

## CHEM 103 (Section 3) – Chemistry I Lecture FALL 2010

**Lecturer:** Dr. Jeff Ashley  
**Room 304, Search Hall**  
(215) 951-2779  
[ashleyj@philau.edu](mailto:ashleyj@philau.edu)

**Office Hours:** Tuesdays from 2:30 pm to 3:30 pm  
Wednesdays from 11:00 am to 12:00 pm  
Thursdays from 10:00 am to 11:00 am

**Course Information:** <http://faculty.philau.edu/ashleyj>

**Homework Website:** <http://www.masteringchemistry.com/site>  
Course ID is: \_\_\_\_\_

**Required Text:** Principles of Chemistry: A Molecular Approach by  
Nivaldo J. Tro ( 2010)

### **Objectives of Lecture:**

- 1. To provide you with an overview of the fundamental laws and theories of chemistry including properties of matter, chemical reactions and stoichiometry, properties of gases, energy and thermochemistry.*
- 2. To give you a sense of the importance and understanding of chemistry in our everyday lives.*
- 3. To develop your problem solving skills.*

### **Tentative Lecture Schedule**

Week	Lecture Date	Chapter in Text	CHEM-103 Lecture Topic
1	Aug 23 Aug 25 Aug 27	Chapter 1	Matter, Measurement, and Problem Solving
2	Aug 30 Sep 1 Sep 5	Chapter 2	Atoms and Elements
3	<i>Sep 6 Labor Day: No Class</i> Sep 8 Sep 10	Chapters 2 and 3	Molecules, Compounds and Chemical Equations
4	Sep 13 Sep 15 Sep 17	Chapter 3	Molecules, Compounds and Chemical Equations
5	Sep 20 Sep 22 <i>Sep 24 TEST 1 (Chapters 1-3)</i>	Chapter 4	Chemical Quantities and Aqueous Reactions

6	Sep 27 Sep 29 Oct 1	Chapter 4	Chemical Quantities and Aqueous Reactions
7	Oct 4 Oct 6 Oct 8	Chapter 5	Gases
8	Oct 11 Oct 13 Oct 15	Chapter 5	Gases
9	Oct 18 Oct 20 <i>TEST #2 (Chapters 4 and 5)</i> Oct 22 <i>Fall Mini Break – No Class</i>	Chapter 6	Thermochemistry
10	Oct 25 Oct 27 Oct 29	Chapter 6	Thermochemistry
11	Nov 1 Nov 3 Nov 5	Chapter 7	The Quantum Mechanical Model of the Atom
12	Nov 8 Nov 10 Nov 12	Chapters 7 & 8	The Quantum Mechanical Model of the Atom Periodic Properties of the Elements
13	Nov 15 Nov 17 <i>Nov 19 TEST 3 (Chapters 6 and 7)</i>	Chapter 8	Periodic Properties of the Elements
14	Nov 22 <i>Nov 24 Thanksgiving Break</i> <i>Nov 26 Thanksgiving Break</i>	Chapter 9	Chemical Bonding I: Lewis Theory
15	Nov 29 Dec 1 Dec 3	Chapter 9	Chemical Bonding I: Lewis Theory
16	Dec 5	REVIEW	

**Mini-Quizzes:** There will be frequent mini-quizzes during the semester. These are short (1 to 3 questions) quizzes that test material introduced from the previous lecture. Mini-quizzes count significantly to your final grade. The only way you can do well on these is study and learn the material after each lecture.

**Tests:** There will be three tests. The tests will emphasize problem-solving skills. There are examples of past tests on the course website. **Bring a calculator and your periodic chart to each test.**

**Final Exam:** The final exam will be cumulative and scheduled during exam week. **Bring a calculator and your periodic chart to the final exam. Students who obtained 90% or better on the three tests, may be exempt from the final exam.**

**Homework Assignments:** There will be homework (HW) problems assigned from each chapter. It is up to you to check the HW page in the course website for HW questions, instructions and due dates. These homework problems will be graded, either for completeness (did you try all the homework?) or accuracy (did you get the correct answer?). There will occasionally be additional assignments designed to focus on a

specific topic. Homework also counts significantly to your final grade; even if you do not get the correct answer, I often reward you for trying.

**Grading:** Three In-class Tests (non-cumulative; 45 points each)  
Final Exam (cumulative; 25 points)  
Mini-Quizzes (10 points)  
Assignments (20 points)

**Final Letter Grades:**

A 94-100%	B+ 87-89%	C+ 77-79%	D+ 67-69%
A- 90-93%	B 84-86%	C 74-76%	D 60-66%
	B- 80-83%	C- 70-73%	F <60%

**Course Policies:**

If you miss a test or mini-quiz due to an excused absence, your remaining grades will be averaged for your final grade (Under only 'special circumstances', **NO MAKE-UP TESTS ARE GIVEN**). If your absence is not excused, you will receive a grade of zero for that test or mini-quiz.

Assignments that are turned in late will not be accepted unless prior arrangements have been made with the instructor. No extra credit assignments will be made. **Therefore, to do well in this course, you must keep up with the lecture material, reading, and any assignments. The only way to learn chemistry is to do it...and keep doing it!**

**Attendance is mandatory in lecture. Missing classes will affect your grade in two ways:**

**1) Missed classes EQUATE to missed material. Time and time again, I've seen that this relates to a poorer understanding of key concepts (and ultimately will decrease your chance of success on quizzes and tests), and**

**2) Penalties for missed classes will begin on your fourth unexcused (non-medical) absence. For every unexcused absence (beyond the three 'grace' classes), your grade will decrease by 2 points (that's 2% each missed class). For example, miss five classes, and you've already decreased your grade by one letter!**

**Student Code of Conduct:**

The Faculty of Philadelphia University takes academic integrity seriously. Instances of academic dishonesty will not be tolerated, and students violating the University's academic integrity policy will be subject to appropriate sanctions. Plagiarism on any written assignments will not be tolerated. You may turn in only your own work for writing and homework assignments (unless I inform you otherwise), and any references that you use must be fully documented (using MLA format). As well, cheating on tests,

final exams or quizzes will not be tolerated. Once again, please familiarize yourself with the **Student Code of Conduct** as it appears in the **Student Handbook for Philadelphia University**.



### **Academic Support Services:**

**Gutman Library** ([www.philau.edu/library](http://www.philau.edu/library))

The home page of the Gutman Library provides students with a variety of information resources, including databases and research guides. Librarians are available online and in person at the information desk to help students with research.

**The Learning and Advising Center** ( [www.philau.edu/learning](http://www.philau.edu/learning) )

The Learning and Advising Center provides one-on-one tutoring assistance for writing, study strategies, test taking, and specific Philadelphia University courses\*. To make a tutoring appointment, students should stop by the Learning and Advising Center in Haggard Hall or call (215) 951-2799. Academic resources, including information on citation and documentation, note taking, and study strategies are available on the Center's website.

**Technology assistance** (<http://www.philau.edu/OIT/>)

For assistance with technology issues, students should contact the Technology Help Desk at (215) 951-4648 or send an email to [helpdesk@philau.edu](mailto:helpdesk@philau.edu). General purpose computing facilities are available in Search Hall and Gutman Library.