## Samples of Program Learning Objectives – University of Illinois at Urbana-Champaign

(see http://www.anthro.uiuc.edu/outcomes/)

Each program must identify its general goals; learning objectives in three main areas: declarative knowledge, intellectual skills, and student attitudes.

#### **English**

General goals of the Undergraduate program:

The undergraduate majors in English and Rhetoric aim to develop students'

- familiarity with literatures written in English and with the outlines of British and American literary tradition;
- understanding of texts in their cultural and historical contexts;
- appreciation for the aesthetic qualities of literature and literary production:
- awareness of critical and interpretive methods:
- · critical reading, thinking, and communication skills.

### **Desired Learning Outcomes:**

Declarative Knowledge: The English and Rhetoric majors aim to increase students' familiarity with:

- literary terms, forms, and genres;
- representative authors and cultural characteristics of major literary historical periods;
- critical and interpretive methods;
- principles of composition and bibliographic reference.

Intellectual Skills and Abilities: The English and Rhetoric majors aim to improve students' ability

- to comprehend texts from a variety of historical periods and cultures and to relate them to each other formally, thematically, culturally, or historically;
- to understand the process by which literature is produced in response to and in reaction against prior literary texts and cultural settings;
- to construct critical and interpretive arguments;
- to reflect self-consciously on the cultural, psychological, and aesthetic bases of literary response;
- to write clear, coherent, and persuasive essays;
- to locate, evaluate, and use responsibly a variety of research materials from both the print and electronic media:
- to create original poetry, prose fiction, or drama;
- to adapt expository writing to different audiences and purposes.

Attitudes: The English and Rhetoric majors aim to increase students'

- · appreciation for the aesthetic pleasures of literature and good writing;
- openness to a variety of cultural or ethnic perspectives;
- awareness of and reflection on personal values and openness to the possibility of self-transformation through reading and creating literature;
- commitment to intellectual honesty and integrity in the use of sources;
- confidence in critical thinking and analytic skills.

General Goals: the English Graduate Program in Literature and Writing Studies seeks to develop:

- the ability to conduct significant research in the fields of literary criticism and writing studies;
- the ability to teach a range of courses in Composition and in English, American, and World Literatures in English;
- the ability to understand and contribute to issues and debates in the field.

## **Desired Learning Outcomes**

Declarative knowledge:

- broad knowledge of several of the historical fields in, literary genres of, and major critical approaches to English, American, and World Literatures in English; or, broad knowledge of Writing Studies issues and methodologies;
- specialized competence in the primary and secondary literature of an appropriate specialized sub-field of Literature or Writing Studies;
- development of a range of teaching methods and strategies appropriate for particular courses.

# Intellectual Skills and Abilities:

- the ability to analyze literary and cultural texts with originality and rigor in the light of contemporary theory and to contribute to the field;
- the ability to write publishable critical essays and a book-length dissertation;
- teaching excellence.

### Attitudes:

- respect for and understanding of the literatures and cultures of different historical periods, nationalities, genders, and ethnicities;
- respect for and appropriate use and acknowledgment of the scholarly work of others;
- respect for and commitment to students' intellectual growth.

### History

General Goals: the undergraduate program in history seeks to develop:

- Effective learning and reasoning skills;
- Understanding of some of the various areas of history, including historiography and methodology.
- Career-Transferable Skills: transferable, functional abilities that are required in many different problem-solving and task-oriented situations.
  - o information management skills
  - design and planning skills
  - o research and investigation skills
  - o communications skills
  - o human relations and interpersonal skills
  - critical thinking skills
  - management and administration skills

### Learning Objectives.

## Declarative Knowledge

The student should command:

- An understanding of the central concepts and language of history; and
- General competence in the historical areas the student has chosen to study.

### Intellectual Skills:

- · Ability to formulate and solve research problems; and
- Effective written and verbal communication skills.
  - Focus: A well-focused piece of writing or presentation is one in which all of the elements work together toward a common, coherent goal. Such a piece of writing might discuss many different perspectives, but the goal of the discussion will be clear, and the different elements will each contribute toward meeting that goal.
  - Support: Supporting evidence plays a crucial role in any academic writing or presentation, because academic writing is generally argumentative or persuasive. To convince or persuade in a logicdriven genre, one needs evidence.
  - Organization: A well-organized piece of writing makes the reader's job easier -- it helps bring the reader efficiently and comfortably to the thesis or objective and then through the argumentation which supports that thesis. Organization is all about intentionality -- when an academic writer is writing well, the arrangement of her material is rarely accidental, but rather is carefully chosen so that her argument is represented in the best possible way.

