

CHM 6154 (Fall, 2011)

Chemical Separations

Instructor: Charles Cao (cao@chem.ufl.edu), 226 Leigh Hall

Lectures: M, W, F, 7th Period (1:55 pm to 2:45 pm), 207 LIT Hall

Office hours: M, W, F, - 8th Period (3:00 pm to 3:50 pm), or by appointment

Website: <http://www.chem.ufl.edu/~cao/CHM6154/index.html>

Textbook: *Unified Separation Science* by J. Calvin Giddings
(John Wiley & Sons, INC)

Reference book: *The Essence of Chromatography* by Colin Poole (Elsevier)

Themes:

1. Introduction: Fundamentals of Distribution Equilibrium
2. Gas Chromatography
3. Liquid Chromatography
4. Other Analytical Separations

Homework: Problems will be assigned throughout the semester as an aid in comprehending the course material. They will not be graded. Answers to the assigned problems will be discussed in the class.

Quiz and Exams: Fourth quizzes will be given throughout the semester as an aid to review the course material periodically. Two exams will be included in the course. The midterm exam covers the first and second part of the themes, and it will be a 2-h exam during October. The final one is a comprehensive exam, but it will emphasize the last two parts of the themes. *The Final exam: (16E) Dec. 16th: 5:30~7:30 PM.* Note that students are invited to submit one or more suggested questions for the midterm and final exam.

Group study: Reach-oriented study on a specific topic related to separation. The topic will be given by the instructor. One group is composed of three students. The results from the group study will be shown as group presentation: 30-min talk.

Research Proposal: The topic of the proposal is on a separation technique.
The length of the proposal is about 1800 words. The detailed requirement will be given after the midterm exam.

Grading:

Homework:.....	0 points
4 Quizzes.....	20 points (5 points for each)
Midterm Exam:.....	80 points
Final Exam:.....	100 points
Research Proposal:.....	60 points
Group study:.....	40 points