

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – General Chemistry I

<http://www.ltcconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

**I. INSTRUCTORS:** **Cat Jaroszewski**, B.S. Environmental Science  
(530)541-4660, ext 704; [Jaroszewski@LTCC.edu](mailto:Jaroszewski@LTCC.edu)  
**Millie Oleson**, B.S. Chemistry  
(530)541-4660, ext 704; [Oleson@LTCC.edu](mailto:Oleson@LTCC.edu)  
**Martin Wallace**, M.S. Chemistry & Chemistry Education  
(530)541-4660, ext 284; [Wallace@LTCC.edu](mailto:Wallace@LTCC.edu); office: D-105

OFFICE HOURS (Wallace): M&W 9:30-11am; Tu&Th 10-11am; *and by appointment*

**II. PREREQUISITES:** MAT154 *and*  
CHM100/114 or equivalent (*e.g. high school chem. w/ a "C" or better*)

### III. REQUIRED MATERIALS:

TEXT: *Chemistry, 7<sup>th</sup> ed.*, Zumdahl & Zumdahl  
ISBN 10: 0-618-52844-X ~or~ 0-547-05405-X  
ISBN 13: 978-0-618-52844-8 ~or~ 978-0-547-05405-6

LAB MANUAL: *Chemical Principles in the Laboratory, 8<sup>th</sup> ed.*, © 2005  
Slowinski, Wolsey, & Masterton

- ISBN 0-534-42453-8
- about \$110 new; possible "used" copies at lower prices
- available online only (?); not in LTCC bookstore
- good for CHM 101, 102, *and* 103

~or~ *Chemical Principles in the Laboratory, 9<sup>th</sup> ed.*, © 2009  
Slowinski & Wolsey

- ISBN 0-534-42453-8 ~or~ 978-0-495-11288-4
- about \$110 new; "used" copies probably not readily available
- available online and through major booksellers (?)
- good for CHM 101, 102, *and* 103

~or~ *Laboratory Manual, General Chemistry, CHM 101*, © 2008  
Slowinski, Wolsey & Masterton

- about \$40 new; "used" copies probably not available
- only available in the LTCC bookstore
- good for *CHM 101 only*

SAFETY GOGGLES: must have (1) indirect venting, and (2) ANSI Z87.1 impact protection  
The Uvex "Stealth" (Uvex #S-3960) meets these requirements, is reasonably comfortable and durable, and costs about \$15. These can be purchased at the LTCC bookstore and from other retailers.

CALCULATOR: You will need a simple scientific calculator. Basic models can be purchased at office supply stores for about \$10-\$15. See me if you have any questions.  
***Programmable calculators cannot be used during quizzes or exams.***

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – General Chemistry I

<http://www.ltconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

#### IV. STUDENT LEARNING OUTCOMES:

As evidenced by quiz, examination, and/or lab report scores, CHM101, students will be able to:

1. Describe and perform calculations with sub-atomic particles for atoms, molecules, ions.
2. Perform calculations associated with percent composition, molecular and empirical formulas of compounds.
3. Perform stoichiometry calculations.
4. Predict products and write chemical reaction equations for acid-base and precipitation reactions.
5. Write names and formulas for simple inorganic compounds.
6. Correlate macroscopic properties of gases to the Kinetic Molecular Theory.
7. Perform basic laboratory tasks to obtain accurate and appropriately precise results; interpret experimental results to draw appropriate conclusions.

#### V. ACCOMODATIONS FOR STUDENTS WITH DISABILITIES:

Lake Tahoe Community College and I are committed to accommodating students with disabilities. The Disability Resource Center (DRC, room A-205, ext. 249) facilitates accommodations for learning, psychological, hearing, visual and communication disabilities as well as health disorders and mobility limitations. Students requesting any special services should contact the DRC.