## Attitudes. The student should:

- Promote cross-cultural awareness and understanding
- Subscribe to the ethical codes of the historical discipline based on the American Historical Association's Statement on Standards of Professional Conduct, 1998 Edition.

### **Business Administration**

## **Desired Learning Outcomes**

Students pursuing either the B.S. degree or the M.S. degree in Business Administration are expected to have:

- knowledge and understanding of the basic functional areas of business management;
- knowledge and understanding of one or more areas of concentration including the critical skills necessary to solve business problems;
- knowledge of written and verbal communication skills, and computer use;
- knowledge of the legal and international environments in which businesses operate;
- knowledge of mathematics and statistics sufficient to apply quantitative reasoning and analysis;
- knowledge of the economic, political science and behavioral science fields to be able to manage human and material resources effectively.

In addition, students completing these two degrees are expected to demonstrate the ability to:

- apply basic business principles to solve new and recurring decision problems:
- conceptualize and analyze business problems;
- communicate their conceptualization, analyses, and solutions effectively, both verbally and in writing.

# Materials Science and Engineering

## **Desired Learning Outcomes**

The mission of the Department of Materials Science and Engineering is to meet the needs of society and our profession through excellence in education, research and service; to educate scientist and engineers who will become leaders in their chosen field; and to generate new science and engineering- based knowledge for the benefit of society and the profession.

## Specific Goals of the Program

Undergraduate Program

- To provide undergraduate students with an understanding of the underlying principles of synthesis, characterization and processing of materials and of the interrelationships among structure, properties and processing.
- To prepare graduates for professional careers in a wide variety of industries as well as for advanced study.
   Graduate program
- To provide students with expertise in the principles of synthesis, characterization and processing of a materials area
  and of the interrelationships between structure, properties and processing.
- To prepare graduates for positions of leadership in industry, government and academia.

## Department Educational Objectives

## Undergraduate Program

- To provide students with the necessary foundation for entry level industrial positions in materials related industries or advanced study programs through rigorous instruction in the fundamentals of materials science and engineering.
- To provide students with an introduction to team work and communication techniques to prepare them for successful careers in industry or advanced study programs.
- To provide students with the opportunity to broaden their education in engineering and science or expand their knowledge in a particular technical area by offering a choice of technical and free electives. To provide students with the opportunity to participate in the Co-op and Study Abroad programs.
- To provide students with opportunities to learn and grow as individuals, contribute to society and to appreciate the ability to achieve their goals through life-long learning.

#### Graduate program

- To provide graduate students with the necessary foundation for advanced level positions in materials related industrial, government, and academic positions.
- To provide graduate students with the opportunity to perform original research either individually or as a member of a team.
- To provide graduate students with the opportunity to develop and utilize written and oral communication skills
- To provide graduate students with the opportunity to broaden their knowledge base through a choice of courses in materials related subjects.
- To provide graduate students with opportunities to learn and grow as individuals, contribute to society and to appreciate the desirability of life-long learning.

### **Educational Outcomes**

## Undergraduate program

The educational outcomes for undergraduate students are determined by the educational outcomes set by ABET. Undergraduate students will have

- An ability to apply knowledge of mathematics, science and engineering to materials science and engineering problems.
- An ability to design and conduct experiments.
- An ability to analyze and interpret data.
- An ability to design systems or processes to meet needs.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- A broad education.
- A recognition for the need to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use techniques, skills and tools necessary for materials engineering practice.
- Familiarity with chemistry, physics and advanced mathematics.

### Graduate program

#### Graduate students will have:

- An ability to conduct original research.
- An ability to utilize and evaluate existing literature.
- An ability to apply knowledge of mathematics, science and engineering to materials science and engineering problems.
- An ability to design and conduct experiments.
- An ability to analyze and interpret data.
- An ability to design systems, components or processes to meet needs.
- An ability to identify, formulate and solve materials science and engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- An in-depth and broad knowledge of materials science and engineering.
- A recognition for the need to engage in life-long learning.