CHEM 597 Advanced Research Techniques and Design II, Fall 2012

Course Description: Three semester hours. Prepare students to carry out research project assignments effectively. Prerequisites: Chem 521 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 systematically prepare various supported metal catalysts and/or acid/base catalysts, skills to carry out various catalyst characterization techniques and to analyze the results independently, the design and setup of reaction systems for various heterogeneous catalytic reactions and effective skills in project report preparation.

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.