

## Walters State Community College Course Syllabus

### **Course Information**

Course Number and Name: CHEM 2010 Organic Chemistry I

Section ID: 80875.202380 Semester and Year: Fall 2023

**Credit Hours: 3** 

**Start Date:** August 21, 2023 **End Date:** December 08, 2023

Course Format: CON - Conventional Methodology

Catalog Course Description: Chemistry 2010 is an introductory sequence course in organic chemistry that considers the occurrences, structure, properties, and uses of the more important classes of organic compounds. Concepts such as mechanisms of reactions and the relationships between structure and properties are developed. Topics covered are: carbon compounds and chemical bonds, representative carbon compounds, alkanes and cycloalkanes: conformational analysis, stereochemistry: chiral molecules, ionic reactions: nucleophilic substitution and elimination reactions of alkyl halides, alkenes and alkynes, alcohols and ethers, and free radical reactions.

Prerequisite: CHEM 1120. Pre/Co-requisite: CHEM 2011. F Meeting Details: TR; 09:35AM - 11:00AM; NSCI 141

Course Drop Deadline: October 27, 2023

### **Instructor Information**

Name: Matthew Smith
Office Location: NSCI 125

Office Hours: Office hours are posted in eLearn

Office Phone: 423-585-6881 Email: Matthew.Smith@ws.edu

Supervisor Name: Dr. Amy Ross, Interim Vice President of Academic Affairs

Supervisor Phone: 423-585-6933 Secretary Name: Sherry Woody Secretary Phone: 423-585-6865

## Required Textbook(s) and Materials

No materials required

## Supplemental or Optional Materials

Students may use any college level Organic Chemistry textbook. My lecture notes are prepared using Organic Chemistry by Smith, 5<sup>th</sup> edition, McGraw-Hill Publishing

Many of the materials for this course are electronic Open Education Resources (OER). An electronic device (computer, laptop, tablet) to access these materials outside of class will be useful.

Other resources are listed in the Course Materials document in eLearn.

# **Student Learning Outcomes/Objectives**

- Upon completion of this course students will be able to demonstrate mastery by applying and relating the following course objectives to the course topics below:
  - Bonding and Properties describe the molecular orbitals used in making different types of bonds; rationalize the observed characteristics of different bond types; rationalize the effects that different bonds and functional groups will have on physical properties; etc.
  - 2. Nomenclature/Structure/Conformations of Organic Molecules apply the IUPAC rules to generate the correct name or structure; describe the stereochemical relationship between different structures, recognize and identify different functional groups within a molecule; relate the stability of a molecule to its conformation; etc.
  - 3. **Principles Governing Reactivity** explain the principles of acidity and basicity and analyze their effect on a reaction; rationalize the principles of nucleophilicity; analyze the implications on reaction rate for substitution and elimination reactions; rationalize enthalpy, activation energy; etc.
  - 4. **Reactions** correctly identify the major product obtained or reagents necessary to carry out specific reactions; reason the stereochemical outcomes of a reaction; perform multi-step syntheses; etc.

#### **Course Topics:**

- 1. Covalent Bonding and Shapes of Molecules
- 2. Acids and Bases

- 3. Alkanes and Cycloalkanes
- 4. Stereochemistry and Chirality
- 5. Nucleophilic Substitution
- 6. Alkenes I: structure, properties, nomenclature, and β-eliminations
- 7. Alkenes II: addition reactions
- 8. Alkynes
- 9. Haloalkanes, Halogenation, and Radical Reactions
- 10. Alcohols
- 11. Ethers, Epoxides, and Sulfides

Specific student learning objectives by topic can be found in eLearn.

#### **COURSE COMPETENCIES:**

- 1. Prepare students for advanced studies in chemistry or work in related disciplines.
- 2. Develop an understanding of the benefits derived from the use of organic chemistry.
- 3. Develop critical thinking and skills that allow students to assimilate large amounts of information required for success in graduate school courses.

# Instructional Approach and Methods

- 1. Lectures
- 2. Class participation and discussion
- Advanced preparation outside the classroom

# Assessment, Evaluation and Testing Procedures

1. Exams 60%

2. Assignments/Quizzes/etc.15%

3. Comprehensive Final 25%

A description of how the professor will divide the exams and other assignments will be provided to all students on the first day of class.

