TENTATIVE COURSE SYLLABUS

CHM 136.01

COURSE INSTRUCTOR: Dr. Mary Lynn DeShazo

COURSE TITLE: INTRODUCTORY ORGANIC AND BIOCHEMISTRY LECTURE

CREDIT HOURS: 3 semester hours

SEMESTER, YEAR: Fall Semester, 2007

LOCATION OF CLASS MEETING: CFS Building, Room 121

MEETING TIMES: Tuesdays and Thursdays - 11:00 a.m.-12:20 p.m.

OFFICE LOCATION: CFS Building, Room 317C

OFFICE HOURS: Tuesdays 8:30 a.m. – 9:30 a.m.

Tuesdays 1:30 p.m. – 4:30 p.m. Thursdays 1:30 p.m. – 4:30 p.m. Other hours by appointment.

OFFICE TELEPHONE NUMBER: (936) 294-3750 (Chemistry Department)

E-MAIL ADDRESS: chm mld@shsu.edu

COURSE DESCRIPTION: "An orientation in organic chemistry is given in the first part of the course to allow treatment of the chemistry of nutrition and other biochemical aspects given in the last part. This course is for non-science majors. Prerequisite: CHM 135, CHM 138, or completion of a high school chemistry course. Credit 3" (Sam Houston State University, 2006-2008, Undergraduate Catalog, p. 162)

This course will explain why carbon forms so many compounds compared with other elements. The following topics will be covered in the course: the different classes of hydrocarbons; structural isomerism and cis-trans isomerism; structure of benzene; nomenclature of simple organic compounds; different classes of organic compounds based on functional groups; classification of naturally occurring carbohydrates; molecular structure of mono-, di-, and polysaccharides; properties of saturated and unsaturated fatty acids; proteins and amino acids; nucleic acids and nucleotides; steroids; enzymes; similarities and differences between natural and synthetic polymers; digestion of carbohydrates, fats, and proteins; metabolism of carbohydrates, fats, and proteins; dietary needs for carbohydrates, fats, and proteins; dietary needs of vitamins and minerals; nutritional disorders and diseases; value and potential danger of food additives; routes by which toxic substances enter the body; the way metabolic poisons cause harm; poisoning with toxic metals and with neurotoxins; how chemicals are detoxified in the liver; and the risk associated with exposure to toxic chemicals.

The course is taught by lecture.

Chemistry 116 is the laboratory course for this course. This laboratory meets two hours per week for one semester hour of credit. It is taught by a teaching assistant. The coordinator for the Chemistry 116 laboratories is Dr. Rukma Basnayake. Students scheduled for Monday and Wednesday labs will meet for the first time on Monday, September 10. Students scheduled for Tuesday and Thursday labs will meet for the first time on Tuesday, September 11. Dr. Basnayake will assign the grades for Chemistry 116.

The scheduled exams for the lecture course will be multiple choice. The make-up exams will be different from the scheduled exams. There will be definitions, formulas to write, compounds to name, equations to complete, specific questions to answer with short answers, structural formulas to draw similar to those explained in class, and common names of compounds for the student to supply in the make-up exams. These will be related to the specific test that is being made up.

COURSE OBJECTIVES

- 1. To provide the background in organic chemistry and biochemistry required for students who are in the health-related career programs as nursing, dental hygiene, respiratory therapy, and radiological and nuclear technology.
- 2. To provide the basic knowledge of organic chemistry and biochemistry that is essential for nutrition and fashion and consumer science majors.
- 3. To furnish agriculture majors with an understanding of organic chemistry and biochemistry.
- 4. To give non-science major students information in organic chemistry and biochemistry that will assist them in understanding themselves as related to metabolism, health, nutrition, and drugs.
- 5. To provide non-science major students information in organic chemistry and biochemistry that will enable them to read scientific articles in newspapers and magazines with understanding.
- 6. To fulfill part of the eight hours of laboratory science required of all graduates of Sam Houston State University.

TEXTBOOK: General, Organic, and Biological Chemistry, Structures of Life second edition, by Karen C. Timberlake

REQUIRED MATERIALS FOR THE COURSE: The student will be expected to bring a scantron (50 answers on each side) and a No. 2 pencil with a good eraser to take each scheduled test. The scantron can be used to take two tests. Students who take make-up tests will not bring a scantron to take the test. The test will be furnished the student. There will be space on the test for the student to answer the questions.

COURSE REQUIREMENTS

Exams: There will be four exams. The regularly scheduled exams will be multiple choice.

