Chemistry 121 - Section 001, winter 2014-2015, MWF 11:00 am- 12:15 pm CTH 322 Introduction to Organic Chemistry and Biochemistry

Instructor: Dr. Upali Siriwardane **Office**: 311 Carson Taylor Hall **Phone**: 257-4941

Office hours: MWF 8:00 - 10:00 am; TR 9:00 - 10:00 am 1:00 - 2:00 pm **E-mail**: Upali@latech.edu

Course Homepage: http://moodle.latech.edu/ Select Chemistry 121 –Section 001, Winter 2015

<u>Course objective</u>: This is the second of a series of chemistry courses designed primarily for non-science majors who have an interest in the subject as it will be applied to future work in allied health careers. It attempts to give the student a general appreciation of the field of organic chemistry with a working knowledge of certain of its more important phases as summarized in course syllabus and course calendar.

<u>Text:</u> <u>General, Organic, and Biological Chemistry, 6th Edition</u>; Stoker; ISBN: 978-1-133-10394-3 and also purchase <u>Study Guide with Selected Solutions for Stoker's General, Organic, and <u>Biological Chemistry, 6th</u> ISBN-10: 1-133-10423-1, ISBN-13: 978-1-133-10423-0 Follow the link on the course web pages to access text-book websit</u>

<u>OWL</u>: Students are required to buy access to <u>OWL (Online Web-bases Learning)</u> program offered by Brooks/Cole's Thompson Learning Website if the access code didn't come with the textbook. You will be earning (50% points) towards your grade based on your participation on OWL system activities.

Text e-book and OWL Bundled package:

e-book of Stoker's General, Organic, and Biological Chemistry, 6th bundled with OWL could also be purchased at the bookstore or the or online.

Supplements: A copy of chapter notes, lessons plans, slides, sample exam questions are available online: http://blackboard.latech.edu/ and following the appropriate menu bars.

<u>Molecular model kits</u>: To be used in class and examinations to aid in the understanding of stereochemistry.

Molecular model kits may be purchased from Louisiana Tech American Chemical Society Student Affiliates.

Supplements: A full copy of my class lecture slides, homework, exam review guides and sample exam questions are available online: http://moodle.latech.edu/ and following the appropriate menu bars.

<u>Course Evaluation</u>: The final course grade will be based on a score of **1000 pts**. and converted to % (NO CURVE).

1. Four hourly exams:	60% (@ 150 pts. each)	*600 pts. (60%)
2. Comprehensive	@ 150 pts will replace a missed test	pts.
Make-up Exam:		•
3. ~10 Group Homework Assignments:	20% (@20 pts. Each and averaged)	200 pts. (20%)
4. 4 OWL Assignments on chapters	10% (@ 25 pts. Each and averaged)	*100 pts. (10%)
covered in for the test. One each		
before Test		
5. ~20 Quizzes:	10% (@10 pts. Each and averaged)	100 pts. (10%)
Course Total		1000 pts.

^{*}If you didn't do OWL your four hourly exams scores will be counted as 700 pts or 70%. OWL Assignments are intended to improve your test scores and the test scores should reflect would improve as you benefit form OWL

Bonus points: (50 maximum make-up pts.)

	7	
1. Bonus "ESSAY" assignment:	40 pts.	40 pts. (4% out of 100)
2. Class& group participation:	10 pts.	10 pts. (1 out of 100%)
Bonus Total		50 pts. (% 5 out of 100)

^{*} If you missed significant amount of classes (3 or more) and quizzes and also late in group homework submissions (2 or more) you are not eligible for any kind of bonus points. In cases of students with disputed, late and/or missing assignment, instructor reserves the right to calculate their course grade based on the averages of the four tests.

Class attendance:

You should attend all classes regularly and punctually. The ~20 Quizzes points you earned for the about 20 in-class quizzes also reflect you class attendance/Online Quiz participation/experience.

Failure to attend classes without proper excuses will lead to losing points for the in-class quizzes (20%) you missed and participation bonus (1%) and that may lead to a lower grade in this course.

