought provides a perspective on the nature of human life and lays foundations for theories of education. This course will address questions such as: What is the nature of a child’s knowledge at various ages? Which processes of development are innate and which require interaction with the world? What is the relationship between thought and language? How do children learn? Can theories of development help to evaluate educational ideas such as Headstart and the open classroom?

The course will be organized around a series of nine core lectures. There will be three lectures on each of three topics: Piaget’s genetic epistemology, the relationship between thought and language, and children’s learning processes. Each lecture will be associated with a set of readings and small section meetings led by one of the instructors.* Readings will be drawn from journals and from the following books:

Piaget,
Chukovsky,
Holt,
Slobin,

Biology and Knowledge
From Two to Five
How Children Learn
Psycholinguistics

There will be approximately one lecture/discussion and one small section meeting each week. The course will be run as a Division II course but is open to Division I students and has no prerequisites.

Practicum

Nine students in the course will have the opportunity to spend one month of the term in New York City studying at Rockefeller University with Professor Cole and working with young children in his research program. Housing will be provided, and there is a possibility of a stipend for incidental expenses where needed. Students electing the practicum will be doing the equivalent of two courses work and should adjust their course load accordingly. They will also have to plan the rest of their work to allow a one-month absence during the term.

*Richard Dogerst, Professor of Psychology at the University of Massachusetts will be an active participant in class activity.
The decline and regeneration of political institutions has long been a central topic of political theory. Recently, it has been most actively explored in the study of developing countries, with their special problem of adapting traditional institutions to rapid modernization and of creating new institutions to meet new demands. The United States, however, is also a developing country, and its institutions are also subject to decay -- and in some cases regeneration -- in the face of shifting and accelerating social forces.

This course will analyze the process of decay and regeneration of key urban institutions such as the public schools, the police, and public housing, as well as more explicit political institutions such as the political machine, the political party, and the Mayor's office.

The first part of the course will concentrate on building up a common understanding of the concepts of "institutions", "institutional development and decay", and "institutional regeneration." The readings will include Plato, The Republic, Niccolo Machiavelli, The Prince, Albert O. Hirschman, Exit, Voice, and Loyalty, Theodore Lowi, The End of Liberalism, and Samuel P. Huntington, Political Order in Changing Societies.

The second part of the course will require each student individually, or in groups, to analyze one key urban institution in terms of the concepts discussed in the first part of the course. Classes during this time will be devoted to discussions of ongoing research problems and findings, as well as the continuing exploration of books and articles in this field.

By the end of the course each student will have presented a report to the class on his research, and have prepared a final paper on the institution he has analyzed.

Field research in cities such as Holyoke and Springfield will be encouraged.

The course will meet twice a week, once for two hours and once for one hour.
SS 240

WHY WORK?
Margaret Howard and Barbara Linden

Work is our sanity, our self respect, our salvation. So far from being a curse, work is the greatest blessing.
- Henry Ford

Using classics in the fields of sociology, anthropology, economics, and history, we will explore the meaning and role of work in different times and cultures. Particular focus will be given to occupational placement, automation, unionization, alienation and other aspects of work under modern capitalism. Socialist and other alternatives to the organization of work will be explored, along with studies of specific occupations. Readings will be selected from among the following: Weber, The Protestant Ethic and the Spirit of Capitalism; Marx, Political and Economic Writings; Blauw, Alienation and Freedom; McClelland, The Achieving Society; Swados, On the Line; Langer, Women of the Telephone Company; Hills, White Collar; Goertz, Puddlers and Princes; Bloch, Land and Work in Medieval Europe; Gora, Strategy for Labor; Films: "The Netsilik Eskimos" Ford: "Don't Paint It Like Disneyland".

SS 246

MOTIVES AND SOCIETY
Robert Birney

A study of the major incentive systems used in human societies to guide and direct behavior. Beginning with Atkinson's statement of the problem, we will examine the models of McClelland, Rotter, and Atkinson for their usefulness in generating research and action programs for social change. The literature on motivation for achievement, affiliation, and power will be studied with special attention to experimental and observational researches.

Students will be encouraged to conduct replication studies using data gathered from the class where possible. The course will meet twice weekly for an hour each session and there will be one two hour lab.

Major titles from which reading will be drawn are Atkinson's Introduction to Motivation, McClelland's The Achieving Society, Winter's The Power Motive, and Birney, Burdick and Tevann's Fear of Failure.
The fifth most populous nation in the world is composed of over 300 distinct ethnic groups, and provides in microcosm a series of topics worthy of study by social scientists, artists, historians or other literati. The contrast between the "inner islands" (Java and Bali) and the "outer islands" (Sumatra, Halmah, Sulawesi, the Moluccas, West New Guinea, etc.) is one of ecological, economic, and socio-cultural importance, as is the distinction between cultures based on wet-rice agriculture in the fertile volcanic basins of Java/Bali and the labor-oriented cultures on the coasts. The multi-ethnic urban groups, the culture-change as Indonesia begins to "develop and modernize", the religious differences between Islam, Hinduism and Christianity, the indigenous folk-tales, arts and rituals, the problems in education, transportation, language development, political stability and international infra-structures are all of interest to me, and might be examined by students.

