

Ohlone College
General Chemistry 101A
Fall 2006

Sections 028688, and 028689

Instructor: Dr. Maru Grant

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Office Hours: T Th 1:00 p.m. - 3:30 p.m. In Room 2312
Also by appointment.

Course Content:

Chemistry 101A is a general college-level inorganic chemistry course designed for students majoring in biology, chemistry, engineering, pre-med and other fields demanding rigorous scientific preparation. Topics covered include atomic theory, stoichiometry, chemical reactions, introductory thermochemistry, theories of bonding, and the properties of solids, liquids, gases, and solutions.

Course Materials Required:

- Kotz, Treichel and Weaver, Chemistry and Chemical Reactivity. General Chemistry 101A. Custom Edition for Ohlone College. Bundle with OWL access code and RI clicker.
- Klent, *Chemistry Experiments Chem101A*, Harcourt Brace.
- Lab notebook (carbon copy)
- Safety Goggles for Chemistry - must seal to the face with indirect ventilation.
- Lab Coat
- Disposable gloves
- Highlighter or color pen
- Scientific Calculator

Course Materials Recommended:

- Kotz, *Student Study Guide*, Thomson (strongly recommended)
- Kotz, *Student Solutions Manual*, Thomson.
- Niccolls, *Supplement for General Chemistry 101A*, Ohlone College.
- Tie-back device for long hair
- Loose-leaf binder for handouts, notes, etc.
 - Sticky flags to mark important pages

Class Meeting Time and Place:

Lecture: MWF 11:45 a.m. - 12:45 p.m. Room 3201

Lab (one of the following)

Sect. 028688	T,Th 9:15 a.m. – 12:25 p.m.	Room 2310
Sect. 028689	M,W 2:15 p.m. – 5:25 p.m.	Room 2310

Prerequisites:

- Advanced Algebra (Math 152 or equivalent) with a grade of "C" or higher
 - Chem 106A (or equivalent) with a grade of "C" or higher taken within past six years
- Advisory: ENGL 151B and ENGL 163

Homework:

Homework is assigned on-line. You must have an access code to Online Web-based Learning (OWL) from Thomson Learning. The access code is sold with your textbook. Once you are signed in the system, you will be able to see the assigned homework and I will be able to see your work. I am able to obtain all details about it, like how much time you spent doing it, how many times you tried, your mistakes, etc. Each homework has a due date. Past that date you will be able to do it but you will not receive any credit for it. Also, in order to receive credit you must master the subject, i.e. if you do not solve the problem correctly, the system will correct your mistakes and you will have to do another problem until you get it right. You can try as many times as you want. It is recommended that you do more problems than the required ones. You want to make sure that you have mastered the subject! Homework counts as 10% of your grade.

Quizzes and Exams:

There will be several quizzes, four tests, and one comprehensive ("Final") exam. Quizzes are worth 10% of your total grade, tests are worth 40% of your grade, and the final exam is worth 20% of your grade. There are no make up quizzes. Students, who miss a quiz, *regardless of the reason*, will receive a score of zero for that quiz. You will need a clicker to take the quizzes. Clickers are sold at the bookstore with your textbook. You are responsible for your clicker. Make sure it doesn't get lost or stolen, or you will have to buy another one. Also it should not get mixed up with another one! Be very careful with it.

If exceptional, **document able** reasons arise that force you to miss a test, make pre-arrangements With me. Make-up tests are more difficult than the original test. It is the student's responsibility to contact me to arrange for a make-up test *within one week of the original test date* -- if this obligation is neglected the student will receive a zero on the test.

The Final Exam counts as 20% of your grade. It demonstrates your level of mastery of the course.

FINAL EXAM Friday, Dec 15 9:30 a.m. – 11:30 a.m. In Room 3102

Laboratory:

Lab provides you "hands-on" experience with chemistry as well as practice with calculations and other important skills. Only by doing experiments yourself you really learn the necessary skills and techniques. By applying chemical principles to the observations you make in lab, gradually you will understand them far better than if you studied exclusively from books.

Always come to lab well prepared by studying the lab experiment ahead of time. For every experiment you will need to:

Write a formal preparation in your lab notebook **before** coming to lab.

Write an error analysis and conclusion – you are allowed **one week** to complete this.

Tear the yellow pages and attach them to your report.

The laboratory workbook (both experiments and work sessions) counts for 20% of your grade. Complete the data tables and answer the questions in the spaces provided. Tear these pages out and turn them to the instructor with your report. The student is allowed up to **one week** to complete the lab pages and turn them in. It is the student's responsibility to remember to turn the lab in! Late labs will lose points. See "Chem 101A Lab Policies" for more information.

Attendance:

You are expected to attend all class sessions. It is wise to inform the instructor of illness or other circumstances that lead to absence of more than a day or two. An instructor may drop you at any time for nine absences from lectures and/or labs.

Remember, if you decide to drop, it is YOUR RESPONSIBILITY to file a drop card with the Office of Admissions and Records. If this is not done, you may be carried in the class till the end of the semester and receive an "F" grade. A student who has missed more than 9 hours of lab time must drop. Lab time includes both experiments and work sessions. If this occurs after the "W" deadline, the student will receive a grade of F in the course.

Grading Summary:

Homework: 10%
Tests: 40%
Quizzes 10%
Lab Work 20%
Final exam 20%

> 90 A
> 80 B
> 70 C
> 60 D
< 60 F

Note: All work must be turned in by the final exam.

