ORGANIC CHEMISTRY II – CRN: 95003
Department of Physical and Environmental Sciences
Summer II 2019

A. COURSE INFORMATION

Course number/section: 3412.001
Class meeting time: MWF – 13:00-14:55
Class location: CI-112
Course Website: Most announcements, forms, handouts, lecture notes, learning materials etc. are either posted on blackboard.

B. INSTRUCTOR INFORMATION

Instructor: Dr. Cesar A. Marquez
Office location: CS-206
Office hours: MTWR – 15:00-16:15
Telephone: (361) 825 5701
e-mail: cesar.marquez@tamucc.edu
Appointments: By email

C. COURSE DESCRIPTION

The structure, nomenclature, synthesis, reactions and mechanisms of the principal classes of organic compounds. Stereochemistry and spectroscopy of organic compounds. Designed only for science major.

D. PREREQUISITES AND COREQUISITES

Prerequisites
1. Requires Registration in Lec/Lab
2. Organic Chemistry I (CHEM 3411)

Co-requisites
Student Laboratory Safety Training (SMTE-0093)

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email, but if don’t receive this email, you can register by simply visiting our course website: Unique Course URL (https://app.tophat.com/e/007807).

Top Hat may require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing. Your textbook will be applied at checkout for an additional price. Don’t worry if you don’t see any content in the course right away, I will make it available to you as we progress through the semester.

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through
text message. Additionally, we will be using the custom-built interactive textbook “Organic Chemistry I” within Top Hat for this class.

**Material at the bookstore:**
3. Top Hat 1 Semester Subscription ISBN: 978-0-9866151-0-8 (*in class response system*)

**Technical Support:**
Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the *in app* support button, or by calling **1-888-663-5491**.

**F. STUDENT LEARNING OUTCOMES AND ASSESSMENT**

Assessment is a process used by instructors to improve learning. The process begins by describing student’s learning outcomes (they focus on what you are expected to learn) like the ones described below for this course. By measuring how well you are accomplishing these students’ learning outcomes the instructor can take appropriate actions to enhance your learning.

It is expected that completion of CHEM 3412 will enable students learning the following specific topics of organic chemistry

1. Molecular spectroscopy to identify organic compounds
2. Organic functionality and aspects of stereochemistry
3. Modern aspects of chemical bonding & molecular structure
4. Prediction of products from organic reactions
5. Understanding reaction mechanisms
6. Understanding of organic syntheses
7. Understanding the importance of thermodynamic in organic reactions

**G. INSTRUCTIONAL METHODS AND ACTIVITIES**

This course is based on direct teaching, centering on lectures where the different topics are discussed. Students practice those concepts online, with exercises that are graded automatically and posted on blackboard. The preparation of summaries before the classes is highly recommended, as well as the attendance to the seminars prepared weekly by the supporting instructors.

**H. MAJOR COURSE REQUIREMENTS AND GRADING**

The course includes lectures and laboratories, graded separately. The final course grade (1000pts) will consider the following distribution:

Lectures Part (750pts): Midterm exams (3 exams, 200, 200, 200pts respectively, total 600pts) will include the material that has been covered in class by that time. There will be a final exam and it is comprehensive (150pts).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Score</th>
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<tbody>
<tr>
<td>Midterm Exams (× 3)</td>
<td>600</td>
</tr>
<tr>
<td>Final Exam</td>
<td>150</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>750</strong></td>
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Attendance is mandatory and therefore it will not be considered when grading.

**Laboratory Part (250pts):** After completed all lab experiments, assignments and exam, your instructor will grade your performance. All complains and concerns about the lab grade should be directed to the lab instructor. You will receive more information about the Organic Chemistry I Laboratory Course in the lab syllabus.

The laboratory part of this course is mandatory; a course final grade “F” will be assigned to students absent more than two laboratories without official excuse or justification.

Final letter grading for the course will be as follows: $A > 900, B > 800, C > 700, D > 600, F < 600$. 

I. **COURSE CONTENT/SCHEDULE**

The schedule below is a preliminary outline of the course. 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 effect on your grade in this course.

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Topic</th>
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<tbody>
<tr>
<td>July 08</td>
<td>Introduction and Syllabus Discussion</td>
</tr>
<tr>
<td>07/08, 09</td>
<td>CH16 IR Spectroscopy and Mass Spectrometry</td>
</tr>
<tr>
<td>07/10, 11</td>
<td>CH17 NMR Spectroscopy</td>
</tr>
<tr>
<td>07/11</td>
<td>CH16-CH17 Exercises</td>
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<tr>
<td>July 15</td>
<td>Exam 01 (CH16-CH17)</td>
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<tr>
<td>07/15, 16</td>
<td>CH19 Conjugated Systems, Orbital Symmetry and Ultraviolet Spectroscopy</td>
</tr>
<tr>
<td>07/17, 18</td>
<td>CH20 Aromatic Compounds</td>
</tr>
<tr>
<td>07/22, 23</td>
<td>CH21 Reaction of Aromatic Compounds</td>
</tr>
<tr>
<td>07/23</td>
<td>CH19-CH21 Exercises</td>
</tr>
<tr>
<td>July 24</td>
<td>Exam 02 (CH16-CH21)</td>
</tr>
<tr>
<td>07/24, 25, 29</td>
<td>CH22 Aldehydes and Ketones</td>
</tr>
<tr>
<td>07/29, 30</td>
<td>CH24 Carboxylic Acids</td>
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<tr>
<td>07/30</td>
<td>CH22-CH24 Exercises</td>
</tr>
<tr>
<td>July 31</td>
<td>Exam 03 (CH16-CH24)</td>
</tr>
<tr>
<td>07/31, 08/01</td>
<td>CH25 Carboxylic Acids Derivatives</td>
</tr>
<tr>
<td>08/05, 06</td>
<td>CH26 Condensation and Alpha Substitutions of Carbonyl Compounds</td>
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<tr>
<td>08/07</td>
<td>CH25-CH26 Exercises</td>
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<tr>
<td><strong>Aug 08, 13:00</strong></td>
<td><strong>Final Exam (CH16-CH26), CI-112</strong></td>
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**Note:** Changes in this course schedule may be necessary and will be announced to the class by the instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.
J. **COURSE POLICIES**

**Attendance/Tardiness**
This course is mandatory, and 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.

**Late Work and Make-up Exams**
There is no make-up exam for this course. 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 the exam 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.

**Extra Credit**
There is no extra credit in this course.

**Cell Phone & Laptop Use**
Cell phones and laptops are allowed during lectures. 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 allowed.

**Food in Class**
Food or drinks are not allowed in this course.

**Missed Exam**
Students who do not arrange to take the exam 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.

**Participation**
Students are expected to participate during the classes, this way contributing to the learning process of the group. The classes are designed as an active environment where every new concept is applied to real synthetic examples. The students are expected to participate as a team, applying critical thinking to the resolution of the different practical challenges proposed.

K. **COLLEGE AND UNIVERSITY POLICIES**

**Academic Integrity (University)**
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

**Classroom/Professional Behavior**
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all
instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Statement of Civility**
Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

**Deadline for Dropping a Course with a Grade of W (University)**
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

**Grade Appeals (College of Science and Engineering)**
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, 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 Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

**Disability Services**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that 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 disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816. http://disabilityservices.tamucc.edu/

**Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within
two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. OTHER INFORMATION

Academic Advising
The College of Science & Engineering 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. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

M. GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.