

WEST VALLEY COLLEGE
CHEMISTRY DEPARTMENT
Spring 2008

COURSE TITLE

Chemistry 30B, Fundamentals of Chemistry

INSTRUCTOR

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Web site: <http://www.westvalley.edu/wvc/sci/chem/harrison.html>

OFFICE HOURS

M: 12:00-12:30 T: 1:00-2:00 T: 3:30-4:00 W: 12:00-12:30 Th: 3:30-4:00 SM52c

MEETING TIMES

Lecture: T 4:00-6:05, SM 30

Lab: Th 4:00-7:10, SM 52

REQUIRED MATERIALS

- 1) Denniston, Topping, Caret General, Organic, and Biochemistry, 5th Edition McGraw-Hill Higher Education
- 2) Weiner, Introduction to Chemical Principles Brooks/Cole 6th edition
- 3) Safety Goggles (Bookstore; if purchased elsewhere, must be approved by your instructor)
- 4) Scientific calculator, Periodic Table, **Stapler**

Optional Materials

Student study guide/ solution manual

Lab coat.

Grading Scheme

<u>Minimum Course Score</u>	<u>Grade</u>	Course score formula	Possible Points
85%	A	$\frac{(3*M + F + L + HW)}{6.7} = G$	
75%	B		
65%	C		
55%	D		
Advanced Study Guide 2 pts		M= Average of four Midterm exams	300
Lab 8 pts		F= Final exam score	200
		L= Laboratory score	120
		HW= Homework	50
		G= Grade in the course	
			Total Points Possible=670

Lecture- Each of three Midterm exams will be worth 100 points, homework will be worth 50 pts, and the comprehensive final exam will be worth 200 points. If a student is absent during any exam, 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. Unethical behavior of any kind is not tolerated and will result in the student failing the course.

Homework- Homework will be collected and graded. Homework is due in the first five minutes of class after which it will be considered late. Late homework will not be accepted. The lowest scoring homework will not be counted.

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 and worksheets are due on the next lab day and are due within the first five minutes of the scheduled lab period. If a lab report is turned in 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 completing and turning in extra homework problems. The student must discuss each make up assignment with the instructor prior to beginning the make up work. The make up problems will be due within two weeks of the missed lab. 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 labs contain the same data both students will receive a zero.

Attendance- Attendance is required in all labs. Students are expected to attend all classes. It is the students responsibility to officially drop the class if they wish to. Failure on the part of the student to do so will result in a failing grade. All students (officially registered, dropped, or withdrawn) must check out of the lab before the end of the semester (last lab day). If you do not check out of lab by the last day, a hold will be placed on your records, and no grades will be issued. Pre-laboratory work is worth two points.

Success- To be successful in a chemistry course requires diligence and 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 (even numbered answers are in the back of the book)
- 6) Study hard, at least 6-10 hours per week.
- 7) Form study groups.

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.

Chemistry 30B: Lecture Schedule T 4:00-6:05

<u>Week</u>	<u>Date</u>	<u>Day</u>	<u>Chapter</u>	<u>Subject</u>	<u>Homework</u>	
1	1-29	T	Intro,10	Organic		
2	2-5	T	11,12	Hydrocarbons Alcohols		
3	2-12	T	13,14	Aldehydes, Ketones Carboxylic acids	HW#1 Due	
4	2-19	T	15	Amines, Amides	HW#2 Due	
5	2-26	T	EXAM #1 Chapters 11-15			
6	3-4	T	16	Carbohydrates		
7	3-11	T	17	Lipids	HW#3 Due	
8	3-18	T	18	Proteins		
9	3-25	T	19	Enzymes	HW#4 Due	
10	4-1	T	Spring Break			
11	4-8	T	EXAM #2 Chapters 17-19			
12	4-15	T	21,22	Carbohydrate Metabolism Aerobic Respiration		
13	4-22	T	22,23	Fatty Acids		
14	4-29	T	20	Molecular genetics	HW#5 Due	
15	5-6	T	EXAM #3 Chapters 20-23			
16	5-13	T	Review			
17	5-22	Th	2:00-4:00	COMPREHENSIVE FINAL EXAM		

Chemistry 30B Laboratory Schedule Spring 2008

<u>Week</u>	<u>Date</u>	<u>Experiment</u>
1	1-31	Lab Safety, Green Sheets

2	2-7	Exp#29: Hydrocarbons and alcohols
3	2-14	Exp#30: Aldehydes, Ketones, and Carboxylic Acids
4	2-21	Practice Exam
5	2-28	Synthesis of Esters hand out
6	3-6	Exp#33: Carbohydrates
7	3-13	Lipids Hand Out
8	3-20	Exp#34: Amino Acids and Proteins
9	3-27	Practice Exam
10	4-3	SPRING BREAK
11	4-10	Enzymes hand out
12	4-17	Exp#31: Preparation of Aspirin
13	4-24	Food Test Handout
14	5-1	Practice Exam
15	5-8	Exp#32: Preparation and Properties of Soap
16	5-15	Lab Check-Out, Cleanup, More Review

Suggested Problems (5th edition)

Chap

10	4,odd,5-11,17,19,31,33,35-39,48,54,55,56,odd 65-79,85,87-95,103
11	2,4,19,20,23(a,b),odd 45-51,57-60,63,69(a,b,d,f),79
12	5,odd 11-15,17-19,21,29-31,33,49,55,odd 59-73,77,83
13	1,2,17,20,35,67,69,71,83,85
14	1,13,15,16,21,23,odd 31-37,57,59,63,75,77,81,83,85,89
15	3,11,21,23,33,37,65,67
16	2,3,5-7,9,15,19,21,31,50,51,59,61,69,71,81,83,84

17	odd 3-11,15,21,25,27,35,37,odd 41-45,odd 51-55,61,65,67,73,75,76,81,82,85,86,89,91,93
18	3-6,11,13,23,25,30,33,37,39,41,45,47,51,53,57,59,63,69,75,81,83,85
19	1,7,13,15,16,23,25,29,30,41,42,47-49,57,63,69,71,79,81,85,89
20	1,3,7,11,31,33,37,39,43,45,46,49,53,55,57,65,odd 69-77,81,89
21	6,7,19,25,27-29,36,37,39,43,46,53,65,77,87,91
22	9,12,13,23,27,29,37,41-43,45,47,50,52,61,65,69,70,odd 73-77,78,79,83,85,87,95
23	1,2,6,7,15,17,23,27,28,odd 33-37,43,47,49-52,55,61,71,77,79,85,89,93,95,97

Nomenclature

Chap

11	2,4,6,7,9-11,13,25,81,82,85,91-93,101
12	1-3,6,14,20,22,23,25,37-39,41,45,46,55,57,88(a,b,c,d),97,101
13	5,6,7,9,11-13,43,45,47,51,53,57
14	5-8,11,19,45,47,51,71,73
15	1,7-9,25,27,29,30,55,57,58