Dates to Remember:

Monday, August 28	Classes begin
Monday, Sep 4	Holiday: Labor Day. No classes
Tuesday, Sep 5	Last day to drop and apply for refund
Sunday, Sep 10	Last day to drop without a "W"
Thursday, October 5	Last day to apply for Fall graduation
Friday, Nov 10	Holiday: Veterans Day. No classes
Tuesday, Nov 16	Last day to drop with a "W"
Thursday, Nov 23 –	Holiday: Thanksgiving break. No classes
Sunday, Nov 26	
Friday, Dec 8	Last day of instruction
Friday, Dec 15	FINAL EXAM 9:30 a.m. – 11:30 a.m.

Academic Honesty:

Pursue your coursework with integrity and honesty. Academic dishonesty is a serious matter. If you are caught cheating, Ohlone College initiates a process that may result in severe consequences for you. Cheating includes copying answers on tests and data in labs. If you observe an incident of academic dishonesty in class, I invite you to report it to me. Copies of the college policy on academic honesty may be obtained from the office of the Vice President of Student Services.

Student Conduct

Show mature conduct in your courses. Do not engage in private conversations or in inappropriate behavior during lectures or labs. If you do behave in a manner that seems disruptive to me or to other students, I will ask you to stop. If such behavior persists, I will ask you to leave the class. I have the right to suspend you from my class if your behavior is rude or disruptive. Information on student behavior and the Ohlone College suspension policy is available from the office of the Vice President of Student Services.

Turn off the ringing mode on pagers and cellular phones. Electronic equipment should be turned off during lecture, lab and exams (2 points will be deducted for any electronic beep in class or lab, and 4 points on exams).

Be a good citizen. Help to keep our campus beautiful. Pick up after yourself and others. Don't eat in classrooms or laboratories. Don't spit on sidewalks and stairs. Observe the no smoking policy. Recycle cans and bottles.

Dropping the Course:

Follow college procedures in this regard. Observe college deadlines. At my discretion, I may drop any student who has been absent for 9 or more hours (labs and/or lectures). A student who has missed more than 9 hours of lab must drop the course.

Free Walk-In Tutoring

There is free walk-in tutoring available to all Ohlone Chemistry students in the Biology/Chemistry Learning Center in Room 8318.

Emergency

In case of an emergency a specific location will be selected as a meeting point. Under any circumstances, do not leave the campus unless authorized to do so.

Special Needs

Print materials will be available in alternate formats (Braille, audio tape, electronic format, or large print) upon request. Please contact the Disability and Educational Support Program.

Chem 101A Lab Policies

Lab sessions consist of two 3-hour 10-minute time blocks per week. During lab various activities may take place: experiments, work sessions, demos. Lab begins promptly at 9:15 a.m. or 2:15 p.m. Be punctual! Points will be deducted for tardiness.

a) Experiments:

You must wear goggles while experiments are conducted in the lab. The approved style seals to your face with indirect ventilation. Keep your receipt! If you purchase a style that is not approved, you will need to return it. You must wear a lab coat. Also, the stock room has a limited supply of goggles and aprons for rent or sale. Wear clothing that is at least knee length. Shoes must cover the top of the feet (no sandals). Hair must not fall in front of the face. Long hair must be tied back. Wearing gloves is strongly advised.

All Labs require formal preparation and conclusions to be written in your laboratory notebook.

You will need a calculator for most labs. Usually you will be able to complete the lab work, the calculations, and the questions for each lab during the three hours assigned. Then you can take it home and review it. All labs are due one week after the experiment is completed.

Remember to clean your station before you leave the lab. Be sure all equipment is put away neatly in its proper place. Points will be taken off for messy or incomplete work, either while you are doing the experiment or in your write-up.

All Experiments require **written preparation** in your notebook **prior** to your arrival at lab:

- Purpose
- Procedure (brief outline)
- Hazards

After completing the lab, write a conclusion in your lab notebook. Your conclusion should include

- Qualitative results
- Quantitative results, including % deviation, % yield, or other appropriate statistical analysis
- Discussion of errors

b) Work sessions:

The work sessions emphasize material from the textbook. They are in the lab manual. Bring the textbook, the lab manual, and the Supplement to work sessions. Also bring any labs to turn in. Work sessions count as a lab score. Have your instructor stamp it when you are done. All work sessions are due one week after being assigned.

☞ **There are no make-up labs! If you miss a lab or work session you will get a zero for that session. Any student who is absent for more than 9 total hours of lab must drop the course. If this occurs after the deadline to receive a W, then the student may receive an F in the course.**

Chemistry 101A
Fall 2006
Lecture Schedule

<u>Date</u>	<u>Chapter</u>	<u>Subject</u>
8/28	1	Chemistry and Measurement
9/6	2	Atoms and Elements
9/13	7	Atomic Structure
9/20	8	Electron Configuration
9/27	3	Chemical Nomenclature
10/4	4	Chemical Equations and Stoichiometry
10/11	5	Reactions in Aqueous Solutions
10/18	6	Thermochemistry
10/25	9	Ionic and Covalent Bonding
11/1	10	Chemical Bonding Theory
11/13	12	Gases
11/20	13	Intermolecular forces: Liquids and Solids
11/29	Inter	Modern Materials
12/1	14	Solutions
12/8		Review
12/15		Final Exam