CAMPBELLSVILLE UNIVERSITY

COURSE SYLLABUS

PLEASE TYPE. DATE 12 January 2016

ACADEMIC UNIT Natural Science Division FACULTY Elizabeth K. Sutton

Discipline	Course # Section	Title of Course	Credit Hours	Cross Reference (if applicable)
CHE	342-01	Organic Chemistry II	3	n/a

TEXTBOOK [X] Required [ ] Not Required

Author Smith, Janice Title "Organic Chemistry", 3rd ed.

Publisher McGraw-Hill Date of Publication 2011

WORKBOOK [ ] Required [ ] Not Required

Author Title

Publisher Date of Publication

PLEASE ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER AND ATTACH TO THIS FORM.

1. DESCRIPTION OF COURSE: Develop a brief description of the course as it will appear in the Catalog.
2. STUDENT LEARNING OBJECTIVES: List the student learning objectives for the course. Please relate these objectives to the mission and goals of the University and the Academic Unit. For general education courses, please indicate which student learning objectives address general education goals and the intended method of assessment. A minimum of four of the seven general education goals must be included.

   Example: Students will demonstrate their ability to compare and contrast two types of basket weaving. (Goal: Oral and Written Communication; Evidence: research paper and class presentation)
3. COURSE OUTLINE: Outline the topics/units that are to be taught.
4. EVALUATION: How do you plan to determine the grade in the course? Please include grading scale.
5. REQUIREMENTS:
   a. Examinations: State when tests are to be administered, including unit, mid-term, and final examinations.
   b. Reports: How many, length required, and what type (Oral, term and/or research, book critiques).
   c. Supplemental reading assignments or outside work required.
   d. Supplemental instruction aids: Audio visual aids, field trips, guest speakers, etc.
6. BOOKLIST

DEAN Date Copy Received

VICE PRESIDENT FOR ACADEMIC AFFAIRS Date Copy Received

CHE 342 Organic Chemistry II **INSTRUCTOR: E. K. Sutton, SSC 206**
Spring 2016 **E-mail: eksutton@campbellsville.edu**
CREDIT HOURS: Three **PHONE: 270-789-5327**
OFFICE HOURS: As posted

Section 1: Course Description

CHE 342 is a continuation of CHE 341 with emphasis on the aromatic organic compounds. Also included are aliphatic compounds not treated in CHE 341 in light of modern theories.
Pre requisites: CHE 341, CHE 343. Concurrent enrollment with CHE 344.

Section 2: Course Objectives

A. **General Education Curriculum Objectives (GECO):** (numbered to correspond to the objectives listed in the University catalog.)
   2. Critical Thinking: Students will demonstrate the ability to reflect on theories and issues in a systematic fashion.
   4. Ethics: Students will demonstrate an understanding of Christian values and ethical standards in order to make mature and informed decisions concerning moral issues.
   5. Oral and Written Communication: Students will demonstrate the ability to express ideas, beliefs, and information in an organized, precise, and persuasive manner.
   6. Quantitative Literacy: Students will demonstrate the ability to understand and utilize mathematical and/or logical relationships to analyze data, to construct and assess arguments, and to make sound judgments in quantitative situations that arise in daily life.
   7. Social Responsibility and Citizenship: Students will demonstrate an understanding of personal and social responsibility in a changing global environment so that students can make contributions to their respective discipline and to society as a whole.

B. **Student Learning Outcomes (SLO)**: (Numbered to correspond to the pertinent General Education Curriculum Objective [GECO]).
   1. Students will understand and be able to explain the basic principles of organic chemistry. (GECO 2, 6)
   2. Students will execute calculations related to quantitative aspects in organic chemistry. (GECO 2, 6)
   3. The student will recognize how chemistry provides solutions to contemporary, historical, technological, and societal issues. (GECO 2, 4, 6, 7)
   4. Students will develop an awareness of how a basic understanding of chemistry, the proper application of that knowledge, and the interaction between chemistry and other fields of study and careers is important to personal and social issues. (GECO 4, 6, 7)
   5. Students should be able to read, understand, and apply scientific information through thinking more critically, discussing more meaningfully, arguing more persuasively, and writing more effectively. (GECO 2,5**)**

C. **Program Learning Outcomes (PLO):** (numbered to correspond to the listing in the program assessment document)
   1. The student will be able to demonstrate a solid understanding of the core principles in the traditional subdivisions of chemistry: Analytical, Inorganic, Organic, and Physical.
   2. The student will be able to perform qualitative/quantitative chemical analyses/syntheses through the use of the appropriate laboratory techniques/equipment, experimental design, data acquisition, interpretation of data, and relevant instrumentation.
   4. The student will be able to articulate chemical information/data/ideas clearly and effectively in speech and in writing in an acceptable presentation format.
   6. The student will demonstrate critical thinking skills in chemistry: interpretation, evaluation, explanation, and scientific inquiry; how to ask appropriate questions, gather relevant information effectively and creatively, and reason logically from this information to make reliable conclusions.