#### VI. SCHEDULE

##### Lecture Topics, Quizzes, & Exams

We will cover chapters 1-6 and 18 in the text; we may not cover 100% of this. A (constantly updated) class schedule that includes lab experiments, lecture topics, quiz and exam dates can be found at:

**<http://www.ltconline.net/wallace/>**

##### ***Tentative Exam Dates***

Exam #1 (ch. 1-3) .....	Mon. & Tues, Oct. 26 & 27
Exam #2 (ch. 4-6) .....	Mon. & Tues, Nov. 23 & 24
Final Exam (ch. 1-6+18).....	Monday, Dec. 7 @ 10:00-11:50am

##### **Other Important Dates:**

Last day to drop classes and receive a refund.....	Friday, Oct. 2
Last day to drop with no record.....	Friday, Oct. 16
Last day to drop with a "W" grade.....	Friday, Nov. 6

##### **Other VERY Important Dates:**

Veteran's Day Holiday, campus closed .....	Monday, Nov. 9
Thanksgiving Holiday, campus closed .....	Thursday – Sunday, Nov. 26-29

# LAKE TAHOE COMMUNITY COLLEGE

## CHM 101 – General Chemistry I

<http://www.ltconline.net/wallace/>

Fall 2009

REVISED Sep. 14, 2009

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

### VII. GRADING

#### Approximate Overall Point Breakdown

Laboratory* (9 @ 10 points each; lowest score dropped) .....	80
Quizzes* (7 @ 25 points each; lowest score dropped) .....	150
Exams (2 @ approx. 100 points each).....	200
Final Exam (2 questions/chapter, 7 points/question, multiple-choice) .....	100
<hr/> TOTAL	(APPROXIMATELY) 530

\*The total number of quizzes may vary by about  $\pm 1$ ; lab experiments by about  $\pm 1$ .

**Overall Grading Scale;** from the total points possible this quarter:

A=480-530 pts (90.0–100%), B=420-480 pts (80.0–89.9%), C=370-420 pts (70.0–79.9%),  
D=320-370 pts (60.0–69.9%), F<320 pts (<60.0%)

Note that points are *approximate*.

#### Quizzes

Each quiz will be worth 25 points. The lowest quiz score will be “dropped”.

#### Laboratory Reports

*Your laboratory instructor may provide their own syllabus and/or laboratory policy/policies that may be different from those listed in this syllabus. If your lab instructor does not provide their own policies, these apply.*

Each lab report will be worth 10 points. Your lowest lab report grade for the quarter will be “dropped”.

Each lab report is worth 10 pts (max.) and will be graded on the following basis:

A **10-point** Lab Report will have the following attributes:

1. extra effort and high-level thought are evident throughout
2. proper significant figures are used throughout
3. proper units are used throughout
4. calculations are shown
5. calculated results are correct
6. answers are correct (or at least reasonable); “unknowns” are correctly identified (*2 points*)
7. unreasonable results are noted and an explanation is attempted
8. conclusions logically follow from experimental results
9. lab procedures have been followed exactly
10. written answers are detailed and thorough; complete sentences are used; work is legible
11. student name, course number, section number, date, etc. is included on each page
12. report is turned in on either original lab manual pages (cut or torn neatly from the book) OR photocopied pages from the manual
13. only the pages that are clearly meant to be included are included with the final report; introductory text is NOT included with the final report

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – *General Chemistry I*

<http://www.ltconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

#### VII. GRADING (*continued*)

##### Laboratory Reports (*continued*)

- In general, 1 point will be deducted from the 10 points for each error or omission listed above.
- A complete lab report, no matter how many errors, will be assigned a minimum of 6 points.
- **Zero points** will be assigned to laboratory reports that are substantially incomplete.
- The "pre lab" (usually designated the Advance Study Assignment, or ASA) is worth 2 points.
- ***Students who arrive late to their scheduled lab meeting will have the following points deducted from that week's lab report: 1<sup>st</sup> offense = -0 points, 2<sup>nd</sup> offense = -1 point, 3<sup>rd</sup> offense = -2 points...***

