INTRODUCTORY CHEMISTRY II
CHEM.1407.62430
WINTERMESTER 2018
12/11/2017 TO 01/05/2018

PROFESSOR:    SAMAR KOLAILAT
EMAIL:     SKOLAILAT@DCCCD.EDU
OFFICE NUMBER:    H 127
OFFICE HOURS:    BY APPOINTMENT
MEETING DAYS AND TIME:  LEC: INET
                      LAB: INET
                      M T W R F
CREDIT HOURS:  4
DIVISION:    SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS
DEAN:     CHERLYN SHULTZ-RUTH,
DIVISION OFFICE PHONE:   214-860-3617
DIVISION OFFICE NUMBER:

COURSE DESCRIPTION
This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. (3 Lec., 3 Lab.)

COURSE PREREQUISITES
One of the following must be met: (1) Developmental Reading 0093 or (2) English as a Second Language (ESOL) 0044 or (3) have met the Texas Success Initiative (TSI) Reading standard.

COURSE COREQUISITE   NONE
REQUIRED TEXT(S)
LECTURE
CHEM 1405, 1406 and 1407 need to use the following e-text from this website:
Ball et al. "The Basics of GOB Chemistry"

LABORATORY
CAROLINA DISTANCE LEARNING CHEMISTRY SCIENCE KIT
http://www.carolina.com/catalog/detail.jsp?prodId=581557
REQUIRED MATERIALS: GOGGLES, AND LATEX GLOVES

STATE REQUIREMENTS:

COURSE OBJECTIVES
The objective of the study of a life and physical sciences component of the core curriculum is the focus on describing, explaining, and predicting natural phenomena using scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.
Required Core Objectives for Chemistry are as follows:

- Critical Thinking
- Communication
- Empirical and Quantitative Skills
- Teamwork

For 2016-2017, Chemistry will evaluate and assess the following Core Objectives:

- Teamwork

The following science courses include the above core objectives: Biology 1406, 1407, 1408, 1409, 1411, 2401, 2402, 2406, 2416, 2420, 2421; Chemistry 1405, 1406, 1407, 1411, 1412, 2423, 2425 Geology 1401, 1402, 1403, 1404, 1405, 1445, 1447; Physics 1401, 1402, 1403, 1404, 1405, 1407, 1415, 1417, 2425, and 2426.

STUDENT LEARNING OUTCOME

STUDENT LEARNING OUTCOMES FOR DISCIPLINE OF CHEMISTRY

Student will be able to:
1. Solve quantitative chemistry problems and demonstrate reasoning clearly and completely. Integrate multiple ideas in the problem solving process. Check results to make sure they are physically reasonable.
2. Clearly explain qualitative chemical concepts and trends.
3. Describe, explain, and model chemical and physical processes at the molecular level in order to explain macroscopic properties.
4. Perform laboratory techniques correctly using appropriate safety procedures.
5. Analyze the results of laboratory experiments, evaluate sources of error, synthesize information, and express it clearly in written laboratory reports.
6. Maintain a laboratory notebook according to standard scientific guidelines.
7. Design, construct, and interpret graphs accurately.
8. Ability to relate to chemistry through artistic interpretation.
9. Apply chemical knowledge to other science and non-science disciplines.

STUDENT LEARNING OUTCOMES FOR AA & AS DEGREE PROGRAM

Student will be able to:
1. Reason logically to solve social, political, economic, scientific, quantitative, or personal problems.
2. Communicate ideas (aurally, orally, and in writing) with clarity, logic, proper grammar, and appropriateness for audience and occasion.
3. Employ reading strategies to demonstrate learning, to analyze information, to formulate judgments, and to make recommendations.
4. Apply research skills necessary to retrieve and evaluate information.
5. Demonstrate scientific reasoning to solve problems. (AS Degree only)

COURSE OUTLINE

CHEMISTRY 1407 COURSE CONTENT

CHAPTER COVERED:

- Organic Chemistry of Hydrocarbons
- Organic Functional Groups: Structure and Nomenclature
- Organic Functional Groups: Introduction to Acid-Base Chemistry
- Functional Group Reactions
- Carbohydrates
- Lipids
- Proteins and Enzymes
- Nucleic Acids
- Metabolism
This is a tentative lecture schedule of events and is subject to change. Please refer to ecampus.dcccd.edu for all course information.

