## Stevens Institute of Technology 2006-2007 Catalog


*The list indicates the highest earned degree, year awarded, and institution where earned.

## UNDERGRADUATE PROGRAMS

The Division of Humanities and Social Sciences offers a broad education in the liberal arts. It provides a wide range of introductory and advanced courses in traditional disciplines - literature, history, philosophy, the social sciences, and the arts. Study of the humanities and social sciences is aimed at the development of an open and inquiring mind. This requires cultural and historical literacy, a knowledge and appreciation of the rich intellectual, social and artistic heritage of humanity, and a thoughtful examination of its ethical and aesthetic values. Such a liberal education also demands the ability to reason clearly and analytically, and to write effectively. Therefore, the program emphasizes the practical exercise and development of these logical and communication skills. Reflecting the traditional values of the liberal arts, it is fully committed to the principle of free and unfettered intellectual inquiry.

Besides courses for business, computer science, engineering, management, and science students, the department offers three special programs: a single B.A. degree, a double B.A. degree, and a minor.

## The Core Program for the B.E. and B.S. degrees

## Requirements for Engineering and Science Students

If you are enrolled in either the engineering or science program, the required core consists of eight courses: four 100-level courses during the freshman and sophomore years and four 300/400-level courses during the junior and senior years. Of the four 100-level courses, two must be in Group A (literature or philosophy) and two in Group B (history or social science).

## Requirements for Computer Science Students

If you are enrolled in the computer science program, you must satisfy the requirements for engineering and science degree students (see above) and take one additional 300/400-level course, for a total of nine courses in humanities or social sciences. You are also encouraged to join the minor program in humanities or social sciences (see below), and among the nine basic courses you must take HSS 371.

## Requirements for Business and Technology Students

Since you are enrolled in a lock-step program, you must adhere to the required sequence of courses (see "Department of Business and Technology" in this catalog) which includes two courses in Group A (literature or philosophy) and two in Group B (history or social science), as well as one humanities elective.

## The Writing Program

Proficiency in written English is a graduation requirement of all undergraduates. To achieve an acceptable level of proficiency, you may be required to take courses recommended by the Humanities Division. These courses include, but are not limited to, HUM 103/104, Freshman Writing, and Humanities. If you experience writing skills difficulties while enrolled in any Humanities courses, you may be referred for free tutoring. All students must pass the Stevens English Competence Exam (SECE) in order to graduate. Upper division students may be allowed to submit a writing portfolio for evaluation instead.

## Cross-Registration with New York University

You may take courses in the College of Arts and Sciences at New York University through a special cross-registration program at no charge. To have the course count towards a Stevens degree, you must be enrolled full-time in a regular Stevens degree program. Please direct any questions to the Office of the Dean of Undergraduate Academics at Stevens, (201) 216-5228.

## The B.A. Single Degree Program

You may earn the B.A. single degree in one of five fields of concentration: English and American literature, history, philosophy, science and technology studies, or individualized major. Special features of the program include a secondary concentration in a professional, applied, or scientific field or in another area of the humanities or social sciences, along with a senior thesis written under the close supervision of a humanities faculty member. If you want to pursue an advanced degree, the program serves as preparation for graduate level work in the major field or for professional programs in law, medicine, or management.

During the first and second years you complete eight courses, four each in Groups A and B, including two courses in the major field of concentration. During the last two years you complete eight 300/400-level courses in the major field, a Seminar in Writing and Research Methods, and a Senior Thesis. This amounts to a total of ten courses in the major field. There are varying distribution requirements for these ten, depending on the field of concentration. They are as follows:

- English and American Literature. Required: two courses in pre-1798 English literature, one must be an intensive introduction to Chaucer or Shakespeare; two courses in post-1798 English literature; two courses in American literature, and Senior Thesis (498). The other three courses are 300/400-level literature courses and are selected in consultation with your advisor. Recommended: a genre course; a course in literary or linguistic theory; a foreign language course (especially for future graduate work); and courses in fields related to the major, including philosophy, history, art, and music.
- History. Required: one year of a freshman/sophomore history sequence: History of European Society and Culture I \& II (123, 124) or United States Social and Economic History I \& II $(125,126)$ or History of Science I \& II (129, 130); at least one course in American, European, or History of Science; Seminar in Writing and Research Methods (301); Senior Thesis (498), and electives from among the history concentration (American, European, History of Science, World), selected in consultation with your faculty advisor.
- Philosophy. Required: Philosophy I: Theories of Human Nature (111), and Philosophy II: Knowledge, Reality and Nature (112); Ethics (339), Social and Political Philosophy (340), or Aesthetics (348); Philosophy of Science (368) or Logic (442); Theories of Knowledge and Reality (347), Philosophy of Language (443), or Philosophy of Mind (444); and Senior Thesis (498). The other four are 300/400-level philosophy courses selected in consultation with your advisor.
- Science and Technology Studies. Please consult with your advisor.
- Individualized Major. Programs include Art and Technology, Music and Technology, American Studies, and Turkish, Middle Eastern, and Central Asian Studies. Please consult with your advisor.


## Additional Requirements:

You are required to take a variety of other courses, including two in mathematics, two in science (non-laboratories), one in psychology or economics, one in Writing and Research Methods (Hum 301), five courses as a secondary concentration, and ten courses at any level and in any field.

The formal requirements for the humanities program are listed in the following semester-by-semester schedule, including the Notes.

## Term I

|  |  | Hrs. Per Wk. |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Sem. |
| HUM |  |  |  | Cred. |

Term II


Sophomore Year

| Term III |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Hrs. Per Wk. |  |  |
|  |  | Class | Lab | Sem. |
|  |  |  |  | Cred. |
| Hu | Humanities A | 3 | 0 | 3 |
| Hu | Humanities B | 3 | 0 | 3 |
|  | Mathematics |  |  |  |
|  | or |  |  |  |
|  | Science | 3 | O(3) | 3(4) |
|  | Secondary Concentration ${ }^{5}$ | 3 | 0 (3) | 3(4) |
|  | Elective | 3 | 0 | 3 |
| PE 200 | Physical Education III | 0 | 2 | 1 |
|  | TOTAL | 15 | 2(8) | 16(18) |

Term IV
Hrs. Per Wk.
Class Lab Sem.
Cred

| Hu | Humanities A | 3 | 0 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| Hu | Humanities B | 3 | 0 | 3 |
|  | Mathematics |  |  |  |
|  | or |  |  |  |
|  | Science | 3 | $0(3)$ | $3(4)$ |
|  | Secondary Concentration | 3 | $0(3)$ | $3(4)$ |
|  | Elective 200 | Physical Education IV | 3 | 0 |
| 3 |  |  |  |  |

Junior Year

|  | Term V |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | . Per | Wk. |
|  |  | Class | Lab | Sem. |
| Hu | Major Concentration | 3 | 0 | 3 |
| Hu | Major Concentration | 3 | 0 | 3 |
|  | Secondary Concentration | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
| PE 200 | Physical Education V | 0 | 2 | 1 |
|  | TOTAL | 15 | 2 | 16 |

Term VI


## Senior Year

Term VII

|  |  | Hrs. Per Wk. |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Sem. |
| HUM |  |  | Cred. |  |
| Hu | Major Concentration | 3 | 0 | 3 |
|  | Major Concentration | 3 | 0 | 3 |
|  | Secondary Concentration | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
|  | TOTAL | $\mathbf{1 5}$ | $\mathbf{0}$ | $\mathbf{1 5}$ |

Term VII I

|  |  | Hrs. Per Wk. |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Class | Lab | Sem. |
| HUM 498 | Senior Thesis | 4 | 0 | 4 |
| Hu | Major Concentration | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
|  | Elective | 3 | 0 | 3 |
|  |  |  |  |  |
|  | TOTAL | $\mathbf{1 3}$ | $\mathbf{0}$ | $\mathbf{1 3}$ |

Notes (for Single and Double Degree Programs):
1 All students must satisfy an English language proficiency requirement as described in the Undergraduate Programs III section of this catalog.

2 A year-long sequence from Group A: literature and philosophy is required for each of the first two years.

3 A year-long sequence from Group B: history and social science is required for each of the first two years.

4 One year of mathematics is required. One year of science courses is required (either 3-0-3 or $3-3-4)$. In the program schedule it is assumed the mathematics courses are taken in the freshman year and the science courses in the sophomore year, but the order may be reversed if prerequisites are met.

5 Secondary concentration courses and electives can be 3-0-3 or 3-3-4.

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## The B.A. Double Degree Program

In the double degree program you can earn a B.A. degree in humanities while also obtaining a B.E. or B.S. degree. There are five fields of concentration: English and American literature, history, philosophy, science and technology studies, and individualized major. You may complete the double degree in four years at no additional cost by maintaining a 2.80 GPA and taking two humanities or social science courses each semester for a total of sixteen courses. See the section entitled "Academic Procedures" in this catalog for more information.

You may also complete the additional requirements within four years by taking summer or transfer courses. Many double degree students are co-op students or in accelerated programs. The double degree program is designed for students who are academically strong.

You must complete the sequence and major concentration requirements for the single degree B.A. program, including the senior thesis. You may substitute HUM 301 for one of the major concentration courses. Most students complete the program by taking two humanities or social science courses each semester.

