

## Fundamentals of Chemistry II Lab Syllabus CH 152L Spring 2012

Instructor:	Dr. Seid M. Adem	Dr. Lisa Sharpe Elles	Dr. Alan Shaver
E-mail:	<a href="mailto:seid.adem@washburn.edu">seid.adem@washburn.edu</a>	<a href="mailto:lisa.sharpeelles@washburn.edu">lisa.sharpeelles@washburn.edu</a>	<a href="mailto:alan.shaver@washburn.edu">alan.shaver@washburn.edu</a>
Phone	785-670-3242	785-670-3255	Use E-mail
Office & Mail-box:	312 F Stoffer	312 D Stoffer	Office: 115 Stoffer Mail-box: 312 Stoffer
Office Hours:	MWF 8:00am -10:00am	W 10am-noon, R 1-2pm, or as arranged	R 11am-noon, or as arranged (TR)
Section:	<b>L3</b> Tuesday 3:30-6:29pm <b>L4</b> Wednesday 2:00-4:59pm	<b>L2</b> Tuesday 12:30pm-3:29pm	<b>L1</b> Tuesday 9am-11:59am

**Lab Coordinator:** Dr. Shaun E. Schmidt, [shaun.schmidt@washburn.edu](mailto:shaun.schmidt@washburn.edu), 785-670-2265, 312 E Stoffer Science Hall, Office hours MWF 12-1 or as arranged.

**Purpose:** “Laboratory work deals with experimental studies on the theories of chemistry, qualitative analysis and independent laboratory projects.” Significant focus will be placed on 1) making and recording scientific observations, 2) communication of these observations using the language of chemistry, and 3) analysis and subsequent application of the chemistry observed. In other words:

**Pre-requisite:** CH 151

**Co-requisite:** CH 152

**Textbook, etc.:**

- *Laboratory Manual for Principles of General Chemistry*, by J. A. Beran, 2010, 8<sup>th</sup> ed. as prepared for the Department of Chemistry at Washburn University (required)
- *Student Lab Notebook*, Hayden-McNeil Specialty Products (required)
- Scientific calculator (required)

- 1) Observe IT,
  - 2) Record IT,
  - 3) THINK about IT,
  - 4) Question IT,
  - 5) Loop to step 3,
  - 6) Apply IT.

This laboratory textbook manual was prepared for Fundamentals of Chemistry I & II at Washburn University. It only includes material which your instructors deemed essential. Pages 8-10 render descriptions of laboratory equipment. Pages 11-34 present a good review of laboratory techniques. Review these pages. Also review the end of the manual containing Appendices. Over the two semesters, you will perform most or all of the Experiments. Each Experiment contains a Prelaboratory Assignment, which must be completed and turned in prior to the laboratory; a Report Sheet, that you fill out after the laboratory; and Laboratory Questions. You will complete all the Laboratory Questions presented in the textbook. Answer all Laboratory Questions in your lab notebook. You will not receive credit for answers written elsewhere.

**Attendance:** Class attendance is required. The instructor must be notified in person and by e-mail at least two weeks prior to any potentially excused absence. In the very unlikely case of a dire emergency, you must immediately notify your instructor by phone or in person. For any excused absence, the student is required to make arrangements with the instructors and a lab partner to make up any missed experiments at an appropriate time. If a university field trip or athletic event conflicts with a lab time, it is the **student's responsibility** to make arrangements with the instructors to perform the lab.

The Laboratory class is scheduled for 2 hours and 59 minutes. Due to the scheduling of the laboratory class and to ensure fairness for all students enrolled in various sections, it is imperative that all assigned work (including cleaning glassware, countertops, and gathering personal materials) must be completed in

the allotted time. Students who remain in the laboratory over the allotted time may have points deducted from their grade at the discretion of their laboratory instructor.

Laboratory participation is required for the successful completion of this course. If you are pregnant or become pregnant during this semester you should consult with your physician to decide if it is advisable for you to continue with this chemistry course. You may obtain a list of chemicals used during labs from your instructor.

