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:

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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	Wednesday	Thursday	Friday	
	Tuesday C150-Lab		C150-Lab	in 146	C150-Lab
830-920	Tech 230		Tech 230	III 140	Tech 230 Elec
	Mech A/B		Comp A/B Usually CBA		A/B
	C150-lab	C150	C150-lab	Usually in	C150-lab
930-1020	Tech 230	Lect.1Tech 173	Tech 230	CBA 146	Tech 230
	C150-lab	Usually in	C150-lab	C150	C150-lab
1030-1120	Tech 230	CBA 146	Tech 230	Lect.2Tech 173	Tech 230
	Lunch office	Lunch office	Lunch office	Lunch office	
1130-1220	by	by	by	by	
	arrangement	arrangement	arrangement	arrangement	
	C150	Usually in	Usually in	Usually in	Gone
1230-1320	Lect.2Tech 173	CBA 146	CBA 146	CBA 146	
	Usually in	C150	C150	C150	Sail-
1330-1420	CBA 146	Lect.2Tech 173	Lect.2Tech 173	Lect.2Tech 173	
4400 4500	Usually in	Usually in	Usually in	Usually in	-ing
1430-1520	CBA 146	CBA 146	CBA 146	CBA 146	_
	C150	C150	C150	C150	
1530-1620	Lect.1Tech	Lect.1Tech	Lect.1Tech	Lect.1Tech	
	173	173	173	173	

Course Outline

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

Week	Topics	Laboratory (approx.)
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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: pKa 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		