## The Minor Program

You can minor in the humanities or social sciences if you have a GPA of at least 2.00 and want to concentrate your studies in one of the following five fields: literature, philosophy, history, social science, or music. If you are enrolled in the computer science degree program you only need to satisfy the distribution and GPA requirements to receive a minor. Students who complete the minor receive a certificate upon graduation.

The minor requires a total of nine humanities courses. You must satisfy the requirements of the core humanities program for your degree and the following distribution and GPA requirements: five of the courses must be 300/400-level and five must be in the field of concentration; you must maintain a cumulative GPA of at least 3.00 in the field of concentration; and the nine courses must cover three of the five fields of humanities or social sciences at Stevens.

## GRADUATE PROGRAMS

## Graduate Certificate Program in Professional Communications: Scientific, Technical, and Business

Communication is an enabling technology and is a critical core professional competence. Communication of all kinds -- written, oral and web-based -- is the sine qua non of today's professional's skill set. To earn the graduate certificate,
students must take four courses.

HUM 501 Foundations of Technical Communication
And two out of three of the following:
HUM 502 Professional Presentations
HUM 503 Advanced Documentation Techniques or
HUM 504 Business Plan Writing,
and a capstone course on the skills needed in specific industries, chosen from one of the following:

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HUM 530 Writing for Engineers
HUM 535 Writing for International Markets
HUM 540 Foundations in Financial Writing
HUM 545 Medical Writing
HUM 550 Writing for the Web
HUM 555 Writing for Project Management
HUM 560 Writing for and about the Science Community
HUM 565 Publicity Writing: Techniques of Packaging
Information
    HUM 570 Proposal Writing
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Successful completion of all four courses will lead to the graduate certificate. The advantage to our students and their employers to having the four-course certificate program instead of a stand-alone course is the depth and breadth of expertise graduates will acquire. In today's market, one person must be able to fill the niches once occupied by several employees. Pedagogically, having students take a series of courses will ensure homogeneous class skills. Foundations of Technical Communications is a recommended prerequisite for the capstone courses. The next two courses have no prerequisite although the Foundations of Technical Communication course would be useful. Corporate clients might elect to have their employees take a single course, in which case, prerequisites might be waived.

## Graduate Certificate Program in Cognitive Science

Graduates and selected undergraduates in science, engineering, and management need the ability to analyze complex problems by identifying, comparing, and using ideas from cognitive science to solve problems and develop new products and services. Cognitive systems collect and process data from an outside environment to generate actions that enable the system to achieve its goals. Although science, engineering, and management curricula include selected ideas, models, and arguments from cognitive science, they do not enable students to gain a broad-based understanding of different cognitive viewpoints that can be used in problem solving and the commercialization of knowledge.

The program will concentrate on the applications of cognitive concepts, models, and theories in the development of new solutions to problems that lead to new inventions that produce products and services. It is designed to allow student researchers to make more effective and creative use of cognitive logic in problem solving and the process of conceiving new products and services and producing them in the marketplace. To earn the graduate certificate, students must take four courses:

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## UNDERGRADUATE COURSES

Courses in brackets are not scheduled to be taught during the 2006-2007 academic year.

## HUM 90 Basic English Skills

(6-0-1)
Basic English Skills is an intensive communication skills course for speakers of English as a second language. It focuses on basic grammar and syntax as well as introducing the forms of the essay.

## 100-Level Courses

All 100-level courses are designated as Writing Across the Curriculum (WAC) and include an English composition requirement.

## Group A: Literature/ Philosophy

HUM 103 Freshman Writing and Communications I
(3-0-3)
Offers writing-intensive instruction to students across the disciplines by means of readings in various fields. The course includes giving oral presentations; gaining facility with PowerPoint and other technical tools; and using various modes of research. This course serves native and non-native speakers of English who will practice the skills necessary to essay writing in all its forms.

## HUM 104 Freshman Writing and Communications II

## (3-0-3)

Continuation of Hum 103 with emphasis on research paper writing and documentation.

## HPL 111 Philosophy I: Theories of Human Nature

## (3-0-3)

This course is intended as a general introduction to the discipline of philosophy through an examination of various attempts throughout history to answer the very fundamental question, "What does it mean to be human?" Topics discussed include happiness, the soul, virtue, good and evil, and the like. Readings from classical sources include Plato, Aristotle, Augustine, Hume, Mill, Nietzsche, Sartre and others.

## HPL 112 Philosophy II: Knowledge, Reality, and Nature

(3-0-3)
This course provides an examination of philosophical concepts and ideas that address questions regarding the problem of knowledge (epistemology), methods of reasoning and the nature of reality (metaphysics). Special attention will be given to applying these topics to an introduction to the philosophy of natural science. Readings include classical sources such as Plato, Aristotle, Descartes, Hume, Kant, and Hegel, as well as contemporary works.

## HLI 113 Western Literature I

(3-0-3)
Readings in great books of western literature. Representative texts include works by: Homer, Sophocles and Virgil, and readings in the Hebrew and Christian Bibles. One section of this course also takes up great books of science such as Vitruvius' Ten Books on Architecture read in conjunction with Virgil's Aeneid.

## HLI 114 Western Literature II

(3-0-3)
Readings include works from Dante, Racine, Shakespeare, de Lafayette, Austen, Brontë, and Kafka.

## HLI 115 The English Language: Language of I deas

## (3-0-3)

Examination of the philosophical use of language as it deals with concepts and value judgments.

HLI 116 The English Language: Introduction to Literary Forms
(3-0-3)
Uses of language to convey thought and feeling in a variety of fictional and nonfictional forms.
HLI 117 American Literature I
(3-0-3)
A survey of major developments in American literature from 1789 to 1900.
HLI 118 American Literature II
(3-0-3)
A continuation of HLI 117. A survey of major developments in American literature from 1900 to the present.

## Group B: History/ Social Science

HUM 107 Modern Civilization and its Sources
(3-0-3)
This course seeks to provide a multidisciplinary introduction to today's world and how it came to be. The ecological, technological, and scientific bases of the contemporary world are emphasized. Other themes include humankind's biological and cultural origins, the Industrial Revolution, today's global socioeconomic context, challenges to the nation-state, and cultural and gender issues.

## HUM 108 Studies in History and Social Science

(3-0-3)
Topics include significant issues in history and political science. This course satisfies spring sequence requirements for freshman/sophomore history and social science courses.

## HSS 121 Cities and Civilization I

(3-0-3)
An examination of the origins, nature, and progress of urban society. Selected readings focus on recurrent and persistent urban problems: overcrowding, traffic congestion, political corruption, faulty sanitation systems, etc. A student may also engage in field analysis projects that relate either to hometown areas or to the North Jersey region.

## HSS 122 Cities and Civilization II

## (3-0-3)

A continuation of HSS 121. Major emphasis is on current economic, environmental, and social problems.

## HHS 123 History of European Society and Culture to 1500

(3-0-3)
This course and HHS 124 investigate the social, economic, intellectual, political, and cultural trends in Europe from the Middle Ages to the present, in lectures and discussion.

HHS 124 History of European Society and Culture Since 1500
(3-0-3)
A continuation of HHS 123
HHS 125 United States Social and Economic History to 1900
(3-0-3)
This course and HHS 126 examine the main trends in the socioeconomic, political, and diplomatic history of the U.S. from the Pre-Revolutionary period to the present.

HHS 126 United States Social and Economic History Since 1900
(3-0-3)
A continuation of HHS 125
HSS 127 Political Science I
(3-0-3)
An introduction to the evolution and operation of the U.S. federal government. This course focuses on problems in energy policy, foreign policy, elections, and civil rights.

## HSS 128 Political Science II

(3-0-3)
A survey of the evolution of juries and recent legal and social scientific analysis of jury rules. Case studies are used to explain the scope of issues decided by juries and conceptions of justice used to evaluate their performance.

HHS 129 Topics in the History of Science and Technology
(3-0-3)
A topical introduction to the humanistic study of science and technology.

## HHS 130 History of Science and Technology

(3-0-3)
A historical survey of science and technology. Principal topics include science and technology in prehistory, Egyptian and Babylonian science and culture, Greek science, Medieval technology and science, the Scientific Revolution, the making of the modern physical science, Darwin, and the Darwinian Revolution.

## HHS 135 Survey of the I slamic World

## (3-0-3)

This course provides a survey of the origin and development of the modern Islamic World. Beginning in sixth-century Arabia, the course follows the theological and political development of the Muslim community. It explores the reasons for the great appeal Islam has had and the reasons for its spread throughout the Middle East, North Africa, and Southern Asia as well as other regions of the world.

## HSS 175 Fundamentals of Psychology I

(3-0-3)
This course emphasizes the biological underpinnings of behavior and of mental processes. What do we know? How do we come to know? What do we want? Why do we act the way we do? In this course these fundamental questions of psychology are mainly looked at from a biological perspective that emphasizes the study of the brain and nervous systems. Historical, philosophical, and evolutionary perspectives on mental processes are considered, as well.

## HSS 176 Fundamentals of Psychology II

(3-0-3)
An introduction to issues and theories in Life Span Development, Personality Theory, and psychological disorders. Topics include cognitive and social development, attachment, moral thinking, and psychoanalytical theory. Focus is placed on those seminal theories that have had lasting import for psychology as well as other disciplines. These theories include, but are not limited to, those of Piaget, Erikson, and Freud.

## HUM 288 Sophomore Honors in History/ Social Science

(3-0-3)
By permission of the instructor.

