## CHEG 306: Chemical Engineering Analysis

Introduction of chemical engineering analysis that enables us to express engineering problems in precise quantitative terms. This translation process, from physical system to mathematical description, will be emphasized throughout the course. The fundamental principles that will be used are the conservation laws of mass and energy adapted to the particular situations of interest. These may be closed systems (no flow into or out of the system boundaries) or open systems where such flows occur. We will solve systems of algebraic and first order differential equations with an emphasis on the modeling and simulation techniques of the MATLAB/ SIMULINK package.

## Credits: 3

## Prerequisites/Permissions:

PRE-REQ: CHEG 301, MATH 159 / CO-REQ: CSCI 165 Program:

## **Chemical Engineering**

**COURSE DESCRIPTIONS**