Course Description: The structure, nomenclature, synthesis, reactions and reaction mechanisms of the principal classes of organic compounds. Stereochemistry. Designed for the science major.

Student Learning Outcome: At the completion of CHEM 3412 the student will be able to demonstrate proficiency in the following specific topics of organic chemistry:

- Orbital theory and bonding
- Molecular functionality
- Rational design of synthetic protocols
- The chemistry and IUPAC nomenclature of alkanes, alkenes, alkynes, and alkyl halides
- Isomerization, stereochemistry and the assignment of stereochemical identities
- Prediction of synthesis products
- Reaction mechanisms
- Nucleophilic unimolecular and bimolecular substitution and elimination reaction tuning
- Multi-step molecular synthesis and retrosynthesis

Required or Recommended Readings: Textbook: Organic Chemistry by John McMurry; 8th ed.; Brooks Cole Publisher (reqd.)

There will be three regular exams and a final exam. The regular exams will cover the material that has been covered in class by that time and final is comprehensive. The average of the four exam grades will determine the lecture grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Exams</th>
<th>Final Exam</th>
<th>Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3@100</td>
<td>1@100</td>
<td>400</td>
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</table>

Course Grade-25% of the organic chemistry grade is from organic chemistry lab. At the end of the semester, after you completed all the lab assignments and exams, you will be
assigned a lab grade by your lab instructor. All complaints and concerns about the lab grade should be directed to the lab instructor. You will receive more information about the organic chemistry lab in the lab syllabus.

<table>
<thead>
<tr>
<th>Grade Type</th>
<th>Formula</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Grade</td>
<td>Lecture % X 0.75</td>
<td>75</td>
</tr>
<tr>
<td>Lab Grade</td>
<td>Lab % X 0.25</td>
<td>25</td>
</tr>
<tr>
<td>Course Grade</td>
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<td>100</td>
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*Final letter grading for the lecture course will be as follows: A ≥ 90%, 89% ≥ B ≥ 80%, 79% ≥ C ≥ 70%, 69% ≥ D ≥ 60%, F < 60%.*

**Make-up Exams:** There are no make-up exams for this class. Students with a university approved scheduled absence (athletics, military duty, etc.) MUST contact the instructor well in advance of the scheduled absence! Exams may be taken early in those specific cases. Students who do not arrange to take exams ahead of time will not be eligible for this special consideration. A written excuse from the university department involved or the Office of the Dean of Students is required.

**Class Website:** Most announcements, forms, handouts, lecture notes, learning materials etc. are either posted, or will be posted on blackboard. You will be able to login using your WebCT ID and Password.

**Use of Electronic Devices during Exam:** Any use of an electronic device (PDA, Cell Phone, MP3 player, CD player, computer …) during an exam is strictly prohibited. Any use of such a device will be considered an attempt to cheat on the exam and will result in a 0 on the exam although more severe actions may be considered. Calculators may be allowed on exams when needed, but only for mathematical operations. The use of programmable calculators to store or retrieve information during an exam will be considered an attempt to cheat on the exam. Also, if a calculator is discovered to have saved programs or information that could be used as an unfair advantage on the exam, this will be considered an attempt to cheat on the exam.

**Course Tutoring:** You can find information regarding the Tutoring at: [http://casa.tamu.edu](http://casa.tamu.edu).

**Students with Disabilities:** The Students With Disabilities Center is located in the Student Services Center (round building: 825-5816). Should you need special consideration for exams and/or class activities (special microphones, additional time for exams, enlarged exams, etc.), please contact this center. The university will provide assistance as needed, but you must contact the center to make arrangements. The instructor cannot make modifications without the center’s involvement. Should you have mobility problems, please notify the instructor and TA so that they may seek assistance for you in the case of fire drills or emergencies.

**Class Standards:** The student is expected to be on time and attend every class. If absent, it is the responsibility of the student to obtain missed information from a classmate. Missed information includes not only lecture notes, but also any possible information regarding syllabus changes. The student is expected to arrive on time prepared to take notes, i.e., with pen, paper, and colored markers/pencils.
Before you enter the lecture hall turn **OFF** your cellular phone! Beepers must also be turned off or put on silent mode. Electronic interruptions absolutely will **NOT** be tolerated!

**Class Conduct:** All students are expected to follow proper classroom behavior and treat the other students and the instructor with respect. If a student’s actions or behavior is deemed disruptive to the class by the instructor, the students will be asked to leave the class for that day.

**Academic Integrity and Honesty:** All students are expected to conform to college-level standards of ethics, academic integrity, and academic honesty. By enrolling in this course, you agree to be bound by the Regulations and Procedures published in the TAMU-CC STUDENT HANDBOOK. Group interactions, investigations, and studying are encouraged; however, duplicative work will be treated as cheating and will receive a grade of zero. Anything that is viewed as cheating on an exam will be given the most severe penalty possible, most likely an "F" for the course, but may include more severe punishments.

**Lecture Schedule:** The schedule below is a preliminary outline of the semester. It is your responsibility to keep up with changes to this schedule. The reading and problems assignments that will be assigned in class should be completed before the next class meeting. Failure to stay current on reading and problem assignments will greatly affect your ability to keep up during lecture and, therefore, will have an indirect affect on your grade in this course.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 21</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>January 28</td>
<td>Chapter 1</td>
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<tr>
<td>February 4</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>February 11</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>February 18</td>
<td>Chapter 4</td>
</tr>
<tr>
<td><strong>February 25</strong></td>
<td><strong>Exam</strong></td>
</tr>
<tr>
<td>March 4</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>March 11</td>
<td>Spring Break</td>
</tr>
<tr>
<td>March 18</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>March 25</td>
<td>Chapter 8</td>
</tr>
<tr>
<td><strong>April 1</strong></td>
<td><strong>Exam</strong></td>
</tr>
<tr>
<td>April 8</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>April 15</td>
<td>Chapter 5</td>
</tr>
<tr>
<td><strong>April 22</strong></td>
<td><strong>Exam</strong></td>
</tr>
<tr>
<td>April 29</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>May 6</td>
<td>Chapter 11</td>
</tr>
</tbody>
</table>
Exam Schedule
Exam I February 25
Exam II April 1
Exam III April 22
Final Exam  Monday May 15, 11–1:30 PM

No student is admitted to the exam after the first exam-taker has left.

ACADEMIC ADVISING: The College of Science and Technology requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College's Academic Advising Center is located in Faculty Center room 178. Please choose the advisor who corresponds to your major (or potential major). Contact your advisor directly, or call Tracey Ramirez at (361) 825-6094, to schedule an appointment. Walk-in times may be available at especially busy times of the year (such as the start of a semester). Please call the Advising Center to check availability and ensure a minimal wait.

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Biology MS  
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Fisheries & Mariculture MS  
Marine Biology MS & PhD

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Environmental Sci BS & MS

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Computer Science BS & MS  
(undergraduate & graduate)  
Undecided S&T Students

Grade Appeal Process. As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of
the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

In choosing to take this course, you are agreeing to abide by the course rules, regulations, and standards. This includes agreeing to be respectful to your instructor and fellow students. Conduct that is disruptive or disrespectful will not be tolerated and is grounds for dismissal from the class. Should you have concerns or questions, you are to discuss them with the instructor as soon as possible. However, you are bound by these rules, regulations, and standards from the first day of class through the duration of the course.