Chemistry 3411 Organic Chemistry II Fall 2015

Class: MWF 8:00 - 8:50 Laney-Manion Hall 102 Lab (18056): M 2:00 - 4:50 Laney-Manion Hall 306 Lab: (18923) T 8:00 - 10:40 Laney-Manion Hall 306 Lab: (10594) T 10:50 - 1:30 Laney-Manion Hall 306

Instructor: Dr. Richard M. Tarkka
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Office hours: Mondays 3 – 4 PM; Tuesdays 3 – 4 PM; Wednesdays 11 – 12 PM

Thursdays 9 – 10 PM; Fridays 9 – 10 PM

You can email me questions - please put "Chem 3411" in the subject line

Required Course Materials:

- 1. Organic Chemistry, 4th Ed., by Janice G. Smith, McGraw-Hill, 2014
- 2. UCA lab materials (Free: posted on Blackboard)
- 3. Laboratory notebook
- 4. Safety Glasses

Optional Course Materials: Model Kit; Lab Coat or Apron; Solution Manual

Course Description Objectives

This is a continuation of Chemistry 2401. You must have a grade of C or better in Chem 2401 to be enrolled in this class. Furthermore, you *must* have a good understanding of the material taught in that class to be successful. This class is intended for students majoring in science and/or obtaining courses required for pre-medicine, pre-dentistry, pre-pharmacy, and other related health fields. Topics we will explore include, but are not limited to: NMR spectroscopy; conjugated and aromatic molecules; alcohols, phenols and epoxides; carbonyl compounds; amines; carbohydrates, nucleic acids, lipids, proteins and amino acids.

Objectives

At the end of this semester, you should have a good working knowledge of the material covered in the Smith textbook as it pertains to the general field of organic chemistry. Students will a passing grade in this course should be able to do well on graduate school entrance exams for organic chemistry, etc. the organic chemistry portions of MCAT, DAT, PCAT, I also want my students prepared to take senior level biochemistry.

Attendance and Make-Up Work: Students are expected to attend <u>all</u> lectures and labs. A student missing multiple classes without contacting me to give me a valid reason may be dropped with a "WF" grade. Makeup exams are not given unless you are participating in a conflicting UCA-sanctioned event. If you miss an exam, and contact me promptly with a valid explanation, your other exams will be count more to make up for the loss of points. If you do not contact me promptly or lack a valid reason for missing an exam, a grade of 0 will be assigned. There is a detailed explanation of this protocol posted on blackboard; please read it thoroughly before asking for an explanation.

Writing an Exam Early, Including the Final Exam: Not allowed.

Electronic Devices: Students may not use any electronic devices during tests or quizzes for any reason. Doing so will be considered to be cheating.

Cell Phone Policy: Students should turn their cell phones to silent (turn off the vibrate mode) at the start of class and leave them off throughout the entire class. You may access your messages at the break time if there is one.

Schedule: Although we will work through the material at our own pace, past experience shows that we will be pretty close to the schedule set out in this syllabus. You are responsible to keep up with the material. It is strongly recommended that you read approximately the next day's material before each lecture. We will go through chapters 12-25, and 31, of the text book.

Homework: Homework will be assigned, but it will not be collected or graded. It is <u>very</u> strongly recommended that you do, at a minimum, <u>all</u> of the assigned homework in a timely manner (don't cram! It has to worked on regularly). It is the only way you can check your understanding of the material. Many of the exam and quiz questions come from the homework.

Grading

4 tests 100 points each 1 final exam 200 points

5 Quizzes 100 points (25 points/quiz, lowest score dropped)

<u>Labs</u> 250 points

TOTAL: you will graded on a total of 950 available points

"Extra Credit" is not available

Note: Questions relating to your laboratory exercises will be asked on your exams.

Tentative Grading Scale

A: 90.0 % - 100% B: 80.0% - 89.9 % C: 70.0% - 79.9 % D: 60.0% - 69.9 %

F: > 60.0 %

Important Dates:

August 26: Last date to register, add classes, change from credit to audit, audit to credit, or drop the course for 100% refund.

September 7: Final date to drop the course for 75% refund. 0% refund after this date.

October 30: W deadline

November 30: WP/WF deadline

December 12: Commencement

Schedule CHEM 3411 Fall 2015

LAB FOR THE WEEK	MONDAY	WEDNESDAY	FRIDAY
			August 21
			1 st day of class; Ch.14
	August 24	August 26	August 28
Check In and Policy Review	Ch.14	Ch.14	Ch.12/14
IVEAIGM	August 31	September 2	September 4
¹ H NMR			
	Ch. 12	Ch.12	Ch.15; Quiz 1
No Labs this Week	September 7	September 9	September 11
	Labor Day – No Class	Ch.15	Ch.15
Reduction of Benzoin	September 14	September 16	September 18
	Ch.15	Test 1	Ch.16
Diels-Alder Reaction Part 1	September 21	September 23	September 25
	Ch.16	Ch.17	Ch.17
Diels-Alder Reaction Part 2	September 28	September 30	October 2
	Ch.17	Ch.17	Quiz 2 ; Ch.18
lodination of Salicylamide	October 5	October 7	October 9
	Ch.18	Ch.18	Ch.18
Mass Spectrometry	October 12	October 14	October 16
	Test 2	Ch.19	Ch.19
Pechmann Condensation	October 19	October 21	October 23
	Quiz 3 ; Ch.20	Ch.20	Fall Break – no class
Heck Reaction	October 26	October 28	October 30
	Ch. 20 November 2	Ch. 20 November 4	Ch.21 November 6
Wittig Reaction	November 2	November 4	November 6
Transfer Teachers	Ch.21	Ch.21	Test 3
Polymers, Part 1	November 9	November 11	November 13
	Ch.22	Ch.22	Ch.22
Reductive Amination	November 16	November 18	November 20
	Quiz 4 ; Ch. 22	Ch. 25	Ch. 25
Polymers, Part 2	November 23	November 25	November 27
	Test 4	Thanksgiving Week – no class	Thanksgiving Week – no class
Polymers, Part 3	November 30	December 2	December 4
	Ch.31	Quiz 5 ; Ch.31	Dead Day

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Academic Integrity

The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the *Student Handbook*. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.

Americans with Disabilities Act

The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Support Services, 450-3613.

Building Emergency Plan

An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at http://uca.edu/mysafety/bep/. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.

Title IX Disclosure

If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to "student-on-student" or "employee-on-student"), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: https://uca.edu/titleix. *Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct occurs when the third party is a participant in a university-sponsored program, event, or activity.

Students should familiarize themselves with all policies included in the *Student Handbook*, particularly the following: Sexual Harassment Policy; Academic Policies.