

**WEST VALLEY COLLEGE
CHEMISTRY DEPARTMENT
SUMMER 2011**

COURSE TITLE

Chemistry 2, Introduction to Chemistry

Class 06/06/11 to 07/14/11

Meeting times: V 19 MTWTh Lec 11:00-1:05 MTW SM 20 Lab 1:30-4:10

INSTRUCTOR

Dr. Blaine Harrison Tel#: (408) 741-4017 email: Blaine.Harrison@westvalley.edu

Web site: <http://instruct.westvalley.edu/harrison/harrison.html>

OFFICE HOURS

SM19A MTW: 1:05-1:30

REQUIRED MATERIALS

- 1) Peters, Cracolice: Introductory Chemistry. 4th Edition.
- 2) S. A. Weiner, Harrison Introduction to Chemical Principles. A Laboratory Approach, 7th Edition, Saunders Publishing Co.
- 3) Safety Goggles (Bookstore; if purchased elsewhere, must be approved by your instructor)
- 4) Scientific calculator, Periodic Table, **Stapler**

Optional Materials

Cracolice: Study Guide

Lab coat

Grading Scheme

<u>Minimum Course Score</u>	<u>Grade</u>	
85%	A	Course score formula
75%	B	$(3 * M + F + L + Q) = G$
65%	C	6.80
55%	D	

	<u>Possible Points</u>
M= Average of three Midterm exams	300
F= Final exam score	200
L= Laboratory score	120
Q= Quizzes	60
Total Points Possible= 680	G= Grade in the course

Dropping- It is the responsibility of the student to drop the class or a failing grade will be assigned.

Lecture- Each of three Midterm exams will be worth 100 points, quizzes will be worth 60 points (3 quizzes, 20 pts/each) and the comprehensive Final exam will be worth 200 points. If a student is absent during any exam or quiz, he/she will receive a grade of zero. At the discretion of the instructor, a makeup exam may be allowed for an urgent medical or legal situation which prevents a student from attending class. In such cases, all of the following requirements will apply: 1) Student must present documentation of the reason for absence (letter from doctor or court official, including address and phone number) to the instructor on the day student returns to school, 2) Exam must be made up within two days of missed exam, 3) Only one make-up exam is allowed per semester. Un-ethical behavior of any kind will result an F grade on that assignment. Work must be shown on all exams and quizzes to receive credit. Bathroom breaks during exams is strongly discouraged.

Quizzes- There will be three quizzes taken in the first fifteen minutes of Lab. Missed quizzes will be treated the same as exams.

Laboratory- All assigned laboratories and worksheets must be completed in order to pass the course. A problem-solving assignment or worksheet is considered a lab experiment and must be completed before leaving lab. Lab reports are due on the next lab day and are due within the first five minutes of the scheduled lab period. However, in some circumstances the entire lab must be completed before leaving the lab. If a lab

report is late it will be penalized twenty percent per day. For all laboratory experiments, the advance study assignment sheet must be completed prior to the beginning of the lab period. Late study guides will be penalized the same as lab reports. **Make-up labs will not be permitted.** If you are unable to complete an experiment from start to finish during the week that is scheduled, you may satisfy the requirement for that experiment by doing assigned homework problems out of your text book. You must discuss the make up assignment with your instructor prior to completing the assignment. A maximum of one missed lab experiment may be made up in this manner. If a second experiment is missed for any reason, you will automatically be dropped from the class with a failing grade. If two lab reports are turned in with identical data each student will receive a zero for that lab. Pre-lab assignments are worth 2 points each.

Attendance- Attendance is required in all labs. Students are expected to attend all classes. All students (officially registered, dropped, or withdrawn) must check out of the lab before the end of the semester (last lab day). Check out is through the stockroom and can be done any time stockroom personnel are present. If a student is not registered in the class by the first official roster none of their work will be graded and they will not receive credit for the class.

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.

Disabilities- West Valley College makes reasonable accommodations for persons with documented disabilities. Students should notify the Disability and Educational Support Program (DESP) at 741-2010 of any special needs.

Success- To be successful in a chemistry course requires diligence and the taking advantage of the resources available.

- 1) Go to office hours.
- 2) Go over in detail past mistakes on homework and exams.
- 3) Read ahead and prepare for lecture.
- 4) Attend class on a regular basis.
- 5) Do all assigned homework and do as many unassigned problems as possible.
- 6) Study hard, at least 6-10 hours per week.
- 7) Form study groups.