**Course Outline (Calendar):**

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<tr>
<td>12/11-12/14</td>
<td>11.1. Bonding and Molecular Geometry &amp; Biodiesel</td>
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<tr>
<td>12/14</td>
<td>QUIZ 1</td>
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<td>12/15</td>
<td>EXAM 1</td>
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<td>Labs: Aspirin &amp; Chromatography</td>
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<tr>
<td>12/19</td>
<td>QUIZ 2</td>
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<td>12/20</td>
<td>EXAM 2</td>
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<tr>
<td>12/21-12/24</td>
<td>15. Lipids</td>
<td>16. Amino Acids, Proteins, and Enzymes</td>
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<td></td>
<td>Labs: Saponification &amp; Fermentation</td>
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<tr>
<td>12/24</td>
<td>QUIZ 3</td>
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<td>12/26</td>
<td>EXAM 3</td>
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<td></td>
<td>Labs: Isolation &amp; Enzyme</td>
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<tr>
<td>12/30</td>
<td>QUIZ 4</td>
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<td>01/02</td>
<td>EXAM 4</td>
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<td>01/04</td>
<td>LAB FINAL EXAM</td>
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<td>01/05</td>
<td>Comprehensive Final Exam</td>
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**Homework and Exam Dates Will Be Given in Class.** There will be no make up work without sufficient proof of absence.

**Late Assignments may receive a 10% deduction in grade.**

Note: Starting Fall 2006, the final exams for this course as well as other chemistry courses will be standardized exams from the American Chemical Society.

**Assessment**

*Exams and Assignments:*
The final grade for the course is based on the grade scale shown below. There are no exceptions to this grade scale.

The total points are based on the following:

- 50.0 pts EXAMS
- 10.0 pts QUIZ
- 24.0 pts LAB REPORTS
- 6.0 pts LAB FINAL
- 5.0 pts HOMEWORK ASSIGNMENTS
- 5.0 pts COMPREHENSIVE FINAL EXAM

100 pts

**FINAL EXAM**
The final exam will be a standardized test compiled by the American Chemical Society. This tool will assess your overall chemistry knowledge of this course. A mastery of 60% or above is acceptable and the paradigm.

**LAB**
*All students must score 70% on lab safety exam.* If score is less than 70%, student must retake safety exam. No student will be allowed to work in the lab unless 70% mastery is achieved. Labs for Excel graphing will be specially assessed to test your graphing ability. A mastery of 60% or above is acceptable and the paradigm.

**LAB FINAL EXAM**
Questions will be specifically assessed to determine your laboratory knowledge, one of which will be on Excel graphing exercise. A mastery of 60% or above is acceptable and the paradigm.

Grades will be assessed on basis of creativity, originality, neatness and accuracy with an assessment form administered by the Chemistry department. A mastery of 60% or above is acceptable and the paradigm.

**Quizzes**
Quizzes are given at the discretion of the instructor, and could be calculated into overall grade.

**GRADING SCALE**

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<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>100 TO 89.5</td>
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<tr>
<td>B</td>
<td>&lt;89.5 TO 79.5</td>
</tr>
<tr>
<td>C</td>
<td>&lt;79.5 TO 64.9</td>
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<tr>
<td>D</td>
<td>&lt;64.9 TO 59.5</td>
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<tr>
<td>F</td>
<td>&lt;59.5 TO 0</td>
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**INSTITUTIONAL POLICIES**

**Attendance Policy:**
Students are expected to regularly attend all classes in which they are enrolled and to be on time. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. There are NO make-up exams, labs or homework assignments EXCEPT with a genuine excuse from instructor
No student is exempted from taking the final exam. If a student cannot take the final exam on the regular scheduled date, that student will receive a grade of “incomplete” until such time as the exam is completed, EXCEPT in case of an emergency.