### **Testing Procedures:**

Chemistry exams will emphasize factual knowledge and assess the achievement of the Learning Outcomes. Short answer, essay questions, diagrams and multiple choice, and verbal response questions may be used. Exams focus on what happens in class as supplemented and amplified by the readings.

Assignments and exams may be given in class or online via d2L/eLearn. For those administered online through d2L/eLearn, students may be required to use a virtual proctoring program like Respondus Lockdown Browser with Monitor. Students will be provided specific testing procedure and assignment completion information directly from the instructor.

## **Grading Scale**

A	90 - 100%
	80 - 89%
	70 - 79%
	60 - 69%
F	below 60%

The percentile distribution is a guarantee for letter grade assignments. A student will not receive a letter grade lower than what this ranking indicates for his/her earned lecture average. However, the professor reserves the right to favorably adjust letter grade assignments to fit natural breaks and distributions. If one desires a specific letter grade in this course, he/she should rely on the percentile rank and not a grade adjustment.

## Assignments

As listed in eLearn.

## **Class Participation**

For each unit you will be provided with a set of electronic notes. These notes contain pertinent concepts, examples, terms, definitions, etc. as well as interactive practice problems, tutorial videos, and interactive websites. You will be responsible for reviewing this material prior to class so that you are able to come to class with a **basic** knowledge of the material. During lecture we will work practice and critical thinking problems in order to reinforce the material you studied and must know. Material will be made available through eLearn.

### Course and Class Policies/Procedures

#### **Extra Credit:**

Each professor has the option to offer the opportunity to earn **40** additional points through the semester. Examples include, but are not limited to, bonus questions on exams, in class quizzes, attending a scientific event, etc. The instructor's policy will be explained in detail on the first day of class. In no instance will credit be provided for any activity not related to the scope of the course. The aim of the class is to get a solid understanding of chemistry so that grades reflect our abilities to communicate the material and not a supplementary assignment or task. All students, especially those that feel they are struggling with the material, are strongly encouraged to use office hours, send emails, make appointments for extra help, etc. throughout the semester.

#### **Missed Exam Policy:**

Students who are absent on the day of an exam must provide a documentable excuse before a makeup exam will be given. The missed exam must be made up <u>before the next scheduled lecture exam</u>.

# Additional Course Requirements/Details/Information

This course is offered in a **CONVENTIONAL** format this semester. Students should expect to attend each scheduled meeting in-person. It is anticipated that exams will be given in-person during a scheduled class meeting.

Students who are impacted by COVID or other illness should contact the instructor to discuss arrangements for completing the required assignments and obtaining the lecture material.

#### The Student Can Expect from the teacher:

- 1. Email response within 24 hours during the normal work week. Holidays and vacations excluded.
- 2. Email during the weekend will be answered on Monday.
- 3. Exams to be graded and returned in a timely manner.
- 4. Enthusiasm for the subject and encouragement to help you when you need it.
- 5. A fair grading system, with feedback.
- 6. Learning that ties concepts into the real world around us.

7. Respect for you as a learner.

STAY AWAKE IN CLASS. Your mere presence in class is not sufficient—you must be able to actively process the information presented! Sleeping in class is disruptive in two ways: the student who is snoozing is not interested and not participating in the classroom discussion; secondly, sleeping in class is considered to be disrespectful to the teacher and other students. The penalty for sleeping in class may range from the student being requested to leave the class with a following conference with the instructor, to notification of the Vice-President of Academic Affairs (in the cases of habitual sleepers). If you have a medical condition that prevents you from staying awake in class, please discuss this with the instructor.

<u>CLASSROOM COURTESY</u>. Being in a college environment it is **expected** that classroom courtesy will be given to your instructor and classmates in limiting unnecessary talking and communication during class lecture or student presentation. An Academic Misconduct Form will be filed for those who have difficulty following this policy and disrupt class.

#### Your Right to Know:

Tennessee Law requires that you are provided notice that some of the laboratory exercises involve contact with chemicals which have been identified with potential health hazards. These chemicals include, but are not limited to: acetone, chloroform, formalin, acids and bases. While every effort has been made to make the materials as safe as possible these chemicals are toxic and you must be responsible for their safe handling. If **you** feel you may be at a higher risk than normal, if pregnant for example, we recommend you consult your physician.