#### VIII. POLICIES, DEFINITIONS, & ADDITIONAL DETAILS

##### Tips for success in this class

1. Form small study groups and work together to master this material.
2. Participate in the lectures and ask questions.
3. Last minute cramming isn't effective, so work on this class a little bit every day. Spend at least 1 hour per day doing some combination of the following: reading the text, reviewing your notes, working study problems, studying with classmates, and/or meeting with your instructor.
4. Read the text.
5. Work example problems in the text before attempting assigned homework problems.
6. Complete / turn in every item that has a point value: lab reports, quizzes, & exams.
7. Be honest with others and yourself. If you really hate this kind of work, don't complain or cheat, but instead find something that you do like to do. Life is too short to be miserable.

##### Practice Exercises

"Homework" problems won't be collected or graded in any way, but the quiz questions will look very much like the recommended study problems. The recommended practice/study problems will be listed on the schedule for this class, which can be found by following the links from

**<http://www.ltconline.net/wallace/>**

I have placed a copy of the complete solutions guide for our text on reserve in the library.

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – General Chemistry I

<http://www.ltconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

### VIII. POLICIES, DEFINITIONS, & ADDITIONAL DETAILS (*continued*)

#### Quizzes

Chemistry is most successfully tackled in small, regular bites through continuous studying; for most students, "cramming" immediately before an exam is not effective. Therefore, you'll be given a brief quiz almost every week in lab.

The quiz questions look very much like the questions in the recommended study problems and earlier lab reports; I will explicitly indicate the text sections associated with each quiz via the class Web page.

You will be allowed 30 minutes to complete each quiz. **If you arrive late to lab, you will NOT be given more time to work on your quiz. You may not use programmable calculators during exams or quizzes.**

#### Laboratory Policies & Safety

*Your laboratory instructor may provide their own syllabus and/or laboratory grading policy/policies that may be different from those listed in this syllabus. If your lab instructor does not provide their own policies, these apply.*

We will review safety, policies & procedures early in the quarter, but some of the basics are:

1. ***Whenever ANYONE in lab is working with chemicals, glassware, or equipment of any kind, you are required to wear safety goggles; no other type of eye protection is acceptable. Students who do not comply with this will be sent away from the lab.***
2. The first few minutes of the lab meeting will often be dedicated to a discussion of safety considerations. ***Students who arrive late – even a few minutes – may be sent away from the lab.***
3. ***Students who habitually arrive late to their scheduled lab meeting will have the following points deducted from that week's lab report: 1<sup>st</sup> offense = -0 points, 2<sup>nd</sup> offense = -1 point, 3<sup>rd</sup> offense = -2 points...***
4. You do not need to complete the "Advance Study Assignment" in your lab manual before your lab meeting time, however, you should complete this – and have your instructor check your work – before you begin the experiment. I'll explain this in more detail in lab.
5. Laboratory reports are due at the end of the laboratory period specified by the online class schedule or your lab instructor; *no late work can be accepted.*
6. You are encouraged to use a pencil to write your lab reports.
7. You will most often be encouraged to work in small groups of 2 (or sometimes 3) students (*not 5 or 6 or 12 students*), but each student will turn in their own individual laboratory report.
8. You must pass the laboratory to pass the class overall. Missing 3 or more laboratory meetings will be grounds for failing the class overall unless special arrangements have been made for highly unusual situations. See me immediately if you are going to miss 3 lab meetings.

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – *General Chemistry I*

<http://www.ltcconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

### Academic Dishonesty ("Cheating")

I take cheating very seriously, and I will pursue the strictest penalties for clear-cut cases of cheating. However, I will assume that you are innocent until proven guilty.

1. Cheating will be defined as, but not limited to (1) using any method to copy another's work on an exam or quiz; (2) directly copying another student's homework assignment or laboratory report; (3) using any method other than your own honest efforts to complete and earn grades for exams, quizzes, outside-of-class assignments or laboratory reports.
2. The following activities are NOT cheating: (1) collaborating with other students to complete laboratory reports or "homework" assignments; (2) working with other students to study for exams or quizzes.

