

CHEMISTRY 1A LECTURE

WINTER 2010

Instructor: Mrs. Crevier
Lecture: TTh 2:00-3:25P Room 4301

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Office Hours: TWTh 1:00-2:00P Office 5607

REQUIRED LECTURE MATERIALS:

Text: Brown, LeMay, Bursten, and Murphy, *Chemistry: The Central Science*, 11th edition. *You are encouraged to contact your instructor if you are considering purchasing the 10th edition.*

Mastering Chemistry Online Access: An access code is provided at no additional cost with the purchase of a new text from the college bookstore otherwise you must purchase access separately at www.masteringchemistry.com. *If you used Mastering Chemistry in a prior course, then you do not need to purchase another access code.*

Lecture Handouts: The same chapter slides that will be projected during the lecture session will be posted online at www.foothill.edu/psme/crevier.

Supplies: You must have a scientific or graphing calculator.

HOMEWORK STRATEGIES:

Your homework in this course will come from two different but equally important sources: (1) recommended problems from your text and (2) graded online homework facilitated through a program called Mastering Chemistry. The recommended text problems will afford you a vital opportunity to first become confident and proficient in applying the key course concepts before attempting the graded online homework. *You must prioritize your time to allow for the successful completion of all of your homework in order to perform above average on the exams in this course.* A separate handout will be posted online at www.foothill.edu/psme/crevier that details both the Mastering Chemistry registration and enrollment instructions plus some helpful tips for success in using the program.

LECTURE STRATEGIES:

There will be many opportunities during the lecture sessions to process and better understand the key chapter objectives outlined in the lecture handouts. These opportunities will be valuable and significant if and only if you (1) preview the relevant lecture handouts and the corresponding sections in your text beforehand, (2) arrive on time with both the appropriate lecture handouts and your calculator, (3) take clear and meaningful notes during the lecture sessions, and (4) choose to be an active learner. *The lecture sessions will periodically involve collaborative group activities, providing you the opportunity to exchange ideas and take responsibility for your own learning.*

LECTURE EXAMS:

There will be three lecture exams and one comprehensive final exam administered in this course. The exams will test not only your problem solving skills but also your conceptual understanding of the material and your ability to integrate concepts and will focus on (1) the lecture handouts, (2) the in-class group activities, (3) the recommended text problems, and (4) the online homework assignments. *The date for each lecture exam will be announced in advance, and if you miss a scheduled lecture exam, then you will automatically receive a zero for 6% of your final grade.* The final exam date scheduled for this course is Thursday, March 25th from 3:00-5:00P. *If you miss the final exam scheduled for this course, then you will not receive an overall passing grade.*

ATTENDANCE AND ACADEMIC DISHONESTY:

You are responsible for all the material covered in this course, and it is expected that you attend and participate in all of the lecture and laboratory sessions. *If you must be absent, then it is in your best interest to contact your instructor as you may be dropped from the course after two unexcused absences.* Additionally, it is your responsibility to understand what constitutes academic dishonesty in accordance with the Foothill College Academic Honor Code (www.foothill.edu/services/honor). *If you are caught cheating or plagiarizing at any time, then your violation will be reported and you may be dropped from the course.*

LECTURE CONTENT:

Text Coverage	Key Concepts	Recommended Text Problems
chapter 1 all sections	classification of matter significant figures dimensional analysis	1, 4, 8, 17, 19, 29, 33, 35, 39, 43, 49, 53, 61, 64, 73, 81
chapter 2 all sections except 2.9	atomic structure atomic mass nomenclature	4, 19, 21, 25, 27, 29b, 35a, 39abcd, 49, 51, 57, 65, 67, 69, 71, 102
chapter 3 all sections	the mole stoichiometry limiting reactant	1, 3, 9, 11, 13, 15, 17, 19, 33, 37, 39, 43, 47, 49c, 51, 57, 61, 63c, 67, 71, 73, 77, 79, 81, 101, 103
chapter 4 all sections	classification of reactions net-ionic equations molarity	1, 3, 5, 7, 19, 21, 25, 31, 37, 39, 41b, 49, 51, 55, 57, 59, 63, 67, 69, 73, 77, 83, 87, 92, 94, 104, 106, 109, 113
chapter 5 all sections except pages 183-184	enthalpy calorimetry Hess's law	6, 17, 23, 25, 27, 31, 35, 37, 39, 41, 45abd, 51, 53, 61, 63, 67ac, 73, 77, 83, 93, 96, 100, 117
chapter 6 all sections	quantum mechanics orbitals electron configurations	5, 8, 15, 17, 19, 25, 27, 29, 31, 35, 49, 51, 53, 55ab, 59, 63abc, 65, 67abcd, 69, 71, 73, 90, 96, 99
chapter 7 all sections	effective nuclear charge periodic trends main-group chemistry	7, 11, 15, 23, 25, 27, 29, 31a, 35, 37, 39, 41, 45ab, 49, 53, 55, 63, 67, 71, 73ab, 79, 83, 96, 98
chapter 8 all sections	ionic and covalent bonds electronegativity Lewis structures	2, 5, 7, 17, 19, 21, 23, 25, 27, 37bc, 43b, 51, 53, 55, 63, 65, 69, 83, 103
chapter 9 all sections except 9.7 and 9.8	molecular shapes molecular polarity hybrid orbitals	1, 3, 5, 7, 11, 17, 19, 21, 25, 29, 31, 35, 37, 43, 45, 47, 49, 53, 55, 76, 79, 81, 99
Comprehensive Final Exam: Thursday, March 25 th from 3:00-5:00P		

OVERALL COURSE GRADE:

Your final grade in this course will be determined according to the following percentage scheme:

best two lecture exams (14% each)	28%
worst lecture exam	6%
comprehensive final exam	24%
online homework assignments	10%
in-class group activities	2%
laboratory work	30%

A letter grade, including any plus or minus designations, will be assigned according to the following percentage scale (a C or higher is a passing grade in this course):

A+ ≥97%	A ≥93%	A- ≥90%	B+ ≥87%	B ≥83%	B- ≥80%	C+ ≥77%	C ≥68%
D+ ≥65%	D ≥61%	D- ≥58%	F <58%				

You have until the end of the 4th week of the quarter to drop this course without a grade and until the end of the 8th week to drop with a W (withdrawn) grade.