

## 2401 Organic Chemistry I Spring 2019

Class:	T Th	9:25 – 10:40	Laney Hall 102
Lab (CRN 28256)	Monday	11:00 – 1:50	Laney Hall 306
Lab (CRN 20239):	Monday	2:00 – 4:50	Laney Hall 306
Lab (CRN 20238):	Tuesday	2:40 – 5:20	Laney Hall 306

Instructor: Dr. Richard M. Tarkka  
Office: 203 Laney Hall  
Telephone: 852-5137  
email: rtarkka@uca.edu

Office hours: Monday: 9:45 – 10:45 Tuesday: 11:00 – 12:00  
Thursday: 8:15 – 9:15 Friday: 12:30 – 1:30

You can email me questions - please put "chem 2401" in the subject line. This is a better way of getting in touch with me than sending a message through blackboard.

Peer tutoring: Laney Manion room 103.

### Required Course Materials:

1. Organic Chemistry, 5th Ed., by Janice G. Smith, McGraw-Hill, 2017
2. UCA lab materials (Free for download from Blackboard)
3. Laboratory notebook
4. Safety Glasses with Side Shields or Goggles. Our department policy is that we will not provide students with safety glasses should they be broken, lost, stolen, or forgotten.
5. Model Kit

Optional Course Materials: Lab Coat or Apron; Solution Manual

Course Description: Intended for students majoring in science and/or obtaining courses required for pre-medicine, pre-dentistry, pre-pharmacy, and other related health fields, this course serves as an introduction to organic chemistry. Topics we will explore include, but are not limited to: structure, nomenclature, and properties of organic molecules; alkanes; alkenes; alcohols; alkyl halides; various types of reactions; how to write out and deduce simple reaction mechanisms; how to develop a multi-step organic synthesis. Prior successful completion of Chemistry 1451 (or an approved equivalent course) is a prerequisite.

My objectives for you: (1) acquire good fundamental skills in elementary organic chemistry as described in the first 11 chapters of the Smith text book so that you can be successful in Organic Chemistry II (Chem 3411); (2) develop good record keeping skills in the organic chemistry lab; (3) make connections between the structures you draw on paper and the solids and liquids you use in the lab; (4) acquire some basic organic chemistry lab skills.

**Attendance and Make Up Work:** Students are expected to attend all lectures and labs. A student missing multiple classes without contacting me to give me a valid reason may be dropped for non-attendance. Students missing four lab meeting, for any reason (exceptions are limited to military service, jury duty, or a conflicting UCA sanctioned event) will be dropped. Makeup exams are not given unless you are participating in a conflicting UCA-sanctioned event, jury duty, or military service. If you miss an exam, and contact me promptly with a valid explanation, your overall grade will be based on your performance vs. class average in the other exams. A detailed explanation of the missed test policy is given on blackboard. Please do not email me without looking this up first. If you do not contact me promptly, or lack a valid reason for missing an exam, a grade of 0 will be assigned. If you miss a quiz, that will count as your dropped quiz.

**Writing an Exam Early, Including the Final Exam:** Not allowed. Do not book your vacation to occur during the final exam period.

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

**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 quite 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 the first 11 chapters of the text book.

### **Homework**

Suggested problems will be assigned after class period. They will not be collected or graded. It is very strongly recommended that you do all of the assigned homework in a timely manner. 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**

<u>3 full period tests</u>	100 points each
<u>1 final exam</u>	200 points
<u>Labs</u>	200 points
<u>5 Quizzes</u>	100 points (25 points/quiz, lowest one dropped)
TOTAL: you will be graded on a total of 800 available points	

### **Tentative Grade Cut Levels**

A: 720+                      B: 640+                      C: 560+                      D: 480+

"Extra Credit" is not available.

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

*Chem 2401 syllabus, Tarkka, Spring 2019*  
**AVID:** UCA is dedicated to Academic Vitality, Integrity, and Diversity.

