Introduction to Organic and Biological Chemistry (CHEM 114.02)
Abilene Christian University
Spring 2012

MWF 9:00-9:50
3 credit hours
Foster Science Building 117

Dr. Sarah Lee, Assistant Professor of Biochemistry
Office Hours: Monday 1-5 pm, Wednesday 1-4 pm

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ACU Mission:
To educate students for Christian service and leadership throughout the world.

Department Mission:
To prepare students for careers in chemistry, biochemistry, chemical education, and health professions by displaying high professional standards and by modeling Christian values, leadership, and service.

Course Description:
During this course, we will discuss the fundamental concepts of organic and biological chemistry including the subjects of saturated and unsaturated hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acid derivatives, amines, carbohydrates, lipids, amino acids, and proteins as a foundation for the further study of chemistry.

Prerequisite:
CHEM113 Introductory Chemistry

Course Purpose and Audience:
This course is for students majoring in nursing, agriculture, and family and consumer sciences and will satisfy the general science required in the General Education Requirements. This course prepares students to apply the concepts listed in course description in their field and in future chemistry courses.

Course Materials:

Text:
General, Organic, and Biological Chemistry: Structures of Life by Karen Timberlake. Third Edition. Pearson. 2010.

MasteringChemistry Access Kit- this is available for purchase at:
http://www.masteringchemistry.com/

Optional Text:
Study Guide: General, Organic, and Biological Chemistry: Structures of Life by Karen Timberlake. Pearson.

Other Required Materials:
Scientific Calculator (in addition to the one on your iDevice)

Other Resources: Course Blackboard on my.acu

Attendance Policy:
Attendance is expected and required. **The professor may drop a student who has more than 9 absences (excused and unexcused) with a WF.** Roll will be taken in the form of a sign-in sheet. If you are tardy, please see the professor after class to assure that you were counted as present (do not chase the roll sheet). Absences will be excused for illness with accompanying doctor's note, death in the family, school sanctioned trips, or other reasons approved by the instructor.

Course Requirements:

Homework:
Problems from each chapter will be assigned through the MasteringChemistry website. Due dates will be given on the website and in class. All homework will be turned in online.

Quizzes
Eight quizzes will be given during the semester on Fridays. Quizzes will be based on assigned homework and material covered in lecture. The quiz will be given at the beginning of the period and will be collected after 10 minutes. **The lowest quiz score will be dropped**. Quizzes will not be made up if you are absent or arrive after the quiz has been given. Since one quiz will be dropped, quizzes **will not be made up for excused absences**. If more than one quiz is missed for excused absences, the problem will be dealt with on an individual basis.

One-Minute Papers:
We will occasionally use One Minute Papers as an assessment tool. These assignments will be given in class (generally at the end), and will require a short response to a particular question. Your responses will be graded based on how well you answer the question, and on your ability to form your answer in complete sentences. **You can drop one One Minute Paper without affecting your grade.**

Exams:
Three exams will be given during the semester. Attendance is required at exams. The professor must be notified **BEFORE** the exam if you will not be able to attend. Make-up exams will only be given for excused absences (see attendance policy). There will be 2 days during the semester that you can take a make-up test.

Make-up test for Exams 1 or 2: Wednesday, March 28th, 3:00-4:00 pm
Make-up test for Exam 3: Wednesday, April 25th, 3:00-4:00 pm

Final:
The final will consist of two parts. The first half will be taken from the portion of the material covered in class since the third exam (non-cumulative, this section is worth 15% of your final grade). The second half will be comprehensive (this part is worth 10% of your final grade). Check the final exam schedule for the time of the final.

Academic Integrity:

Violations of academic integrity and other forms of cheating, as defined in ACU's Academic Integrity Policy, involve the intention to deceive or mislead or misrepresent, and therefore are a form of lying. Every member of the faculty, staff and student body is responsible for protecting the integrity of learning, scholarship and research. The full Policy is available for review at the Student Life web site.
http://www.acu.edu/campusoffices/studentlife

Any cheating will result in a zero on the assignment. A second incidence of cheating will result in an F in the class.

Email Policy:

Email is a great method of contacting me. However, I cannot always provide an immediate response. Normally you will be sent a response within two business days.

When you send an email, you are expected to write as you would in any professional correspondence (i.e. complete sentences, proper capitalization, a greeting, an informative subject line). Communication should be courteous and respectful.

Cell Phones/Mobile Devices:

Cell phones are to be on **SILENT** at all times.

You will occasionally be asked to use your device during class. This is appropriate usage, but keep the device on silent.

When we are not using the device for Chemistry related purposes, please put away your device. Using your device at any non-approved time is inappropriate and disruptive. You will be asked to leave class if you continue to use your device when asked to put it away.

Groups:

Students will be assigned to groups that will generally consist of 4 students each. Groups are for the purpose of studying, doing homework, and working in teams for in-class assignments. Groups will sit together in class.

Grading

Grade Corrections: If there are questions about a grade in the course, the question must be presented to the professor **within two weeks** of the exam, quiz or assignment being returned to the student.

Summary of Activities:	
3 Semester Exams	45%
Final Exam	
Cumulative portion	10%
Non-cumulative portion	15%
Quizzes	15%
Homework	10%
One-minute papers	5%
Total	*100%*

Grade Distribution	
A	90%
B	80%
C	70%
D	60%
F	Below 60%

Grades will be posted in Blackboard, except for the homework grades, which are available on the MasteringChemistry website.

Course Content

The following chapters, along with other material, will be covered in Introduction to Organic and Biological Chemistry.

Ch. 11 Introduction to organic chemistry: Alkanes
Ch. 12 Unsaturated hydrocarbons
Ch. 13 Alcohols, Phenols, Ethers and Thiols
Ch. 14 Aldehydes, Ketones, and Chiral molecules
Ch. 15 Carbohydrates
Ch. 16 Carboxylic acids and esters
Ch. 17 Lipids
Ch. 18 Amines and Amides
Ch. 19 Amino acids and proteins
Ch. 20 Enzymes and Vitamins
Ch. 21 Nucleic acids and protein synthesis

Tentative Course Schedule:
January 18- First Day of Class
January 27- Quiz #1
February 3- Quiz #2
February 10- Exam 1
February 17- Quiz #3
February 24- Quiz #4
March 2- Quiz #5
March 9- Exam 2
March 12-16- Spring Break
March 30- Quiz #6
April 6- Good Friday
April 13- Exam 3
April 20- Quiz #7
April 27- Quiz #8
Final Exam- TBD
http://www.acu.edu/campusoffices/registrar/finalexams/spring2012finals.html

The above schedule is tentative and is subject to change.