

**CEM 351 Organic Chemistry I**  
**Michigan State University, Fall 2016**

Class Meetings	MWF 1:50 - 2:40 pm (138 chemistry)
Instructor: Prof. Xuefei Huang	
Course Coordinator: Ms. Nancy Lavrik	Email: <a href="mailto:Lavrik@chemistry.msu.edu">Lavrik@chemistry.msu.edu</a> Please send emails to Prof. Huang regarding the course through Ms. Nancy Lavrik (Be sure to include CEM351 and your session number in the subject line)
Office: 425A chemistry	Office hours: M 10:00 – 11:00 am or by appointment

**Textbook: Organic Chemistry, Structure and Function. 7<sup>th</sup> Edition**

Drs. Peter Vollhardt and Neil Schore

**Supplements:** Study Guide and Solutions Manual, 7<sup>th</sup> edition

**Course web site:** <http://www2.chemistry.msu.edu/courses/cem351/>

Syllabus, any announcements, and other information are available at the website.

**Course Content:** Chemistry 351 is the first part of a two semester sequence covering the most common organic reactions involving certain types of organic compounds. Examples of biological and industrial processes involving organic chemistry will be discussed. It will be necessary for you to learn how to name organic compounds, to draw and understand their structures in 2- and 3-dimensions, and to learn how chemical structure and chemical reactivity (reactions) are interrelated.

**Recitations:** In signing up for this course, you have enrolled in a lecture and a recitation section. Recitation time will be devoted to working problems. Quizzes will be returned and reviewed during recitation, and grade records will be kept by the section instructor. You **must** write your **TA's name** and **section number** on every exam or quiz to be sure your grades are properly recorded.

For changes in recitation sections, course adds/drops visit the General Chemistry Office, Room 185 Chemistry.

**\*\*\* Recitations begin September 6<sup>th</sup>, 2016\*\*\***

**How Much Should You Study:** Organic chemistry in many ways resembles a new language and you cannot avoid quite a bit of memorizing (vocabulary). It is a very intensive course requiring much practice. A conservative estimate for study time is about 4 hours per each lecture, beginning from day one. It is important to keep up with the lectures, as they often refer to previously discussed material. It is very easy to fall behind and very difficult to catch up if you do. It is highly recommended that you read the corresponding material prior to the lecture!

**Academic Honesty:** University policies on integrity of scholarship and grades will be strictly enforced. It is the responsibility of the students to ensure that they are familiar with these policies. Any students found violating these university policies will receive a failing grade. There are **NO exceptions**. In addition, a letter describing the incident will be sent to the Chair of the Chemistry Department and to the Dean of the student's college.

**Code of Behavior:** You are encouraged to participate in class discussions. However, no one should disrupt the teaching and learning environment in this classroom.

**Emergency Response:** Please familiarize yourself with the location of the nearest evacuation route. If an emergency arises in this classroom, building or vicinity, I will inform you of actions to follow for your safety and for an orderly evacuation. Typically, classes will restart 20 minutes after an all-clear is given by the police.

**Special Assistance:** Any students requiring special assistance must identify themselves to the instructor at the beginning of the semester.