## 300/ 400-Level Courses

## HUM 301 Writing Seminar and Research Methods

(3-0-3)
In this course, students explore the tools and techniques of advanced writing and research Students write four research papers and give several oral presentations. This course is required for single degree B.A. students and strongly recommended for double degree students.

## HUM 315 Great Works of Science and Technology I

(3-0-3)
This course examines the works of some of the world's greatest scientific thinkers. We begin in the ancient world with writings of Hippocrates, Aristotle, and Archimedes, and continue through the Middle Ages and Renaissance, ending at the threshold of the Scientific Revolution with the great astronomers Copernicus and Kepler. Special attention is be paid to the way these scientists contributed to the body of knowledge known as "natural philosophy."

## HUM 316 Great Works of Science and Technology II

This course continues the journey of examining the works of scientists in light of their philosophical contributions. Works taken from Galileo, Newton, Darwin, Mendel, Laplace, Poincare, Einstein, Bohr, Heisenberg, as well as contemporary works from Gould and Hawking. While it is a historical continuation of HUM 315, that course is not a prerequisite for taking this one.

## Literature

## HLI 312 Modern Literature

(3-0-3)
A survey of Modernism in European Literature. The authors to be considered include Rimbaud,
Mallarme, Rilke, and Mann. Developments in architecture, music, and art are provided, as well.

## HLI 314 Nineteenth Century English Literature: Victorians

A survey of Victorian poets and prose writers: Tennyson, Browning, Arnold, Ruskin, Wilde, Rossetti, and Carlyle.

## HLI 315 Language, Meaning and Reality

(3-0-3)
This course is a form of argument about meaning that emphasizes two points: 1) the language we have available determines our idea of reality and 2) semantic structures seem to convey their own independent meanings in spite of what speakers of the language may think they intend.

## HLI 316 Science Fiction

(3-0-3)
A study of the fiction of science and the science of fiction through the reading of authors from Mary Shelley (Frankenstein) to William Gibson (Neuromancer), the viewing of films such as Metropolis and Dune, and the writing of a piece of science fiction.

## HLI 317 The Creative Act

(3-0-3)
A study of twentieth-century literary works concerned with sources of creativity. Works to be considered include Mann's Death in Venice, Rilke's Sonnets to Orpheus, and other works.

## HLI 318 Ethnicity and Literature

(3-0-3)
Course examines the interrelationship of literary works and the ethnic heritage of their authors and/or the texts themselves
(3-0-3)
This course investigates the views man has expressed about the advent impact of technology and science across recorded history. Questions that might be addressed include: What is the relationship between religion and technology? Has man always viewed technological innovations as positive? What relationship is there between man's vision of utopian society and technology? Readings may include, but are not limited to, novels, philosophical treatises, and the literature of various societies.

## HLI 330 Classical Mythology

(3-0-3)
Myths are much more than entertaining stories; they teach much about their cultures. Myths pervade our lives and represent a discrete way of thinking, different from rational logic. In this course, students will see how Western civilization was enriched by Greek and Roman myths. Myths from the ancient Near East also reached the West through the Judeo-Christian tradition. This course provides an introduction to ancient civilizations and their literary, religious, and artistic legacies.

## HLI 331 Shakespeare

(3-0-3)
Selected plays by Shakespeare are read and analyzed with the emphasis placed on their success as scripts to be performed in theaters. Students will read a selection of tragedies, comedies, and histories, as well as being introduced to the sonnets and other poems.

## HLI 332 Literary Heritage of Russia

## HLI 334 Chaucer: A Literary Study

## (3-0-3)

Geoffrey Chaucer's The Canterbury Tales is read in modern English against a historical
background of Chaucer's life and times; "The General Prologue" and the "The Nun's/Priest's
Tale" are read in 14th-century English (Middle English). Other readings of the period include Sir Gawain and the Green Knight and Boccaccio's The Decameron.

## HLI 335 Shakespeare in the City

(3-0-3)
During the summer, Shakespeare is presented in parks and parking lots throughout New York City. In this course, we read and discuss plays and then go to see them. We view both traditional and experimental productions. Sometimes we see more than one production of a play, if a number of companies decide to do it.

## HLI 336 The Short Story

(3-0-3)
The study of prose fiction in short story form. Texts consist of representative selections of the short story genre that offer a wide variety of techniques and themes. All students will participate in classroom critical analysis.

HLI 337 History of the English Language
(3-0-3)
A study of the Indo-European origins and development of English from Old English
Anglo-Saxon, to Chaucer's Middle English and the Modern English Period.

## HLI 341 Nineteenth Century English Literature: Romanticism

## (3-0-3)

Consideration of texts by writers of the romantic movement in England: Blake, Coleridge, William and Dorothy Wordsworth, Percy Bysshe and Mary Shelley, Keats, and Byron.

## HLI 342 Twentieth-Century Drama

## HLI 344 British Fiction

## HLI 345 A Survey of Dramatic Literature

## HLI 349 American Poetry to 1900

## HLI 352 The American Renaissance in Literature

(3-0-3)
An examination of 19th-century race relations in America from a literary perspective
HLI 354/ 357 American Culture
(3-0-3)
An interpretation of American civilization through its literature and cultural forms. The course involves close reading of a few works by some of the giants of American literature since World War II.

## HLI 358 American Poetry: Twentieth Century

(3-0-3)

A study of works of major American poets of the twentieth century including Pound, Eliot, Williams, Moore, Stevens, Lowell, Ashbery, and Ginsberg.

## HLI 362 British Fiction II: Twentieth Century

## HLI 409 Rhetoric and Technical Writing

(3-0-3)
An introduction to classical and modern expository and argumentative writing and speech, as well as an introduction to contemporary technical and science writing.

## HLI 410 Medieval Literature

## (3-0-3)

This course surveys the work of the medieval period in Europe and includes such works as Beowulf, The Song of Roland, and selections from the works of Dante, Boccaccio, Chaucer, Marie de France, and other poets.

## HLI 412 Medieval Romance: The Rise of the Individual

(3-0-3)
This course focuses on the new interest in the individual in society in medieval romance. Works and authors studied include: Sir Gawain and the Green Knight, Chretien de Troyes and Gottfried von Strassburg. The course follows the adventuring knight on his quests.

## HLI 413 Literature by Women: The Tradition in English

(3-0-3)
A survey of women authors writing in English from the fourteenth century to the present.

## HLI 414 Literature and Empire

(3-0-3)
This course examines the role of empire building and its influence on the novel, prose, and poetry of the late nineteenth century. Readings present an overview of both colonial and post-colonial literature against the historical background. This course also examines relevant films to explore how the twentieth and twenty-first centuries portray imperialism.

## HLI 416 Arthuriana: The Legend of King Arthur

(3-0-3)
The course covers a variety of literary and historical texts beginning with the earliest chronicle reports of Arthur, king of Britain, and ending with romance material such as the Vulgate Quest for the Holy Grail and The Death of King Arthur. The course explores the birth and development of the Arthurian legend. Was there ever a historical Arthur? Did he arise to save his people? Will he come again as legend has promised? What role does his story play in literature and popular culture? Delving into the mythic past of the British Isles, we will discuss folk-tales, read historical chronicles, and immerse ourselves in some of earliest (and certainly the best) sword and sorcery literature.

HLI 417 English Literature from Beowulf to the Restoration
(3-0-3)
A survey of English literature from its beginnings to the restoration of the monarchy in the seventeenth century.

## HLI 418 Literature and Critical Theory

(3-0-3)
The application of contemporary literary theory derived from Heidegger and modern linguistics to the study of postmodern American literature. Students are introduced to various literary theories developed by Barthes, Kristeva, Lacan, Derrida, and Foucault, and then asked to apply these theories in considerations of works by such postmodern American writers as Pynchon, Bronk, Gass, Spicer, and Ashbery.

## HLI 420 America in the Great Depression and the Second World War

## HLI 446 English Literature: Restoration (1660) to the Present

(3-0-3)
A survey of English literature from the restoration of the monarchy to the present.

## HLI 447 Survey of British Literature

(3-0-3)
A study of major works and authors, including Beowulf, Chaucer, Spenser, Milton,
Shakespeare, Wordsworth, and Wolf.

## Philosophy

HPL 339 Ethics
(3-0-3)
Discussion and critical analysis of leading moral theories, including utilitarianism, intuitionism, emotivism, and virtue theory. A comparison of virtue ethics versus an ethics of care is also discussed.

HPL 340 Social and Political Philosophy
(3-0-3)
A study of the relation of the individual to society and the state. Major issues to be examined include the nature of freedom, justice and equality, alienation, and political authority. Also includes an analysis of political models such as liberalism, socialism, conservatism, and anarchism, as well as alternative conceptions of democracy.

## HPL 346 Modern Philosophy

(3-0-3)
Beginning with René Descartes-considered the "father of modern philosophy"-this course will examine the debates between Rationalism and Empiricism throughout the 17-18th centuries. Philosophers studied include Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, and Kant.

## HPL 347 Theories of Knowledge and Reality

## (3-0-3)

A comprehensive examination of the disciplines of Epistemology and Metaphysic; topics addressed include being and reality, logic and language, the concept of truth, skepticism, causality, and knowledge. Readings are both historical and contemporary in nature.

