

Chemistry 221: Organic Chemistry 1 Fall 2009

Section 010: HS 103, MWF 9-9:50 a.m.

Instructor: Dr. Miguel O. Mitchell (Miguel) **Office hrs:** MTuWF 10-12 noon, Tu 4-5 pm
Office: HS 334 **e-mail:** momitchell@salisbury.edu
Phone: 410-677-5064 **webpage:** faculty.salisbury.edu/~momitchell

Required Texts: Lecture:
Ch. 1-3 (online text)
Ch. 4-15: *Organic Chemistry* (2nd Edition) by Janice G. Smith.
Lab:
1) *Techniques in Organic Chemistry* by Mohrig *et al.*
2) SU Chemistry 221 Lab Manual.
In addition to the texts, various lecture handouts will be provided.

Purpose The study of carbon compounds, including their naming, classification, structure, preparation, and reactivity. This course is designed for majors in Chemistry, Biology, Pre-Med, Pre-Dent, and Medical Technology. It fulfills Group III General Education requirements.

Attendance Policy

Students are expected to attend all lectures and laboratory meetings (see **Lab** section in this syllabus).

Dishonesty

Dishonesty or cheating in this course will not be tolerated and could result in an F for the course.

Grading Policy

Exams (3)	20% (Exam 1), 15% (Exam 2), 15% (Exam 3): 50% total
Quizzes (4)	15% (Quiz 1: 3%, Quizzes 2-4: 4% each)
Lab	20%
Final	<u>15%</u>
	100%

Grade Scale

The grade scale is fixed, not curved. By careful problem selection, my exams are designed so that a fundamental grasp of the material (C) should result in a minimum grade of 70%. A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F < 60%.

Exam and Final Topics Review

Before each exam, a practice exam will be posted online, and there will be both an in-class and evening review of topics for each exam.

Exams

All exams are CLOSED BOOK, 55 minutes long, and will cover the designated chapters, and may include lab topics.

There are NO makeup exams. If you miss ONE exam, your final exam will be worth 35% if you miss Exam 1 and 30% if you miss Exam 2 or 3. In addition, your final will not be the same as other students and will cover more of the missed topics.

Any additional missed exam will simply receive a grade of 0, regardless of your reason for missing this additional exam.

NOTE: Using or checking cell phones during an exam, quiz, or the final will result in a grade of 0 for that exam, quiz, or final.

Homework Problems

Homework problems are end-of-chapter problems designed to help you understand and apply the course material. Homework problems are never collected; some may be worked on as in-class exercises. However, quizzes, exams, and the final are ALL based on homework problems.

Quizzes

All quizzes are CLOSED BOOK, will be 10 minutes in duration, and will be given at the start of the regular lecture period. Quiz 1 tests your knowledge of the following general chemistry concepts: knowing non-metal valences based on the periodic table, drawing Lewis structures, VSEPR, electronegativity trends in the periodic table, and hybridization. Quizzes 2-4 will be *analogous* to one or more homework problems from a previously covered chapter, e.g., if today's lecture topic is on Ch.2, the quiz will cover Ch. 1.

Quizzes are worth 15% of your grade, so prepare for them!

There are NO makeup quizzes. Missing a quiz will result in a grade of 0 for that quiz.

Lab

You are only allowed to makeup one missed lab with a valid excuse, and you may makeup this lab at the end of the semester. If possible, instead of missing a lab, try to attend another lab section during that week if there is space and the lab instructor agrees. You can only attend another lab section ONCE in a semester. Your 2nd missed lab will automatically receive a grade of 0. If you miss 3 or more labs, you will not only receive an "F" for the lab portion of the course, you will also receive an "F" for the course.