**Tentative Lecture and Examination Schedule:**

<b>Date</b>	<b>Topic</b>
August 31 <sup>st</sup>	Ch 1. Structure and Bonding in Organic Molecules
September 2 <sup>nd</sup>	
September 5 <sup>th</sup>	<b>Labor day, no class</b>
September 7 <sup>th</sup>	Ch 2. Structure and Reactivity
September 9 <sup>th</sup>	Quiz 1
September 12 <sup>th</sup>	
September 14 <sup>th</sup>	Ch 3. Reactions of Alkanes
September 16 <sup>th</sup>	Quiz 2
September 19 <sup>th</sup>	Ch 4. Cycloalkanes
September 21 <sup>st</sup>	
September 23 <sup>rd</sup>	Ch 5. Stereoisomers Quiz 3
September 26 <sup>th</sup>	
September 28 <sup>th</sup>	
September 30 <sup>th</sup>	Ch 6. Properties and Reactions of Haloalkanes, Quiz 4
October 3 <sup>rd</sup>	
October 5 <sup>th</sup>	Ch 7. Further Reactions of Haloalkanes
October 7 <sup>th</sup>	Quiz 5
October 10 <sup>th</sup>	
October 12 <sup>th</sup>	Ch 8. Hydroxy Functional Group: Alcohols
October 14 <sup>th</sup>	Quiz 6
October 17 <sup>th</sup>	
October 19 <sup>th</sup>	Ch 9. Further Reactions of Alcohols and the Chemistry of Ethers
October 21 <sup>st</sup>	Quiz 7
October 24 <sup>th</sup>	
October 26 <sup>th</sup>	Ch 10. Using Nuclear Magnetic Resonance Spectroscopy to Deduce Structure
October 28 <sup>th</sup>	Quiz 8
October 31 <sup>st</sup>	
November 2 <sup>nd</sup>	
November 4 <sup>th</sup>	Quiz 9
November 7 <sup>th</sup>	Ch 11. Alkenes: Infrared Spectroscopy and Mass Spectrometry
November 9 <sup>th</sup>	
November 11 <sup>th</sup>	Quiz 10
November 14 <sup>th</sup>	Ch 12. Reactions of Alkenes
November 16 <sup>th</sup>	
November 18 <sup>th</sup>	Quiz 11
November 21 <sup>st</sup>	
November 23 <sup>rd</sup>	Ch 13. Alkynes
November 25 <sup>th</sup>	<b>Thanksgiving weekend, no class</b>
November 28 <sup>th</sup>	
November 30 <sup>th</sup>	Quiz 12
December 2 <sup>nd</sup>	Ch 14. Delocalized Pi Systems
December 5 <sup>th</sup>	
December 7 <sup>th</sup>	Quiz 13
December 9 <sup>th</sup>	
(FINAL EXAM) Monday, December 12 <sup>th</sup> , 2016 12:45 – 2:45 PM Room 138	All inclusive

**Grades:** Your grade in this course will come from the sum of 12 highest quizzes and the final exam.

Twelve quizzes (	12 x 25 = 300 points
Final exam	1 x 200 = 200 points
<b>Total</b>	<b>500 points</b>
Bonus points	10 points

**Recitation Attendance Bonus Points:** (10 points) You can receive a bonus point for each FULL recitation attended. You will sign an attendance sheet at the end of each recitation. The maximum recitation attendance number of bonus points one can receive is 10.

Your course grade can be **ESTIMATED** from the following scale:

Total Points Earned	Grade
≥ 450	4.0
410 – 449	3.5
370 – 409	3.0
331 – 369	2.5
299 – 330	2.0
273 – 298	1.5
250 – 272	1.0
< 249	0.0

**There will be no makeups for quizzes and lecture exams.** If you have a legitimate reason to miss a quiz, we may prorate your quiz score.

**Final Exam:** The final (200 points) is comprehensive. A picture ID must be presented in order to take the final. University rules stipulate that a course grade of 0.0 is given to students who do not take the final exam. Final exams will be kept on file until the middle of the following semester and then destroyed. If you wish to check your final exam score see CEMSCORE (<https://ntweb11.ais.msu.edu/CemScores/>).

**Posting of quiz/exam scores:** After the quiz/exam has been graded and recorded, you can check the cemscores site for your grade: <http://cemscores.msu.edu>

To access cemscores throughout the semester, you can bookmark the link.

The cemscores link will be activated after the posting of Quiz 1 grades.

### **Policy on Returning Exams and Regrading:**

a) Quizzes will be returned **only** during a regularly scheduled recitation meeting.

b) Regrade requests directed at the instructor must be **written** on the **quiz** and signed by you and your TA at recitation.

**The entire test will be regraded by me.**

c) No exam which has left the recitation room in possession of the student will be considered for regrading.

d) If you miss your own recitation, you may make arrangements with your TA to pick up your test in another one of his/her regularly scheduled sections.

e) Students are not to enter research labs in search of TAs, since potentially dangerous chemicals and equipments are always present in the Chemistry Building.