WALTERS STATE COMMUNITY COLLEGE
Course Syllabus

COURSE: Organic Chemistry Laboratory I - CHEM 2011
SEMESTER: Fall 2011
INSTRUCTOR: Dr. Lawrence F. Kennard, Office 124 NSCI, 585-6878
e-mail: Lawrence.Kennard@ws.edu
Office Hours: Posted on instructors office door
FAX: 423-318-2762
Secretary: 423-585-6865 (Sherry Woody)

REQUIRED TESTBOOK AND SUPPLEMENTARY MATERIALS:
Organic Chemistry Laboratory Experiments developed by professor
180° Wraparound Safety Spectacles from Norton
Laboratory Notebook from Comer School Supplies

COURSE DESCRIPTION:
An introductory sequence course in organic chemistry which considers the occurrences,
structure, properties and uses of the more important classes or organic compounds with
laboratory experiments and exercises which correspond to lecture materials in CHEM 2010.
(Corequisite CHEM 2010)
3 hours laboratory ------------------------------------------ 1 hour credit

COURSE COMPETENCIES AND OBJECTIVES:
Students are required to demonstrate competencies in performing simple distillation, fractional
distillation, flash evaporation, vacuum distillation, recrystallization, melting-point determination.
Karl Fisher titration, high performance liquid chromatography, thin-layer chromatography, gas
chromatography, sample preparation, labeling, reading MSDS documents, writing in a laboratory
journal and in doing material balance calculations. Students will acquire skills needed for
advanced lab work in chemistry or related disciplines. This course will also prepare the student
for work in the chemical industry.

COURSE TOPICS:
Experiments will be selected which will meet the objectives outlined above. [See attached
schedule].

METHODS OF INSTRUCTION:
1. Introductory lecture and demonstration
2. Student Experimentation
3. Problem Assignments

EVALUATION:
1. Quizzes 20%
2. Experiments 60%
3. Comprehensive Final Exam 20%
Grades will be determined by the student's percentile rank as follows:

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 0-59

Course Ground Rules:
Students should attend the first day of class or contact the instructor prior to the first class. Failure to do this may result in being dropped from the class.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students with disabilities must register with Student Support Services (CCEN), Room 262 (phone 423-585-6892) if they need any special facilities, services, or consideration.

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located in the College Center (CCEN), Room 261. The phone number is 423-585-6920.

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

Students who have not paid fees on time and/or are not correctly registered for this class and whose names do not appear on official class rolls generated by the Admissions and Records Office will not be allowed to remain in class or receive credit for this course.

Cellular phone use during classroom interaction is prohibited. Cellular phones must be turned to the non-audible mode until after class, at which time calls can be received or checked. (See the Walters State Catalog/Handbook)

For information related to the cancellation of classes due to inclement weather, please check the college’s Web site at www.ws.edu or call the college’s student information line, 1-800-225-4770, option 1; InfoConnect, (423) 581-1233, option 1045; the Sevier County Campus, (865) 774-5800, option 7; or the Greeneville/Greene County Center for Higher Education, (423) 798-7940, option 4. Also, please monitor local TV and radio stations for weather-related announcements. For additional information on this policy see the college catalog.

In the event of a pandemic or other college declared critical event that impacts the college’s ability to proceed with academic course activities as planned, the college reserves the right to alter this course plan. In the event of a pandemic or other event, please refer to the college’s home web page, www.ws.edu or call InfoConnect, (423) 581-1233 for further information.

Regular class attendance is a student’s obligation. (See the Walters State Catalog/Student Handbook) If for some reason a student misses class, it is his or her responsibility to see the instructor regarding missed assignments and/or activities and to be prepared for the next class. Excessive absences may substantially lower the semester grade. The college requires the instructor to keep accurate records and to report when students are not attending class.

Students are required to supply a #2 pencil for each lecture exam.
The wearing of hats and caps in class is not allowed! Students will be asked to remove their hats and caps.

**STAY AWAKE IN CLASS.** Your mere presence in class is not sufficient—you must be able to actively process the information presented! Sleeping in class is disruptive in two ways: the student who is snoozing is not interested and not participating in the classroom discussion; secondly, sleeping in class is considered to be disrespectful to the teacher and other students. The penalty for sleeping in class may range from the student being requested to leave the class with a following conference with the instructor, to notification of the Vice-President of Academic Affairs (in the cases of habitual sleepers). If you have a medical condition that prevents you from staying awake in class, please discuss this with the instructor.

**Safety:**
1. There will be **NO food, drink or tobacco products in the laboratory.**
2. **NO opened-toe shoes** can be worn during lab. You will not be allowed to stay in the laboratory if the lab exercise uses any sort of glassware or chemicals.
3. **NO purses, bags or coats** on top of the student tables.
4. **NO visitors in the laboratory without prior approval of the instructor.**

**Your Right to Know:**
Tennessee Law requires that you are provided notice that some of the laboratory exercises involve contact with chemicals which have been identified with potential health hazards. These chemicals include, but are not limited to: acetone, chloroform, formalin, acids and bases. While every effort has been made to make the materials as safe as possible these chemicals are toxic and you must be responsible for their safe handling. If you feel you may be at a higher risk then normal, if pregnant for example, we recommend you consult your physician.

**WSCC Catalog Notification Statement:**
All students attending Walters State Community College, regardless of the time and location of the class, must abide by the rules and regulations outlined in the current *Walters State Catalog/Student Handbook* and the current “Walters State Timetable of Classes.” A copy of the *Catalog/Handbook* and the “Timetable of Classes” may be obtained from the Admissions Office on the Main campus or at any of our off-campus sites. You may also access the Catalog/Handbook on-line at the following web address: [http://www.ws.edu/catalog](http://www.ws.edu/catalog).

**Alternative Teaching Plan**
In the event of a pandemic or other college declared critical event, the lead faculty member for this course will use eLearn to communicate with the students. If the lead faculty member is affected by this event, another member from the teaching team will assume instruction for the course. The course will continue utilizing an online format of instruction and testing.

**ATTENTION:** The Natural Science faculty members are concerned with proper academic advising of students in **ALL** Pre-Professional programs. It is our explicit desire to help you with any advising problems you may encounter.
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<thead>
<tr>
<th>Week</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>Organic Chemistry Laboratory at WSCC, Safety, Check-In</td>
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<tr>
<td>2</td>
<td>Melting Points: Melting Points as a Thermometer Calibration, Melting Point of an Unknown Compound</td>
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<td>3</td>
<td>Distillation: Simple Distillation of a Mixture</td>
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<tr>
<td>4</td>
<td>Distillation: Fractional Distillation of a Mixture</td>
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<td>5</td>
<td>Extraction of caffeine from NoDoz</td>
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<td>6</td>
<td>Thin Layer Chromatography: TLC Analysis of Drugs</td>
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<td>7</td>
<td>Gas Chromatography: Examination of an Unknown Mixture</td>
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<td>8</td>
<td>High Performance Liquid Chromatography: Analysis of Caffeine</td>
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<td>9</td>
<td>Column Chromatography: Isolation of Caffeine</td>
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<td>10</td>
<td>Optical Rotation: Determination of an Unknown Sugar</td>
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<td>11</td>
<td>Recrystallization of Impure Acetanilide</td>
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<td>12</td>
<td>Dehydration of Alcohols: Synthesis of Cyclohexene</td>
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<tr>
<td>13</td>
<td>Dehydration of Alcohols: Synthesis Cyclohexene</td>
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<td>14</td>
<td>Flex Day</td>
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<tr>
<td>15</td>
<td><strong>Final Exam;</strong> Clean-up; Check-out</td>
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