Camosun College Chemistry 150

Summer Quarter 4 – July 2 to September 19, 2003

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: Brown, Lemay and Bursten, Chemistry: The Central Science 9th ed. Solution guide optional but recommended.

Lab. Manual: provided

Evaluation Grading as in calendar

Laboratory (10)	10%
Quizzes (4)	20%
Midterm	20%
Final	50%
Total	**100%**

Blair's timetable Q4, 2003. July 2-Sept. 12.

	Monday Tuesday	Wednesday	Thursday	Friday	
830-920	C150-Lab Tech 230 Mech A/B		C150-Lab Tech 230 Comp A/B Usually CBA	in 146	C150-Lab Tech 230 Elec A/B
930-1020	C150-lab Tech 230	C150 Lect.1Tech 173	C150-lab Tech 230	Usually in CBA 146	C150-lab Tech 230
1030-1120	C150-lab Tech 230	Usually in CBA 146	C150-lab Tech 230	C150 Lect.2Tech 173	C150-lab Tech 230
1130-1220	Lunch office by arrangement	Lunch office by arrangement	Lunch office by arrangement	Lunch office by arrangement	
1230-1320	C150 Lect.2Tech 173	Usually in CBA 146	Usually in CBA 146	Usually in CBA 146	Gone
1330-1420	Usually in CBA 146	C150 Lect.2Tech 173	C150 Lect.2Tech 173	C150 Lect.2Tech 173	Sail-
1430-1520	Usually in CBA 146	Usually in CBA 146	Usually in CBA 146	Usually in CBA 146	-ing
1530-1620	C150 Lect.1Tech 173	C150 Lect.1Tech 173	C150 Lect.1Tech 173	C150 Lect.1Tech 173	

Course Outline

Quizzes will be on Thursdays. The midterm will be on Thursday morning, 8:30

Week	Topics	Laboratory (approx.)

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	Stoichiometry. Thermochemistry. Atomic structure. **Quiz 1**	2: Stoichiometry
3	Periodic properties. Bonding. Molecular structure. Molecular shape, size and bond strength.	3: Nickel determination
4	Gases. Intermolecular forces. Liquids, vapour pressure, mixtures, phase diagrams. Solids, structure and bonding. **Quiz 2**	4: Thermochemistry
5	Polymers and ceramics. Metals**.** Semiconductors	5: VSEPR (in lecture)
6	**Midterm** includes up to Metals and semiconductors. Solutions.	6: Distillation
7	Kinetics. Equilibrium. .	7: Determination of chloride
8	Acid/base equilibria. **Quiz 3** (Thursday)	8: Kinetics
9	Aqueous equilibria.	9: pK_a of acetic acid **Major report**
10	Thermodynamics. **Quiz 4** (Thursday)	
11	Electrochemistry. Review.	
12	Exam period	

Lab schedule

Week	Monday	Tuesday	Wednesday	Thursday	Friday
July 2-4					1

July 7-11	1		1		2
July 14-18	2		2		3
July 21-25	3		3		4
July 28-Aug 1	4		4		Free
Aug 5-8			6		6
Aug. 11-15	6		7		7
Aug. 18-22	7		8		8
Aug. 25-29	8		9		9
Sept. 2-5					
Sept. 8-12	9				