A course in the "Ethnology of South-east Asia" will be offered concurrently by Professor Alfred Hudson of the Department of Anthropology, University of Massachusetts. The two courses will also be meeting for joint programs and discussions during the term; students may enroll in both.

Teams of students with common or complementary interests will be formed to work together in preparing research reports for the weekly or bi-weekly session of the group.

This seminar will meet once a week for three hours.
Man is a symbol-creating animal who uses this capacity to structure the environment (natural and social) within which he operates. Social interaction can be viewed as a process of communication through systems of symbols. The most obvious of these is language, but there are others, such as religious systems, systems of exchange of women in marriage, systems of legal norms and practices, etc. These symbolic systems are meaningful to persons sharing the same culture, but must be decoded if they are to be understood by an outsider. One of the problems anthropologists have to face in studying and attempting to understand the behavior of people in other societies -- or in sub-groups of our own society -- is that of translating alien symbolic systems into terms which are understandable to outsiders, and which will allow for a variety of systems to be compared. Comparison, with a view ultimately to isolating cultural patterns and processes which are universal, is one of the goals of anthropology.

In this course we will investigate the "meaning" underlying symbolic behavior by focussing on three areas of social life (religion, law, and marriage practices), using materials from Africa, Central America, and North America. Our problem will be to investigate whether common themes, styles, or forms of behavior can be found cross-culturally, underlying the diverse systems of symbols within which behavior is coded. We will be particularly interested in the problem of comparing cultural patterns and processes in so-called "primitive", or less economically developed societies, with those in economically developed societies such as the United States. In this kind of comparison the translation problem is particularly acute, since the symbolic systems dealt with may be highly diverse and may give the appearance of discontinuities in form and process where in fact there are none.

Texts for the course will include: Spradley and McCurdy, Conformity and Conflict; Readings in Cultural Anthropology; Spradley, You Den Yourself a Round; and Douglas, Purity and Danger.

The course will meet twice a week for one two hour meeting and an hour meeting.
This course is aimed at developing an analytic framework within which some of the problems confronting contemporary American higher education can be analyzed. Some of the topics to be discussed are:

- the social and historical context within which the contemporary university system developed.
- the nature of academic careers, career contingencies and academic labor markets and the consequences of these for the quality of education.
- academic decisionmaking as distributed among faculty, student, administrative and governing members of universities.
- undergraduate and graduate student perspectives on the educational experience.
- recent student protest movements, from psychological, social-psychological and sociological viewpoints.

The above list of topics is not exhaustive, and areas of interest to students in the class can be added. Students will be expected to apply the ideas and frameworks developed in the class to interpret the Hampshire experience; this analysis can take a number of forms which will be worked out in consultation with the instructor. The class will meet twice a week for an hour and a half.
The situation of women and of children is undergoing rapid change in many parts of the world. This change is both stimulated by and reflected in the legal process. This course will examine the legal status of women and children, principally in America, both as a subject of interest in its own right and as a vehicle for the exploration of the role of law in society. It is intended to meet the needs of those who desire a general view of the operations of legal institutions and to serve as an introduction to legal process for those wishing to establish a foundation for advanced study in legal institutions and processes, as well as to meet the current need for a greater understanding of the legal rights of women and children.

Topics which will be treated in the course will include (1) legal aspects of employment discrimination against women; (2) taxation and property rights; (3) treatment of women in the criminal law and the penal system; (4) the law concerning marriage, divorce, child custody, and adoption; (5) abortion and birth control laws; (6) the law concerning child abuse and parental authority over children; (7) student rights; (8) the juvenile court process; (9) political and civil rights of women and children. We will consider the role of courts, legislatures and administrative agencies, and the practise bar; the relationship of the formal legal system to less formal modes of social control; the internal process of change in the law, including the development of common law, statutory interpretation, litigation and management of transactions; and the capacities and limits of the law as a vehicle for change.

Members of the class will be expected to gather experience on one of the topics of the course through their own field work, to put that experience into the context of the existing research and literature on the subject, and to make the knowledge thus acquired available to the class in a useful way. The class as a whole will be seeking to break ground for instruction in the legal rights of women and children in college, secondary and elementary schools, and by other agencies and groups, such as the Women's Center.

The course will also include a series of meetings, open to the public, featuring speakers who are currently working on problems relevant to the course. The class will meet once a week for two hours plus an hour tutorial.
DEViants, ASSESSORS, AND TREATERS

Thomas Molman

This course will focus on some of the clinical aspects of psychology including concepts of abnormal or deviant behavior, theories and practice of various therapies, and the process of assessment of behavior.

In considering those areas of applied psychology most commonly referred to as abnormal psychology, we will be looking at the various traditional categories of the psychological nomenclature such as psychosis, neurosis, character disorders, etc. We will focus on theories of treatment especially those conceived of and refined by psychologists as they relate to various forms of deviant behavior and involve ourselves in the way psychologists and/or other helping professions come to some understanding of the various behaviors.

The course will meet twice a week for two hours each meeting.

THE ROLE AND PURPOSE OF ALTERNATIVE SCHOOLS

Gloria Joseph

Basically, the purpose of the course is to enable the students to obtain a sufficient background to enable them to constructively develop new and radical educational, philosophic policies and procedures that are relevant to the real condition of people. (Emphasis will be placed on "minorities," "oppressed," "third world" people.) Initial discussions will be devoted to the need for Alternative Schools. The majority of time will be spent developing philosophies, theories, curriculum and class work methodology. In addition to class meetings, students will visit alternative schools in a variety of locales.