Final

The final is comprehensive, 2.5-hrs long, CLOSED BOOK, and covers Ch. 1-12.5, 13, 14, 15.1-15.6 and 15.9, laboratory topics (such as proton NMR spectrometry), and any additional lecture notes. **No makeup final!**

Lecture Syllabus

Week	Dates			Chapter Reading	Homework Problems
1	8/31	-	9/4	Ch. 1 (online)	Practice Problems 1-8 (online) Chapter Problems 1-12 (online)
	9/4				Quiz 1 (General Chemistry Review)
2	9/9	-	9/11	Ch. 2 (online)	Practice Problems 1-23 (online) Chapter Problems 1-22 (online)
	9/11				Quiz 2 (Ch. 1)
3	9/14			Ch. 2 (online)	
	9/16	-	9/18	Ch. 3 (online)	Practice Problems 1-13 (online) Chapter Problems 1-12 (online)
4	9/21			Ch. 3 (online)	
	9/23				Exam 1 Topics Review
	9/25				Exam 1 (Ch. 1-3)
5	9/28			Ch. 13 (text)	13.3-13.4; 13.21; 13.24; 13.30-13.32; 13.35-13.36
	9/30	-	10/2	Ch. 4	4.3; 4.6; 4.8-4.9; 4.12-4.13; 4.16-4.17; 4.19; 4.28; 4.30-4.31; 4.33; 4.35-4.36; 4.40; 4.42; 4.45-4.46; 4.49-4.50; 4.52; 4.54-4.55; 4.59; 4.64; 4.66; 4.70
6	10/5	-	10/9	Ch. 5	5.1; 5.6; 5.8; 5.11; 5.14-5.15; 5.18; 5.20; 5.25-5.30; 5.36; 5.39; 5.43-5.48; 5.53; 5.58-5.60; 5.62; 5.64; online enantiomer separation problems
	10/9				Quiz 3 (Ch. 4)
7	10/12	-	10/16	Ch. 15.1-15.6; 15.9	15.2; 15.6; 15.12; 15.19
8	10/19				Exam 2 Topics Review
	10/21				Exam 2 (Ch. 4-5, 13, 15.1-15.6, 15.9)
	10/23			Ch. 7	
9	10/26	-	10/30	Ch. 7	7.2-7.9; 7.12; 7.16; 7.18; 7.21-7.22; 7.24-7.26; 7.28-7.30; 7.32-7.33; 7.36- 7.39; 7.41-7.42; 7.47; 7.50; 7.52; 7.54- 7.55; 7.57-7.58; 7.60-7.61; 7.63-7.70; 7.73-7.79

Week	Dates			Chapter Reading	Homework Problems
10	11/2	-	11/6	Ch. 8, exclude Sec. 8.9, 8.11, and p. 302 text	8.2; 8.4-8.8; 8.11-8.16; 8.18-8.20; 8.22; 8.26; 8.28; 8.33; 8.36; 8.38; 8.44; 8.46; 8.52-8.56
	11/6				Quiz 4 (Ch. 7)
11	11/9	-	11/13	Ch. 9	9.2-9.3; 9.5c; 9.6b; 9.7-9.8; 9.10; 9.12; 9.12; 9.14; 9.22-9.23; 9.26; 9.30; 9.32-9.33; 9.35; 9.37; 9.48-9.49; 9.50; 9.52; 9.53; 9.56; 9.59; 9.62; 9.64-9.65; 9.67; 9.71; 9.73-9.74; 9.76
12	11/16				Exam 3 Review
	11/18				Exam 3 (Ch. 7-9)
	11/20			Ch. 10	10.7-10.10; 10.14; 10.17-10.19; 10.22-10.25; 10.29; 10.35; 10.44-10.45; 10.50; 10.53; 10.56-10.58; 10.61-10.63; 10.65-10.67
13	11/23			Ch. 10	
	11/25	-	11/29		Thanksgiving Break
14	11/30			Ch. 10	
	12/2	-	12/4	Ch. 11	11.3-11.6; 11.10; 11.12-11.13; 11.16-11.24; 11.38; 11.40; 11.46; 11.47b; 11.48; 11.52-11.53; 11.55
15	12/7	-	12/11	Ch. 12-12.5&14	12.1-12.4; 12.6; 12.10-12.12; 14.31-14.32; 14.48-14.49; 14.60
16	12/18				Final (HS 103, 8-10:30 am)