

## **2401 Organic Chemistry I Fall 2014**

|                  |           |              |                |
|------------------|-----------|--------------|----------------|
| Class:           | T Th      | 9:25 – 10:40 | Laney Hall 102 |
| Lab (CRN 10543)  | Monday    | 11:00 – 1:50 | Laney Hall 306 |
| Lab (CRN 10542): | Monday    | 2:00 – 4:50  | Laney Hall 306 |
| Lab (CRN 10540): | Wednesday | 11:00 – 1:50 | Laney Hall 306 |

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

Office hours: Tuesday: 8:15 – 9:15  
Wednesday: 2:30 – 3:30  
Thursday: 11:00 – 12:00  
Friday 9:30 – 11:00

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.

### Required Course Materials:

1. Organic Chemistry, 4th Ed., by Janice G. Smith, McGraw-Hill, 2014
2. UCA lab materials (Free for download from Blackboard)
3. Laboratory notebook
4. Clicker from elnstruction
5. 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.
6. 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 with a "WF" grade. Makeup exams are not given unless you are participating in a conflicting UCA-sanctioned event 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. 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 Christmas vacation to occur during the final exam period.

**Academic Integrity:** The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university 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 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.

**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 the first 11 chapters of the text book.

### **Homework**

Homework will be assigned, but it 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**

3 full period tests                      100 points each

*Chem 2401 syllabus, Tarkka, Fall 2014*  
**AVID: UCA is dedicated to Academic Vitality, Integrity, and Diversity.**

|                     |   |
|---------------------|---|
| <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

**Bonus points:** If you have fewer than 12 "late points" (0-11) for being late AND you have handed in all exercises on time (including lab exercises), you will be awarded 15 bonus points. If you have 12 or more late points, you will not receive the bonus points.

**Late Points:** Attendance will be taken with the eInstruction clickers, and I will do this about 5 minutes after I start class. Arriving after I take attendance will result in you receiving a late point. Showing up more than 30 min late will result in you getting 2. Missing an entire class will result in 3 late points. Note: this policy applies to all class meetings, including tests, quizzes, and lab sessions.

**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.

Grades Distribution from the previous four Chem 2401 fall semester classes:

| GRADE | Fall 2013 | Fall 2012 | Fall 2011 | Fall 2010 | Total 2010 - 2013 |
|-------|-----------|-----------|-----------|-----------|-------------------|
| A     | 13        | 12        | 12        | 11        | 48 (20.4%)        |
| B     | 16        | 17        | 9         | 12        | 54 (23.0%)        |
| C     | 18        | 16        | 12        | 9         | 55 (23.4%)        |
| D     | 3         | 5         | 6         | 9         | 23 (9.8%)         |
| F     | 5         | 2         | 1         | 7         | 15 (6.4 %)        |
| W     | 9         | 12        | 10        | 9         | 40 (17.0%)        |
| TOTAL | 64        | 64        | 50        | 57        | 235 (100%)        |

## eINSTRUCTION CLICKER QUICK START INFORMATION

We will begin using the clickers on the second day of class. You should get yours on Monday and enroll in my class at [einstruction.com](http://einstruction.com).

You will need:

- (1) the class key, H76440C455
- (2) an enrollment code, available either at the bookstore or online when you register your clicker
- (3) your clicker serial number, which you get when you turn it on

### How to sign up

- go the website ([einstruction.com](http://einstruction.com))
- click "Higher Ed Log in" on found on the right hand side of the black menu bar
- click CPS online – ignore the warning that appears when you hover over the box
- DO NOT CLICK WAVE!!!
- click higher ed students
- select University of Central Arkansas from the pulldown menu
- click "Create New Account" if you have not used a clicker before, then proceed

Your pad **MUST** be an eInstruction Rf pad, not an IR pad or a pad from another company.

# Class Key: H76440C455

**Chem 2401 syllabus, Tarkka, Fall 2014**  
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|   |                              |  |                             |                         |
|---|------------------------------|--|-----------------------------|-------------------------|
| <i>In addition to downloading the modules, you should also download the table of due dates, checklist/rubric, and lab policies sheet.</i> |                              |  | August 21                   | Ch. 1                   |
| August 26   | Ch. 1                        | Check In/Review*<br>(no prelab, notebook not required)   | August 28                   | Ch. 1                   |
| September 2   | Ch. 2                        | No Lab (Labor Day)   | September 4                 | <b>Quiz 1</b><br>Ch. 3  |
| September 9   | Ch. 3/4                      | Natural Dyes<br>You <b>MUST</b> do the prelab exercises <b>BEFORE</b> you arrive to lab, and you <b>MUST</b> have safety glasses!! | September 11                | Ch. 4                   |
| September 16  | Ch. 4                        | <sup>13</sup> C NMR Spectroscopy*<br>(no prelab, notebook not required)  | September 18                | Ch. 4                   |
| September 23  | <b>EXAM 1</b><br>(Ch. 1-4)   | Thin Layer Chromatography  | September 25                | Ch. 5                   |
| September 30  | Ch. 6                        | CHAPTER 5<br>Stereochemistry*<br>(no prelab, notebook not required)  | October 2                   | <b>Quiz 2</b><br>Ch. 6  |
| October 7   | Ch. 7                        | IR Spectroscopy*<br>(no prelab, notebook not required)   | October 9                   | Ch. 7                   |
| October 14  | <b>Exam 2</b><br>(Ch. 5 – 7) | NO LAB (FALL BREAK)  | October 16                  | <i>Fall Break</i>       |
| October 21  | Ch. 8                        | S <sub>N</sub> 1 and S <sub>N</sub> 2 REACTIONS<br>(Blackboard PDF)  | October 23                  | Ch. 8                   |
| October 28  | Ch. 8                        | Green Chemistry*   | <b>Quiz 3</b><br>October 30 | Ch. 9                   |
| November 4  | Ch. 9                        | Dehydration of 2-methyl-2-butanol  | November 6                  | Ch. 9                   |
| November 11   | <b>Quiz 4</b><br>Ch 10       | Epoxidation of Carvone   | November 13                 | Ch. 10                  |
| November 18   | Ch. 10                       | Bromination of Alkenes   | November 20                 | <b>Exam 3</b>           |
| November 26   | Ch. 11                       | No Lab (Thanksgiving)  | November 28                 | <i>Thanksgiving</i>     |
| December 2  | Ch. 11                       | No Lab   | December 4                  | Ch. 11<br><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 values.

**IMPORTANT DATES FOR CHEMISTRY 2401 FALL 2014**

August 21: First day of class  
August 27: Final Day to register or add in to this class  
September 1: Labor Day  
September 4: Quiz 1  
September 23: Exam 1  
October 2: Quiz 2  
October 14: Exam 2  
October 16 – 17: Fall Break  
October 30: Quiz 3  
October 31: Final Day to Withdraw with a W  
November 11: Quiz 4  
November 20: Exam 3  
November 27 – 29: Thanksgiving Break  
December 1: WP/WF Deadline  
December 4: Quiz 5  
December 5: Study Day  
December 11: Final Exam 8:00 AM

### **Academic Integrity**

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### **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.