Grades Distribution from the previous five Chem 2401 fall semester classes (367 students):

GRADE	Spring 2015	Fall 2018	Fall 2017	Summer 2018	Fall 2016	Spring 2016	Total 2014 - 2018
A	14	17	14	5	11	3	64 (22.8 %)
B	15	13	18	4	13	9	72 (25.6 %)
C	19	15	8	4	12	9	67 (23.8 %)
D	17	7	7	1	4	4	40 (14.2 %)
F	4	3	3	0	6	4	20 (7.1 %)
W	0	3	5	1	7	2	18 (6.4%)
TOTAL	69	58	64	64	51	31	281 (100%)

A/B: 48.4%

C: 23.9%

DFW: 27.8%

*Chem 2401 syllabus, Tarkka, Spring 2019*  
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**SCHEDULE CHEM 2401 SPRING 2019**

TUESDAY		LAB EXERCISE	THURSDAY	
<i>In addition to downloading the modules, you should also download the table of due dates, checklist/rubric, and lab policies sheet.</i>			Jan 10	Ch. 1
Jan 15	Ch. 1	Check In/Review* (no prelab, notebook not required)	Jan 17	Ch. 1
Jan 22	Ch. 2	No Lab (MLK Week)	Jan 24	<b>Quiz 1</b> Ch. 2
Jan 29	Ch. 3	Natural Dyes You MUST do the prelab exercises BEFORE you arrive to lab, and you MUST have safety glasses!!	Jan 31	Ch. 4
Feb 5	Ch. 4	IR Spectroscopy* (no prelab, notebook not required)	Feb 7	Ch. 4
Feb 12	Ch. 4	Thin Layer Chromatography	Feb. 14. <b>Exam 1</b> (Ch. 1-4)	
Feb 19	Ch. 5	<sup>13</sup> C NMR Spectroscopy* (no prelab, notebook not required)	Feb 21	Ch. 5
Feb 26	<b>Quiz 2</b> Ch. 6	CHAPTER 5 Stereochemistry* (no prelab, notebook not required)	Feb 28	Ch. 6
Mar 5	Ch. 7	Green Chemistry*	Mar 7	Ch. 7 <b>Quiz 3</b>
Mar 12	Ch. 7	S <sub>N</sub> 1 and S <sub>N</sub> 2 REACTIONS (Blackboard PDF)	Mar 14	<b>Exam 2</b>
Mar 19	<b>Spring Break</b>	No Lab This Week	<b>Spring Break</b>	
Mar 26	Ch. 8	Epoxidation of Carvone	Mar 28	Ch. 8
Apr 2	Ch 9	Dehydration of 3,3-dimethylbutan-2-ol	Apr 4	Ch. 9
Apr 9	Ch. 9 <b>Quiz 4</b>	Melting Points	Apr 11	Ch. 10
Apr 16	Ch. 10	TBD	Apr 18	<b>Exam 3</b>
Apr 23	Ch. 11	Snow Day Makeup	Apr 25	Ch. 11 <b>QUIZ 5</b>

\*DRY LAB The dry labs, including check-in, are worth 10 points each (no quiz, prelab write-up or lab writeup). The others are worth 25 points each. See table with due dates and point value

**IMPORTANT DATES FOR CHEMISTRY 2401 SPRING 2019**

January 10: First day of class

January 16: Final Day to register, add in to this class, or drop this class for 100% refund

January 21: MLK Day

January 24: Quiz 1

January 31: Last day to get a refund if you withdraw (75%). 0 % back after this day.

February 14: Exam 1

February 26: Quiz 2

March 7: Quiz 3

March 14: Exam 2

March 17 – 24: Spring Break

March 29: Final Day to Withdraw with a W. After this date, only grades of A, B, C, D, and  
F will be received.

April 9: Quiz 4

April 18: Exam 3

April 25: Quiz 5

April 26: Study Day

April 30: Final Exam 8:00 AM

### The Fine Print – Mandated by UCA

**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 Disability Resource Center, 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 the 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 are directed to familiarize themselves with all policies included in the Student Handbook, particularly the Sexual Harassment Policy and Academic Policies

**Evaluations:** Student evaluations of a course and its professor are a crucial element in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge. Students may evaluate courses they are taking starting on the Monday of the thirteenth week of instruction through the end of finals week by logging in to myUCA and clicking on the Course Evaluations task.