**Safety:** Safety is of paramount importance in a chemistry lab. It is the student's responsibility to be sure that he/she has watched and understands the video Starting with Safety. In addition, non-adherence to the "Safety Regulations for the Laboratory" may result in a warning, loss of grade points, or dismissal from the laboratory (at the discretion of the instructor). (*Eye protection, proper clothing, and footwear are required at all times while working in the laboratory.*)

**Grading:** The final grade in this course will be based on preparation, technique, documentation in the lab notebook, understanding of chemical concepts, and communication of concepts in the laboratory manual as well as on the mid-term exam. You will attach a copy of pertinent notebook pages to the each lab report handed in for grading. Point values are notated on the class schedule. Assignments (including Pre-laboratory questions) are due at the BEGINNING of the lab. IF ACCEPTED, LATE ASSIGNMENTS WILL BE ASSESSED A 50% PENALTY.

In addition to lab reports, prelab exercises, your lab notebook, and lab drawer check-out, your instructor may give you announced, or unannounced quizzes at the beginning of the lab covering any or all of the material that you've encountered, including the current lab assignment. Such a lab quiz may or may not take the place of the prelab. At the end of the semester, your lab grade will be reported as a percentage: the number of points you earn divided by the total points possible times 100%. This percentage represents 20% of your final CH152 grade. (See the CH152 lecture course syllabus for more details.) *As chemistry is an empirical science, your overall grade in the course will not be more than one letter grade higher than your laboratory grade.*

Experiments are to be done by the individual student, except where pairs or groups are specified. Work not originated by those reporting data will not receive credit and be subject to cheating policy as outlined in the student handbook.

A few notes on the lab notebook.

- For acceptable formatting, read pages 7-8, "D. Laboratory Notebook", followed by pages 5-6, "A. Recording Data" and "B. Reporting Data" in the *Laboratory Manual*.
- The lab notebook should be treated as a legal document. Use only permanent, black ink. All errors should be crossed out with a single line, date and initial. Don't worry, mistakes happen to all of us.
- During each lab session, you must have your instructor initial your notebook. You will not be allowed to work in the lab unless you have completed your prelab assignment and organized your lab notebook to include date, title, a brief explanation as to the purpose or objective of the experiment, an outline of the procedure including balanced equations when necessary and any appropriate tables for collecting data.
- All procedures must start with both a safety section and a waste disposal section.
- Be very clear and organized. It takes a lot of work to fight the entropy!!!
- Do NOT remove original (blue) pages from your laboratory notebook.
- Remove the copy (yellow) pages from your notebook and staple them to the lab report sheet you turn in a week after you have completed the experiment.
- All notebook pages must be signed (or initialed) and dated at the bottom.
- All notebook pages must have the heading section completed.

## UNIVERSITY ADDITIONS – COURSE SYLLABUS

### **Mission of the University:**

Washburn University enriches the lives of students by providing opportunities for them to develop and to realize their intellectual, academic, and professional potential, leading to becoming productive and responsible citizens. We are committed to excellence in teaching, scholarly work, quality academic and professional programs, and high levels of faculty-student interaction. We develop and engage in relationships to enhance educational experiences and our community. *Washburn University Board of Regents, 2010*

### **Definition of a Credit Hour:**

For every credit hour awarded for a course, the student is typically expected to complete approximately one hour of classroom instruction, online interaction with course material, or direct faculty instruction and a minimum of two additional hours of student work each week for approximately 15 weeks for one semester or the equivalent amount of work over a different amount of time.

### **Academic Misconduct Policy:**

All students are expected to conduct themselves appropriately and ethically in their academic work. Inappropriate and unethical behavior includes (but is not limited to) giving or receiving unauthorized aid on examinations or in the preparation of papers or other assignments, or knowingly misrepresenting the source of academic work. Washburn University's Academic Impropriety Policy describes academically unethical behavior in greater detail and explains the actions that may be taken when such behavior occurs. For guidelines regarding protection of copyright, consult [www.washburn.edu/copyright/students](http://www.washburn.edu/copyright/students). For a complete copy of the Academic Impropriety Policy, contact the office of the Vice President for Academic Affairs, Bradbury Thompson Alumni Center Suite 200, or go on-line to: [www.washburn.edu/admin/vpaa/fachdbk/FHsec7.html#VIII](http://www.washburn.edu/admin/vpaa/fachdbk/FHsec7.html#VIII)

### **Disability Services:**

The Student Services Office is responsible for assisting in arranging accommodations and for identifying resources on campus for persons with disabilities. Qualified students with disabilities must register with the office to be eligible for services. The office **MUST** have appropriate documentation on file in order to provide services. Accommodations may include in-class note takers, test readers and/or scribes, adaptive computer technology, brailled materials. Requests for accommodations should be submitted at least two months before services should begin; however, if you need an accommodation this semester, please contact the Student Services Office immediately.

