

Camosun College Chemistry 150

Summer Quarter 4 – June 28 to September 17, 2004

Instructor: Blair Humphrey, CBA 146, Telephone 370-4447 or 385-8888 e-mail: humphreb@camosun.bc.ca web: <http://ccins.camosun.bc.ca/humphreb> Office hours: see schedule below or by arrangement

Text: Fine, Beall & Stuehr, 2000. **Chemistry for Scientists and Engineers**, Prelim. Edn., Saunders

Lab. Manual: On the web site; www.camosun.bc.ca/~humphreb/ and follow the links.

Evaluation Grading as in calendar

	Approximate time	@ 3.6 minutes/%
Laboratory (9)	10%	NA
Quizzes (4)	20%	18 minutes each
Midterm	20% 72	minutes
Final	50% 180	minutes
Total	100%	

Blair's timetable Q4, 2004. June 28-Sept. 10.

	Monday Tuesday	Wednesday	Thursday	Friday	
930-1020		Usually in CBA 146	Usually in CBA 146	Usually in CBA 146	Usually in CBA 146
1030-1120	Usually in CBA 146	Chem 150- 01Tech 173	Chem 150- 01Tech 173	Chem 150- 01Tech 173	Chem 150-01 Tech 173
1130-1220	Chem 150- 02Tech 173	Chem 150- 02Tech 173	Chem 150- 02Tech 173	Chem 150- 02Tech 173	Chem 150-02 Tech 173
1230-1320	Lunch				
1330-1420	Chem 150- 01Tech 173	Usually in CBA 146	Usually in CBA 146	Usually in CBA 146	
1430-1520		Chem 150 Lab Mech CHEM	150 Lab Elex	CHEM 150 Lab Comp	
1530-1620		CHEM 150 Lab Mech CHEM	150 Lab Elex	CHEM 150 Lab Comp	
1630-1720		CHEM 150 Lab Mech CHEM	150 Lab Elex	CHEM 150 Lab Comp	

Tutorial times outside normal office hours by arrangement.

Course Outline

The midterm will be on Monday, July 19, 8:30-10:30 in CC124

Week	Topics	Laboratory

1	Introduction, measurement and the scientific method. Atoms, elements, molecules, compounds, mixtures, Ionic and covalent molecules, the mole The periodic table, nomenclature: naming compounds Chemical reactions,	Introduction, lab safety; 1: Densities
2	Quiz 1 , Stoichiometry. Thermochemistry. Atomic structure,	2: Stoichiometry
3	Midterm includes up to atomic structure. Periodic properties. Bonding. Molecular structure. Molecular shape, size and bond strength	3: Nickel determination
4	Gases. Intermolecular forces Liquids, vapour pressure, mixtures, phase diagrams. Solutions Solids, structure and bonding. Quiz 2	4: Thermochemistry
5	Polymers and ceramics	6: Distillation
6	Kinetics	7: Determination of chloride
7	Equilibrium. Acid/base equilibria Quiz 3	8: Kinetics
8	Aqueous equilibria	9: pK _a of acetic acid
9	Thermodynamics Quiz 4	Tutorial
10	Electrochemistry)	Tutorial
11	Metals	Tutorial
12	Exam period	