Course performance:

You should read, study class notes regularly and punctually on the schedule outlined on the calendar. Taking tests only on test days does not reflect the complete learning/participation/experience provided in this course. The points you earned for the in quizzes, group homework and OWL assignments reflect your class participation/experience. Delay or failure to follow deadlines without proper excuses will lead to losing points for missed quizzes and assignments.

Grading Policy:

<u>Grading Scale</u>: A = 100 - 90%(1000-899 pts) B = 89 - 80%(898-799 pts) C = 70 - 690% (798-699 pts) D = 69 - 60% (698-599 pts) F = below 60% (598-000 pts)

Grades will be posted on Moodle:

Grades will be posted under Course Information for Chemistry 121 - Section 001, winter 2015 on Moodle. Quiz will be available on moodle on the day of the class, group homework and OWL assignment should be done on the times specified in the calendar and it is your responsibility to keep records of them in a course folder to show that you have completed them and to use them as a study guide for the exam. Any answer key that you need will be made available to you on request and coming to my office CTH 311.

<u>Tests</u>: There will be four 75 minutes tests during the class and a comprehensive make up test given at the end of the quarter. Contact me in advance if you will miss n test due to a University allowed absence and I will allow you take the test preferably before the test date. If you could not take the test before the specified date and you have a <u>University allowed</u> excuse you will be eligible for making up the missed test taking the <u>Comprehensive Make-up Test</u> at the end of the quarter. Turning in group homework late without the penalty and/or dropping a quiz you need to bring a dated proof of <u>University allowed</u> excuses within a <u>week of the missed day(s)</u>. If a student made less than 105 or 70% in one tests and wanting to improve your test scores taking this comprehensive makeup test will replace your lowest test score, if you scored higher.

Hourly Exams: Test 1: **December 19, 2014**, Test 2: **January 26, 2014**, Test 3: **February 13, 2015**, and Test 4: **March 2, 2015**; Comprehensive Make Up Exam: **March 3, 2015**, 10:00-11:15 am, CTH 322 Bring your **Tech ID**, **Scantron Sheet 882-E** for all Exams

NOTE: For all Tests you must bring the following: your student ID, a large green Scantron sheet 882-E (purchase at least four at Tech book store), sharpened pencils, and you may also bring a molecular model kit. **NO cell phones are allowed. Use of computer is not allowed during lectures unless it is a disability requirement!!**

Quizzes: There will be about 20 in-class quizzes -- about one per lecture -- worth 10 points each. Each quiz will consist of a simple question pertaining to the material we have covered on or before that day. Quiz sheets with the date will be available at the beginning of each class to be used for each daily quiz - pick one up and fill in your name and study group name. Why a quiz every class? 1) this encourages you to come to class at the same time can learn more than on your own; 2) this assures me that you will be paying attention in class instead of talking to your neighbor, reading the newspaper, etc.; 3) how well you do on the quiz lets me know how well you are learning.

Homework: There will be about 10 graded homework assignments (GHW). Students can work on these GHW in a "organic functional group" study groups composed of three to six students. HOWEVER: Each student in the group must turn in their own hand-written copy of the assignment with their name printed in the upper right hand corner. The deadline for study group sign up is December 10. Groups will be referred to by the assigned chemical element names. Failure to sign up for a group will result in the loss of bonus points (1%) for class participation. You are welcome to change groups at any time, but you must let me know if you switch groups. Your group homework handed in late (without justification) will lose 10 % points per day past the due date. The due date for the homework as found on course calendar means that the homework is due in class on that day before 12:15 PM. Blank homework sheets are available on the internet and the answer keys will be posted for homework and exams on the bulletin board outside CTH 311. There will also be nongraded text book homework problems (NGW) assigned. It is very important that you also do the non-graded text end of the chapter book problems because questions based on them will also appear on

the exams. If after attempting on your own, using solution manual and with your study group if you have any trouble with the graded or non-graded homework problems, you should see me immediately before due dates!

