

Texas A&M University-Kingsville

CHEM 5412, HETEROCYCLIC CHEMISTRY

Course Description:

The course is for graduate students majoring in a field of science and engineering. This course provides an introduction to the broad field of heterocyclic organic chemistry by reviewing the major classes of heterocyclic compounds in terms of nomenclature, structure, properties, preparations and reactions. The syntheses of several physiologically important heterocyclic compounds are given.

Name of Instructor:

Dr. Apurba Bhattacharya

Office Location:

Room 156 B, Nierman Hall. Telephone: (361) 593-2664

Office Hours:

2:00- 4:00 PM, Monday through Friday, or by appointment.

Course Lecture Location:

TBA

Required Texts:

The Chemistry of Heterocycles, 2nd Edition. By Theophil Eicher and Siegfried Hauptmann. 2003 Wiley-VCH Verlag GmbH & Co. KGaA

Heterocyclic Chemistry, 3rd edition, J. A. Joule, K. Mills, and G. F. Smith, 1995, Stanley Thornes (Publishers) Ltd.

COURSE OBJECTIVES/COURSE PURPOSE:

The objective of this course is to give the student a broad understanding of the major classes of heterocyclic compounds. Specifically, the student will learn nomenclature, structure, properties, syntheses, and reactions of the simple 5 and 6-membered ring heterocycles, the benzene ring fused ring heterocycles, the pyridine group, and the quinoline and isoquinoline groups.

Course Outline:

At the successful completion of the course the student will have knowledge about the structures, syntheses, reactions, and properties of the major classes of heterocyclic compounds.

ASSESSMENT OF STUDENT LEARNER OUTCOMES:

Assessment of the objectives of this course will be measured by the students' performance on four in-class exams. Each exam will cover one of the four subdivisions of heterocyclic chemistry covered in the course.

The final exam will measure the students' performance over all of the course material.

The problem sets will be graded and will be used as another measure of the students' performance.

Method(s) of evaluation and grading procedures:

Evaluation of the course objectives will be assessed by the evaluation of two major examinations (hour exams) and a comprehensive final examination.

Examination 1	100pts
Examination 2	100pts
Examination 3, Comprehensive (Final)	200pts

Total	400 pts

Due to time constraints no make-up examinations will be given. A student who can document an excused absence receives a grade based on his/her exam average. A grade of zero will be recorded for unexcused absences. From time to time there will be unannounced quizzes.

Seminar Program. Students are strongly encouraged to attend the seminars offered in

provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disability. If you believe you have a disability requiring an accommodation please contact the Disability Resource Center (DRC) as early as possible in the term. DRC is located in the Life Service and Wellness building at 1210 Retama Drive, or call (361) 593-3024.

Academic misconduct statement (see page 23, section 100 of student handbook): You are expected to adhere to the highest academic standards of behavior and personal conduct in this course and all other courses. Students who engage in academic misconduct are subject to university disciplinary procedures. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct, which discusses conduct expectations and academic dishonesty rules.

Forms of academic dishonesty:

- 1) **Cheating:** Using un

3)

Texas A&M University-Kingsville will investigate all complaints that indicate sexual harassment, harassment, or discrimination may have occurred by the facts given by the complainant. Sexual harassment of anyone at Texas A&M University-Kingsville is unacceptable and will not be tolerated. Any member of the university community