Chemistry 2: Lecture Schedule M,T,W,Th 11:00-1:05

<u>Week</u>	<u>Date</u>	<u>Day</u>	<u>Chapt.</u>	<u>Sections</u>	<u>Topic</u>
1	6-6	M	2	1-9	Intro, Matter and Energy
	6-7	T	3	1-5	Measurements Chemical Calculations
	6-8	W	3	6-10	
	6-9	Th	5	1-7	Atomic Theory: Nuclear Model
2	6-13	M	11	1-6	Atomic Theory: Quantum Model
	6-14	T	12	1-8	Chemical Bonding
	6-15	W	13	1-5	Structure and Shape
	6-16	Th	EXAM #1 Chapters 2,3,5,11,12,13		
3	6-20	M	6	1-12	Nomenclature
	6-21	T	15	1-6	Gases, Liquids, and Solids
	6-22	W	7	1-8	Chemical Formula Relationships
	6-23	Th	8	1-10	Chemical Rxns
4	6-27	M	10	1-5	Quantity Relationships in Chemical Rxns
	6-28	T	EXAM #2 Chapters 15,6,7,8,10		
	6-29	W	4	1-6	Introduction to Gases
	6-30	Th	14	1-9	The Ideal Gas Law and Its Applications
5	7-4	M	HOLIDAY		
	7-5	T	16	1-6,9-12	Solutions
	7-6	W	17	1,2,4-6,8,9,10	Acid-Base Reactions
	7-7	Th	9	1-4	Chemical Changes
6	7-11	M	19	1-6	Oxidation-Reduction Reactions
	7-12	T	EXAM #3 Chapters 4,14,16,9,17,19		
	7-13	W	Review		
	7-14	Th	COMPREHENSIVE FINAL EXAM		

Chemistry 2: Laboratory Schedule

<u>Week</u>	<u>Day</u>	<u>Date</u>	<u>Experiment</u>
1	M	6-6	Introduction, Lab Safety
	T	6-7	Exp#1: Properties and Changes of Matter
	W	6-8	Exp#3: Chromatography
2	M	6-13	Significant Figures pg 460, Dimensional Analysis pg 461
	T	6-14	Quiz 1 chapters 2,3,5, Exp#4: Densities of Liquids and Solids, check in
	W	6-15	Exp#15: Molecular Models: A Study Assignment
3	M	6-20	Exp#13: Qualitative Analysis of Some Common Ions
	T	6-21	Exp#9: Chemical names and Formulas
	W	6-22	Quiz 2 Chapters 6,15 Exp#2: The Chemistry of Some Household Products
4	M	6-27	Worksheets Mole pg 462, Stoichiometry pg 465
	T	6-28	Exp#16: Molar Volume of a Gas
	W	6-29	Exp #11: Mole Ratio for a chemical Reaction
5	M	7-4	HOLIDAY
	T	7-5	Solutions Worksheet pg 468, Gas Laws Worksheet pg 467
	W	7-6	Exp#20: Titration of Acids and Bases: An Introduction
6	M	7-11	QUIZ 3 Chapters 4,14,16 Exp#21: Titration of Acids and Bases: Continued
	T	7-12	Exp#26: Introduction to Oxidation-Reduction
	W	7-13	Lab Check Out, Cleanup

Suggested Problems: 4th edition

Questions, Exercises, and Problems (At the end of each chapter, ones with answers are in blue)

Chapters	Problems
2:	ODD 9-15, 21,23,29,ODD 33-41,49,51,53,66,67,71,76-78,83
3:	1, ODD 5-21, ODD 29-47,51, ODD 53-63, ODD 85-91, 97-99, 101,105
4:	11,15,25,27,31,33,ODD 35-53,56, ODD 59-63,67
5:	9,11,13,17,19,21,27,29,31,35,48
6:	ODD 3-19,25, ODD 29-43, 53,55,61,63,65,67,71
7:	7,13,15, ODD 19-33,ODD 37-63,69,71
8:	Equation Balancing Exercise, ODD 7-17, 23,25,33,35, ODD 43-49, ODD 57-65
9:	ODD 1-15, ODD 25-35, ODD 41-47,80
10:	2, ODD 1-39,45,47,49, 70-76, 79
11:	5,9,19,21,23,27,31,39,ODD 43-53,57,79,87,92,104,105
12:	3,5,9,19, ODD 21-25,42,52,54,61
13:	Do Lewis Diagram Recognition Exercise: ODD 1-47,75
14:	ODD 3-23,ODD 27-45,48-54
15:	ODD 1-13, ODD 21-35,39,41,43,49
16:	5,7,9,15,21, ODD 25-29,ODD 33-53,83,85, ODD 91-103, 141,143,146
17:	ODD 9-19,25,27,ODD 39-61,66
19:	3,9, ODD 17-39,54,60