## HPL 348 Aesthetics

(3-0-3)
An exploration of theories of art and of aesthetic experience. Questions addressed include the following: Are judgments of taste objective? What are the roles of form, expression, and representation in the arts? How is art related to society? What is the nature of creativity in art and science? What is the relationship between creativity and madness? Examples are drawn from the various art forms, including painting, literature, music, dance, and film.

## HPL 350 Ancient and Medieval Philosophy

A comprehensive study of Ancient and Medieval philosophers beginning with the Greek Pre-Socratics, through Plato and Aristotle, the post-Aristotelian schools of Epicureanism, Stoicism and Skepticism, through Plotinus, Augustine, and major Medieval thinkers such as Anselm, Avicenna, Averroes, and Thomas Aquinas.

## HPL 368 Philosophy of Science

(3-0-3)
An examination of the aims, methods, goals, and practices of science. Questions addressed include the following: What defines a science? What distinguishes science from pseudo-science? Is there such a thing as scientific method? Is there progress in science? What is the relationship between science and "truth?" What role do cultural, sociological, and/or psychological factors play in the practices of science and the scientist? Seminal works by the following philosophers of science are studied: Hempel, Carnap, Duhem, Goodman, Popper, Kuhn, Lakatos, and Feyerabend, as well as contemporary thinkers like Putnam, McMullin, van Fraassen, and Kitcher.

## HPL 369 Science and Religion

(3-0-3)
This course investigates the history of the opposition of science and religion, beginning with the emergence of philosophy as an alternative to mythology, through the scholastic dominance of the Aristotelian world-view, to the Scientific Revolution, the emergence and acceptance of evolution, and beyond. Special attention will be given to current attempts at reconciling and/or harmonizing these traditionally antithetical disciplines.

## HPL 440 Citizenship, Nationality and Ethnicity in Contemporary Global Perspective

 (3-0-3)This course assesses a variety of different conceptions of social, political, and cultural identity in light of the resurgence of nationalism, ethnicity, and the affirmation of cultural difference. Special attention is given to problems regarding citizenship and universal rights, as well as the tension between cultural diversity and global interconnectedness. Readings include classical texts, as well as current writings relevant to the topics at hand.

## HPL 442 Logic

(3-0-3)
An examination of the methods and techniques of formal logic, including the history of the discipline from Aristotle through Leibniz, Frege, Russell, Quine, and others.

## HPL 443 The Philosophy of Language

(3-0-3)
A close study of problems having to do with meaning and reference, truth, sense, and intention, as well as communicability. Special attention is given to both the power, as well as limits of language. Readings taken from the works of Frege, Russell, Wittgenstein, Dummett, Quine, Haack, and others.

## HPL 444 Philosophy of Mind

## (3-0-3)

A philosophical examination of the mind and mental functioning. Some questions addressed include the following: Can we know what it is like to be a bat? Could it be that everyone (other than oneself) is a robot? What is the relationship between mind and brain? Can computers think? Readings include the work of Nagel, Wittgenstein, and Freud, among others.

## HPL 445 History of Philosophy

## (3-0-3)

A consideration of the historical development of the western philosophical tradition, beginning with the pre-Socratics, up and through contemporary thinkers. The course will examine the recurrence of perennial problems in the history of intellectual thought.

## HPL 447 Nineteenth Century Philosophy

(3-0-3)
A study of major thinkers and movements in the nineteenth century including Kant, Hegel, Marx, Kierkegaard, Nietzsche, Mill, James, and Freud. Issues discussed will include the nature of scientific knowledge, political and moral right, and the emergence of psychological theory.

## HPL 448 Contemporary Philosophy

(3-0-3)
A comprehensive examination of 20th and 21st century thinkers including Husserl, Heidegger, Merleau-Ponty, Sartre, Dewey, Wittgenstein, Gadamer, Habermas, Ayer, and Quine, as well as more current thinkers in both the Analytic and Continental traditions.

## HPL 449 Philosophy of Law

(3-0-3)
Questions discussed include: What is the basis for the authority of the law? What are the competing theories of crime and punishment? What are the grounds of legal rights and duties? What are the relations among justice, liberty, and equality in the law? This course will also consider such current legal issues as the insanity defense, the death penalty, the rights of unborn children, regulation of the Internet, and affirmative action.

## HPL 450 International Ethics

(3-0-3)
This course will focus on some of the new ethical issues that face social and political actors in the current period of globalization. This will include an examination of the various arguments that seek to establish and broaden international legal and constitutional frameworks. Special attention is given to the following themes: the nature and extent of human rights,; distributive justice,; economic development, and preservation of the environment.

## HPL 455 Ethical Issues in Science and Technology

(3-0-3)
This course provides a critical examination of the problems that arise from the increasing advance of science and technology and their impact on our life and culture. Some of the topics addressed include the responsibility of scientists and technologists, scientific fraud, the uses and abuses of nuclear energy, environmental pollution, and the preservation of natural resources-just to name a few. Special attention is given to the increasing popular method of "green construction" and sustainability.

## HPL 458 Computability and Logic

## (3-0-3)

This course will examine the theory, history, and philosophical significance of the algorithm, as well as some of the conceptual and practical issues that arise from the translation of natural language to computer language.

## HPL 459 The Philosophy of Social Science

## (3-0-3)

This course examines the conceptual foundations of such disciplines as economics, sociology, anthropology, and political science. Readings include excerpts from Smith, Marx, Weber, Durkheim, and Winch, among others.

## HPL 460 Philosophy and Feminism

(3-0-3)
This course is a general introduction to both the history and present concerns of feminist philosophy. Readings include classic essays of feminist thought by Wollstonecraft, Mill, Engels, and others as well as contemporary writings in philosophy and feminism. This course serves as a foundation for a minor in Gender Studies. No prior courses in philosophy are required.

## HPL 461 American Philosophy

(3-0-3)
An examination of the work of the American Pragmatists. Readings from the works of James,
Pierce, Dewey, Rorty, Putnam, and West, among others.

## HPL 462 Eastern Philosophy

## HPL 463 Existentialism

(3-0-3)
This course examines the popular philosophical movement known as "Existentialism." In addition to reading such seminar thinkers as Kierkegaard, Nietzsche, Heidegger, Sartre, and Camus, attention will be given to works outside the rubric of philosophy proper, including literature and cinema.
(3-0-3)
This course follows the work of the following Edith Stein, Simone Weil, Iris Murdoch, Simone de Beauvoir, Hannah Ardent, and Ayn Rand. These are all seminal thinkers who began their philosophical work in the first half of the twentieth century and went on to influence the course of intellectual thought for a generation to come. And yet, more often than not, these women tend to be omitted from the traditional canon of twentieth-century philosophy. One goal of this course is to consider why that is the case. If time permits, works by more contemporary thinkers like Nussbaum and Haack will be examined.

## HPL 495 Seminar in Philosophy

(3-0-3)
The Seminar in Philosophy is intended to provide students with an in-depth examination of the work of either one specific philosopher (or pair of philosophers), or a particular work in the history of philosophy that has had a profound impact on the development of intellectual thought. Special attention will be given to how the philosopher or work in question influenced work outside philosophy.

## History

## HHS 312 Technology and Society in America

(3-0-3)
This course surveys the origins and significance of technological developments in American history from the first settlements to the present. It emphasizes the social, cultural, political, and economic significance of technology in American history.

## HHS 319 The Roman Republic

(3-0-3)
A study of early Roman civilization from the founding of the city of Rome in 753 B.C. to the collapse of the Republic under Julius Caesar. Readings in ancient sources and modern texts.

## HHS 323 Women and Gender in American History

(3-0-3)
This course focuses on the history of the United States from the perspective of women's experiences and the role gender plays in shaping and defining American history from the colonial era to the present. It examines women's social, political, and economic lives; their roles in society, their familial roles, their struggle to achieve civil rights; changes in their legal status; and the rise of feminism.

## HHS 325 African-American Studies

(3-0-3)
An exploration of the African-American experience in the United States from the time of the Atlantic Slave Trade to the present. Topics include social and political dynamics shaping African-American history with particular attention focused on Reconstruction, the Great Migration, and the Civil Rights Movement. Numerous African-American leaders and their concepts for an African-American identity are also emphasized, including the W. E. B. Du Bois and Booker T. Washington debates, as well as speeches from Malcolm X and Martin Luther King, J r.

## HHS 338 The Russian Revolution and the Soviet Regime

(3-0-3)
The course begins with the contradictions inherent in semi-feudal Russia during the age of imperialism which culminated in the collapse of the Tsarist autocracy during World War I. There is a close analysis of the revolutionary year 1917 to determine the reasons for the failure of the liberal Kerensky regime on the one hand, and the rise of the Soviets and Bolsheviks on the other. Marxist-Leninist ideology is studied and compared to economic, social, and political programs during the revolution and during its consolidation in the period of the civil war and in the Stalinist era. The course also covers more recent Russian history.

## HHS 340 History of the Middle East to 1800

(3-0-3)
This course is a general survey of the Middle East beginning in pre-Islamic Arabia in the year 600 and ending with the Napoleonic invasion of Egypt in 1798. The course examines the early formation of the Muslim community and follows its growth under the Umayyid and Abbasid empires. It also explores the influence of the Persians and the Turks in the region, examining the Ottoman and Safavid empires, the Mongol invasion, and ultimately the influence of Western European powers leading to Napoleon's conquest of Egypt in 1798.

