Course: CHEM 1121 – General Chemistry II Lab
Semester: Spring 2012
Instructors: Dr. Lawrence Kennard, Office NSCI 124, Phone 423-585-6878
E-Mail: Lawrence.Kennard@ws.edu
Dr. Doug Hensley, Office NSCI 119, Phone 423-585-6881
E-Mail: Douglas.Hensley@ws.edu
Dr. Matthew Smith, Office WSSC 201, Phone 865-774-5846
E-Mail: Matthew.Smith@ws.edu

Course Supervisor: Dr. Jeff T. Horner, Dean of Natural Science, Office NSCI 126
Contact: Phone: 423-585-6954, E-Mail: Jeff.Horner@ws.edu
Office Hours: Office hours are posted on instructor’s office door
FAX: 423-318-2762
Secretary: 423-585-6865 (Sherry Woody)

Required Textbook:
Textbook: No textbook. Download experiments weekly from eLearn site.
Safety Glasses: "Wrap-a-around" safety glasses
Calculator: Scientific model of your choice

Catalog Course Description:
A study of fundamental concepts and properties of selected elements and compounds with laboratory experiments and exercises which correspond to lecture material in CHEM 1120. (Corequisite: CHEM 1120 - 3 credits).

Course Outcomes:
The course content has been constructed around a common core. The subject content for the core is presented as assessment outcomes. Examinations and other methods will assess the student’s knowledge and understanding of subject content. The subject content for the core is shown as learning outcomes which are available on the Chemistry Home Page at www.ws.edu.

Experiments to be selected from for the Common Core:
1. Molecular Shapes
2. Soap
3. Synthesis of Aspirin, Methyl Salicylate and Ethyl Acetate
4. Chromatography
5. Study of Nitrogen Chemistry
6. Study of Carbonates & Carbon dioxide
7. Colligative Properties
8. Qualitative Analysis – Ca^{2+}, Ba^{2+}, K^+, NH_4^+ & Anions
9. Chemical Kinetics
10. Chemical Equilibrium
11. pH, Acids/Bases & Common Ion
12. Ka & Buffers
13. pH & Titration Curves
14. Oxidation/Reduction Reactions
15. Qualitative Analysis of Group IA
16. Analysis of Bleach

Optional:
I. Analysis of Aspirin by HPLC and VIV-VIS
II. Analysis of Unknown Alcohols by Gas Chromatography
III. Alcohol

General Education Course Designation: Natural Science (1 semester hour)

Instructional and Evaluation Methods:
There will be a lab lecture to go over the experiment, with an emphasis paid on safety and proper waste disposal. The students will then conduct an experiment and receive a grade based on technique and experimental results turned in on the data sheet.

There will be three lab quizzes covering three or four experiments. The quizzes will focus on activities and results obtained from the laboratory exercises and assess the achievement of the learning outcomes prescribed for this course. There will be a comprehensive final exam and clean-up on the last lab day.

Your attendance is essential to your success. You are required to attend each laboratory session in its entirety; each failure to do so without an acceptable excuse will result in a zero for that lab. If you cannot attend your normal laboratory section you may avoid the penalty by arranging in advance to attend a different section that week; however, this requires the advance consent of both lab instructors. It is your responsibility to make sure your regular lab instructor is aware that you attended a different section.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment Result</td>
<td>60%</td>
</tr>
<tr>
<td>3 quizzes average</td>
<td>20%</td>
</tr>
<tr>
<td>Final</td>
<td>20%</td>
</tr>
</tbody>
</table>

Grading Scale:

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

Assignments/Projects:
Students will read and study each experiment before coming to class.
**Class Participation:**
Students will conduct an experiment and submit a data sheet each week.

**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 phones and other electronic devices (ipods, headphones, etc.) 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 9; 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.