Topics to be covered include:
1. The Free-School Movement
2. The Mis-education of American Youth
3. The School as a Radical Agent for Change in American Society
4. The Political Economy of Education

The course will meet once a week for two hours.
The Seminar will study selected dimensions of change in undergraduate liberal education in the present period, against a context of past collegiate experience and future possibilities and requirements. Studies will relate particularly to Hampshire College but will draw substantially upon the data of experience at other institutions in the past and present, and on materials from many sources other than Hampshire.

Some of the dimensions of change the Seminar will be likely to study are the following:

**Curriculum Design.** Among fundamental questions here are those: What learning goals, experiences, and content are most appropriate for undergraduate liberal education now? What are some of the major curriculum design options, and how can one discriminate intelligently among them? On what assumptions? How do today's "most appropriate" options compare with past patterns? How do they relate to future possibilities and needs—of the society and culture as well as individuals? What directions in curriculum design should Hampshire College follow in the next five years? What are the most productive means for curriculum reconstruction on a continuing basis?

**Instruction and Learning.** Some of the basic questions in this regard are: What are the principal variables that affect learning and teaching in an undergraduate institution (e.g. learner ability, interest, need; teacher ability, interest, need; curricular goals; time and money; instructional organization, etc.), and how can their impact and interplay be modified and integrated? What modes of instruction are most appropriate, considering the constraint of existing variables? How can learning be both individual and social? What should be the role (or roles) of the teacher in today's changing college? Of learning/teaching groups? Of individual study? Of courses? How can students and teachers grow in instructional/learning effectiveness—and how can a college help this happen? What should Hampshire be doing better in instruction and learning in the next five years?

**Evaluation.** Among basic questions here are these: What are the functions of feedback in the process of education? For the learner, the teacher, the institution, the society? What are the principal feedback options that are open, and what most appropriate, in today's changing undergraduate college? What are the limitations and potentialities of various modes of evaluation? How can evaluation of learning in a college be maximally individualized and at the same time logistically feasible? How can individualized evaluation avoid being oligomorphic? How can it be communicated in ways that provide social as well as individual meaning.
(e.g. to graduate schools, potential employers, one's peers, etc.), offering the possibility of reasonable contrast and comparison. What should Hampshire College be doing to make the evaluation of learning better—and logistically feasible—in the next five years, as full enrollment is achieved?

The Seminar will be limited to six students and three faculty with enrollment by permission of the Dean of the College.

It will meet once a week, Monday, 2:30 to 4:30 p.m.

It will involve substantial reading in primary and secondary materials.

Each member will be expected to prepare and present a substantial individual paper to the Seminar.

Each member, student and faculty, in some way should be enabled to include the Seminar in his or her regular program as a significant assignment or undertaking.

Regular attendance will be assumed for all concerned.
FOREIGN LANGUAGE INSTRUCTION
CURRICULUM STATEMENT: FALL 1972

The Fall Term will offer students a variety of ways to exercise their interest and skill in French and Spanish. Students interested in pursuing the study of either language should consult with Professor James Watkins in Academic Building 701. For the wide array of courses offered by the Five Colleges in some fifteen foreign languages and literatures, students should consult the college bulletins and, for further assistance, confer with Mr. Watkins.

Within the Five College program for the Fall of 1972, the following studies can be carried out at Hampshire College. It is not necessary to register for such work, though successful completion of a term's work in foreign language study will be acknowledged in your College transcript.

*Supervised self-instruction in French, Spanish, or Portuguese: James Watkins and Seymour Pollock

This course of study is for beginning and intermediate students and for advanced students who wish to set as proctors. Advanced students in language are encouraged to use their proficiency in teaching others. When enrolling, such students should add the word Proctor after the title, and they should arrange to see Mr. Watkins or Mr. Pollock sometime during the week preceding the start of classes.

A first period will serve for intensive exercise in phonology, for acquaintance with method, materials and standards, and for the setting of individual paces. Students with previous training in the language will also use this period to place themselves at the appropriate level.

Thereafter, meetings will be in the form of personal appointments made for particular needs and of small groups organized for oral practice. Total class and preparation time may well run over fifteen hours weekly.

Students should plan and make every effort to spend the following January Term or summer in a French-, Spanish-, or Portuguese-speaking country.

*Le Table Rondo: James Watkins

A seminar for advanced students of French. By advanced is meant those who have acquired a ready, accurate facility in both the written and oral language. This usually implies previous foreign residence or study.
The books chosen for discussion will change each term, allowing students to enroll more than once. In the fall, the titles will be varied in subject; in the spring, they will be to some degree ordered around a common theme. In both cases, they will have been selected because of the recognized influence of their authors and because of their general appeal. A sample selection for the fall might be:

Laurent Lettre ouverte aux étudiants
Étiemble Parlez-vous français?
Fauvels Lettre ouverte aux Français
Hazard La crise de la conscience européenne - I

The seminar will be conducted in French, organized around written and oral assignments, limited to five students. It will meet for one and one-half hours twice a week.