HHS 341 History of the Middle East Since 1800

## (3-0-3)

This course is a survey of the development of the modern Middle East from the Napoleonic invasion of Egypt in 1798 to the present. The course examines the early efforts for political reform and the beginnings of nationalism with particular emphasis on the period following World War I and the development of modern Middle Eastern nation states.

## HHS 355 U.S. Foreign Relations

(3-0-3)
Selected topics in American diplomatic history are studied, including nationalism, imperialism,
economic diplomacy, missionary diplomacy, isolationism, world war, cold war, and detente. Readings include diplomatic correspondence, documents, interpretive articles, and monographs.

## [HHS 356 The Golden Age of Athens]

HHS 365 History of Modern Germany
(3-0-3)
German history from its origins, but concentrating on the period from 1870 to the present. German industrialization, the dominant role of Prussia in unification, World War I, the Weimar and Nazi periods, World War II and the post-war era, including current developments, are covered.

## HHS 367 Twentieth-Century History

(3-0-3)
A retrospective of major world events during the century including world war, revolution, economic and social changes, the decline of colonialism, and the emergence of developing nations in the non-Western world. Trends for the twenty-first century are also examined.

HHS 371 American Political History

## (3-0-3)

An exploration of the modern American political experience from the turn of the twentieth century to the present. This course examines the historical significance of the American policymaking process. Highlighted eras promoting government activism include Progressivism, New Dealism, Great Society measures, and recent political proposals. Discussions also focus on the political dynamics and responsibilities of federal and state governments and the duties of the executive, legislative, and judicial branches.

## HHS 374 Psychohistory

(3-0-3)
An interdisciplinary inquiry into individual and group motivations underlying socially significant historical experiences. Selected issues include personality formation through the ages (Martin Luther and Andrew Jackson), individual and collective consciousness (Anne Hutchinson and the Salem witchcraft hysteria), and psychobiographies of Woodrow Wilson, Adolf Hitler, and others.

## HHS 378 Readings in Modern European History

(3-0-3)
Selected contemporary persepctives on European history since the French Revolution up to the creation of the European Union.

## HHS 386 Ancient Civilizations: The Roman Empire

(3-0-3)
Analyses of the foundation, expansion, and decline of the Roman Empire with an evaluation of its place in history.

## HHS 390 History of Money, Credit, and Banking

(3-0-3)
This course explores the history of mediums of exchange and the consequent development of credit and credit exchange mechanisms from earliest times until the present. In particular, this course examines the relationship of money and credit to the technological environment and how evolving technologies, ranging from metallurgy to electronics, have created and shaped historical eras. Periods covered include pre-feudal, feudal, early capitalist, and modern times.

## HHS 414 I ndustrial America

(3-0-3)
In the late nineteenth and early twentieth centuries the United States was fundamentally transformed. This course examines the nation's genesis as an industrial and economic power and society's adaptation to the industrial age. It also considers the impact of industrialism on such historical problems as technological change, economic development, race and gender relations, political participation, reform movements, urbanization, immigration, imperialism, and globalization

## HHS 420 Modern East Asian Studies

(3-0-3)
This course explores the modern economic and political development of China, Korea, and Japan from the late nineteenth century to the present and responses to Western imperialism. The rise of Chinese and Korean communism and Japanese fascism during the twentieth century are especially emphasized. There is also a close examination and comparison of development in additional Asian countries such as the Philippines and Vietnam.

HHS 429 The Scientist, the Engineer, and the Computer
(3-0-3)
To confront the student with social, political, legal, and ethical issues that professional scientists and engineers are being forced to reexamine in the light of the computer revolution. The course reviews traditional principles while challenging the student to recognize that technological innovation often drives social change and, specifically, that innovations as
sweeping as the rapid and continuing changes in computer technology sometimes lead scientists and engineers into completely uncharted territory.

## HHS 430 History of Modern Turkey

(3-0-3)
A study of the emergence and development of the Turkish Republic. The course examines the Republic's origins in the Ottoman Empire and traces its development from the period after the First World War to the present.

HHS 431 History of Twentieth Century Arab Nationalism (formerly HSS 474 Modern Middle East)
(3-0-3)
A survey of the development of Arab Nationalist movements in the Middle East beginning in the period following WWI and the collapse of the Ottoman Empire, and tracing the different approaches to nationalism adopted in response to late Colonial forces and the emerging state of Israel.

HHS 432 Comparative Nationalism in Turkey, I ran, and Egypt
(3-0-3)
A comparative review of the differing histories and alternative approaches to nationalism in the three major Middle Eastern States.

## HHS 433 History of Central Asia

(3-0-3)
A survey of the History of Central Asia from the period of Persian domination through the Mongol period, the development of the Khanates leading to the Russian conquest, and finally to today's reemergence of autonomous states.

## HHS 434 History of the Ottoman Empire

(3-0-3)
An examination of the economic, social and political transformations that created one of Europe's most powerful empires from 1299 until 1918. The course follows the growth and later dismemberment of the Empire, with special focus on the continuities found in the region today.

## HHS 453 Justice in War

(3-0-3)
Legal and moral issues associated with just and unjust wars in historical perspective and the issue of war crimes in international, legal, and moral terms.

HHS 460 Technogenesis in American History
(3-0-3)
Taught through problem-based learning techniques, the course entails intensive readings on American genesis of technologies through mainly biographical accounts ranging from Eli Whitney's rifles with interchangeable parts to Jim Clark's development of Netscape in Silicon Valley, and the contemporary role of universities in generating intellectual property. Such topics as the inventive-entrepreneurial process, patents, and the role of government in sponsoring research and development, and the development of Management of Technology techniques are covered

## HHS 465 The Engineer in History

(3-0-3)
A study of the significance of technology and the engineering profession in history from ancient times
to the present.

## HHS 468 History of the World

(3-0-3)
A survey of major developments in the history and geography of Planet Earth.

## HHS 469 History of England: 1066 - Present

(3-0-3)
The impact of the Norman Conquest on kingship, government, and social structure; the reign of the Tudors on church and state; the Puritan and Lockean revolutions on the development of Parliament and Common Law; the two party system on reform; the industrial revolution on economic power and Empire; and Britain's role in world wars and the twentieth century. Particular attention is paid to the development of individual rights.

## HHS 473 Renaissance Studies: Leonardo da Vinci

(3-0-3)
The life and times of the Renaissance artist-engineer, the institutions and influences which created his imagination, inventiveness, and great works of art. The course also covers what he was not, exploding popular myths about his achievements, and investigates his life on a personal, more human level.

HHS 476 History of Medicine
(3-0-3)

Examination of the history of medical science in the Western World from Greek antiquity to the present.

## HHS 483 History and Geography

(3-0-3)
A survey of recent trends in the application of ecological and geographical perspectives in historical studies. Some emphasis on historiography is appropriate for thesis writers.

## HHS 495 Seminar in History

(3-0-3)
Research topics in history and methods of historical scholarship.

## Social Science

## HSS 321 Modern Urban Culture

(3-0-3)
This course examines aspects of modern subcultural American life including deviancy and delinquency, crime, drug abuse, and ethnicity.

## HSS 322 Cultural Studies

## (3-0-3)

Drawing on theory and practice from such diverse disciplines as history, media studies, literary criticism, psychology, and sociology, Cultural Studies investigates the production, distribution, and consumption of cultural artifacts. Issues concerning race, class, gender, and sexual orientation are explored with attention to the analysis of social phenomenon.

## HSS 324 Comparative Ethnic Culture

(3-0-3)
This course is a survey of various cultural traditions. Typical study units include Afro-American, Asian, Hispanic, and American ethnic cultures in historical perspective.

## HSS 371 Computers and Society

## (3-0-3)

An introduction to arguments about the relationship between computing and society, the impact of computing activities on social relationships, and the evolution of institutions to regulate computer-mediated activities.

## HSS 373 Social Choice Theory

(3-0-3)
An introduction to the history of and theoretical principles associated with using voting techniques to resolve conflicts. Emphasis is placed on the analysis of operational rules. Student projects constitute a major part of the course.

## HSS 375 History of Psychology

(3-0-3)
An analysis of the historical development of psychology. Issues such as perception, learning, cognition, and memory are explored within the context of various schools of thought.

HSS 376 Theories of Personality
(3-0-3)
What is theory? What is personality? A review of Freud, Adler, Sullivan, Jung, Rogers, etc., on the nature of personality.

HSS 377 Cities and the Global Economy
(3-0-3)
An analysis of major socioeconomic trends impacting modern American cities. Topics covered include: the nature of globalism, major economic and social trends, U.S. competitiveness, urban economic restructuring, and the roles of government.

## HSS 379 International Politics

(3-0-3)
An analysis of the contemporary international political framework. The course explores the character of the state system, the nation-state, the role of leadership personality, transnational actors, the balance-of-power, security and economic issues, the nature and limitations of power, the uses of terrorism, and Third World issues.

## HSS 401 Seminar in Leadership Studies

## (3-0-3)

This course will study the human phenomenon of leadership, focusing on the two main (and oft-times competing) analyses of leadership: the Humanistic approach and the Behaviorist approach.