<u>Class Discussion</u>: I will be asking questions in class to study groups. If your group is sitting together, then you will be able to discuss the question for a short period of time and answer as a group so tries to sit together. **Bonus credit** (maximum of 1% points) will be given to those who show up (remember also attendance is based on the quizzes and signing class rolls) and class participation. Any disruptive behavior in class would be noted in class roll and taken in to consideration when bonus points are given

Bonus Paper Assignment: There will be one BONUS Paper assignment and you should sign up for a topic before or **on January 7 by 12:15 PM in class**. Details of the allowed Bonus Paper topics are on the moodle course webpage. It will be a 3-4 page typed essay with at least 3 references or equivalent assignment on some chemistry topic and it will be worth 40 (4%) points. I will give you the topic during the first 2 weeks of class. The printed assignment can be handed in anytime before or **on February 23 by 12:15 PM in class**. Your groups can help on the bonus assignment **but assignments from each member of same group must be different**. In other words: **each member must select their own topic, turn in their own individual paper (written in your own words and style).**

Helpful Hints for Learning Organic Chemistry:

Outside Class Assistance:

If you can't meet with me during my office hours, then please contact me by phone/e-mail to make an appointment with me at a different time. A couple of days before a exams, I will post a sample test (which will also be posted on the moodle) and will have a review/help session during class time. If you need further help, see me during office hours, or by making an appointment. You can also get help from the free tutors in the in your college or hire a tutor in the chemistry department (there are few chemistry majors who are tutors). If you get a message on your returned homework or exams or by e-mail that says to COME SEE ME IMMEDIATELY, do so immediately so that we can get you on track for a good grade in this course. Please try to come to my office and ask question when I have more time to answer them.

Class Rules:

No talking while I am lecturing. Turn cell phones off before entering class. General in class disruptive behavior includes: **being on the lap-top without any signs of participation**, **cell phone ringing**, **rudeness, coming/leaving class at improper time**. You are expected to pay attention to my lecture in order to learn the material presented and to complete assignments on time. If you fail to do so, you will lose all available BONUS points. Any academic misconduct, whether premeditated or unpremeditated (as defined in the *Code of Student Conduct*) see below, will be reported to the Office of the Dean of Students for appropriate actions.

OWL concept Mastery and Assignments: There will be about 22 OWL Concept Mastery Activities -- about 2 per chapter -- worth 25 points each for OWL assignments before each test and total of 100 or (10%) points for OWL assignments. Each Concept Mastery section will consist of a simple question pertaining to the material you have read on day you are assigned to study. Why a Concept Mastery Activities every day? 1) this requires you to read and complete tasks where you will learn more following the instructions; 2) this assures me that you will be paying attention to concepts and learning the course material; 3) how well you do on the mastery activities lets me know how well you are learning.

Non-graded text book homework problems

There will also be <u>Nongraded text book homework problems (NGW)</u> assigned. It is **very important** that you do the non-graded textbook problems because questions based on these will also appear on the exams. If after attempting on your own, using solution manual you have any trouble with the graded or non-graded homework problems, you should contact me by e-mail or phone!

Helpful Hints for Learning General Chemistry:

- 1. Survey the assigned material for overall concepts before starting online reading, quizzes and assignments-meaning SKIM READ RELEVENT SECTIONS IN THE BOOK or e-BOOK!
- 2. Go back and read the same material for comprehension focusing on unclear areas.
- 3. Work problems within the chapter during this second reading.

- 4. Go online and read chapter lessons before your take OWL or Blackboard quizzes and assignments.
- 5. Reread any remaining unclear areas.
- 6. Work problems, and work problems within lesson plans and at the end of the chapter. Work until you fully comprehend the concept.
- 7. If you are still unclear about a concept, e-mail and send a question for discussion as you study but NOT on the day of the quiz, assuagement are due, or the day before the exam (by then it will be too late for you to truly absorb the material).

Course Activities:

Online tasks:

- Finding and printing assignments, slides and lecture notes.
- Reading or downloading online resources such as library materials & web sites
- Send e-mail to the professor if you had questions that could be handled briefly.
- Completing OWL assignments and reading e-book.