The teaching of English as a second language to Spanish-speakers: Seymour Pollock

This course is for advanced students of Spanish. By advanced is meant those who have acquired a ready, accurate facility in both the written and oral language. This usually implies previous foreign residence or study.

Careful contrastive analysis of Spanish and English, an introduction to the culture of the Spanish-speaking child, and actual experience in a real teaching situation will offer a basis for preparation of instructional materials, the planning of language courses, and the development of actual classroom techniques. Students will, therefore, be encouraged to undertake independent research along these lines.

An important part of the course consists of field work with Spanish-speaking children in Holyoke. Students serve as teaching aids in the ESL program at the West Street School, working with teachers in the school. The amount of time which a student wishes to give to field work will be worked out with the instructor. (Such field work could constitute an Independent Study project for the January or Spring Terms.) Class meetings will be held once a week for two hours.

Sens et Contrastes (James Watkins) and Sentido y Contraste (Seymour Pollock)

These courses are for advanced students of French or Spanish. By advanced is meant those who have a ready, accurate facility in both the written and oral language. This usually implies previous foreign residence or study.
Intercurrent reference to a foreign language dictionary is at best a
futile exercise. At worst, it is misleading. This is especially
the case when the level of language concerned is literary, when meaning
derives from a created content, metaphor, and personal style, when it
derives from an original, often inimitable, usually untranslatable use
of words.

These seminars, then, will exercise the search for meaning inside,
not outside, the text. The mastery of such an exercise is indispensable
to literary perception in a foreign language and prerequisite
to any advanced work in a foreign literature.

The courses will be given and taken in French or Spanish. Seminar
size will be limited to 12 students. Meetings will be once a week
for two hours.

They will be offered in the Spring Term only.

James Watkins, Director

THE HUMAN DEVELOPMENT PROGRAM

CURRICULUM STATEMENT: FALL 1972

The Program in Human Development will be offered in both the Fall
and Spring Terms of 1972-73. Students are encouraged to enroll in
one of the seminars in this Program during their first year. The
goals of the Program are to understand and explore aspects of the
individual life process from a variety of perspectives and to facili-
tate the student's understanding of his own personal development.

Plans for the Fall Term include a series of common experiences con-
sisting of lectures, films, demonstrations, and workshops. The
theme of these events and readings for the Fall Term will be
"Human Liberation Toward Freedom and Dignity." In addition, there
will be a group of seminars led by faculty members from all three
Schools, each seminar focusing upon a particular approach to the
study of human development. Specific seminar and workshop topics
will be announced later.
Janet A. Boettiger, assistant professor of human development, has a B.A. from the University of Maryland at College Park and an M.S. from the University of Pittsburgh. Interested in the teaching of movement and movement therapy, she has worked as a movement analyst at the psychiatric department of Massachusetts General Hospital and as a staff member of the Psychological Services Center within the clinical psychology department at the University of Massachusetts at Amherst.

John B. Boettiger, assistant professor of human development, joined the Hampshire planning staff in 1967, and has devoted himself particularly to exploring experiential and self-reflexive approaches to personal growth. He has taught at Amherst College, from which he has a B.A., and pursued research at the RAND Corporation in California.

James C. Halpern, professor of philosophy, holds a B.S. from Harvard College and a Ph.D. from Yale where he later served as chairman of the Directed Studies Program. He has taught at the University of South Carolina and at Wesleyan, and was chairman of the philosophy department at Oakland University, Michigan. His published works include essays in the history of science and translations of Kant and Casartelli.

Van R. Balter, Jr., director of admissions and associate professor of American studies, was associate director of admissions at Amherst College from 1956 to 1969. His special interests include teacher training and the production of new history materials for secondary schools. He holds a B.A. from Rutgers University and his Ph.D. from the University of Pennsylvania.

Arthur Seeger, professor of design, was formerly chairman of the design department at 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.

Shelia A. Bouie, assistant professor of English, was chairman of the English Department at Clarke College, Iowa, and a founder and director of the Iowa Association of Small College English Departments. She holds a B.A. from Mundelein College and a Ph.D. from the University of Iowa.

Clayton A. Hubbs, assistant professor of literature, is interested in modern drama, twenty-first 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 at Seattle.

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.

Norton Jaster, associate professor of design, is a practicing architect, designer, and writer whose books include The Phantom Tollbooth, a children's fantasy, and The Dot and the Line: a mathematical fable made into an Academy Award-winning animated film. His B. Arch. is from the University of Pennsylvania, and he studied at the University of Liverpool on a Fulbright scholarship.
Timothy Landfield, faculty associate in theatre, came to Hampshire as a Fellow from Amherst College and received a B.A. in June, 1972. He has acted in several plays at Smith and Amherst Colleges and while at Hampshire, taught classes in dance technique and a theatre workshop, directed several plays, and choreographed a dance for a January dance concert.

Jerome Liebling, 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, N.Y.

Richard C. Lyon, professor of humanities and arts, 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. During fall term, 1972 he will be on leave.

Robert A. Massfield, assistant professor of art, received a B.A. from Saint Cloud State College, Minnesota and an M.F.A. from the University of Massachusetts where he later taught. He was also on the faculty at Smith College. His interests are in sculpture, painting, architecture and three-dimensional design.