Disciplinary actions for cheating will be per the "Student Rights and Responsibilities" section of the current LTCC catalog and are outlined below:

#### OBVIOUS CHEATING:

The first incident of obvious cheating will result in recommendation (to the Vice President, Academic Affairs and Student Services) of **disciplinary suspension from the class** for the remainder of the term. The student will be assigned a grade of "F" for that quarter.

#### BEHAVIOR OR EVIDENCE OF POSSIBLE CHEATING:

1. The first incident that appears to be cheating will result in a written **warning**; a copy of this warning will be sent to the dean.
2. A second suspicious incident will result in recommendation (to the Vice President, Academic Affairs and Student Services) of **disciplinary suspension from the class** for the remainder of the term. The student will be assigned a grade of "F" for that quarter.

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – *General Chemistry I*

<http://www.ltcconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

#### Relatively Frequently Asked Questions (*only* by students at LTCC):

I taught at Butte Community College, CSU Chico, and at the high school level for about 10 years before coming to LTCC in 2005. Here are some questions (and associated answers) that I have only heard from LTCC students:

Q: Can I make-up a lab experiment?

A: No.

Q: Can I make-up a quiz?

A: No.

Q: Can I take a quiz or exam early (or late)?

A: No.

Q: Can I take the final exam at a different time?

A: No.

Q: Is there extra credit available in this class?

A: No.

Q: I'm the hardest working student in the class; don't I deserve an "A"?

A: While your efforts are admirable and will serve you well beyond General Chemistry, no.

Q: Will you show us an example of every possible type of question that could be on an exam?

A: No. (It's impossible.)

Q: Is this going to be a fun class?

A: No. However, mastering chemistry (or any subject, for that matter) is extremely satisfying.

Over the past 12 years or so, I have received the following question from all – not just LTCC – students:

Q: I have or had a family emergency / major car accident / serious illness / extraordinarily important extracurricular event / etc. that is going to impact my academic performance; may I have special arrangements?

A: Of course. Please come see me as soon as possible if you find yourself in any of these situations. (Note that while a vacation or marriage proposal is an important extracurricular event, neither is a serious or compelling reason for special arrangements.)

# LAKE TAHOE COMMUNITY COLLEGE

## CHM 101 – General Chemistry I

<http://www.ltconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

### Names of Classmates

Monday, Sep. 21:

*(front of classroom)*

	<i>(You)</i>	

Wednesday, Sep. 23:

*(front of classroom)*

	<i>(You)</i>	

## LAKE TAHOE COMMUNITY COLLEGE

### CHM 101 – *General Chemistry I*

<http://www.ltconline.net/wallace/>

Fall 2009

**REVISED Sep. 14, 2009**

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

*intentionally left blank*

LAKE TAHOE COMMUNITY COLLEGE

CHM 101 – General Chemistry I

<http://www.ltcconline.net/wallace/>

Fall 2009

REVISED Sep. 14, 2009

LECTURE:	sections 1, 2 & 3:	M & W	11:00am-12:50pm	A-208	(Wallace)
LABORATORY:	section 1 (101.1):	M & W	1:00-3:25pm	D-103	(Wallace)
	section 2 (101.2):	Tu & Th	9:30-11:55am	D-103	(Oleson)
	section 3 (101.3):	Tu & Th	3:30-5:55pm	D-103	(Jaroszewski)

Student Information Sheet

Please complete this form and turn it in during the first week of class.

1. Name: \_\_\_\_\_

2. I prefer to be called: \_\_\_\_\_

3. Hometown: \_\_\_\_\_

4. Academic and/or Career Interests: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Previous Chemistry Courses (*please tell me about your preparation for this class; briefly describe your previous chemistry courses including when, where, what, grades earned, etc.*)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Hobbies, Outside Interests: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Anything else I should know about you? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_