## HSS 410 Arab Nationalism and the Formation of the Middle East

(3-0-3)
This course will explore the birth, triumph, and fall of Arab nationalism, focusing not only on intellectual and political leaders of the movement, but also incidents in history which in one
way or another shaped political and/or social traits of the movement. The factors that contributed to the development and/or decline of the movement that will be examined are: the rise of colonialism, the dissolution of the Ottoman Empire, World War I and World War II, the Cold War, emergence of the state of Israel, and the recent incidents in the region and the world. The ideological links between Arab nationalism and modern radical movements will also be examined.

## HSS 415 Islamic Political Thought

(3-0-3)
This course surveys the philosophical foundations and developmental stages of Islamic political thought from the Prophet to the modern ages. In the first part of this course, the theories of early 'Muslim' philosophers, i.e. Avicenna, Al-Farabi, Al-Ghazali, Averreos, and Ibn Khaldun, on the state, government, and politics will be examined. The second part will concentrate on pre-modern (Al-Mawardi) and modern Muslim intellectuals who contributed to the genre of Islamic political philosophy, including liberal and radical trends.

## HSS 475 I ntroduction to Sociology

## HSS 477 Psychology of Religion

(3-0-3)
A survey of different approaches to the psychological interpretations of religious phenomena such as the image of God, rituals, myths, faith healing, meditation, mysticism, and conversion.

## HSS 478 Psychology of Gender

## (3-0-3)

An analysis of gender differences and perceptions in contemporary society.

## HSS 480 I ntroduction to Anthropology <br> (3-0-3)

## HSS 481 Cultural Anthropology

(3-0-3)
An examination of the varieties of organization of human societies in a comparative
ethnographic context.

## HSS 489 Freud and J ung

(3-0-3)
An in-depth and extensive study and discussion of the theories of Sigmund Freud and Carl Jung. Each theory is examined individually; the nature of the unconscious, dream interpretations, religious symbolism, and the aim of psychotherapy are critically examined. Students read from primary sources including Freud's Interpretation of Dreams, Totem and Taboo, Jung's Man and His Symbols and Modern Man in Search of a Soul, as well as from biographical material, and other secondary sources. Emphasis on points of confluence and of departure between the two. The course is limited to 15 students. Prerequisite: HSS 376 or permission of the instructor.

## Art

HAR 190 History of Art: Prehistory to the Modern Era
(3-0-3)
This course will introduce the formal vocabularies specific to works of art and familiarize the student with the complex interaction between form, meaning, and historical context. Course readings will consist of historical documents, as well as recent critical and historical writing. Western and non-Western objects and architecture dating from pre-history to the mid-nineteenth century will be discussed at length in the classroom and at museums.

## HAR 191 Modern Art History and Theory

(3-0-3)
This course introduces students to key moments in the history of modern art in the newly industrial societies of America, Europe, and the [former] Soviet Union. Painting, sculpture, and photography from the 1850 s to the 1980 s will be examined. Focusing on a wide range of methodological questions, this course will also consider the relationship between avant-garde culture and mass culture, the implications of emergent technologies for cultural production, and the development of radical avant-gardism in the context of authoritarian political formations and advancing global capitalism.

## HAR 310 Digital I maging I

(2-2-3)
This is an introductory course in digital imaging, including digital photography and the electronic rendering/manipulating of images. Students are introduced to both hardware (Macintosh platform) and software applications through classroom lectures and hands-on lab experience and exercises, but the emphasis is on the computer software applications as tools for experimentation in creating digital art and applying students' ideas. One trip to Manhattan and one scheduled Media Industry Forum on campus is required.

HAR 311 Digital I maging II
(2-2-3)

This is an intermediate course in digital print media, with an emphasis on how it informs and evolves visual language for artistic expression. Students will consider multiples, sequencing, notation, gesture, and narrative concerns, combining formal elements with experimentation across media; these media may include: printmaking, drawing, painting, photography, and sculpture. Students continue to work with computer software applications as tools to develop a more in-depth knowledge and vocabulary of the technical, theoretic, and aesthetic possibilities inherent in the medium. Classroom lectures and hands-on lab experience and exercises compliment readings and problem-solving projects. One trip to Manhattan and one scheduled Media Industry Forum on campus is required. Prerequisite: HAR 310 or permission from the instructor.

## HAR 320 Video I

(2-2-3)
This course will serve as an introduction to video production and post-production using current video technologies. Traditional camera, sound, and lighting techniques in production are taught, and non-linear video editing using iMovie is introduced. Students will engage with a variety of video art genres, including experimental, narrative, and documentary forms.

## HAR 321 Video II

## (2-2-3)

This class continues with technical, theoretical, historical, and aesthetic approaches to video as a time-based art medium. Students continue to: recognize and control video's formal parameters of image, sound, shot, transition, and sequence; explore the history of video as an experimental art form; and gain an understanding of how concepts and compositions can be developed in time as well as space. Traditional camera, sound, and lighting techniques in production are reviewed, and non-linear video editing using Apple's Final Cut Pro is refined. One trip to Manhattan and one scheduled screening/lecture/event on campus is required. Prerequisite: HAR320, or permission from the instructor.

## HAR 330 Animation I

(2-2-3)
This course introduces students to modeling and simple computer animation using the industry-standard tool, Alias Maya. It also provides a foundation for further work with 3-D and imaging tools. In addition to technical subjects, students will learn about the history, artistic practice, and developmental trajectory of 3-D graphics. It is recommended (but not required) that the student consider Animation as a two-semester sequence, with the student planning to register for HAR 331 Animation II the second semester.

## HAR 331 Animation II

(2-2-3)
Building upon the fundamentals of animation and how they can be applied through Alias Maya, the focus of this course will be for the students to develop the skills necessary to create a final project that shows the ultimate type of animation - character. Students will accomplish this task through observation and practice and are encouraged, in their own creative expression, to explore non-discursive modes of articulation and communication. Prerequisite: HAR 330 or permission of the instructor.

## HAR 332 Animation III

(2-2-3)
This rigorous and intensive computer animation course builds upon Animation I \& II. The course is designed for the serious 3-D animation student who is expecting to continue working in animation. It continues the approach of increasing skills and artistic practice in all areas of 3-D animation: concept, modeling, animation, and rendering. This is not just a software training course. While understanding advanced software tools will be necessary to attain the objectives of this course, grade evaluation is based on the students' development and successful demonstrations of mastery of timing, visual design, and storytelling abilities. Throughout the class, students will be encouraged to find their own artistic voice. Prerequisite: HAR331.

## HAR 387 American Films

(3-0-3)
This course examines American fiction films in terms of their historical development through the studio system and in terms of current narrative theory. The course is concerned with ways in which narratives are constructed and ways in which they provide the appearance of "meaning." Particular attention is given to film noir. Various European films that strongly influenced, or parallel, American works are also examined.

## HAR 389 History of Middle Eastern Art

(3-0-3)
This course is a survey of the myriad art and architectural forms of the Middle East. From earliest origins in Mesopotamia and Egypt, the course examines Byzantine and Sassanid influences on the development of Islamic Art under the Umayyids and Abbassids, as well as the Ottomans and Persians. It follows these influences through the nineteenth and twentieth centuries, examining the current state of art, including film, in the Middle East.

## HAR 390 I ntroduction to Principles of Form and Design I

(2-2-3)

This course moves through the elemental study of two-dimensional art and design--structural elements, organizational principles, psychological effects, and communicative functions--focusing on both the technical and the imaginative. Problem-solving studio assignments (most of which are created on computers) and critiques, combined with visits to museums and galleries, enable students to develop criteria for the analysis and evaluation of images created both by themselves and by others.

## HAR 391 I ntroduction to the Principles of Form and Design II

 (2-2-3)This course explores the concepts of form and space, focusing on hands-on experiences using different types of materials to create three-dimensional sculptural works. Students are encouraged to be experimental with their combination and use of materials. This course will address formal elements of design and construction in relation to contemporary art works through video documentation, slide, s and books. Readings that accompany class discussions and a visit to Manhattan will be assigned throughout the semester.

## HAR 393 Drawing I

(2-2-3)
This course will approach the basics of drawing as an integrative tool where ideas and processes are explored and expanded through the drawing medium. Skills will be rendered through observation, manipulation, and coordinating and understanding these practices. Through problem solving within a range of projects, each student will begin to develop a visual language and the drawing skills that can be applied to conceptual, visual, and technical disciplines.

## HAR 394 Drawing II

(2-2-3)
Students will focus and expand their visual and conceptual knowledge and technical skills, as well as explore new issues, dialogues, and skills surrounding the medium of drawing. The class will include studio course work and independent projects, as well as group field trips to see current drawing exhibitions in New York City. A class presentation of a chosen artist, as well as a supporting written paper, will be required of each student. The final project will be an interdisciplinary independent project designed and created by each student. All students will be expected to have completed Drawing I successfully, or have the professor's permission to register, i.e. presenting a portfolio that demonstrates working knowledge of the basic principals of beginning drawing. Prerequisite: HAR 393 or permission of the instructor.

## HAR 395 I mages of American Life

(3-0-3)
This course is an advanced elective concerned with cultural aspects of American arts from the nineteenth century to the present. The course centers on the ways in which images in literature, painting, photography, films, and other arts reflect, reinforce and stimulate cultural norms. Trends in European arts are studied in relation to their influence on American art.