Robert Morales, assistant professor of Hispanic American literature, has worked for the World University Service in Peru and Venezuela; served as a coordinator of the migrant education program in Middlesex County in Massachusetts; and published translations of Latin American poetry. He holds a B.A. from Brandeis and an M.A. from Harvard.

Elaine Myers, assistant professor of film, has a B.A. in art from Stanford. She did graduate study in painting and photography at the San Francisco Art Institute and taught film and photography at the University of Minnesota. Her photographs have appeared in many exhibitions and publications.

Francis R. McGehee, assistant professor of dance, received a B.S. from the Julliard School of Music and was a member of the Joan Kerr Dance Company and the Anna Sokolow Dance Company. She has studied with the Ballet School of Canada and with Sathe and Raja Yoga.

Randall McCollum, assistant professor of music, received his B.M. from the University of Cincinnati and his Ph.D. from the University of Rochester. He has taught musical theory and composition at West Chester State College, Pennsylvania, where he was also director of the electronic music studio.

James E. McElwee, assistant professor of music, has a B.M. from North Texas State University at Denton and an M.M. from Yale University, where he has been assistant conductor of the Yale Band and the Yale Symphony Orchestra. His interests include both performance and composition; he has played in many symphonies, orchestras, laboratory and jazz bands, and chamber music ensembles, and is setting to music the poetry of Richard Brownigan.

Robert E. Mesbah, assistant professor of the philosophy of religion, has his B.A. from the University of Notre Dame, and his Ph.D. is in progress at the University of Chicago and Harvard. Author of two books, *Personalities and Powers* and
Beckmen, he has taught at the University of Notre Dame in the department of theology.

Earl Pop, associate professor of design, holds a Bachelor of Architecture degree from North Carolina State College at Raleigh and has been design and construction critic for Pratt Institute in New York City. He has been engaged in private practice since 1962.

David S. Roberts, assistant professor of literature and director of the Outdoors Program, holds a B.A. from Harvard University and a Ph.D. from the University of Denver. He is the author of The Mountain of My Fear, a book about mountain climbing, and Deborah: A Wilderness Narrative.

Gladys Schrock, faculty associate in the Theater Program, graduated from Manchester College in Indiana and received an M.F.A. from the School of Drama at Yale University, where he was later playwright in residence. He founded a professional summer stock company in Indiana, the Enchanted Hills Playhouse, and helped to establish the Long Wharf Theatre in New Haven, where he has acted, directed, and had a play produced.

David K. Smith, professor of English and Master of Merrill House, 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 C. Smith is Dean of the School of Humanities and Arts and 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.

Eugene Terry, assistant professor of literature, has taught at Southern University in Baton Rouge, Johnson Smith University in Charlotte, North Carolina, Crumbling College in Louisiana, and at Saint Augustine’s College in Raleigh, North Carolina. He has a B.A. from Howard University and is completing his Ph.D. at the University of Massachusetts at Amherst.

SCHOOL OF LANGUAGE AND COMMUNICATION

David E. Kerr, assistant professor of mass communication, has a B.A. from Miami University, Ohio and is completing his Ph.D. at Indiana University. His teaching experience includes courses in radio-tv, journalism, and English.

James H. Knoll, associate professor of psychology, received his B.A., M.A., and Ph.D. from the University of Minnesota, and taught at Vanderbilt University before coming to Hampshire. His special interests are psycholinguistics and cognitive psychology. He has a joint appointment in the School of Language and Communication and the School of Social Science.
John J. LeFevre, assistant professor of mathematics in the School of Language and Communication and the School of Natural Science and Mathematics, came to Hampshire from Fisk University. He has taught at the University of California at Berkeley (where he received his Ph.D.) and was a mathematics consultant to the Berkeley Public Schools. His B.S. is from the University of Washington.

Malka Lilova, assistant professor of sociolinguistics, received her B.A. from Kalamazoo College and her M.A. from Radcliffe. She has also held Woodrow Wilson and Harvard Teaching Fellowships. A native of Sultene, Latvia, she is preparing her doctoral thesis on the development of Latvian as a national standard language.

William R. 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. He has an inter-school appointment in the School of Language and Communication and the School of Natural Science and Mathematics, and is serving as coordinator of the faculty of the former school.

Stephen O. Mitchell is director of management systems and associate professor of computer science. He has been director of the Computer Center at Lehman College in New York City and director of the Freshman English Program at Syracuse University. His B.S. is from Purdue University and his Ph.D. from Indiana University.

Richard L. Nuiler is acting director of the Library Center, director of educational technology and assistant professor of communication science. He was formerly 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. His appointment is shared by the School of Language and Communication and the School of Social Science.

Robert K. Nardin, II, assistant professor of linguistics, received a B.A. from Dartmouth College and is a candidate for the M.A. at N.Y.U. He has traveled widely in Europe, especially in the Soviet Union and Scandinavia. He speaks six languages, and his interests include international affairs and peace work.

Neil A. Stillings is assistant professor of psychology in the School of Social Science and the School of Language and Communication. He has a B.A. from Amherst and is working toward a Ph.D. in psychology from Stanford. His current research involves the semantics of natural language.

Janet E. Talman, assistant professor of anthropology, received a B.A. from the University of Minnesota at Minneapolis and is completing her dissertation at the University of California at Berkeley. She has conducted field work in Yugoslavia on social interaction patterns in rural and urban Serbia and has worked in an editorial capacity for the Koehner Anthropological Society Project.