### **Academic Honesty**

Faculty expect all students to refrain from acts of academic misconduct including but not limited to:

- 1. Plagiarism refers to using another person's ideas or writing without giving proper credit to the original source. Indulging in this type of conduct will subject the student to disciplinary sanctions, which may be imposed through the regular institutional procedures of Walters State Community College as outlined in the Student Handbook. Plagiarism will result in a grade of "0" for the paper/exam/presentation. Student Conduct and Disciplinary Sanctions contained in the college Catalog/Student Handbook apply (see policy 04:18:02 Disciplinary Sanctions). Plagiarism includes, but is not limited to the following:
  - a. Using cut/paste tool from original document with no references given.
  - b. Copying another student's work and submitting it as one's own.

- c. Forging or otherwise altering signatures.
- d. Giving or falsifying academic documents or materials.
- 2. Cheating construed as attempting to deceive or mislead which includes, but is not limited to the following:
  - a. Utilizing old tests, projects, notes or written papers.
  - b. Providing unauthorized information to a fellow student about exam content.
  - c. Receiving unauthorized aid from any source with quizzes, examinations, or other assignments.
  - d. Seeking information in an unacceptable manner during/preceding an exam or other assigned work (cheat sheet, verbal exchange, looking at another person's paper or electronic device, utilizing headphones, using textbook when the test/quiz is not an open book test/quiz, using textbook test bank etc.).
  - e. Consulting with a classmate or others when taking a computerized test.
  - f. Disregarding other specific policies and procedures outlined for a particular class.
  - g. Utilizing unapproved technology/electronic equipment during testing (i.e.: mobile devices such as cell phones, smart devices, or tablets, etc.).
  - h. Using the same Internet Protocol network address (IP address) as another student for testing without approval from the course faculty.
- 3. The use of any generative artificial intelligence (AI) tool, such as OpenAI's ChatGPT, Google's Bard, or any other pre-trained language model (commonly referred to as "chatbot"), must be cited for any assignment where it has been used and may not be used unless specifically allowed by your instructor. Please see your instructor or the course policies within the syllabus if you have questions.

### **Student Resources**

#### **TUTORING SERVICES**

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located as follows:

- Morristown Campus Student Services Building Room L107 (423) 585-6920
- Niswonger Campus GRNV 226 (423) 798-7982
- Sevierville Campus MMH Room 210 (865) 286-2787
- Claiborne Campus Room 123A (423) 851-4761

Specific tutoring assistance in mathematics and writing is available in-person and online as follows:

Morristown Campus - English Learning Lab - HUM 120 - (423) 585-6970

<u>Walters State English Learning Lab (opens in new window)</u> <u>ws.edu/academics/humanities/writing-lab</u>

Morristown Campus - Mathematics Lab - MBSS 222 - (423) 585-6872

<u>Walters State Mathematics Learning Lab (opens in new window)</u> <u>ws.edu/academics/mathematics/learning-lab</u>

#### **TECHNOLOGY SUPPORT**

Students who need assistance with computing and technology issues should contact the IET Helpdesk by phone at Morristown: (423) 318-2742; Niswonger: (423) 798-8186; or Sevierville: (865) 286-2789 or on-line access.

<u>Walters State Helpdesk (opens in new window)</u> <u>helpdesk.ws.edu</u>

#### STUDENTS WITH DISABILITIES SUPPORT SERVICES

Students with disabilities must register with Student Support Services each semester in the Student Services Building, Room U134 (phone (423) 585-6892) if they need any special facilities, services, or consideration.

<u>Walters State Student Support Services (opens in new window)</u> <u>ws.edu/student-services/disability/</u>

#### SUICIDE PREVENTION STATEMENT

Walters State is committed to and cares about all students. Support services are available for any person at Walters State who is experiencing feelings of being overwhelmed, hopelessness, depression, thinking about dying by suicide, or is otherwise in need of assistance. For immediate help, contact the National Suicide Prevention Lifeline by calling or texting 9-8-8 or the Trevor Lifeline at 1-866-488-7386. Veterans may also contact the Veterans Crisis Line at 1-800-273-8255 (press 1) or Text 838255.

