



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Unit Operations II

CBE 3731

Credit Hours:

1.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lab

Course Description:

The fundamental laboratory course in chemical engineering: laboratory investigation of the operating characteristics of chemical engineering equipment

Prerequisites and Co-requisites:

Prereq: 3730, or permission of instructor.

Course Goals / Objectives:

- After completing the course, students will be able to:
 - Design and conduct laboratory experiments
 - Compare experimentally measured results with literature data and quantify the sources of error that contribute to differences between measured data and literature data
 - Prepare high quality written technical reports and oral presentations to summarize a project in a professional and informative manner
 - Work effectively as a member of a team, both as a team member and as a team leader
 - Work safely in a laboratory by carrying out Safe Operating Procedures, using Personal Protective Equipment properly and consistently, and by properly handling, storing, and disposing of chemicals
-

Course Topics:

- laboratory and workplace safety
 - technical writing, teamwork skills, statistical analysis
 - hands-on experience with equipment related to reaction kinetics and reactor design: batch reactor, continuous stirred-tank reactor, plug flow reactor
-

Designation:

Required