Thomas Vanu, assistant professor of linguistics, has published several papers in his field and is currently preparing his Ph.D. dissertation under the supervision of Susan Cossenky at the Massachusetts Institute of Technology. Recipient of a B.A. from Reed College, he brings a mathematical background to the study of linguistics.

James H. Watkins, director of foreign studies and professor of languages, served at Middlebury College as director of the Language Center and associate professor of French. He was also Middlebury's director of studies in Paris. His B.A. is from the Middlebury Graduate School of French in France, and his other graduate
degrees are from the University of Paris, Sorbonne.

Christopher G. Wil - woom, assistant professor of philosophy, has a B.A. from Arkansas Polytechnic College and is currently completing his Ph.D. at the University of California at Berkeley. He was a Danforth Graduate Fellow and at Berkeley was a teaching assistant and fellow. He has taught at Knoxville College and at Berkeley.

SCHOOL OF NATURAL SCIENCE AND MATHEMATICS

Herbert J. Barnatan, assistant professor of physics, has been a visiting scientist at Brookhaven National Laboratory, a member of the Institute for Advanced Studies at Princeton, and a visiting professor at the Institute for Theoretical Physics in Louvain, Belgium. His B.A. is from Columbia University and his Ph.D. from the University of California at San Diego.

Hele S. Brung, assistant professor of biology, holds a B.A. from Syracuse University and a Ph.D. from Harvard. Her work on crustacean and vertebrate sensory neurophysiology has been supported by the National Institutes of Health and the Crass Foundation. She is the author of several teachers' guides for elementary science studies.

Raymond P. Copeland, associate professor of biology, has worked at the Woods Hole Oceanographic Institution, the Smithsonian Astrophysical Observatory in Cambridge, the United States Fish and Wildlife Service, and the Beheco Tropical Research Station in the West Indies. He holds a B.A. from Boston University and a Four-College Ph.D. (Amherst, Smith, Mount Holyoke and the University of Massachusetts).

John H. Foster, professor of biology, previously taught biochemistry at the Boston University School of Medicine and was a director of the Science Curriculum Improvement Program for the National Science Foundation. He holds a B.A. from Swarthmore College and a Ph.D. in biochemistry from Harvard.

Siegbert Goldberg, associate professor of history of science, taught at Antioch College and was a senior lecturer at the University of Zambia. He has a National Science Foundation grant for a study of early 20th century reactions to Einstein's relativity theory. His B.A. is from Antioch College and his Ph.D. is from Harvard.

Courtney P. Gordon, assistant professor of astronomy, holds a B.A. from Vassar College and an M.A. and Ph.D. from the University of Michigan. Her work has included studies at the Royal Greenwich Observatory in England and the Harvard College Observatory, as well as observing time at the Kitt Peak National Observatory.

Kurtis J. Gordon, assistant professor of astronomy, obtained his B.S. from Antioch College. He holds an M.A. and Ph.D. from the University of Michigan, and has been a research associate and visiting assistant scientist at the National Radio Astronomy Observatory in Virginia. He also studied at the University of Tübingen, Germany, and at Amherst.

Everett M. Hafner, professor of physics, was an associate physicist with the Brookhaven National Laboratory, a National Science Foundation Fellows at Cambridge University, and a faculty member at the University of Rochester, from which he
received his Ph.D. His B.S. is from Union College and his special interest is
the physics of electronic music. He served as the first Dean of the School of
Natural Science and Mathematics at Hampshire.

Kenneth R. Hoffman, associate professor of mathematics, has a B.A. from the Col-
lege of Wooster and an M.A. from Harvard, where he also served as a teaching
fellow. He was chairman of the mathematics department at Talladega College in
Alabama during 1965-70.

David C. Kelly, assistant professor of mathematics, has taught at New College in
Florida, Oberlin and Talladega Colleges, and Boston University. He holds a B.A.
from Princeton University, an M.S. from M.I.T. and his Ph.D. is in progress at
Dartmouth College. He directs an NSF summer program for talented secondary
school students in natural science and mathematics.

Nancy H. Lowry, assistant professor of chemistry, has a B.A. from Smith College
and a Ph.D. from M.I.T. She has taught at Smith College and the Colley Dickinson
Hospital School of Nursing in Northampton and has been a research associate at
M.I.T., Amherst, and Smith. She has coordinated the chemical analysis laboratory
as part of the Mill River Project in Northampton.

Lynn Miller, associate professor of biology, has taught at the American University
of Beirut and at Adelphi University. He has a B.A. from San Francisco State Col-
lege and a Ph.D. from Stanford. He has held post-doctoral fellowships in micro-
biology at Stanford’s Hopkins Marine Station and in genetics at the University of Washington.

Eric A. Nonman, faculty associate in biology, has a B.S. from the Massachusetts
Institute of Technology and the work for his master’s degree in psychology com-
pleted at the same institution. He has done research at the Laboratories of the
Museum of Natural History in New York and the Laboratory of Electronics at M.I.T.