D. **Course Specific Objectives (CSO)**: The student is expected to recognize and apply the fundamental and practical aspects of the following concepts and apply the concepts to problem solving: (numbered to correspond to the pertinent program learning outcome [PLO])

1. The student will be able to define, identify and illustrate various functional groups: aldehydes, amines, aromatic hydrocarbons, carboxylic acids and their derivatives, ketones, organometallic compounds and conjugated dienes. (PLO 1,2,6)
2. The student will be able to demonstrate the ability to name and draw structures of chemical compounds possessing those functional groups. (PLO 1,2,6)
3. The student will be able to predict the outcome of organic reactions involving these functional groups under given reaction conditions. (PLO 1,2,6)
4. The student will be able to draw and show scientifically valid reaction mechanisms of organic chemical reactions. (PLO 1,2,6)
5. The student will be able to demonstrate the ability to outline syntheses of simple organic compounds. (PLO 1,2,6)
6. The student will be able to define, illustrate and discuss pertinent thermodynamic and kinetic parameters associated with conformational analysis and chemical reactions. (PLO 1,2,4,6)
7. The student will be able to demonstrate the ability to interpret infrared, NMR, UV and mass spectroscopy. (PLO 1,2,6)

Section 3: Course Outline

1. Spectroscopy: IR, NMR and Mass Spectroscopy	6. Aromaticity and Aromatic Compounds
2. Organometallic Compounds	7. Aromatic Chemical Reactions
3. Aldehydes and Ketones	8. Amines
4. Carboxylic Acids and Their Derivatives	9. Conjugated Dienes and UV Spectroscopy
5. Enolates and Enamines	

Section 4: Evaluation

Exams (4 @ 100 pts)	400 pts	720-800 pts	A
Final Exam (comprehensive)	200 pts	640-719 pts	B
Quizzes	100 pts	560-639 pts	C
Homework	100 pts	480-559 pts	D
TOTAL	**800 pts**	Below 480 pts	F

- **If, for any reason, you cannot continue to attend this class, be certain you DROP IT OFFICIALLY. Otherwise you will automatically receive a failing grade.**
- **Any student who does not obtain at least 50% of the lecture components (homework, quizzes, hourly exams and final) will fail the course.**

Section 5: Requirements

A. **Numbers to Remember:**

1. **Campus Security Cell Phone: 270-403-3611**
2. **Campus Security Office Phone: 270-789-5555**
3. **Natural Science Division Office Phone: 270-789-5065**

Dates to Remember:			
M. L. King, Jr Day-No Class	Jan 18	First Bi-term ends	Mar 12
Evening classes begin	Jan 19	Spring Break-No Classes	Mar 13-18
Day classes begin	Jan 20	Second Bi-term begins	Mar 21
Last day add/register for Spring term	Jan 22	Easter Holiday-No Classes	Mar 25-28
Last day to drop 1st Bi-term class with W	Feb 20	Last day to drop a semester class with W	Apr 15
Midterm Week	Mar 7-11	Finals Week	May 9-13

B. *Examinations:* Four hourly exams (100 points each) will be given throughout the semester, with exam dates being announced in class approximately a week in advance. A COMPREHENSIVE two-hour final valued at 200 points will be given at the end of the semester according to the exam schedule furnished by the Academic Dean's office. **No make-up exams will be given.** If an exam is missed

throughout the semester, the value of the final exam will increase in proportion to the number of exams missed. However, the maximum number of hourly exams that may be missed is two. (The final exam may not be missed.) Cases of prolonged absence, severe illness, or death in the immediate family will be handled on an individual basis.

Students will be administered the American Chemical Society (ACS) standardized exam at the end of the semester meant to aid in the assessment of the chemistry program. It will be 50 multiple choice questions to be taken in 100 minutes. Each student that scores above 65% will receive 20 points, students scoring above 50% will receive 10 points added to their final exam score.

C. *Quizzes:* Students are required to take out-of-class quizzes. There will be one quiz per chapter for giving a total of twelve online quizzes. Each quiz will be available only during a specified period. All out-of-class quizzes must be completed no later than 5 pm on the last day of class, May 2, 2008. Each out-of-class quiz will have a time limit once the quiz started. You must complete the quiz within that time. You may use your textbook, your notes, a calculator, and scratch paper when working on the online quizzes, but you may not receive any help or give any help to anyone taking an online quiz. It is recommended that the chapter quizzes be taken as soon as possible after the chapter has been covered in class. All quizzes must be completed by the deadlines set by the instructor. Any quiz not completed by the deadline will be recorded as a zero. At the end of the semester, the two lowest out-of-class quiz scores will be dropped, and the remaining quizzes will be averaged.