Off-line tasks:

- Reading assignments, textbooks, articles, etc.
- Working on problems
- Synthesizing materials and crafting outlines
- Making a file collecting all your papers to show authenticity of your work.

Code of Student Conduct:

Complete honesty in all matters pertaining to this course is required as outlined in the Louisiana Tech University Bulletin (catalog) and the Louisiana Tech Honor Code. You must not attempt to copy or download the official online TESTS, or share questions from these tests with other persons. You must not use your textbook while taking an official test and TEST must be taken independently without any outside assistance. No browsing allowed during the TEST and history will be recorded. Any academic misconduct, whether premeditated or unpremeditated (as defined in the *Code of Student Conduct*), will be reported to the Office of the Dean of Students for appropriate actions.

Materials covered:

Chapter	Title
Test 1	
12.	Saturated Hydrocarbons
13.	Unsaturated Hydrocarbons
Test 2	
14.	Alcohols, Phenols, and Ethers
15.	Aldehydes and Ketones
16.	Carboxylic Acids, Esters, and Other Acid Derivatives
Test 3	
17.	Amines and Amides
18.	Carbohydrates
19.	Lipids
Test 4	
20.	Proteins
21.	Enzymes and Vitamins*(optional)
22.	Nucleic Acids
Self Study	
23.	Biochemical Energy Production**(optional)
24.	Carbohydrate Metabolism**(optional)
25.	Lipid Metabolism**(optional)
26.	Protein Metabolism**(optional)

* Optional Study

Important Dates During the Winter 2014-15 Quarter:

December	3	Classes begin
December	19	Christmas holiday Begin at the end of classes
January	5	Christmas holiday Ends classes resume @ 8:00 a.m.

January	5	Classes resume, 8:00 a.m.
January	19	ML King Jr., holiday
January	20	Classes resume, 8:00 a.m.
February	6	Last day to drop courses or resign with "W" grades
February	13	Mardi Gras holiday begins @ end of classes
February	19	Mardi Gras holiday ends. Clases resume @ 8:00 a.m.
March	3	Grades for graduating students due on BOSS
March	3	Last day of classes
March	6	Grades "live" on Student BOSS
March	7	Commencement Day

Important Information

Academic Misconduct and the Honor Code

Academic integrity at Louisiana Tech University is based upon the principles of honesty, fairness, respect, responsibility, and excellence. Academic misconduct tarnishes the reputation of Louisiana Tech University and discredits the accomplishments of current students as well as graduates. Consequently, the University expects that all members of its academic community will demonstrate honesty and integrity in all academic relationships. Details of honor code found in web link:

http://www2.latech.edu/~coneal/LATechhonor-code.pdf

Disability Services

In order to serve the students with disabilities there are guideline and services provided by the Office of Disability Services of Louisiana Tech University. Students with disabilities should request the instructor to obtain extra help they needed to complete the course successfully: http://www.latech.edu/students/ods/accommodation1.shtml

Emergency Notification System (ENS)

Please enroll in the **Emergency Notification System** and keep your contact information current on BOSS. Louisiana Tech Louisiana Police will send all members of the campus community to take precautions during emergencies and severe weather. Anyone in need of on-campus assistance should call Louisiana Tech Police at 257-4018.

Counseling Services

This center offers a variety of study improvement programs to assist you in maintaining academic success. Please consult this site if you are you have concerns that might affect your some academic performance: http://www.latech.edu/students/counseling/index.shtml

Changes on this syllabus:

Scheduled dates on this syllabus are not contractual and may be changed by the instructor when it becomes necessary to do so to accomplish class objectives. However, any changes that are deemed necessary will be communicated orally to the students by announcement and e-mails. Therefore, it is a requirement that students attend class regularly on time or make ask teacher or students about the changes made by the instructor.

Last revised: November 26, 2014, Copyright © 2014, Louisiana Tech University, Department of Chemistry. All rights reserved.