Brian T. O’Leary, assistant professor of astronomy, has a B.A. from Williams
College and a Ph.D. from the University of California at Berkeley. A former
NASA scientist-astronaut, he continues to be involved in U.S. space efforts and
has written The Making of an Astronaut. He has taught at Cornell University,
San Francisco State College, the California Institute of Technology, and the
University of California at Berkeley.

John B. Reid, Jr., assistant professor of geology, has pursued his lunar surface
and earth’s interior research interests at the Smithsonian Astrophysical Observa-
tory in Cambridge, the Geochronology Laboratory at M.I.T. and Remsen-Roper Poly-
technic Institute. Recipient of a B.A. from Williams College and a Ph.D. from
the Massachusetts Institute of Technology, he previously taught in three high
school physics programs.
James B. Sears, assistant professor of botany, holds a B.A. from the University of Oregon at Eugene and a doctorate from the University of Massachusetts at Amherst. His research interests include marine algae and physiological ecology; he has worked at the Marine Biological Laboratory in Woods Hole and the University of Massachusetts Marine Station in Gloucester.

Michael R. Sutherland, assistant professor of statistics, holds an interschool appointment in the School of Natural Science and Mathematics and the School of Social Science. He has been a consultant with the Systems Management Corporation in Boston and has worked on several problems involving applications of statistics to the social sciences. His B.A. is from Antioch College and his Ph.D. is in progress at Harvard University.

Ann M. Woodhull, assistant professor of biology, has a B.A. from Swarthmore and earned her Ph.D. at the University of Washington. Her teaching experience includes high school mathematics in Nigeria as a Peace Corps volunteer and substitute teaching in the school system in North Haven, Connecticut. She is interested in doing behavioral research on primates and experiments with the control of protococm movements.

SCHOOL OF SOCIAL SCIENCE

Richard M. Albert, assistant professor of political science and special assistant to the Director of the Model Cities Program in Holyoke, Massachusetts, has served on the research staff of the Urban Institute in Washington, D.C. He holds a B.A. from Hobart College and a Ph.D. from Harvard.

Emilly Barnes, assistant professor of economics, has a B.A. and M.A. from the University of Nebraska. A citizen of Trinidad and Tobago, Mr. Barnes has taught international economics at the University of the West Indies in Kingston, Jamaica, and at the University of Ottawa in Canada.

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

R. Bruce Carroll, Director of Field Studies and associate professor of political science, has taught at Middlebury and Smith Colleges, where he also directed Washington summer internship programs. He is currently active in the 1972 Presidential campaign. His B.A. is from the University of Vermont and his Ph.D., from the University of Chicago.

Michael Cole, visiting associate professor of psychology, is also professor of ethnopsychology and experimental anthropology at Rockefeller University. He holds a B.A. from the University of California at Los Angeles and a Ph.D. from Indiana University.

Louise J. Farnham, associate professor of psychology, has worked in child guidance and mental hygiene clinics in Minnesota and California, and has taught psychology at Yale, Stanford, and San Francisco State College. She holds her B.A. and Ph.D. from the University of Minnesota.
Monica T. Faulkner, assistant professor of sociology, is a specialist in the sociology of higher education. Other areas of her interest, in which she taught at the University of Rochester, include sex roles and family interaction, and the sociology of science and the arts. Her B.A. and Ph.D. are from the University of California at Los Angeles.

Howard P. Gallup, visiting professor of psychology, has his B.A. from Rutgers University and his Ph.D. from the University of Pennsylvania. He served as research psychologist at Philadelphia Navy Yard and taught at Hobart and William Smith Colleges before joining the faculty of Lafayette College, where he has devoted a major part of his efforts to the implementation of the Keller Plan of Instruction, which involves the development of material for self-paced learning, in several departments at the College.

Penina W. Glazer, assistant professor of history, has a B.A. from Douglass College and a Ph.D. from Rutgers University where she held the Louis Bevier Fellowship. Her special interests include American Intellectual history with emphasis on radical left wing movements in the United States during the 1960’s.

Leonard B. Glick, Dean of the School of Social Science and 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. Louis, West Indies for a public health program and a study of ethnomedicine and social organization in the New Guinea Highlands.

Cayle D. Hollander, assistant professor of political science, holds a B.A. from Syracuse University, an M.A. from Harvard, and a Ph.D. from M.I.T. She has recently published a book entitled Soviet Political Indoctrination: Developments in Mass Media and Propaganda Since Stalin, and is currently doing research on political communications and dissent in the Soviet Union, and women in the Soviet and East European political systems.

Thomas B. Holman, associate professor of psychology and Master of House IV, has been extensively involved in counseling. At Augsburg College, Minnesota, he served as Director of Psychological Services and later as Vice President for Student Affairs and Director of the Center for Student Development. Recipient of a B.S. from the University of Wisconsin at Madison and a Ph.D. from the University of Minnesota at Minneapolis, he taught at Augsburg and Earlham Colleges before joining Hampshire College.

Margaret B. Howard, assistant professor of economics, served with the Cleveland Regional Planning Commission and the Economic Development Administration of the U.S. Department of Commerce. She has a B.A. from Wellesley College, an M.S. from the London School of Economics and a Master of Philosophy from Yale, where she is currently completing her Ph.D. work.

Gloria J. Joseph, associate 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-chairman of the School’s Committee to Combat Racism, and at Cornell she was assistant dean of students. Director of the Committee on Special Educational Projects’ counseling service, and associate professor in the Africana Studies and Research Center.