D. **Attendance/Absences:** The attendance policy of the University will be strictly enforced in this class. An attendance sheet will be passed around at each class meeting, and each student is responsible for initialing the sheet appropriately to record attendance. Students arriving to class more than 5 minutes late to class (by my watch) will be counted as a late arrival. Two late arrivals count as a full absence. After **six(6)** absences, the student will be turned in to the Office of Academic Support. After **eight** absences (the equivalent of four weeks of class), the student will be dropped from the course with a 'WA', this counts like an 'F' in grade-point average computation.

If a student misses the final exam for a documented emergency (traveling early for Christmas vacation or Spring Vacation does not count as an emergency), then a grade of 'X' will be assigned for the course, and a special exam must be taken within one month after the student re-enters the University (contingent on approval by the course instructor and the Vice President for Academic Affairs), otherwise, the 'X' becomes a failing grade and is so recorded.

Each student is responsible for all material covered in class, whether or not the student is in attendance, so always keep up with what was done during an absence by borrowing notes from other students and/or speaking with the instructor. Medical absences will be excused based on written advice from the campus nurse or a health-care provider (based upon clinical findings and prescribed treatment recommendations). The medical document must specifically indicate that you were unable to attend class/recitation. All excused absences require written documentation and will be verified by the chemistry department staff. **No verbal or email excuses will be accepted**.

E. **Classroom Behavior:**

1. **Your basic responsibilities include:**
    a. Attend all lectures, recitations and exams and bring a scientific calculator.
    b. Read the assigned material prior to class.
    c. Study your lecture notes and assigned text reading.
    d. Do assigned homework problems on time and review them before exams.
    e. Do not fall behind!
    f. Take all examinations!
    g. All students are expected to behave in a manner that is conducive to a learning/teaching environment. This includes begin respectful to fellow students, guest speakers, and me. Students who engage in behavior that is disruptive to the learning environment will be asked to leave for the remainder of the class period.
2. Guests are only allowed in class at the discretion of and with prior approval from the instructor.
3. Electronic recording devices of any kind are not permitted except in special circumstances and with the specific permission of the instructor.
4. While you are expected to attend and participate in this class, your cell phone, computer, and

MP3 players are **not**. Pagers, cell phones, and similar items are disruptive to the entire class and **must be turned off** during class. **The owner of any such device that activates during class will be immediately excused from class and counted as absent for the entire period.**

5. **USE OF CELL PHONES, COMPUTERS, AND MP3 PLAYERS DURING EXAMINATIONS AND QUIZZES WILL BE CONSIDERED ACADEMIC DISHONESTY, WHICH WILL RESULT IN A ZERO BEING AWARDED FOR THE QUIZ OR EXAMINATION (NO EXCEPTIONS!).**
6. Hats and caps are to be removed prior to entering the classroom.
7. Take care of any physiological needs *before* coming into the classroom.
8. Unacceptable student behaviors:
   a. Sleeping during class
   b. Chronic tardiness. Be here ready to learn when class begins.
   c. Reading, studying or working on materials for other classes.
   d. Chatting with your classmates when the instructor or other classmates are speaking.
   e. Prematurely packing up your books and bags before class has been dismissed.

F. **Academic Misconduct/Integrity:** Students in this course will be working toward mastery of the material to satisfy the course objectives. ***This class is held to an honor system, meaning that cheating, allowing someone to cheat, or failing to report known cases of cheating are all considered academic misconduct***. Cheating includes, but is not limited to, any attempt to present the work of another as your own; discussing or copying exams, quizzes, or homework with students who have not yet completed them; using "cheat sheets" on exams or quizzes; altering a test for re-grade, plagiarism of primary or secondary sources of information or using programmable calculators to store and/or recall prohibited information for an exam. Any student who refuses to allow a calculator to be inspected by the instructor upon request will not be allowed to use that calculator on the exam/quiz. Be aware that aggressive methods are used to protect the majority of you who are honest. **Students caught cheating or plagiarizing will receive a grade of zero for that test or assignment and may be given an F for the course.** A copy of the Division of Natural Sciences (DNS) policy on Academic Integrity is available on the course TigerNet page. Please read this policy and take it very seriously.