Location: Student Services, Morgan Hall Room 135 (new location)

Phone: 785-670-1629 or TDD 785-670-1025

E-Mail: [student-services@washburn.edu](mailto:student-services@washburn.edu)

Students may voluntarily identify themselves to the instructor for a referral to the Student Services Office.

### **Office of Academic Advising:**

As a Washburn student, you may experience difficulty with issues such as studying, personal problems, time management, or choice of major, classes, or employment. The Office of Academic Advising is available to help students either directly through academic advising, mentoring, testing and developing learning strategies or by identifying the appropriate University resource. If you feel you need someone with whom to discuss an issue confidentially and free of charge, contact Academic Advising in Morgan 122, 785-670-1942, [advising@washburn.edu](mailto:advising@washburn.edu).

**Withdrawal Policy:**

During fall and spring semesters, students may go online and withdraw from full semester courses through the second week of class with no recorded grade. From the third through the eleventh week a "W" is recorded for any dropped course. After the eleventh week, there are NO withdrawals, and a grade will be assigned for the course. These deadlines will be different for short-term, out-of-sequence, or summer courses. To view the deadline dates for your courses visit the "Last Day" Deadlines web page at: <https://www2-prod.washburn.edu/self-service/coursedates.php>

**Attendance/Administrative Withdrawal:**

Although it is the student's responsibility to initiate course withdrawals, an instructor, after due notice to the student, may request withdrawal of the student from a course because of nonattendance through the same date as the last day a student may withdraw from a course. This would NOT absolve the student of financial responsibility for tuition/fees for the course in question. The inclusion of this information in the course syllabus is considered due notice.

**Official E-Mail Address:**

Your Washburn University e-mail address will be the official address used by the University for relaying important messages regarding academic and financial information and the University will consider this your official notification for important information. It may also be used by your instructors to provide specific course information. If you prefer to use an alternate e-mail address to receive official University notices, you can access your MyWashburn e-mail account, choose the "Options" tab, and select "Settings", scroll to the bottom of the screen, click enable forwarding and enter the e-mail address you would like your Washburn emails forwarded to in the "mail forwarding" area. Click add and then click on save changes. This will complete the process of forwarding your Washburn e-mail. It is your responsibility to ensure that your official e-mail box does not exceed your message quota resulting in the inability of e-mail messages to be accepted into your mailbox.

**Success Week:**

Success Week for undergraduate students is designated as the five week days preceding the first day of scheduled final examinations each Fall and Spring semester. Success Week is intended to provide students ample opportunity to prepare for final examinations. For academic programs, the following guidelines apply:

A. Faculty are encouraged to utilize Success Week as a time for review of course material in preparation for the final examination. If an examination is to be given during Success Week, it must not be given in the last three days of Success Week unless approved by the Dean or Department Chair. Assignments worth no more than 10% of the final grade and covering no more than one-fourth of assigned reading material in the course may be given.

B. Major course assignments (extensive research papers, projects, etc.) should be due on or before the Friday prior to Success Week and should be assigned early in the semester. Any modifications to assignments should be made in a timely fashion to give students adequate time to complete the assignments.

C. If major course assignments must be given during Success Week, they should be due in the first three days of Success Week. Exceptions include class presentations by students and semester-long projects such as a project assignment in lieu of a final. Participation and attendance grades are acceptable.

The Success Week policy excludes make-up assignments, make-up tests, take-home final exams, and laboratory examinations. It also does not apply to classes meeting one day a week for more than one hour. All University laboratory classes are exempt from this policy.