

## **CHE 1001 Introduction to Chemical Engineering**

Required course for ChE program

**Catalog Description:** Overview of the chemical engineering curriculum, professionalism, career opportunities, and issues of safety and environment. Introduction to chemical engineering calculations; units, dimensions and conversion factors.

**Recent Textbook:** *Chemical Process Safety*, 2<sup>nd</sup> Edition (2002) by Daniel A. Crowl and Joseph F. Louvar, published by Prentice-Hall.

**References:** Various newspaper clippings, NSPE and AIChE Codes of Ethics, technical writing manuals

**Set of Course Goals/Objectives:** By the end of the semester the students will be able to:

1. Correctly and consistently convert between different unit systems
2. Describe the role of Chemical Engineers in current events
3. Write a resume
4. Identify potential safety problems and suggest reasonable courses of action to remedy them
5. Evaluate an ethical dilemma, select an appropriate ethical code for dealing with the situation, and justify their resolution of the problem

**Prerequisites by Topic:** None

**Major Topics Covered in the Course:** 1 Unit Conversions, 2 Technical writing, 3 Oral presentations, 4 Statistics, 5 Graphing, 6 Safety, 7 Ethics

**Class/Laboratory Schedule:** Class meets for two 50-minute sessions each week for 14 weeks.

**Professional Component Contribution:** This course provides one hour each of engineering science and general education.