Office Hours: Scheduled office hours will be determined during the 2nd week of classes to accommodate individuals or small groups and will be posted on CANVAS. If the scheduled times are not convenient, e-mail me with times that you are free so that we can set up an appointment. Open Door Policy: If the door is open, come on in!

Course meetings: Tuesday/Thursday, 9:30-10:45 a.m., USFSM Room A203A.

Prerequisites: CHM 2046, CHM 2046L with a C or better.

Course Description: Lecture 3 cr. Fundamental principles of organic chemistry. The fundamental principles of chemistry will be applied to the study of organic functional groups by examining the correlation between structure and physical properties to predict chemical reactivity.

Student Learning Outcomes: This course presents the fundamental concepts of structure, bonding, reactivity and mechanisms of organic chemistry through classroom activities. By the end of this course, the student will be able to...

- Use the IUPAC rules of nomenclature to determine names and/or structures for molecules
- Explain bonding in organic molecules and its effects on molecular structure and reactivity.
- Relate the acidity and basicity of organic compounds to the mechanisms of chemical reactions.
- Correlate the effects of electronic, steric and orbital interactions to the behavior and properties of molecules.
- Perform stereochemical and conformational analyses of organic compounds and predict the effects of these properties on reactivity and reaction outcomes.
- Write reactions that show the preparation of molecules containing the functional groups: alkanes, alkenes, alkynes, alcohols and alkyl halides.
- Mechanistically illustrate substitution, elimination, addition, radical, and cyclization reactions.

Additionally, students will be able to demonstrate:

- Problem solving skills in classroom assignments.
- Effective oral and written communication skills as evidenced through peer instruction.
- Teamwork and interpersonal skills as displayed in small group projects.
- Ethical responsibility and an awareness of the role of chemistry in contemporary societal and global issues.
- Collaboration with class members to design and develop a method to communicate chemical concepts using various types of current technology methods.

Course Text/Materials: Required for successful completion of this course:


Canvas Use: The class syllabus is posted in Canvas, an online course management system. In this class Canvas will be used as a repository for documents and powerpoint slides pertinent to the course. Information on how to use Canvas is available at: http://usfsm.edu/e-learning-services/student-resources/
**Evaluation:** The course grade will be based upon four in-class exams, a comprehensive final exam, a series of quizzes/assignments, a group project, and laboratory reports. Grades will be based upon the following point system:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class Exams (3)</td>
<td>300 pts</td>
</tr>
<tr>
<td>Cumulative Final Exam</td>
<td>200 pts</td>
</tr>
<tr>
<td>Assignments</td>
<td>100 pts</td>
</tr>
<tr>
<td>Literature Assignment</td>
<td>100 pts</td>
</tr>
<tr>
<td>Group Project</td>
<td>100 pts</td>
</tr>
<tr>
<td></td>
<td>800 pts</td>
</tr>
</tbody>
</table>

Final letter grades for the course will be based upon the percentage of possible points earned as follows: A+=97-100%; A=93-96%; A-=90-92%; B+=87-89%; B=83-86%; B-=80-83%; C+=77-79%; C=73-76%; C-=70-72%; D+=67-69%; D=63-66%; D-=60-62%; F=59% or below.

**Exams:** There will be three one-hour tests (a.k.a. Celebrations of your knowledge) and a two-hour cumulative final exam. Questions that appear on the exams will be integrated and composed from lecture material, assigned readings, and assignments and problems from the textbook.

**Assignments:** In-class assignments are an integral part of the collaborative class experience, thus class attendance is essential. Additional assignments will be given to be completed individually outside of class. Additionally, textbook problems for each chapter will be recommended for self-assessment.

**Literature Assignment:** Familiarity with the scientific literature is paramount in becoming aware of the concepts and models utilized in the past to spark new ideas in this field of discovery. *Dans les champs de l'observation le hasard ne favorise que les esprits préparés.*

Translation: In the fields of observation chance favors only the prepared mind.

Louis Pasteur Lecture, University of Lille (7 December 1854)

**Group Project:** Small groups will be formed at the beginning of the course and each group will develop a project utilizing some form of current technology to communicate chemistry to a general audience. A variety of options will be suggested and creativity is encouraged. The overriding goal is to provide helpful information about organic chemistry in our lives.