Barbara Harrison Linden, assistant 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.

Myron J. Lamie, dean of the College and professor of political science, is interested in the political ideologies of both developed and underdeveloped nations, and in social issues such as "the good society." While holding teaching positions at the University of Colorado at Boulder, Fisk University, Kent State University, and the University of Istanbul, Turkey, he worked on academic organizational problems such as interinstitutional cooperation and honors programs. His B.A. and Ph.D. are from the University of Iowa.

David E. Meltz is assistant dean for academic development and assistant professor of law. He received his B.A. from Brandeis University and his LL.B. from Harvard Law School. He taught law at the University of Liberia in West Africa as a member of the Peace Corps, and is chairman of the Hampshire County Civil Liberties Union. During the academic year 1972-73, he will be on leave as research scholar at the Harvard Law School.

Lester J. Mason, Henry B. Luce Professor of Law, has a B.A. and LL.B. from Stanford, served as law clerk to the Hon. Warren E. 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.

Philip P. McKinney, assistant professor of anthropology, received a B.D. from Yale Divinity School and an M.A. from Brown University. He has served as a university chaplain in Djakarta, Indonesia, and at Brown, and as a clergyman in Rhode Island. His most recent research and publications examine cultural change and modernization in Bali.

Joel S. Meister, assistant professor of sociology and master of House III, holds an A.B. from Stanford University and an M.A. from Berkeley, where he is a candidate for the Ph.D. He has worked as an urban community organizer with the Peace Corps in Peru and as a secondary school social studies teacher and counselor at Palo Alto, California.

Anthony B. Millman, foreign curriculum consultant and faculty associate in Caribbean history, holds a B.A. from University College of the West Indies and an M.A. from the University of London. He has taught at the University of West Indies in Barbados.

Kenneth Rosenberg, assistant professor of law and treasurer of the College, graduated from Amherst and holds an LL.B. from Yale Law School. He served as a law clerk of the Appellate Division, Supreme Court, and practiced law in Newark, New Jersey prior to his appointment at Hampden.

Miriam Slater, assistant professor of history and master of Dakota House, 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.

Barbara Turcillen, assistant dean for academic administration and assistant professor of political science, has taught at Connecticut College and Mount Holyoke College. She received a B.A. from the American University of Beirut in Lebanon, and did doctoral work at Columbia.
Robert P. 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.

Frederick Stetson Weaver, associate professor of economics, 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 California at Santa Cruz. His special interest is the historical study of economic development and underdevelopment.

Whitney Wilson, director of health, counseling, and advising and assistant professor of sociology, has been a psychiatric social worker in mental health clinics and family service agencies. He received his B.A. and M.A. in social work from Syracuse University.

Barbara B. Yegrosen, assistant professor of anthropology, received her B.A. at 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.


Charles R. Longworth, President.
A graduate of Amherst College, Mr. Longworth holds an M.B.A. from Harvard University and an L.L.D. from Amherst. He is a member of Phi Beta Kappa. From 1961 to 1965 he was assistant to the president of Amherst College. His association with Hampshire began in 1965, when he became chairman of the Hampshire College Educational Trust, which had responsibility for the initial formation of the College. He served as secretary to the Trustees from 1967-71, and as Vice-President of the College from 1966 to June, 1971, when he was elected President. With Franklin Patterson, he wrote The Making of a College.

Robert C. Birney, Vice President.
(See School of Social Science.)

Donald F. Berth, Director of Development and Public Relations.
Mr. Berth holds a B.S. and M.A. from Worcester Polytechnic Institute and did doctoral work at Cornell in educational and business administration and social sciences. He was formerly assistant dean of engineering at Cornell University, and was responsible for the publications and public information program as well as the undergrad advising and counseling center. His teaching interests centered on the implications of technology to society. He also serves as secretary to the Hampshire College Board of Trustees and its Executive Committee.

Kenneth Rosenthal, Treasurer.
(See School of Social Science.)

Dudley B. Woodall, Business Manager.
A graduate of Amherst College, Mr. Woodall holds an M.B.A. from the University of Pittsburgh. He came to Hampshire College from Westinghouse Electric Corporation, where he was manager of financial control.

Howard E. Paul, Director of Physical Plant.
A graduate of Long Island Technical Institute (now SUNY at Farmingdale), Mr. Paul has served as construction supervisor for Hampshire College since 1968. He has supervised major construction for Scholastic Magazine in New Jersey and Detroit Metropolitan Airport.
SPECIAL NOTE

In addition to preliminary and final course descriptions catalogs for Fall and for Spring terms, the College publishes a complete Register of Courses at the conclusion of the academic year in which they were offered. It also prepares an announcement of January Term offerings. Approximate publication dates are:

- Preliminary Course Descriptions - Fall Term: April 1
- Final Course Descriptions - Fall Term: August 1
- January Term Offerings: December 1
- Preliminary Course Descriptions - Spring Term: December 1
- Final Course Descriptions - Spring Term: January 1
- Register of Courses (summary of offerings for academic year): August 1

Any of the above publications may be obtained without charge by writing to:

Office of Admissions
Hampshire College
Amherst, Massachusetts 01002

Students on campus may obtain them at the Central Records Office in the Science Building.