CHEM 497 Research Techniques and Design II, Fall 2012

Course Description: Three semester hours. Prepare students to carry out research project assignments effectively. Prerequisites: Chem 340 or consent of the instructor; Credit Hours: three lecture hours.

Class Time and Location: TR: 4:46pm-5:59pm; Sci 123

Instructor: Dr. Ben Jang; Sci 335, x5383, ben.jang@tamuc.edu

Office Hour: TR: 2:30pm-4:30pm & W: 8:00am-9:00am

Goals of the Course: Provide training on the theories and practices of heterogeneous catalysis. Learning outcomes include techniques to prepare various supported metal catalysts or acid/base catalysts systematically, preliminary skills to carry out various catalyst characterization techniques independently, and/or the skills to operate the assigned catalytic reaction system with changes of several parameters.

Course Requirements and Assignments:

References:

Heterogeneous Catalysis in Practice, 2nd Ed., Charles Satterfield, 1996

Introduction to Surface Chemistry and Catalysis, Gabor A. Somorjai, 1994.


Assignments: Assignments will be given in the beginning of each week. Each assignment is due normally a week later.

Grading Procedure:

2 Presentations: 30%
1 Report: 20%
Assignments: 50%
A: ≥90.0; B: 80.0 ~ 89.9; C: 70.0 ~ 79.9; D: 60.0 ~69.9; F: <60.0
**Attendance Policy:**

All students are expected to attend classes on a regular basis. The Department of Chemistry adheres to the attendance policy set by the University as stated in the most current Catalog. The attendance record is kept by **roll call**. Being more than 5 minutes late or missing a daily quiz is equivalent to missing a lecture. Excessive absence is defined as missing more than 10% of the lectures without excusable reasons. In addition, **according to the TAMU-Commerce Procedure A13.02, if a student has excessive absences, the instructor may drop the student from the course.** The instructor will only excuse an absence if the student provides, with appropriate documents an excusable reason allowed by the TAMU-Commerce Procedure A13.02.

**Plagiarism:**

Cheating on any assignments is not be allowed. Any instance of cheating will result in a grade of “F” for that assignment and could result in dismissal from the course. Working together for any assignments is encouraged; however, acknowledgement of team members and literature and reference citation are required. Blatant plagiarism will result in a grade of “F” for the assignment. Proven offenders will be dismissed from this course with a grade of “F” assigned. The offender will be reported to the Dean of the College and the Dean of Students.

*Students requesting accommodations for disabilities must go through the Academic Support Committee. For more information, please contact the Director of Disability Resources & Services, Halladay Student Services Bldg., Room 303D, (903) 886-5835.*

*All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student’s Guide Handbook, Policies and Procedures, Conduct.) Students are required to check their university email accounts daily for communication.*