

## Chemistry 2323-002 Fall 2011

### **Contact Information**

Nichole M. Jackson

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Office Hours: M 2:00 – 5:00 PM

TTH 9:30 – 11:30 AM

W 8:00 – 9:00 PM

TH 1:30 – 3:30 PM

### **Course Information**

Department: Physical Sciences

Start Date: 08/22/2011

End Date: 12/08/2011

Modality: Face-to-Face

Credits: 3 hours

Lecture: MWF 9:00 – 9:50 AM

### **Required Reading/ Material**

*Organic Chemistry* 8<sup>th</sup> edition, J. McMurry, Brooks/Cole Publishing, 2012.

Suggested: Nomenclature 2271

### **Course Prerequisites**

CHEM 1312

Corequisite: CHEM 2123

### **SCANS**

1, 6, 9

### **Course Description**

A lecture course that presents a mechanistic approach to an integrated study of aliphatic, alicyclic, and aromatic hydrocarbons and includes an introduction to instrumental methods applicable to organic chemistry. Involvement in reading information or problems and using critical thinking skills to organize the information so as to arrive at an answer.

### **Course Objectives and Learning Outcomes**

The objective in any chemistry course is to develop problem-solving skills. To study the rules of nomenclature for organic compounds by functional groups, structures and their properties and synthesis of organic compounds.

Upon completion of this course, students will be able to:

- (1) Compare and contrast the structures, properties, and reactions of aliphatic hydrocarbons, alkyl halides, alcohols, and ethers.
- (2) Formulate reaction mechanisms for the synthesis and transformation of the above functional groups.

- (3) Perform and justify the separation techniques used in purifying organic compounds.
- (4) Interpret experimental data obtained from classical and spectroscopic methods used in characterizing organic compounds.

### **Course Attendance**

Attendance is required and will be checked. To effectively master the material, your **attendance** for each class is necessary.

### **Academic Dishonesty**

Students are responsible for understanding the code of Student Conduct found in the OC Student Handbook. Academic Dishonesty will not be tolerated in this course. Cheating in any form will be handled accordingly.

### **Students with Disability**

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the ADA of 1990. Students with special needs or issues pertaining to access and participation in this class must contact me immediately. Further, you may call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

### **Cell Phone**

When class begins, all phones need to be on silent or vibrate. If it is necessary for you to answer your phone or text message, then you need to step out into the hallway. If you consistently text message while in class, you will be asked to leave the class. Your phone **cannot** be used as a calculator on quizzes or exams.

### **Course Grading**

Exams	60%
Quizzes	10%
Homework	10%
Final Exam	20%

### **Homework**

Assignments will be made, collected and graded. The homework assignments are to help you prepare for the exams because variations of these will be on the exam. You should attempt to work all of the homework questions.

### **Quizzes**

There will be a short quiz given each week. The quizzes will include questions and problems over the current material but may require some knowledge of the previous material. Your lowest quiz grade will be dropped at the end of the semester. **If you miss a quiz, be prepared to make it up on the day you return to class**, otherwise you will not be allowed to make it up.

## Examinations

(tentatively)

**First Exam:** Monday, September 19<sup>th</sup>  
**Second Exam:** Monday, October 21<sup>st</sup>  
**Third Exam:** Monday, November 21<sup>st</sup>  
**Final Exam:** Wednesday, December 7<sup>th</sup>, at 8:00 a.m.-10:30 a.m.

## Make-Up Exam

A make-up exam will be given on the last day of class. If you miss an exam for any reason you will have the opportunity to take this exam. This exam may also be taken by any student who may wish to replace a lower exam. The make-up exam will be multiple choice questions covering the entire semester.

## Final Exam

The final exam is comprehensive over the entire semester.

## HELP

Please do not wait until the last minute to get help! Come in during office hours or make an appointment to see **ME** as soon as a concept or problem gives you difficulty. I am here to help you make it through this experience.

## Learning Resource Center (Library)

The Library, known as the [Learning Resources Center](#), provides research assistance via the [LRC's catalog \(print books, videos, e-books\)](#) and [databases \(journal and magazine articles\)](#). [Research guides](#) covering specific subject areas, [tutorials](#), and the "[Ask a Librarian](#)" service provide additional help.

## Student E-mail

Please access your [Odessa College Student E-mail](#), by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

## Student Portal

Please access your [Odessa College Student E-mail](#), by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

## Technical Support

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at [https://www.odessa.edu/dept/ssc/helpdesk\\_form.htm](https://www.odessa.edu/dept/ssc/helpdesk_form.htm).

## Important School Policies

For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the [Odessa College Student Handbook](#).

**Course Schedule**  
(tentatively)

<b>Chapter</b>	<b>Topic</b>	<b>Description</b>	
I	Structure and Bonding	Review of General Chemistry	<b>Quiz</b>
II	Polar Covalent Bonds: Acids and Bases	Bronsted-Lowry and Lewis theories	<b>Quiz</b>
III	Organic Compounds: Alkanes and their Stereochemistry	Naming and Properties of Alkanes	<b>Quiz</b>
			<b>1st Exam</b>
IV	Organic Compounds: Cycloalkanes and their Stereochemistry	Isomers and Conformations	<b>Quiz</b>
V	Stereochemistry at Tetrahedral Centers	Optical Activity and Chirality	<b>Quiz</b>
VI	An Overview of Organic Reactions	Describing Organic reactions	<b>Quiz</b>
			<b>2nd Exam</b>
VII	Alkenes: Structure and Reactivity	Markovnikov's Rule And carbocation	<b>Quiz</b>
VIII	Alkenes: Reactions and Synthesis	Reactions using Alkenes	<b>Quiz</b>
IX	Alkynes: An Introduction to Organic Synthesis	Reactions using Alkynes and developing synthesis proceses	<b>Quiz</b>
			<b>3rd Exam</b>
X	Organohalides	Reactions using Alkyl Halides	<b>Quiz</b>
XI	Reactions of Alkyl Halides: Nucleophilic Substitutions and Eliminations	SN1 SN2 E1 and E2 reactions	<b>Quiz</b>
			<b>Final Exam</b>

**Good Luck this Semester!!!!!!!!!!**