Walters State has a relationship in place with the following community agencies to provide services (may include crisis referral services, prevention screenings, etc.):

- Cherokee Health Systems 423-586-5032
- Frontier Health 423-467-3600

### **College Policies**

#### STUDENTS HANDBOOK AS OFFICIAL GOVERNING DOCUMENT

This class is governed by the policies and procedures stated in the current Walters State Community College Student Handbook. All students attending Walters State Community College, regardless of the time, location, or format of the class, must abide by the rules and regulations outlined in the current Walters State Catalog/Student Handbook and the current Walters State Timetable of Classes.

<u>Walters State Catalog (opens in new window)</u> <u>catalog.ws.edu/</u>

<u>Walters State Timetable of Classes (opens in new window)</u> <u>ws.edu/admissions/registration/</u>

#### PURPOSE, LIMITATIONS AND MODIFICATION OF SYLLABUS

This syllabus sets forth the expectations for the course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. The instructor reserves the right to modify this syllabus at any time with written notification to the students. Though changes are possible, it is expected that the course will be conducted as described in this syllabus for the semester/year specified in the Course Information section of the syllabus. This syllabus is only valid for the semester/year specified and course requirements are not guaranteed for future semesters.

#### **COURSE GROUND RULES**

- Students must attend the first day of on-ground class or contact the instructor prior to the first class. Failure to do this may result in being dropped from the class. Excessive absences may substantially lower the course grade.
- Regular class attendance is a student's obligation for any course regardless of format. (See the Walters State Catalog/Student Handbook). If a student misses class, it is his or her responsibility to contact the instructor regarding missed assignments and/or activities and to be prepared for the next class assignment.
- Students enrolled in web courses must follow the course attendance policy defined for online attendance during the first week of class and throughout the term. Failure to do this may result in being dropped from the class during week one OR may result in the accrual of absences which may negatively impact the student's grade in the course.
- Students who have not paid fees on time and/or are not correctly registered for this class and whose names do not appear on official class rolls generated by the Walters State student

information system (MyWS) will not be allowed to remain in class or receive credit for this course.

Electronic devices must not disrupt the instructional process or college-sponsored academic
activity. Use of electronic devices is prohibited unless use of the device is relevant to the activity
and use is sanctioned by the faculty member in charge. Electronic devices that are not relevant
to the activity or sanctioned by the faculty member in charge should be set so that they will not
produce an audible sound during classroom instruction or other college-sponsored academic
activity.

#### FINANCIAL AID

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

All forms of student Financial Aid may be jeopardized or lost due to the lack of Satisfactory Academic Progress in one or multiple courses. Lack of Satisfactory Academic Progress may negatively impact a student's degree/certificate completion pace and further jeopardize Financial Aid eligibility.

#### CANCELLATION OF CLASSES AND ACADEMIC CONTINUITY

For information related to the cancellation of classes due to inclement weather or other events, please check the Senators Emergency Text system or the college's Web site at:

<u>Walters State Homepage (opens in new window)</u> ws.edu/home/

<u>Walters State Facebook page (opens in new window)</u> <u>https://www.facebook.com/WaltersState/</u>

<u>Walters State Twitter page (opens in new window)</u> https://twitter.com/waltersstate

or call the college's student information line, 1-800-225-4770, option 1; the Sevier County Campus, (865) 774-5800, option 7; the Niswonger Campus (423) 798-7940, option 7; or the Claiborne County Campus, 423-636-6200, option 7. Also, please monitor local TV and radio stations for further announcements.

When an event or disaster interrupts the scheduled operations of the college and the ability to proceed with the academic course activities as planned, the college and your instructor may alter the course plan outlined in the syllabus. Should an event occur, students should refer to their course e-Learn pages and/or class materials previously delivered to receive guidance from their instructor. Students should continue to monitor the official college channels of communication listed in the above

paragraph. If you would like to sign up for the Senators Emergency Text system, please go to the following Web site:

### <u>Senator Emergency Text System (opens in new window)</u> ws.edu/set/

Dual Enrollment students attending on a high school campus should refer to the high school inclement weather cancellations.

#### **LEARNING MANAGEMENT SYSTEM**

Brightspace (commonly known as eLearn or D2L) is the college's Learning Management System (LMS).

Brightspace is committed to accessibility by "deliver[ing] a learning experience that meets the needs of all people, regardless of age or ability." <u>Brightspace Accessibility Standard (opens in new window)</u>

Brightspace is also committed to guarding student data and privacy. <u>Brightspace Privacy Policy</u> (opens in new window)