For information about plagiarism and how to avoid it, consult the following websites:

- Plagiarism? It's your call (Western Michigan University/Stanford University, 2008) http://www.wmich.edu/library/searchpath/module6
- The Plagiarism Court: You Be the Judge (Islam,2007, Fairfield University) http://www.fairfield.edu/library/lib_plagiarismcourt.html)
- What is Plagiarism? (Pearson/Prentice-Hall) http://wps.prenhall.com/hss_understand_plagiarism_1/
- Indiana University Bloomington, School of Education (accessed 16May2012) http://www.indiana.edu/~istd/.

Students will be asked to sign an integrity statement on each assignment/examination/quiz. The following statement reads as follows:

"I pledge on my honor that on this assignment/examination/quiz I have neither received nor given nor have I seen any dishonest work.
Signature _____ Date _____"

G. **Teaching Methods**
The lecture method will be used as well as a hands-on laboratory experience in instrumental methods. In addition to hands-on laboratory work, computer simulation programs will be used to provide the student with experience in generation and interpretation of several instrumental methods.

Section 6: Book List

Organic Chemistry, William H. Brown, Christopher S. Foote and Brent L. Iverson, 4th ed., Brooks/Cole—Thomson Learning, 2005, ISBN: 0-534-46773-3

Section 7: Disabilities

Campbellsville University is committed to reasonable accommodations for students who have documented physical and learning disabilities, as well as medical and emotional conditions. If you have a documented disability or condition of this nature, you may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Coordinator of Disability Services at 270-789-5192 to inquire about services.

Section 8: Academic Support

The Academic Support area, located in the Badgett Academic Support Center (BASC), exists to help students. At certain times, most students need some help with studying, choosing a career, major/minor, or assistance in a difficult course. The following services are available Career Services, Disability Services, tutoring, and the Citizens Bank & Trust Writing Center. *These services are provided at no extra cost to the student.* Space is also available for individual and group study, and laptop computers are available for students to check-out and use within the building. Information about these services is accessible by clicking on the "Current Students" tab on the University website at www.campbellsville.edu. Information is also available by calling the Office of Academic Support at (270) 789-5064.

Section 9: Title IX

Campbellsville University and its faculty are committed to assuring a safe and productive environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office of Civil Rights, the University requires all responsible employees, which includes faculty members, to report incidents of sexual misconduct shared by students to the University's Title IX Coordinator.

Title IX Coordinator:
Terry VanMeter
1 University Drive
UPO Box 944
Campbellsville, KY 42718

Administration Office 8A
Phone: 270-789-5016
Email: twvanmeter@campbellsville.edu

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: www.campbellsville.edu/titleIX

Tentative CHE 342 Course Schedule Spring 2016

WEEK #	WEEK OF	TOPIC	TEXT
1	JAN 18	Introduction, IR Spectroscopy, Mass spectroscopy	Ch. 13
2	25	Mass Spectroscopy, NMR Spectroscopy	13,14
3	FEB 1	NMR (Continued)	14
4	8	Radical Reactions **Exam 1**	15
5	15	Organometallic Compounds Introduction to Carbonyl Chemistry	20
6	22	Aldehydes and Ketones Introduction to Carbonyl Chemistry	21 20
7	29	Enols & Enolates (Substitution Reactions of Carbonyl Compounds) **Exam 2**	23
8	MAR 7	**Mid-term Week** Carbonyl Condensation Reactions	24
9	**14-18**	**SPRING BREAK—NO CLASS**	
10	21	Carboxylic Acids	19
	25-28	**EASTER HOLIDAY BREAK—NO CLASS**	--
11	30	Carboxylic Acids & Their Derivatives	22
12	APR 4	**Exam 3** Benzene and Aromatic Compounds	17
13	11	Benzene and Aromatic Compounds Electrophilic Aromatic Substitution (EAS)	17 18
14	18	Electrophilic Aromatic Substitution (EAS) Amines	18 25
15	25	**Exam 4** Amines	25
16	MAY 2	Conjugated Dienes, General Review	16
17	**9**	**Finals Week – Final will be Monday, 9 May 2016 at 8:00 a.m.**	

In the event of class cancellation for any reason (weather, instructor illness, etc.) exams or other scheduled activities will be administered in the next active class period.

COURSE #: _____ SEMESTER: _____

COURSE TITLE: _____

Student's Acceptance of Course Policies

Please fill out and sign the following form and **return it no later than _____** to the instructor. **Use a blue or black pen (no pencil).**

I, _____, have read the entire syllabus describing the course
(Print your name neatly)

policies for this course, taught by Ms. E. K. Sutton. I fully understand these policies and I agree to comply with them during the entire _____ term.

Signature: _____ Date: _____