

# **KWANTLEN UNIVERSITY COLLEGE**

## **CHEM-1094, R 10: PREPARATION FOR GENERAL CHEMISTRY**

**FALL 2004**

**INSTRUCTOR:** Dr. Paul Kaushal  
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**OFFICE HOURS:** Please check the timetable posted on the office door

**PREREQUISITE:** Math 10 ( with a C or better )

**COREQUISITE :** Math 0093 or higher, or ACPM 0083, or Math 11 with C or better.

**INSTRUCTION FORMAT:** Lectures (4 hr/week) and Labs (2 hr/week)

**REQUIRED MATERIALS:** Basic Chemistry by Steven Zumdahl  
Lab manual by KUC  
Lab notebook

**OPTIONAL MATERIALS:** Study guide and solutions manual

### **NO CONTACT LENSES ALLOWED IN THE LABORATORY**

**MISSED EXAMS AND LABS :** Students will not be allowed to make up a missed exam. However, a doctor's note is required to avoid getting a score of zero for the exam. If an exam is missed because of sickness or a valid excuse then weight of the missed exam will be added to the exams remaining. Students who are repeating the course must meet with the instructor to determine whether they will be exempt from the lab experiments.

**ANSWERS TO EXAMS AND PROBLEM :**Solutions to exams and problem sets will be posted on the bulletin board outside my office. For sample final exams and supplementary lab materials, go to <http://plaza.kwantlen.bc.ca/sites/sciences.nsf> click on **Chem Department**

## **CHEM 1094 COURSE OUTLINE AND SCHEDULE**

**TEXT:** Basic Chemistry by Steven Zumdahl

### **INTRODUCTION (Chapter 1)**

Introduction to Chemistry, the scientific method.

### **MEASUREMENT AND CALCULATIONS (Chapter 2)**

Scientific notation, metric system, significant figures, problem solving by dimensional analysis, temperature, density.

### **MATTER AND ENERGY (chapter 3)**

Matter, physical and chemical properties and changes, elements and compounds, mixtures and pure substances, separation of mixtures, energy and energy changes.

### **ELEMENTS (chapter 4)**

Dalton's atomic theory, atomic structure, isotopes, atomic weights, periodic table, ions.

### **COMPOUNDS ( Chapter 5)**

Molecular and ionic compounds, naming compounds, writing formulas of compounds, acids and bases.

### **CHEMICAL REACTIONS (Chapters 6, 7, 8)**

Evidence for a chemical reaction, writing and balancing chemical equations, types of reactions, net-ionic reactions

### **CHEMICAL COMPOSITION ( Chapter 9)**

The mole concept, molar mass, Avogadro's number, mass-mole calculations, empirical and molecular formulas.

### **CHEMICAL QUANTITIES ( Chapter 10)**

Calculations based on balanced chemical equations, limiting reagent, percent yield, percent purity.

### **SOLUTIONS ( Chapter 15)**

Components of a solution, concentration units, % by mass, molarity, solution stoichiometry, titrations.

### **GASES ( Chapter 13)**

Properties of gases, gas laws, gas stoichiometry (if time permits).

## CHEM 1094 FALL 2004

### EVALUATION

#### Lecture course

- a) Three in-class tests 40 %
- b) Final exam (comprehensive) 30 %

#### Lab component

- a) Lab reports and unknowns 22 %
- b) Lab exam 8 %

### CHEMISTRY GRADE GUIDELINES

The following grade guidelines are used to determine a grade in this Chemistry course. Satisfactory completion of the laboratory component (i.e. >60%) of this course is a requirement for a grade of C or better

<u>GRADE</u>	<u>PERCENT</u>	<u>REQUIREMENTS</u>
A+	90-100	Minimum of 80% on final
A	85-89	Minimum of 70% on final
A-	80-84	Minimum of 65% on final
B+	76-79	Minimum of 60% on final
B	72-75	Minimum of 60% on final
B-	68-71	Minimum of 55% on final
C+	64-67	Minimum of 50% on final
C	60-63	Minimum of 40% on final
C-	56-59	Minimum of 40% on final
D	50-55	Some incomplete work
F	<50	

### IMPORTANT DATES

Oct. 06	Test # 1
Oct. 30	Last day to withdraw, a W appears on transcript
Nov. 17	Test # 2
Dec. 06	Test # 3
FINAL EXAM	<b>Monday, December 20, 8 – 11, Room 3450</b>

# PLAGIARISM AND CHEATING POLICY

## Introduction

### 1. DEFINITIONS

Cheating, which includes plagiarism, occurs when a student or group of students uses or attempts to use unauthorized aids, assistance, materials or methods. Cheating is a serious educational offense.

Plagiarism occurs when a student represents the work or ideas of another person as his or her own.

## Policy

Kwantlen University College condemns all forms of cheating.

If it is determined that a student has cheated, the University College will proceed with discipline in the following manner:

1. for most first offences, a grade of zero will be awarded for the affected assignment, test, paper, analysis, etc.;
2. for most second offenses, a failing grade will be assigned in the affected course;
3. depending upon the circumstances surrounding a first or second offense, a more severe level of discipline may be imposed by the University College;
4. Where deemed appropriate in the circumstances, for any third offence, the matter *must* be referred to the University College President under Policy No. C21 Student Conduct for the assignment of discipline, which may include suspension or expulsion from the University College.
5. Any student who contributes to an act of academic dishonesty by another student may face disciplinary action.

This policy must be communicated in all course presentations.

## Procedural Guidelines

1. When an invigilator, instructor, or Dean's designate, after obtaining the student's explanation, determines that a student has cheated, he or she will immediately gather the available evidence, assign a grade of zero to the affected assignment, test, paper, etc., and report the incident, with documentation, to the Dean under whose jurisdiction the course falls.
2. The Dean will assign any additional disciplinary action which may be in order under the policy described above, and will inform the Registrar.
3. The Registrar will maintain a record of each offense in the student's file.
4. The affected student has the right at any time to consult with a University College counsellor and/or the student ombudsperson.
5. Except in circumstances where the matter has been referred to the President under Policy No. C.21 Student Conduct, a student may appeal a decision or penalty under this policy to the Kwantlen University College Appeals Committee (C.5 Appeals of Academic or Admissions Decisions).