Course Information
Organic Mechanism and Structure (CHEM 513)
Spring 2013

Course: Chemistry 513 is scheduled to meet Monday, Wednesday and Friday from 8:00 AM to 8:50 AM in STC 122.

Instructor: Allan D. Headley

Office: Science Building, 307

Office Hours: Wednesdays 11:00 AM to 12:00 Noon, other times by appointment.

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Course Objectives: This course is designed to develop and improve the student's ability to think critically and analytically and to apply that approach to solve problems scientifically based on available information. Students of this course will not only gain a thorough knowledge and understanding of the principles and mechanism of organic chemistry, but will also have the ability to utilize the knowledge gained in the development of new ideas for their research.

University Policies, Procedures, Statements and Notifications: http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/

Important Dates: Visit the following website for important university dates: http://www.tamuc.edu/admissions/registrar/academicCalendars/default.aspx

EXAMINATIONS

First Midterm: Week of February 25, 2013
Second Midterm: Week of April 8, 2013
Final Exam: Week of May 6, 2013

Each midterm exam is worth 100 points (20% of your final grade); 20% of your grade will come from a modeling project in which Spartan, a modeling software will be used; the final exam is worth 200 points (40% of your final grade).

Any student who, because of a disabling condition, may request that special arrangements be made in order to meet the course requirements. This student should contact the instructor as soon as possible so that necessary accommodations can be made.

TENTATIVE SYLLABUS*

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<tr>
<th>Week of</th>
<th>TOPICS TO BE COVERED</th>
<th>READING ASSIGNMENT</th>
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<tr>
<td>Jan 14</td>
<td>Introduction &amp; stereochemistry</td>
<td>59 – 110</td>
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<td>Jan 21</td>
<td>Reactive intermediates</td>
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Jan 28  Methods of studying reactions  316 – 323
Feb 4   Methods of studying reactions  323 – 332
Feb 11  Methods of studying reactions  332 – 350
Feb 18  Models of atomic and molecular structure 1-54
Feb 25  Midterms #1
Mar 4   Molecular modeling and applications, including Spartan  119-173
Mar 11  Spring Break
Mar 18  Methods of studying reactions  351 – 386
Mar 25  Acid-base catalyzed reactions  394 – 448
Apr  1  Substitution reactions  453 – 506
Apr  8  Midterm #2
Apr 15  Substitution reactions  506 - 542
Apr 22  Addition reactions  548 – 637
Apr 29  Elimination reactions  641 – 703
May  6  Final Exam

Reference Books

* Please note that this schedule and topics are subject to change