CHM 2211







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		Office hours:	Mo & We:	02:00 - 03:30 pr	02:00 - 03:30 pm	
			Fr:	09:30 – 11:00 ar	n	
Course: CHM 2211	Organic Chem	nistry II	₃ U	Inits		
Meetings: Lecture	Sec. 0001	Mo/We/Fr	11:	30 am - 12:20 pm	HEC 125	

Required Materials

- 1. Organic Chemistry, 2nd Edition, David Klein
- 2. WileyPLUS Access Code

<u>Study Aids</u>

- 1. Student Study Guide and Solution Manual
- 2. Organic Chemistry as a second language I and II, David Klein, 3rd Edition
- 3. A guidebook to Mechanism in Organic Chemistry, Peter Sykes, 6th edition
- 4. Structure and Reactivity in organic chemistry, Mark G. Moloney

Course Description

CHM 2211 is a 3 credit hours course designed to fulfill requirements in organic chemistry for the second semester in science education. Emphasize will be on nomenclature, properties, syntheses, and reactions of aromatic compounds, aldehydes and ketones, carboxylic acids and derivatives, amines, and carbohydrates; including the mechanisms of the reactions. An introduction to infrared, magnetic nuclear resonance spectroscopies and mass spectrometry will be covered.

Prerequisites

C grade or better in CHM 2210 or equivalent.

Learning Outcomes

By the end of this course, you should be able to:

- Interpret infrared, proton NMR and carbon-13 NMR spectra to predict the structure of organic molecules.
- Use the IUPAC rules for nomenclature to determine names and/or structures for organic functional groups of aromatic compounds, amines, carboxylic acids, aldehydes, ketones, and esters.
- Write reactions which show the synthesis for organic molecules containing the functional groups amines, carboxylic acids, esters, ketones and aldehydes and predict the products of such reactions.
- Perform mechanism for organic reaction of aromatics, aldehydes and ketones, carboxylic acids and derivatives, and amines.
- Develop plans for retrosynthetic analysis to solve multistep synthesis problems.
- Develop and enhance critical thinking and problems solving skills.

Evaluation and Grading

Your final grade for this course will be computed using the following data:

<u>4 Exams (100 points each):</u>	<u>400 points</u>	<u>40%</u>
(The lowest will be replaced by the % final exam, if higher)		
11 Quizzes (the lowest will be dropped)	150	15%
Final exam (ACS Test CHM 2210+CHM 2211)	200	20%
Online Homework	150	15%
ORION Assignment	50	5%
Class Participation	50	5%
Total	1000	100%

Extra Credit: I offer 50 points (possible) as extra credit. These points are based on your reading and answering the ORION and online homework assignments of chapters 25-27.

I will adopt the following grading scale:

A: 90-100 %	B+: 85-89 %	B: 80-84 %	C+: 75 -79%
C: 70 -74%	D: 60-70%	F: ≤ 59 %	

Grades for this course will be posted on WebCourses2@UCF. You may access your scores at any time through https://webcourses.ucf.edu. Grades will not be given out over the phone or via e-mail.

Online Supplements

Mastering organic chemistry concepts and knowledge requires a lot of practice and problem solving. I encourage you to solve as many problems as you can at the end of each chapter.

Graded online homework assignments are assigned using WileyPLUS learning and course management system (access code required). The system provides an interactive learning environment. To register, go to www.wileyplus.com/class/470810 and follow the instructions. You need to enter your name as it appears in Webcourses and use your NID.

There are three types of assignments:

- 1. ORION: Adaptive learning assignments
- 2. Mastering: You may work on this type of assignment as many attempts until you master it.
- 3. Questions Assignments:
 - a. Chapter Questions Assignment
 - b. Chapter Challenge Assignment
 - c. Chapter Mechanism

Each online assignment has a due time and date. You need to complete your assignment before the deadline. No extension will be provided.

If you encounter technical problems such as log in or accessing the assignment, you need to contact WileyPLUS technical support, http://wileyplus.custhelp.com/app/home. Your instructor will not be able to help with such issues.

Classroom Response System

I will be using the i>clicker student response system in class this term. i>clicker helps me to understand what you know and gives everyone a chance to participate in class. Participation with i>clicker will account for 5% of your final grade.

You may use one of the following models:

The original i>clicker, i>clicker +, or i>clicker 2

How to register:

In order to receive credit, you will need to register your i>clicker remote on Webcourses, you must so by 8/31/2015. To do so, log into your Webcourses account, choose CHM 2211 course, then click i>clicker link and follow the instructions.

If you have more questions on i>clicker registration, please visit <u>http://support.iclicker.com</u> for FAQs and other resources.

Cheating

I consider bringing a fellow student's i>clicker to class to be cheating and a violation of the University Honor Code. If you are caught with a remote other than your own or have votes in a class that you did not attend, you will forfeit all clicker points and may face additional disciplinary action.

Webcourses2@UCF

CHM 2211 is a face-to-face course. I use Webcourses@UCF, <u>https://webcourses.ucf.edu</u>, to enhance the face-to-face environment. Lecture notes, <u>quizzes</u>, announcements, grades, links, etc. are posted on Webcourses@UCF.

Attendance Policy

You should make every effort to attend lecture classes and comply with the examination schedule outlined in this syllabus. You are held responsible for all material presented in the classroom even during your absence.

Makeup Policy

The following makeup policy will be applied:

- No makeup for missed exams, quizzes, and homework under any circumstances.
- If you miss one schedule exam, your final exam grade (%) will be used for that exam.
- More than one missed schedule exams shall count zero (o), except for any University sanctioned events.
- Missing the final exam will lead to an F grade in the class.

