United States Naval Academy
Chemistry Department
Course Policy Statement

SC226 Organic Chemistry II
Prof. Joseph J. Urban
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Section 2001; Spring, 2016
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Required Materials: Materials required in this course are 1) Organic Chemistry, 2nd Ed., Joseph M. Hornback, 2) Student Solutions Manual and Study Guide for Hornback’s text, and 3) the accompanying molecular model set. A 3-ring binder is also recommended for lecture notes, homework problems, quizzes, etc.

Important Webpages:
Urban Homepage: www.usna.edu/Users/chemistry/urban/
Chemistry Dept.: www.usna.edu/ChemDept

Learning Outcomes for the Chemistry Major:
- Explain natural phenomena and solve problems involving chemical processes using the principles of atomic/molecular structure and reactivity, thermodynamics and kinetics.
- Answer scientific questions by employing technical literature, conducting experiments, analyzing and critically interpreting the results obtained, and applying these techniques to the design of new experiments.
- Communicate effectively using oral, graphical and written expression with a variety of audiences.
- Practice and justify the professional and ethical standards of chemists.
- Operate as independent learners capable of self-directed intellectual growth.
- Describe the relevance of chemistry to the Navy and current/historical world events.

Learning Outcomes for Organic Chemistry II, II (SC225/226):
Students will be able to:
- analyze differences in chemical structure and reactivity in terms of appropriate bonding theories, steric, electronic, and resonance effects.
- evaluate common reactivity patterns of organic compounds in terms of movement of electrons, kinetics and thermodynamics.
- interpret and illustrate the structure and reactivity of organic molecules using the visual language of chemistry.
- design and evaluate syntheses of target organic compounds by combining appropriate sequences of organic transformations.
- describe the role of organic chemistry in the development of compounds with important applications in the Navy, in the life sciences and in society.

Attendance and Classroom Decorum: Attendance is mandatory and will be taken by the assigned section leader at the start of each class. You are expected to be present in the classroom when class begins and to remain in the room for the duration of the period. Midshipmen not present at the start of class will be marked “absent” or “tardy” on MIDS. Midshipmen who leave the room prior to the end of class will be entered as “left early” on MIDS. No eating in the classroom. No use of electronic devices during class. No sleeping in class. Attention on deck will be called by the section at the start and finish of class.

Reading Assignments: A Lesson Assignment Sheet will be provided with a day-to-day schedule of the material we will be covering. In order for the lectures to be effective, it is crucial that you read, or at least look over, the assigned reading material prior to class. We meet in class for 150 minutes each week, which is a small fraction of the time that it takes to master the material. The classroom activities are designed to introduce key concepts and skills. However, mastery of the material comes through reading the text and working many practice problems. It is important, therefore, that you learn to comprehend complicated material beyond that which is given explicit mention in the lecture. The text we have chosen is well suited for this.

Homework: The best way to learn the material in this course is to do the problems in the textbook. The book contains in-chapter problems that are embedded in the chapter as well as end-of-chapter problems. Do all of the in-chapter problems as you read the chapter. These are drill problems that help you understand the most
fundamental material. How many end-of-chapter problems should you do? That depends on you, but in general, the more the better. Do problems everyday. Do not get behind. Students in organic chemistry courses (here and elsewhere) generally find that doing the vast majority, if not all, of the text problems is the best approach. Keep all of your work on the problems in your binder (which you will bring to every class) as you will be asked to present problems at the board.

The solutions to all of the problems are in The Student Solutions Manual and Study Guide. Use this resource wisely. If you cannot do a problem, consult the solutions manual to learn the problem-solving strategy, but then do many additional problems on your own where you get to apply the strategy for yourself. Take responsibility for your own success.

**Quizzes:** Quizzes will be given at the start of every Wednesday class period. Any exceptions to this will be announced in advance (i.e., if there is no announcement, there is a quiz). The problems in the textbook are representative of what you should expect to see on the quizzes. In fact, at times, quiz questions will be taken directly from the textbook problems.

**Other Assignments:** There may be additional problems sets, presentations, take-home exams, etc. assigned throughout the semester.

**Team Activities:** In addition to traditional lectures, we will be covering course material via team activities in class as well as through out-of-class group assignments. These activities are designed to foster deeper understanding of the course material (which should translate to good performance on exams) as well as to develop teamwork. Midshipmen are expected to contribute in an equitable and professional manner to these group activities.

**Class Notes:** You are required to take notes in class. Taking notes, by hand, is the first step of the learning process in this course. Organic Chemistry has a rich and complicated language of words and symbols that are completely foreign to the new student. It is important that you develop written and oral fluency. This begins by writing and speaking the language of organic chemistry in the classroom. I recommend that you maintain a three-ring binder to contain all of your lecture notes, handouts, lab reports, quizzes, etc. Bring this binder to every class meeting and to my office for E.I.

**Extra Instruction (EI):** I highly encourage you to come to me for extra instruction. If you allow yourself to fall behind in this course, catching up can be impossible. If you have tried the homework problems and are having difficulty, come to my office and we will work the problems together. I will be in my office during regular working hours during the day and often nights and weekends. My door is always open and no appointment is necessary. However, for your convenience, I suggest you give me a call or an email to make sure I'm in my office before you stop by.

**Hour Exams:** Four exams will be given in class. Anticipated dates and coverage for each are provided on the lesson assignment sheet. Details are subject to change and may be adjusted throughout the semester. Absence from a scheduled exam for any reason other than illness or emergency leave must be cleared with me prior to the exam date. Exams missed due to legitimate absence must be made up at the earliest date possible.

**Honor Issues:** All work submitted for grading must be the product of the student(s) whose name(s) is(are) recorded on the material and who therefore is(are) claiming academic credit. It is legally and morally unacceptable to submit the work of another person as your own. The use of unauthorized assistance, as defined by your course instructor, on graded assignments will be considered a violation of the honor concept and will be treated as such.

**Grading Policy:**

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<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes/Assignments</td>
<td>25%</td>
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<tr>
<td>Hour Examinations</td>
<td>50%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>25%</td>
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Joseph J. Urban, Ph. D.