## HMU 480 Media Culture and Theory

(3-0-3)
This course will survey key benchmarks and documents in the history of media technologies while also introducing critical readings of 20th and 21st century media culture, both from the theoretical field of media studies and the creative works of artists, filmmakers, and writers. We will explore how media technologies from print and photography through film, radio, television, video, the Internet, games, and social software have been successively introduced, disseminated, and commodified, and how their mediations have profoundly affected the way we experience and interpret our contemporary society and culture. Students will be required to complete readings every week, to contribute to a class web project including blogs and wiki, and to produce short papers and presentations that respond to and analyze the readings, in-class screenings, and other material we discuss.

## HAR 485 Contemporary Art

## (3-0-3)

This course is an overview of a broad range of topics about contemporary fine art. We examine theoretical issues, modern and post-modern styles, and the industry and practice of visual art through bi-weekly visits to galleries and museums in Manhattan. Readings, papers, and presentations are required. This course approaches its subject matter from the artists' standpoint and is taught by a professional artist.

## HAR 486 Art and Technology

(3-0-3)
Artists have always experimented with emerging technologies, but in recent decades, as personal computers and the Internet have gained increasing importance in our lives, the field of Art and Technology has emerged as a dynamic and historically significant domain of artistic practice. This course is designed as an investigation into the history of art and technology. Students will become familiar with a wide range of art and technological subjects, including the technological aspects of Cubism, Futurism, Dada, Marcel Duchamp, Surrealism, Kinetic Art, Op Art, and E.A.T. We shall also examine contemporary examples of the merging of art and technology.

## Music

## HMU 350 Music of the Eastern Mediterranean

## (3-0-3)

This course is an introductory survey of the music of the Eastern Mediterranean as explored by Traditional and Modern Turkish music. It explores the Balkan, Greek, and Persian influences from earliest times as well as Western composition and idioms. Modern jazz, rock, dance, and video influences will be examined, as well.

## HMU 387 African-American Popular Music

## (3-0-3)

This course traces the development of black popular music from its earliest roots in northwest Africa to the urban centers of the U.S.

## HMU 392 Music Appreciation I

(3-0-3)
The development of listening techniques used to aid in the appreciation of classical music and analysis of representative compositions covering the Baroque, Classical, Romantic, and Modern periods.

## HMU 393 Music Appreciation II

## (3-0-3)

A survey and analysis of representative composers through critical listening and analysis of important music literature. Prerequisite: HMU 392.

## HMU 394 History of J azz

(3-0-3)
Techniques in how to listen and what to listen for. History of the idiom. Analysis of outstanding performances and styles.

## HMU 393 Music Appreciation II

(3-0-3)
A survey and analysis of representative composers through critical listening and analysis of important music literature. Prerequisite: HMU 392.

## HMU 394 History of J azz

(3-0-3)
Techniques in how to listen and what to listen for. History of the idiom. Analysis of outstanding performances and styles.

## HMU 395 Elementary Harmony

(3-0-3)
This course begins with a review of the rudiments of music (scales, modes, key signatures, time signatures, rhythm, meter, intervals, and basic acoustical principles) and a review of important compositional trends that have affected the course of Western musical history. Students are then introduced to the triad and seventh chords in all inversions. All theoretical study is accompanied by listening, score analysis, and actual writing. All incoming students should already know how to read music (treble and bass clefs).

## [HMU 396 Advanced Harmony]

## HMU 397 Orchestration I

(3-0-3)
This course is an exploration of traditional orchestral instruments. The student will learn fine details related to the characteristics of instruments in the orchestral family with classroom examples of masterpieces in the classical repertoir, e as well as by experiencing either live demonstrations or sampled demonstrations by the instructor. The student will learn the basics of expanding a piano score to woodwind, brass, and string quartets. Prerequsite: HMU 395.

## HMU 401 Music Through Multimedia Technology

## (3-0-3)

This course involves production tools available in hardware and software utilized to make compositions and sound tracks for an array of visual and live performance environments. The course provides an introduction to these areas, offering background important to other courses in the program that students may take in the future. Topics include the music business, general recording studio protocol, MIDI (Musical Instrument Digital Interface), basic recording techniques with "ProTools," techno music production sequencing with "Digital Performer," synthesizer history and programming, electronic music and "synthestration," interactive applications such as "MAX," sound design, digital sampling for visual art support with "Mach 5," and sound-effect libraries, music programs for the Web: Quicktime, Real Audio, and Windows Media Player applications, mastering with ProTools "Plug-Ins," "Peak," "Roxio Jam" and "Toast," and "MP3" creation and web uploading and distribution with e-commerce.

## HMU 402 MIDI and Electronic Music

(3-0-3)
The Musical Instrument Digital Interface (MIDI) revolutionized the production world of electronic music. This course will explore the fine details of the code, as well as the everyday studio and stage use of the protocol. The student will explore all types of synthesis techniques via keyboards, tone modules, and software plug-ins. There will also be an overview of
traditional electronic music from the last century to the present. In the weekly lab, the student will explore the software and hardware interconnection process and create an artistic experiment in electronic music as a final project.

## HMU 403 Synthestration

(2-2-4)
Currently, the complexity of the tools of the trade, enable one person to perform a non-linear symphony. The art of "Synthestration" is commonly utilized in the motion picture and popular music industries. Synthestration is the art of utilizing sound synthesizers to emulate the sound of an orchestral instrument. In today's competitive hi-tech musical instrument world, any musician can now play virtually any sound from their performance device via the integration of keyboard, string or pitch, and velocity to digital converters. It has become quite mainstream for one musician to be expected realize an orchestral score with synthesizes to give the composer or the producer/director/client a sample of what the final orchestra performance may be like. Often, the "synthestration" becomes the final version in the contemporary market. This course will present and analyze both aesthetic and artistic issues in the field. The student will have the opportunity to create a digital performance of their Orchestration class experiments in a weekly lab session as well as on their laptop computer. Prerequisite: HMU 397.

## HMU 410 Audio Engineering Science I

(2-2-3)
In today's music composition world, artists may accelerate their potential by having a basic understanding of sound recording technology, since this competitive field is becoming more dependent on composer-operated tools to generate the art. This course will give students an understanding of the terms and basic skills needed to make quality recordings of their art on the "Pro Tools" non-linear-based system. Microphone, Monitor, Mixer, Digital Signal Processing "Plug-Ins," Dynamics, and basic studio acoustics will be explored. Students will meet in small groups for at least four hours a week to execute organized studio "hands on" lab exercises. Students will experience the producing and recording of a basic multi-track song project at the completion of the course.

## HMU 411 Audio Engineering Science II

(2-2-3)
Mixing consoles in project studios will be explored and more advanced techniques in dynamics, equalization, reverberation, and signal processing. Students will meet in small groups for at least four hours a week to execute organized studio "hands on" lab exercises. Students will experience the producing and recording of a more advanced multi-track song project at the completion of the
course.

## HMU 450 Music Business

(3-0-3)
This course is an overview of the vast music business world and what a real and successful producer must know to compete in today's commercial music environment. Topics include discovering an act, training, development, music union memberships, performance, music attorney expectations, management contracts, booking agents, promoters, publishing deals, performance rights organizations, production deals, recording studio management, record deals and labels, interactive media and web promotion, and distribution. Guest speakers may be invited to class and students may visit "indie" and major label headquarters. All students will be encouraged to participate in the student organized media label club.

## HMU 490 Music Performance: Concert Band

(1/2 credit)
The study and performance of popular Concert Band repositories.

## HMU 491 Music Performance: Jazz Ensemble

(1/ 2 credit)
The study and performance of modern music.
HMU 492 Music Performance: Stevens Choir
(1/ 2 Credit)
The study and performance of choral masterworks.

## HMU 493 Music Through Multimedia and Technology

(3-0-3)
This lecture course, with interactive studio demonstrations, is an introduction and overview of the world of multimedia. The student explores the basics of audio, graphics, photography, and video production through the use of digital audio, midi and music production, digital graphics, and photography and video software.

## HMU 496 Music Performance: Private Lessons

## (1/2 credit)

The student is required to play a musical instrument and is expected, according to the audition process, to have moderate skills on his/her primary instrument. The student may continue with private lessons on his/her primary instrument or they may take lessons on their secondary instruments. A faculty member or a member of the tri-state area's community of professional musicians may conduct regular lessons as per the student's level and artistic desires. The
lessons may be on campus, or the student may commute to the musician's training studio. There will be one hour of lessons weekly with the instructor and the student is expected to rehearse for at least four additional hours. The lessons shall lead to a performance on campus during the same semester. The performance may be solo or part of an ensemble.

## HMU 497 Music Performance: Recital

(1/2 credit)
Each student is encouraged to either give solo performances or to join a student ensemble and take part in a series of performances on campus as well as in other metropolitan New York City stages. Many of the performances will be recorded and marketed by the student-run media label. The student will need to attend weekly rehearsals and participate in at least one performance each semester.

## Science and Technology Studies

HHS 309 Newton and the Scientific Revolution
(3-0-3)
A study of the life and works of Sir Isaac Newton. Attention focuses on the scientific philosophical and religious background of Newton, on his biograph, y and on his work. Newton's Principia and Opticks will be read.

## HHS 310 Social History of Science

(3-0-3)
This course analyzes science as a social entity. The connections between science and society are studied in the first instance through a historical survey of the externals of science: the non-cognitive social, institutional, and professional dimensions of the scientific enterprise. On a case-study basis, the course proceeds to investigate more theoretical problems concerning relations between scientific knowledge and social structure, particularly as interpreted in the Strong Program of the Sociology of Knowledge. Students complete individual projects arising out of themes developed in class

HHS 311 Science and Society in the Twentieth Century
(3-0-3)
An examination of the historical process whereby the scientific enterprise became a central concern of the state in modern industrial societies.