Students who are absent from class for the observance of a religious holiday may take an examination or complete an assignment for that missed class within a reasonable time after the absence, if no later than the 15th day of the semester, the student notified the instructor that the student would be absent for a religious holiday.

Sec.51.911TX. Educ. Code

**Attendance Policy Addendum Statement**

Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.

**Repeating This Course:**

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. This class may/may not be repeated for the third or subsequent time without paying the additional tuition. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 semester. More information is available at: https://www1.dcccd.edu/cat0506/ss/oep/third_attempt.cfm

**STOP BEFORE YOU DROP**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops

**Financial Aid:**

If you are receiving financial aid grants or loans, you must begin attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. For further information, please contact Financial Aid at 214-860-8688, 8834, or 8826.

**The Texas Success Initiative (TSI):**

The Texas Success Initiative (TSI) is a statewide program designed to ensure that students enrolled in Texas public colleges and universities have the basic academic skills needed to be successful in college-level course work. The TSI requires assessment, remediation (if necessary), and advising of students who attend a public college or university in the state of Texas. The program assesses a student’s basic academic skills in reading, writing, and
math. Passing the assessment is a prerequisite for enrollment in many college level classes. Students who do not meet assessment standards may complete prerequisite requirements by taking developmental courses in the deficient area and passing them with a grade of C or higher. Additional information is available at https://www1.dcccd.edu/cat0506/admiss/tsi_requirements.cfm

**Academic Honesty:**
Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Online Catalog. More information is available at https://www1.dcccd.edu/cat0406/ss/code.cfm

**ADA Statement:**
If you are a student with a disability and/or special needs who requires accommodations, please contact the college Disability Services Office. For information regarding the rights and responsibilities of students with disabilities, contact DSO at 972-260-8691 (Voice) or 972-860-3651 (TDD).

**Religious Holidays:**
Absences for observance of a religious holy day are excused. A student whose absence is excused to observe a religious holy day is allowed to take a make-up examination or complete an assignment within a reasonable time after the absence.

**Inclement weather:**
In the event of severe weather conditions, please listen to local radio or television stations for information concerning official closing of Mountain View College facilities. You can also call the information line at 214.860.8680, or check for updates on this web site. Decisions for evening classes will be made by 4:00 pm. http://www.mountainviewcollege.edu/1weather.aspx

**Final Course Grade:**
Final grades are available only on eConnect and touchtone telephone at 972-613-1818. You will need your student ID number and use your birth date as your password. http://econnect.dcccd.edu/econnect/st/stmenu.html

**Disclaimer Reserving Right to Change Syllabus:**
The instructor reserves the right to amend this syllabus as necessary.

**Withdrawal Policy (with drop date):**
If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office by 

Failure to do so will result in your receiving a performance grade, usually an "F." If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a "W" (Withdraw) in each class dropped.
STUDENT CONTACT INFORMATION

Name:
Current E-mail Address:

I will read the syllabus and ask questions on subjects that need further clarification. I understand that this syllabus is a contractual agreement, and accept this syllabus as a contract subject to change, and, if changes are made, my professor will give me prior notice in the form of oral or written communication in class. I will also refer to this syllabus when I have questions about grades and extracurricular projects. I understand that it is my responsibility to drop this course, after consulting my professor. I will consciously make an effort to turn off my cell phone before every lecture. I also understand that lab safety is my responsibility and will come prepared for lab with proper equipment. I understand that if I am not properly prepared for lab, that I will be asked to leave and receive a zero for that lab. I also understand that any violation of the rules that are written and/or orally communicated for lecture and/or laboratory could result in disciplinary action.

Signature and Date