

**Department:** Chemical Engineering

**Course Number:** ChE 3951

**Course Title:** Cooperative Education

**Catalog Description:** Practical work experience with an employer closely associated with student's academic area. Arranged by mutual agreement among student, department, and employer. Formal written report of work completed must be submitted to department at end of experience.

**Prerequisites:** ChE candidate

**Textbook(s) and/or other required material:**

1. Specified by employer

**Course Learning Outcomes**

1. Multidisciplinary team skills
2. Technical communication
3. Understanding of professional responsibility
4. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

**Topics Covered**

- 1.

**Class/Laboratory Schedule:** NA

**Contribution of course to meeting the requirements of Criterion 5**

1. Cooperative Education

**Relationship of course to Program Outcomes:**

Cooperative Education prepares students to achieve the following outcomes:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- (d) an ability to function on multidisciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively

- (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- (i) a recognition of the need for, and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

**Prepared by:** Richard Davis

**Date:** 1 June 2009