**Attendance:** Attendance is expected for all scheduled classes, labs, and activities. A clear correlation between poor attendance and poor performance has been observed. When absences are unavoidable, the student is responsible for all material covered in class as well as for assignments, quizzes and examinations, and other activities listed in the syllabus that were missed. Notify the instructor in advance of any anticipated absences (excused or otherwise) so that arrangements can be made to take a quiz or exam before the scheduled date. If an in-class exam is missed, the final exam percentage will be counted for the missed exam.
Academic Dishonesty
The University considers any form of plagiarism or cheating on exams, projects, or papers to be unacceptable behavior. Please be sure to review the university's policy in the USFSM Catalog and the USF Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88

Academic Disruption
The University does not tolerate behavior that disrupts the learning process. The policy for addressing academic disruption is included with Academic Dishonesty in the USFSM Catalog and the USF Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88

Contingency Plans
In the event of an emergency, it may be necessary for USFSM to suspend normal operations. During this time, USFSM may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main USFSM and College websites, emails, and MoBull messages for important general information. The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency. See the Campus Police Website for further information. The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency.

Disabilities Accommodation
Students are responsible for registering with the Office of Students with Disabilities Services (SDS) in order to receive academic accommodations. Reasonable notice must be given to the SDS office (typically 5 working days) for accommodations to be arranged. It is the responsibility of the student to provide each instructor with a copy of the official Memo of Accommodation. Contact Information: Disability Coordinator: 359-4714; email: disabilityservices@sar.usf.edu and website: http://usfsm.edu/disability-services/

Fire Alarm Instructions
At the beginning of each semester please note the emergency exit maps posted in each classroom. These signs are marked with the primary evacuation route (red) and secondary evacuation route (orange) in case the building needs to be evacuated. See information available on the USFSM student and faculty webpages at www.usfsm.edu

Religious Observances
The University recognizes the right of students and faculty to observe major religious holidays. Students who anticipate the necessity of being absent from class for a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second week of classes. http://generalcounsel.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf

Emergency Preparedness
It is strongly recommended that you become familiar with the USF Sarasota-Manatee Emergency Action Plan on the Safety Preparedness See information available on the USFSM student and faculty webpages at www.usfsm.edu

Web Portal Information
Every newly enrolled USF student receives an official USF e-mail account. Students receive official USF correspondence and Canvas course information via that address. Therefore it is the student’s responsibility to check their USF email regularly.

Instructor Copyright
Students may not sell notes or other course materials.
**Course Content – Classroom Portion:** The following chapters of the text will be covered in this course. Scheduled dates and content covered are **tentative** and listed for general guidance. Examinations will be always held on the scheduled date.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day:</td>
<td>Introduction to Organic Chemistry</td>
<td>Aug. 26</td>
</tr>
<tr>
<td>Chapter 1:</td>
<td>Electrons, Bonds and Molecular Properties</td>
<td>Aug. 28, Sep. 2, 4</td>
</tr>
<tr>
<td>Chapter 2:</td>
<td>Molecular Representations</td>
<td>Sep. 9, 11, 16</td>
</tr>
</tbody>
</table>

**Celebration of Knowledge #1:** Thursday, September 18, 2014

| Chapter 3: | Acids and Bases | Sept. 23, 25 |
| Chapter 4: | Alkanes and Cycloalkanes | Sept. 30, Oct. 2, 7 |

*(Note: Material covered in Chapters 5: Stereoisomerism and Chapter 6: Chemical Reactivity and Mechanisms will be integrated throughout Organic I and II)*

| Chapter 7a: | Substitution Reactions | Oct. 9, 14 |

**Celebration of Knowledge #2:** Thursday, October 16, 2014

| Chapter 7b: | Substitution Reactions | Oct. 21, 23 |
| Chapter 8:  | Elimination Reactions  | Oct. 28, 30 |

**November 1, 2014** Last day to drop with a “W”

| Chapter 9: | Addition Reactions of Alkenes | Nov. 4, 6 |

**Holiday: Veterans Day** November 11, 2014

**Celebration of Knowledge #3:** Thursday, November 13, 2014

| Chapter 10: | Alkynes | Nov. 18, 20, |
| Chapter 17: | Conjugated Pi Systems and Pericyclic Reactions | Nov. 25, Dec. 2 |

*(Note: Material covered in Chapter 11: Radicals will be covered throughout Organic I & II)*

**Thanksgiving Break:** November 27-28, 2014

| Last Day: | Review and study tips | Dec. 4 |

**Final Celebration of your Knowledge:** Thursday, December 11th, 2014

You will be responsible for all material covered in this course.