The make-up exams will be different from the regularly scheduled exams. There will be definitions, formulas to write, compounds to name, equations to balance, equations to complete, specific questions to answer with short answers, some simple problems that are similar to those explained in class, and common names of compounds for the student to supply in the make-up exams. These will be related to the specific test that is being made up.

Each student who misses an assigned examination is expected to show appropriate cause for missing the examination before being permitted to take the make-up examination. Appropriate causes for missing an examination include personal illness; death in the student's immediate family; death of the student's roommate, girlfriend or boyfriend; hospitalization of the student; confinement of the student in a jail; summons of the student to be present in a court hearing; jury duty; and involvement of the student in an automobile accident immediately prior to the examination. The student may be able to show other appropriate cause for missing an examination. The student may take only one make-up test.

Test Dates

Test 1 To be announced

Test 2 To be announced

Test 3 To be announced

Final exam 11:00 a.m. – 1:00 p.m., Thursday, December 13, 2007

(Tu, Th Class - 11:00 a.m. - 12:30 p.m.)

Tentative Make-up Test Date

Thursday, December 6, 2007 2:00 p.m. – 3:00 p.m.

Final Exams

Thursday, December 13, 2007 11:00 a.m. – 1:00 p.m.

All students in the class are expected to begin the final exam at 11:00 a.m.

Grading Plan:

There will be four exams (Test 1 - 100 points, Test 2 - 100 points, Test 3 - 100 points, and the final exam - 100 points). The maximum total points for the four exams will be 400 points. You must take the final exam. If you do not take the final exam and you have not been permitted to take it at a later date, "0" will be averaged in for the final exam.

The final grade for the course will be based on the total points which a student has earned; A - 360-400 points, B - 320-359 points, C - 280-319, D - 240-279, and F - 0-239.

A student's grade will not be penalized for three or fewer hours of absences (absences of two or less class periods on Tuesdays and Thursdays) when examinations have not been missed. A student's grade may be penalized for more than three hours of absences. An excused absence is not erased from the student's attendance record.

It is not anticipated that there will be projects for extra credit.

A student may receive an incomplete grade ("X") if "the student has not been able to complete the course because of emergency circumstances beyond the student's control. These circumstances usually prevail over other drop dates and opportunities to withdraw from the course. When the student is given the X mark, it is assumed that the student will be able to finish the course without further instruction or tutoring from the faculty member in charge of the course. Permission to award the mark of X is granted only by the chair of the academic department involved with the recommendation of the instructor. If the student meets the prescribed requirements of the course before the end of the next academic semester (Summer school, two sessions, is considered a unit equivalent to a long semester.) after the X is given, the student will receive the grade earned; otherwise, the **mark X will be automatically changed to the grade of F**." (Sam Houston State University, 2006-2008, Undergraduate Catalog, p. 72)

Grades in the course are posted online for the registrar's office. As soon as the grades are posted they are recorded on the student's transcript.

Wednesday, October 10, 2007, is the last day to drop the course without a grade of F or to resign from Sam Houston State University without receiving either a WP or WF. Friday, November 16, 2007, is the last day to resign from Sam Houston State University.

"A student receiving a grade believed to be in error after the grade is reported should request a review of this grade upon receipt. The review of the grade should be made with the instructor involved." (Sam Houston State University, 2006-2008, Undergraduate Catalog, p. 74.) My policy is to follow the above directive.

Attendance:

Regular and punctual class attendance is expected of each student enrolled in Chemistry 136. The class roll will be checked each day. A written record of each student's attendance will be maintained. If a student is tardy to class, it is the student's responsibility to inform the instructor that he/she was tardy immediately after the class has been dismissed so that the absence can be removed from the student's record.

Students are expected not to be disruptive when they are tardy to class. Also, when it is necessary for a student to leave class early, the student is expected not to disturb other students. Students should not regularly be tardy to class. Neither should students regularly leave class early.

It is the responsibility of each student who misses lecture material to obtain the class notes over the lecture material from a student who was present during the lecture presentation.

It is the responsibility of each student who misses a class to prepare a statement as to why the class was missed, the date of the missed class, and his/her name. This written information should be presented to the instructor who will place it in the class file. This statement should be presented to the instructor on the day the student returns to class after an absence.

