

## Elements of General Chemistry

**Professor:** Brenda Broers

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**Lecture:** Tues & Thrs 9-11:30 Room C-101

**Lab/Recitation:** Tues & Thrs 12-2 Room A-128

**Office Hours:** By appointment

**Semester Dates:** Jun 2-July 23

### Required:

- Chemistry, Timberlake 11<sup>th</sup> Ed., Pearson 2012
- Sapling: University of New Mexico, Valencia – CHEM 111 – Summer15 – BROERS
- Goggles; Lab Coat

### Course Description:

One-semester survey of general, organic and biochemistry chemistry, especially for non-science majors in the health sciences.

### Teaching and Learning Objectives:

- To acquaint students with scientific methods and chemical principles, especially atomic structure, stoichiometry, chemical reactions, acid/base equilibrium, and basic biomolecules.
- To enhance problem solving abilities and communication skills.
- To learn methods and procedures used in a chemical laboratory.
- More detailed objectives can be found on Blackboard.

### Course Requirements:

- Attendance in lecture and laboratory/recitation is mandatory. You may be dropped from the course without notice for >2 unexcused absences. If you are more than 10 minutes late, you will be considered absent. The sign-in sheet will be at the front of the classroom.
- Students are responsible for all assignments regardless of attendance.
- There are no make-ups for homework, quizzes, laboratory experiments, or exams.
  - Late submission of laboratory assignments **will** result in a lower grade. Lowest lab will be dropped.
  - The two lowest homework grades will be dropped.
  - The lowest exam will be dropped
- Homework will be completed in Sapling and used as inspiration for quiz and exam questions. You may access the homework the week preceding the due date. Late submissions will not be graded.
- The last day to drop the course without a grade is **Jun 12<sup>th</sup>**. If you have any unexcused absences before Jun 12<sup>th</sup>, you will be dropped from the course without notice.
- The UNM Blackboard Learn system will be used for class announcements, detailed objectives, handouts, labs, grade book and assignments.
- Calculators must be brought to all classes and have log, anti-log, and exponential functions. **NO CELL PHONES MAY BE USED DURING CLASS.** Phone or smart pad (ie, iPad) use, for any reason, during quizzes or exams will be considered cheating.

### Laboratory/Recitation:

- Laboratory time will be used for experimentation, quizzes, demonstrations, problem solving, exams and lecture.
- Information from the laboratory/recitation time WILL APPEAR on exams and quizzes during lecture time.
- **\*\*Mandatory PERSONAL PROTECTIVE EQUIPMENT (PPE) for laboratory experiments: GOGGLES, closed flat shoes (no high heels, no exposed toes, no exposed heels), long pants, and LAB COATS. Students without proper personal protective equipment will not be allowed in lab\*\***
- No food, drink, or gum chewing is allowed in lab regardless of the activity planned for that day.

### Course Recommendations:

- Chemistry 111 requires **at least** 20 hours per week of study time outside of the classroom. If you do not have this time available to devote to chemistry, I recommend you take the course another semester.
- Participation in the SI hours is **STRONGLY** recommended. Organize study groups and take advantage of free tutoring from the Learning Center and STEM center. Online tutoring is also available.
- DO NOT FALL BEHIND.

### General Campus Policies – Reminder:

- Academic Honesty –  
*Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.*  
*Academic dishonesty includes, but is not limited to, dishonesty in labs, quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.*
- If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner.
- **Take advantage of the resources available to you on campus.**
  - **The Learning Center – Individual Tutoring, Study Group Meeting Space**
  - **The STEM Center – Individual Tutoring, Molecular Modeling Kits**
  - **SI Classes**
  - **Online Tutoring** – available through The Learning Center

### Grading

30 pts	Attendance (-2 points per absence/tardiness)
80 pts	Pre-lab exercises, lab quizzes, lab reports (10 pts per lab session-lowest will be dropped)
110 pts	Homework (10 pts per chapter-two lowest will be dropped)
500 pts	Exams (100 pts per exam-lowest will be dropped)

**Grades: 98-100% A+, 92-97% A, 90-91% A-; 88-89% B+, 83-87% B, 80-82% B-; 78-79% C+, 73-78% C, 69-72% C-; 60-68%=D; <60%=F**

## Chem 111 Course Schedule

Date	Tuesday		Thursday	
	Lecture	Assignments Due*	Lecture	Assignments Due*
June 2/4	Lecture: Syllabus Ch 1.1 – 1.10 Lab: Sapling Learn	<i>Sapling Learn Online Intro</i>	Lecture: Ch 2.1 – 2.7 Lab: Floating Egg (online)	<b>Sapling Learn Online 1 (Ch 1) Floating Egg Pre-lab</b>
June 9/11	Lecture: Ch 3.1-3.7 <b>Lab: Lab Measurements</b> & Review Ch 1-3	<b>Sapling Learn Online 2 (Ch 2) Floating Egg Lab Report</b>	<b>EXAM 1 (Ch 1-3)</b> Lecture: Ch 4.1-4.5 Lab: Nomenclature Worksheet (online)	<b>Sapling Learn Online 3 (Ch 3) Nomenclature Pre-Lab</b> <i>Drop Deadline is Friday, June 12<sup>th</sup></i>
June 16/18	Lecture: Ch 4.6-4.8 <b>Lab: Chemical Reactions</b> (online)	<b>Chemical Reaction Pre-Lab Nomenclature Worksheet Report</b>	Lecture: Ch 5.1 – 5.8 Lab: Problem Solving / Review	<b>Sapling Learn Online 4 (Ch 4) Chemical Reaction Lab Report</b>
June 23/25	<b>Exam 2 (Ch 4-5)</b> Lecture: Ch 6.1 – 6.8 <b>Lab: Airbag (online)</b>	<b>Sapling Learn Online 5 (Ch 5) Airbag Pre-Lab</b>	Lecture: Ch 7.1-7.6 Review Ch 6-7 Lab: Problem Solving / Demos	<b>Sapling Learn Online 6 (Ch 6) Airbag Lab Report</b>
June 30 July 2	<b>Exam 3 (Ch 6-7)</b> Lab: Ch 8.1-8.4	<b>Sapling Learn Online 7 (Ch 7)</b>	Lecture: 8.5-8.6 <b>Lab: Acid/Base Lab (online)</b>	<b>Acid/Base Pre-lab</b>
July 7/9	Lecture: Ch 10 Lab: Organic Nomenclature (online)	<b>Sapling Learn Online 8 (Ch 8) Organic Nomenclature Pre-Lab Acid/Base Lab Report</b>	Lecture: <b>Exam 4 (Ch 8, 10)</b> Lab: Ch 11	<b>Sapling Learn Online 9 (Ch 10) Organic Nomenclature Lab Report</b>
July 14/16	Lecture: Ch 13 <b>Lab: Penny (online)</b>	<b>Sapling Learn Online 10 (Ch 11) Penny Pre-Lab</b>	Lecture: <b>Exam 5 (Ch 11, 13)</b> Lab: Ch 15	<b>Sapling Learn Online 11 (Ch 13) Penny Lab Report</b>
July 21/23	Lecture: Ch 16 Lab: Mystery Lab	<b>Sapling Learn Online 12 (Ch 15)</b>	Lecture: <b>Exam 6 (Ch 15, 16)</b> Lab: Ch 17	<b>Sapling Learn Online 13 (Ch 16)</b>

\*Assignments in **bold** should be completed before class time. Assignments in *italics* will be completed during class time.

Highlighted lab sessions will require PPE.

⬆️ **Last day to drop the class with and full refund and without a grade appearing on your transcript is June 12<sup>th</sup>.** ⬆️