HHS 312 Technology and Society in America
HHS 361 Galileo and the Scientific Revolution
(3-0-3)
An in-depth study of the career of Galileo Galilei (1564-1642) and his place in
seventeenth-century science.
HHS 363 Darwin and the Darwinian Revolution

## HHS 369 Studies in the Scientific Revolution

(3-0-3)
An analysis of the intellectual and methodological transformations of sixteenth- and seventeenth-century science and the development of the modern world view. This course focuses on the major scientific figures of the age (Galileo, Descartes, Newton), with particular attention to the study of original texts. The social and institutional transformations of science in this period are also considered.

## HSS 371 Computers and Society

## HSS 380 Energy, Politics, and Administration

## HHS 397 Historical Materialism

(3-0-3)
A survey of various attempts to base historical explanations on material conditions - microbes and disease, nutritional requirements, agriculture, climate, geography, genes, and technical and economic constraints and opportunities.

## HHS 414 Industrial America

## HSS 454 The Geography of Science

## HHS 465 Engineering in History

## HHS 479 Studies in the History of Technology

## HSS 488 Science and Human Nature

(3-0-3)
An introduction to recent Darwinian and sociobiological theories of human nature.

## HUM 198 Humanities Colloquium

(1-0-1)
An introduction to the humanities disciplines through weekly lectures and discussions.

## HUM 301 Writing Seminar and Research Methods

(3-0-3)
In this course, students explore the tools and techniques of advanced writing and research. Students write four research papers and give several oral presentations. This course is required for single degree B.A. students and strongly recommended for double degree students.

## HUM 498 Senior Thesis

( 4 credits)
The student completes a major research thesis in the area of concentration under the guidance of a faculty advisor. Open to B.A. degree students.

## HUM 499 Tutorial

(3-0-3)
An individual program of study arranged between student and instructor. A tutorial plan must be prepared (and presented to the Tutorial Committee of the Department of the Humanities) outlining the program and indicating the nature and scope of the project (generally a written paper). Upon completion of the program, the student receives a grade and credit for a Humanities elective.

## GRADUATE COURSES

All Graduate courses are 3 credits except where noted.

## HUM 500 Gearing Up for Professional Communications

This course covers topics that include brainstorming, organizing, writing, and revision of technical documents, as well as preparation of verbal presentations with visual aids. In this overview class, students will be exposed to these skills, and have time to generate their own documents and presentations for feedback, but HUM 500 is primarily designed to give the students a foundation so that they may continue on with other, more specialized, classes in this field. Students in need of ESL/ESD attention will receive it. The course may be offered as a week-long intensive class designed to get students familiar with the basic concepts and tools they will need to master in order to pursue the Certificate Program in Professional Communications or other Stevens graduate degrees or programs. This course does not carry graduate credit toward the MS/IS program or the Graduate Certificate Program in Professional Communications. Prerequisite: Students must have a good background in general writing. A basic working knowledge of Microsoft Word and PowerPoint is also required.

## HUM 501 Foundations of Technical Communication

This course introduces professional communications: How should professionals construct technical documents for the business or scientific/technical community? What are the techniques writers need for specialized, clear writing? Topics include: genres of technical writing; successful writing strategies; design principles; format; and contents. Students will practice the techniques presented through weekly writing assignments.

## HUM 502 Professional Presentations

This course will present a range of professional presentation techniques: oral, web-based, and audio-visual. Students' existing skills will be sharpened and enhanced with knowledge of current best professional practices. Weekly assignments will guarantee that students will master new techniques.

## HUM 503 Advanced Documentation Techniques

This course sharpens students' ability to deliver written descriptions, explanations, and instructions to a diverse audience who may not share the writers' technical expertise. Students will create overviews and abstracts; lay out guidelines for readers; craft orderly instructions and explanations; insert necessary illustrations that enhance the documentation; build links to the next set of instructions; summarize effectively; and format for maximum comprehension.

## HUM 504 Foundations of Business Plan Writing

This course introduces the foundations of writing a business plan. Topics include: what investors and lenders are looking for; the key elements of a business plan; and special considerations when writing a business plan for an international endeavor or web-based or web-supplemented businesses. Students will demonstrate their knowledge of the material presented through weekly writing assignments.

## HUM 530 Writing for Engineers

This course is an introduction to writing for engineers. As technical writers, engineers may often feel that their task is merely to "inform," but as has been dramatically illustrated over the last few years, "informing" can be vital to successful system deployment and operation. Lives are often affected by not only the accuracy of an engineer's calculations, but by a clear and understandable presentation of conclusions and recommendations. The ability to write clearly and effectively is essential to an engineer.

## HUM 535 Writing for I nternational Marketing

This course introduces the issues related to writing for international markets. What factors make writing for an international market different from writing for a domestic market? Topics covered include: the influence on writing of the key elements that make each nation different; the behavior of foreign consumers; translation issues; and considerations when writing presentations, instructional texts, business plans, and Web content for international audiences.

## HUM 540 Foundations in Financial Writing

This course is concerned with the communication of financial information in writing: How should financial professionals construct documents? What are the writing techniques needed to make the numbers tell their own story? Topics include genres of financial writing; successful writing strategies; organizing information; and using tables and charts.

## HUM 545 Medical Writing

This course introduces essential concepts for writing in pharmaceutical houses, medical advertising agencies, and other medical settings. Topics covered include basic medical terminology, appropriate AMA style and form and format in the use of professional research, preparation of meeting and conference materials for professionals in the field, and working with physicians.

## HUM 550 Writing for the Web

This course dispels the myths about writing for the Web and provides students with the skills to move successfully from print to web. The dynamic medium of the Internet not only demands concise, clear, well-organized copy, but an ability to operate in a non-linear world. This course will enable students to: reinforce good technical writing practices; incorporate usability issues when designing information for the Web; think in non-linear ways; recognize the different functions of web copy and how to write for each (educational, promotional, information-seeking); and understand the different delivery methods and how they influence the layout of the information and audio-visual choices.

## HUM 555 Writing for Project Management

This course introduces the writing tasks that are critical to project management as it is used across a wide variety of industries. Topics covered include: the language of work breakdown structures; addressing project requirements; the semantics of risk analysis; assessing scope and designing and building a project plan. Students will review online project management tools. Students will apply the techniques of writing for project management by creating a project plan to manage some aspect of an academic or extra-curricular activity.

## HUM 560 Writing for and About the Science Community

This course introduces the interpretation and analysis of complex scientific information and the translation of difficult scientific concepts into lively and readable prose. Topics include: effective interview techniques; information-gathering skills; news and feature article structure; editing; and writing for the general public, scientists, and industry. Students will practice these skills through in-class and take-home writing assignments. Writing assignments will progress from short, weekly articles to longer pieces. By the end of the semester, each student will write a feature article.

## HUM 565 Publicity Writing: Techniques of Packaging Information

This course introduces the technical aspects of publicity writing. Topics include: writing a press bio; writing a topic summary; the art of the press release; the basics of the op-ed; and organizing the short informational feature. The course will include "how-to" discussions regarding inquiries from the press and the public, and ways to negotiate direct contacts with both. Guest speakers from the press/marketing field will make occasional presentations during the length of the course.

## HUM 570 Proposal Writing

This course helps students developing a case for support for a nonprofit organization, making long-range programmatic and financial plans, researching potential funders, and preparing proposal materials. Students will learn how to find funding sources and will make regular presentations on their research and writing samples. The class will compile a comprehensive set of funding resources, as well as sample grants and planning documents. Guest speakers will share professional insights and experiences.

## COGN 500 Models of Cognitive Processes

An introduction to different conceptions of cognition in science, engineering, and management and how they are used to construct models to explain patterns and solve problems. In-depth, technically-informed case studies from philosophy, philosophy of science, political science, economics, psychology, social psychology, history, history of science, art, music, and management will be used to highlight the development of new technologies, techniques, and products and services. Prerequisites: Graduate standing or advanced undergraduate with permission.

## COGN 601 The Brain and Human Cognition

A review of current theories about the brain with a focus on conceptions of cognition and new approaches to problem solving. Topics include the use of new techniques for studying brain functions, human behavior, language, memory, and reengineering to solve medical problems. The commercialization of these ideas will be analyzed. Prerequisites: COGN 500 and Graduate
standing or advanced undergraduate with permission.
COGN 602 Introduction to Artificial Intelligence
Problems solved by search and constraint satisfaction. Games, first-order logic, knowledge representation, planning, learning, decision theory, and statistical learning. The commercialization of cognitive breakthroughs will be highlighted. Prerequisites: COGN 500 and 601. Graduate standing with qualifying course work or experience in computing or advanced undergraduate with permission.

## COGN 603 Practicum

A seminar devoted to student projects that integrate knowledge from previous courses and work experience to analyze a problem based on an understanding of the complex role of cognition in modeling processes and producing innovations. Prerequisites: COGN 500, 601, and 602. Graduate standing with qualifying course work or experience in computing or advanced undergraduate with permission.


[^0]:    COGN 500 Models of Cognitive Processes
    COGN 601 The Brain and Human Cognition
    COGN 602 Artificial Intelligence
    COGN 603 Practicum

