

General Chemistry II Lecture

Chemistry 1120-050

Summer 2015

General Information

Time: M-F 9:00-10:30 a.m.

Place: 364 Brown Hall

Course Summary

This is the second lecture course in general chemistry for those intending to major in chemistry or go to professional school. Prerequisite: General Chemistry I (CHEM 1110/11), Corequisite: General Chemistry II Laboratory (CHEM 1121).

D2L Site

A Desire2Learn (D2L) site (<http://elearn.etsu.edu>) for this course is available. All in-class assignments, handouts, *etc.* will be posted to the site.

WileyPlus

This course will make use of resources provided by the textbook publisher at:

<http://edugen.wileyplus.com/edugen/class/cls459624/>

Registration is by email address. You must use your university Goldmail address. Registration codes are included with the textbook when purchased new, or available separately. It is recommended to email your code to yourself so that you do not lose it. Online homework assignments will use WileyPlus, and are a mandatory part of the course.

Contact Information

Instructor: Dr. Scott Kirkby

Phone: 423-439-5823

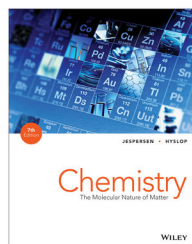
Office Hours: MW, 10:30-11:30 a.m.

Office: 464 D. M. Brown Hall

Email: kirkby@etsu.edu

Individual assistance may also be obtained by appointment or by emailing questions to the instructor.

Text



Neil D. Jespersen, and Alison Hyslop; Chemistry: The Molecular Nature of Matter, 7th Edition, John Wiley & Sons, New York, New York, 2015.

Lab Manual

Ray Mohsnei; Experiments in General Chemistry 6th Edition, John Wiley & Sons, New York, New York, 2009.

Grading

Assignment	Percent of Final Grade
Online Homework (WileyPlus)	10%
Quizzes & Assignments	10%
Four Midterm Tests 7.5% each (50 min., in class) 17 July 24 July 31 July 7 August	30%
Laboratory (CHEM 1121)	25%
Final Exam (in class) 14 August	25%
Total	100%

Midterm Tests: The midterm tests will not be explicitly cumulative, but material from previous tests may be required to complete the current work. There will be no make-up midterm tests or final exam. If you miss a midterm, the 7.5% will be added to the final exam weight. If you miss the final and are otherwise passing, an “Incomplete” will be given.

Quizzes and Assignments: Since chemistry is inherently cumulative, all covered material will be “fair game” for any quiz. The dates for quizzes/assignments may be announced in advance or may be unannounced (“pop” quiz). There will be no makeup of quizzes or assignments.

Lab: A single grade is obtained for the both CHEM 1120 and CHEM 1121 (4 hours, lecture and lab) computed on the above basis. You must be registered for both

lecture and laboratory to pass the course. If you have taken this course at ETSU within the past year and are repeating it, and if you made an average of 70% or higher in the laboratory, you may omit the laboratory work and apply the previous laboratory grade to this semester's average. If you elect to do this, you must remain registered for the laboratory and you must notify the lecturer no later than the first scheduled laboratory class. The application form is available from the main chemistry office. The laboratory grade will be based on the written laboratory exam and the laboratory work. Specific requirements will be detailed by your lab instructor. Attendance and completion of the laboratory work is required for a passing grade to be obtained.

Lab Safety Training: Before lab starts you are required to complete the online safety training module. This may be completed by going to:

<https://healthsafety.etsu.edu/index/login>

and login using your complete e-mail address (*i.e.* doej@goldmail.etsu.edu) and your ETSU network password. The site will welcome you, and then you will need to click on the "Training Modules" link on the left side of the page. A list will appear telling you which modules you are registered for. Click on the "Take" option next to Chemistry Safety. Please watch the video and then read all the safety information in the module. When complete, click on the "Take Training Quiz" link at the bottom of the module and take the quiz. You must complete and pass the quiz before being allowed in lab.

Calculators: Non programmable scientific calculators are permitted for use on the quizzes, midterm tests and the final exam. Programmable calculators may not be used. Calculators that are part of a communications device, including IR transmitting calculators, are not permitted.

Cell Phones, etc.: Cell phones, pagers, IR transmitting calculators or any other communications devices are not permitted during quizzes, tests or the final exam. Use of any communications device during a test or final will result in a grade of zero for the assignment. For the purposes of this course, possession in a functional state will be considered usage.

Academic Integrity

This course will comply with the Department of Chemistry's Academic Integrity Policy (available in the course's content section on D2L). Any violation of the policy is unacceptable and will not be tolerated. At the minimum, a grade of zero for the assignment will be given.

Conversion to Letter Grades

Grade	Percent	Grade	Percent
A	91-100%	C	66-69%
A-	86-89%	C-	62-65%
B+	82-85%	D+	58-61%
B	78-81%	D	54-57%
B-	74-77%	F	<54%
C+	70-73%		

Note: Percents will be rounded off to integer values.

This course is an introduction to chemistry. The material is often abstract and mathematical. It cannot be learned the night before a test. It can only be mastered by working problems. Please make every attempt to keep up and do not hesitate to ask questions both in and out of class.

Topics

1. Properties of Gases
2. Intermolecular Attractions and the Properties of Liquids and Solids
3. Mixtures and the Molecular Level: Properties of Solutions
4. Chemical Kinetics
5. Chemical Equilibrium
6. Acids and Bases, A Molecular Look
7. Acid-Base Equilibria in Aqueous Solutions
8. Solubility and Simultaneous Equilibria
9. Thermodynamics
10. Electrochemistry

Note: You will also be responsible for all of the mathematics covered.

Course Notes

Lecture notes will be available for download from the course D2L site. (These notes are the notes that I lecture from and hence will match the lectures.) They are not meant to be a complete set, merely an additional aid to the student. No assurances are given for their correctness. The textbook should be assumed to be correct in all conflicts between it and these notes.

Mental Health

Students often have questions about mental health resources, whether for themselves or a friend or family member. There are many resources available on the ETSU Campus, including: ETSU Counseling Center (423) 439-4841; ETSU Behavioral Health

& Wellness Clinic (423) 439-7777; ETSU Community Counseling Clinic: (423) 439-4187.

- **If you or a friend are in immediate crisis, call 911.**
- Available 24 hours per day is the National Suicide Prevention Lifeline: 1-800-273-TALK (8255).