Each student who misses an assigned examination is expected to show appropriate cause for missing the examination before being permitted to take the make-up examination. Appropriate causes for missing an examination include personal illness; death in the student's immediate family; death of the student's roommate, girl-friend or boyfriend; hospitalization of the student; confinement of the student in a jail; summons of the student to be present in a court hearing; jury duty; and involvement of the student in an automobile accident immediately prior to the examination. The student may be able to show other appropriate cause for missing an examination.

Academic Honesty:

"The Faculty Handbook states that the University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. Furthermore, the University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials."

Students are expected to follow the code of academic honesty outlined in *Student Guidelines*, 2007 – 2008, of the Division of Student Services.

Proper Classroom Demeanor/Rules of Conduct:

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the University. Please turn off or mute your cellular phone and/or pager before class begins. Students are requested not to eat and drink in class, use tobacco products, make offensive remarks, read newspapers, sleep, talk among each other at inappropriate times, wear inappropriate clothing, or engage in any other form of distraction. Inappropriate behavior in the classroom shall result in a, minimally, a directive to leave class or being reported to the Dean of Students for disciplinary action in accordance with university policy.

Students will turn off their cellular phones and laptops while taking exams. In addition, their cellular phones and laptops must not be visible while taking exams.

The only exceptions to turning off or muting cellular phones will be students who have jobs that require them to be on call at all times (EMS personnel, some law enforcement personnel, etc.). Students who will possibly receive telephone calls related to their jobs should inform the instructor about this situation. Also, occasionally a student will have a sick child that will require the student to be notified of the child's condition. Students who have this situation should inform the instructor about it before class starts.

Students should respect the rights of all students to hear the lecture by not talking to other students during the lecture.

OTHER ADMINISTRATIVE MATTERS

Americans with Disabilities Act:

Sam Houston State University adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until the student registers with the Counseling Center. The student is encouraged to discuss with the faculty member about how the faculty member can best help the student.

The policy for services to Sam Houston students with disabilities is found in *Service and Documentation Guidelines Brochure*. Students seeking academic accommodations for disabilities are expected to follow the outlined documentation requirements and procedures.

"According to University policy requests for accommodations must be initiated by the student. A student seeking accommodations should go to the Counseling Center and Services for Students with Disabilities (SSD) in a timely manner. Every semester that the student desires accommodations, it is the student's responsibility to complete a Classroom Accommodation Request Form at the SSD office and follow the stated procedure in notifying faculty. Accommodations for disabled students are decided based upon documentation and need on a case-by-case basis by the Counseling Center."

MISCELLANEOUS (AS NEEDED OR DESIRED)

Visitors In The Classroom:

"Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom." (Faculty Handbook)

Official Majors

Students only become Official Majors when they file a degree plan with the appropriate departmental office. Students are often eligible for departmental scholarships when they are official majors in that department.

Religious Holidays:

Wednesday, September 5, 2007, is the deadline for the student to notify the faculty of the student's intent to be absent on Religious Holy Days. University policy states that a student who is absent from class for the observance of a religious holy day is to take an examination or complete an assignment scheduled for that day must do so within a reasonable time after the absence.

TENTATIVE COURSE OUTLINE

Week of	Chapter	Subject
Aug. 15 - 17		Registration
Aug. 20 - 24	11	Class Attendance Policy, Organic Compounds Hydrocarbons, Alkanes,
Aug. 27 – 31	11	Hydrocarbons, Alkanes, Cycloalkanes
Sept. 3	Labor Day Holiday	
Sept. 4 - 7	12	Unsaturated Hydrocarbons – Alkenes, Alkynes, Aromatic Hydrocarbons
Sept. 10 – Sept. 14	13	Alcohols, Phenols, and Ethers
Sept. 17 - 21	14	Aldehydes, Ketones
Sept. 24 - 28	16	Carboxylic Acids, Esters
Oct. 1 - 5	18	Amines, Amides
Oct. 8 – Oct. 12	15	Carbohydrates
Oct. 15 - 19	19	Proteins
Oct. 22 – 26	20	Enzymes
Oct. 29 – Nov. 2	17	Lipids
Nov. 5 - 9	21 20	Nucleic Acids Vitamins
Nov. 12 - 16	20	Vitamins Minerals
Nov. 19 – 20	22	Carbohydrate Metabolism
Nov. 21 - 23	Thanksgiving holidays	
Nov. 26 – 30	22	Carbohydrate Metabolism
Dec. 3 - 6	24	Lipid and Amino Acid Metabolism
Dec. 7	Final Exam Study Day	
Dec. 13	Final Exam	