CHEM 333 Organic Chemistry I Fall 2015

(Honors Section H01)

Prof. Chuanbing Tang

Lecture: MW 2:20 p.m. – 3:35 p.m. PSC 002 (if you are late please come in from the back door.)
Recitation: F 2:20 p.m.- 3:10 p.m., PSC 104

I. Instructor

• **Dr. Chuanbing Tang**: An organic polymer scientist with research interests in the areas of organic polymer synthesis, polymers for biomedical applications, sustainable and green materials, nanoscience and nanotechnology.

• E-MAIL: tang4@mailbox.sc.edu **(this is the best way to get in touch with me!!**)
• OFFICE: Horizon Building Room-234 (Corner of Main St./Blossom St.)
• PHONE: 803-777-3628

• OFFICE HOURS: Wed 4:00 p.m.-5:00 p.m., or make an appointment via email

Teaching Assistant: Meghan Lamm

Office: Horizon Building Room-210; Office Hours: Mon 4:00 p.m.-5:00 p.m.

E-MAIL: mgradle@email.sc.edu

II. Course

• **Prerequisites:** Chem 112 or 142 (or equivalent)
• **Materials:** **Organic Chemistry** (10th edition) by Solomons and Fryhle
Organic Chemistry as a Second Language (optional)
Molecular Model Set (optional, but very helpful)
Sapling Learning Homework Site (www.saplinglearning.com)

Learning Outcomes: The aim of this course is to expose students to the field of organic chemistry. The development of analytical and problem-solving skills will also be emphasized. Upon completing of this course, the students will be able to:

- Name basic organic functional groups and simple organic molecules.
- Use arrow pushing to explain the mechanism of typical organic reactions.
- Understand the basic reaction conditions of the alkane, alkene, alkyne, alcohols, and other basic classes of organic compounds.
- Design simple synthetic schemes for organic compounds.

Instructional procedure

Information is presented both in the classroom and through the text. Classroom meetings will be in a lecture format such that the instructor will lecture on important material to be learned. However, no attempt will be made to cover all aspects of the text but instead difficult, important, or particularly interesting aspects of organic chemistry will be discussed.

While the class meetings are relatively structured lectures, there is enough time set aside for questions and answers. Students are encouraged to ask questions and to interrupt the lecturer for points of information, clarification, etc.

About the Course

- Organic chemistry 333 is **extremely demanding and intensive**. It is totally different from any courses you have ever taken in terms of format, contents and requirement. Students are advised to spend **at least 2 to 3 hours per lecture in addition to class time studying the material**. Your success in the course is **DIRECTLY PROPORTIONAL** to the **time** and **effort** that you invest in studying! If you think that you cannot spend enough time in studying for Chem 333, you should consider dropping the course to avoid a low grade. Very often students who got "A's" in other courses can only get a "C" or worse in Chem 333 if they could not put enough time and effort into the course, do systematic daily work after classes, and complete homework assignments.

- **Class attendance:** You should come to class. Some of the information in this course is not contained in the text. There might be unannounced quiz. Furthermore, university policy states that "Absence from more than 10% of the scheduled class sessions, whether excused or unexcused, is excessive and instructors may exact a grade penalty for these absences." University policy also states that "A student who misses more than 25% of class sessions will automatically receive an F in the course."

- **Exams:** There will be three exams during the course of this class. There will be a cumulative final. Exams will be based on the homework (not identical question but in similar format). If you can do the homework independently without looking the textbook and notes, then you should be fine with the exams.

- **Homework:** Homework will be assigned through Sapling Learning. Students must complete the problems on their own account on Sapling. You may work in groups on the problem sets. Try doing all the problems first without the study guide. ***Some questions on the quizzes will come directly from the homework; and many in the exams will come from the homework (or very similar questions).***

- **Quiz:** Quizzes will be given in class, in recitation or through the Sapling Site. The quizzes will typically include two-three questions. Typically one from the homework, the others very similar to the homework or to a problem from the lecture. There will be 5-7 quizzes. One quiz grade may be dropped.

- **Recitation:** Attendance is required at recitations. These recitations are for your benefit, and you should come prepared to work the assigned homework problems and answer questions. Specific topics may be reviewed to enhance the students understanding of the concepts. Please review and study the lecture material very thoroughly before attending recitation. The beginning will consist of answering questions about lecture material. Quizzes might be given to assess progress. Each student will be required to **participate in the problem solving and discussion**.

- **Blackboard:** Many handouts from this class will be posted on Blackboard.
- **Other Policies:** Disruptive behavior such as talking in class, sleeping, arriving late or leaving early from lecture will not be tolerated. Switch off your cell phone before you enter the classroom. Unauthorized use of written or oral information during exams and quizzes constitutes cheating. Such conduct may result in a failing course grade, suspension, or dismissal from the University.

Grading

Exam 1	100 pts	
Exam 2	100 pts	
Exam 3	100 pts	
Quizzes	100 pts	
Final	200 pts	
	600 pts	
	-100 pts	(drop lowest 100 pts, can be quizzes, Exam 2 or 3 or ½ Final **but not Exam 1**!!)
Total	500 pts	

- After each exam, you should hang in your answer sheet to your TA and sign your name on a running sheet. Without your signature, we will consider that you have missed the exam.

- There will be no make-up exams. If you miss a test, then that will be the test score that will be dropped. (**You cannot drop the first exam!**)

- Exam re-grading must be brought to the instructor or the attention of the TA **within 24h** receiving the graded exam. Beyond 24 hours, re-grading request will be ignored. For re-grading, your test will be re-graded completely. (**Note: Do not write on the exam itself. That can lead to confusion. Just note your objections on a separate piece of paper.**)

- The final course grades will not be posted. I (or TA) will be available to answer any questions regarding final course grades on Friday, Dec 11th between 10:30 a.m. and 12:00 p.m. **only**.

- There may be no traditional curve. The ranges for the different grade categories may be broadened at the end of the course.

89.6% - 100%	A
83% - 89.5%	B+
75% - 82.9%	B
68.6% - 74.9%	C+
59% - 68.5%	C
53.6% - 58.9%	D
< 53.5%	F

Outline of material to be covered (tentative)

Chapter 1 (Aug 24, 26, 31)
Chapter 2 (Sep 2)
Chapter 3 (Sep 9, 14)
Chapter 4 (Sep 16)
Exam 1 (Sep 21)

Chapter 4 (Sep 23)
Chapter 5 (Sep 28, 30, Oct 5)
Chapter 6 (Oct 12)
Exam 2 (Oct 14)

Chapter 7 (Oct 19, 21)
Chapter 8 (Oct 26, 28, Nov 2)
Chapter 10 (Nov 4, 9)
Chapter 11 (Nov 11, 16)
Exam 3 (Nov 18)

Chapter 12 (Dec 23, 30)
Overview (Dec 2)

Final (cumulative) (Dec 9 9:00am)

Chapters 1-12 (not 9)
Plus recitation topics

Aug		**Sep**	
			2
		--	9
24	26	14	16
31		**21**	23
		28	30
Oct		**Nov**	
5	7		
12	**14**	2	4
19	21	9	11
26	28	16	**18**
		23	--
		30	
Dec			
	2		
	9		

11 (Answer questions on grades 9:00am-11:30am)

Tentative exam dates are in bold fond in boxes.