<u>Withdrawal</u>

If you wish to withdraw from the course you must do so by <u>Monday, November 02, 2015, 11:59 p.m.</u> to receive a W. In case you do not withdraw from the class and do not show up, you will receive an F grade.

Supplemental Instruction

The Student Academic Resource Center (SARC) offers weekly study sessions for all students in Organic Chemistry I. The sessions are led by an experienced SI Leader. I strongly encourage you to participate in these sessions. The statistics showed that students attended SI sessions improve their final grades significantly.

<u>Tutorial</u>

SARC also provides free tutoring to all UCF students taking Organic Chemistry I. The Student Academic Center is located in Phillips Hall, Room 115. 🕾 407-823-5130. http://sarc.ucf.edu

Tutoring schedules are posted on SARC website and will be announced in class.

Accessibility Accommodations

If you need academic accommodations, such as private testing, interpreters, note takers, etc., please contact the Students Accessibility Services (SAS) in Room 132, 2 407-823-2371, <u>http://sas.sdes.ucf.edu</u>. This office will then notify me, in writing, of the need for an accommodation. No accommodations will be provided until SAS notifies me.

Academic Integrity/Plagiarism

"Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone".

Only nonprogrammable calculators are allowed in exams

<u>Cell phones and other personal digital communication devices are not allowed during examinations</u>. Use of electronic communication devices during exams or other graded activities may constitute grounds for disciplinary action.

Federal Financial Aid Regulation

All faculty members are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete the following academic activity by the end of the first week of classes, or as soon as possible after adding the course, but <u>no later than August 28 by 5:00 pm</u>. Failure to do so will result in a delay in the disbursement of your financial aid.

FA. Q.

What you need to do to succeed in this class:

- You need to attend all lectures to be successful in this course. Bring your textbook/ebook every meeting. Arrive to the lectures on time.
- Read the material in the textbook/ebook <u>before</u> it is presented in class. This will make you familiar with the material and allow you to better understand the lecture. Reading the material before coming to lecture will help you to think of questions during the lecture. Furthermore, if you have read the text and do not understand something then you can ask about it during the lecture. Do not be afraid to ask questions during lecture. I truly encourage and promote questions and discussions.
- Solve all assigned online homework questions. Then solve as many problems as you can at the end of each chapter.
- Practice!, practice!, practice!

Classroom Conduct

I want to promote an environment that allows everyone to benefit from this course. To attain this goal, each of us should respect the rights of everyone else. The following are some behaviors that are **not allowed** in this class.

- No phone conversation, texting and/or messaging in classroom.
- Laptops, tablets, and other mobile devices should be used *only for educational purpose*.
- If you arrive late for class, be quiet as you enter the room.
- Do not have conversations during lectures or during clicker questions
- All types of recording /taking photos during the class are not allowed unless a prior permission is obtained from the instructor.

Proctor Quizzes

Online quizzes will be taken using an online video monitoring system called ProctorHub. You will need access to a webcam on your computer (Windows, Mac OS X, or Linux) in order to use this program.

ProctorHub is a UCF test monitoring system that utilizes a webcam to monitor test taking activity during online testing. Videos are only accessible to your instructor, and are stored in a secure environment. If you do not have a webcam, there are computers with webcams in the UCF library, or you can visit the LibTech desk at the library to sign out one. Lib tech can also direct you to a computer in the library with a webcam. Please note that these computers cannot be reserved ahead of time. It is your responsibility to ensure that you will have access to a computer with a webcam and know how to log into and use ProctorHub, prior to the time that the tests start. Please note that ProctorHub is not yet compatible with Apple iOS (iPhone, iPod Touch, iPad) or Android smartphones. No quiz will be accepted without ProctorHub.

Tentative Class Schedule

The following schedule is tentative and may not be followed exactly. You are expected to prepare for each lecture by reading the assigned material in advance.

Date/Week	Testing	Lecture
08/24-08/28		Chapter 15: Infrared Spectroscopy and Mass Spectrometry
08/30-09/04		Chapter 15 + Chapter 16
09/07		Labor Day (No Class)
09/09-09/09		Chapter 16: NMR Spectroscopy
09/14	Exam 1	
09/16-09/18		Chapter 17: Conjugated π Systems and Pericyclic Reactions
09/23-09/25		Chapter 17: Conjugated π Systems and Pericyclic Reactions
09/28-10/02		Chapter 17: Conjugated π Systems and Pericyclic Reactions
10/05-10/09		Chapter 18: Aromatic Compounds
10/12-10/16		Chapter 18: Aromatic Compounds
10/19	Exam 2	
10/21-10/23		Chapter 19: Aromatic Substitution Reactions
10/26-10/30		Chapter 19: Aromatic Substitution Reactions
11/02-11/06		Chapter 20: Aldehydes and Ketones
11/09	Exam 3	
11/13		Chapter 21: Carboxylic Acids and Their Derivatives
11/16-11/20		Chapter 21: Carboxylic Acids and Their Derivatives
11/23-11/25		Chapter 22: Alpha Carbon Chemistry: Enols and Enolates
11/30	Exam 4	
11/30-12/04		Chapter 23: Amines
12/07		
12/08		Study Day (No Class)
12/09/2015	Final Exam	10:00 am-12:50 pm

The instructor reserves the right to modify the schedule, the testing procedure, and the grading basis if, in the professional judgment of instructor, such modification is in the best interest of fulfilling the course objectives and assuring the academic integrity of the course and the institution.

You are responsible for announcements made during lectures and discussion sessions and/or through electronic communication (i.e. Webcourses@UCF, email)