## **CHEMISTRY 302 COURSE INFORMATION - WINTER TERM 2003**

### **ENVIRONMENTAL CHEMISTRY I**

## INTRODUCTION

Welcome to Chemistry 302. This is a half-course in Environmental Chemistry at the third year level. It assumes the required background of first year chemistry. It is intended for students interested in chemistry in the context of the environment.

This course is revised each time it is offered. We welcome your constructive criticisms and suggestions.

#### **TEXTBOOKS**

There is one textbook required for this course:

Environmental Chemistry, Second Edition by Nigel Bunce

There are a number of textbooks on various aspects of environmental chemistry available through the library. Material not in the textbook may be assigned. You will find it useful to have access to texts for first year chemistry and for physical chemistry. Recommended supplementary reading includes:

Environmental Chemistry by Colin Baird

Atmospheric Chemistry by Barbara J. Finlayson-Pitts and James N. Pitts, Jr.

Environmental Chemistry, Fifth Edition by Stanley E. Manahan

Fundamentals of Environmental Chemistry by Stanley E. Manahan

Environmental Organic Chemistry by René P. Schwarzenbach, Philip M. Gschwend, and Dieter M. Imboden

Atmospheric Chemistry and Global Change by Guy P. Brasseur, John J. Orlando, and Geoffrey S. Tyndall

All of the above have been placed on reserve in the library in addition to several books on Physical Chemistry.

#### **LECTURES AND TUTORIAL**

There is one lecture section for this course held MWF 11:30-12:20 in room 5-155. The tutorials are in room 5-138 from 10:30-11:20 on Mondays and in room 7-102 from 10:30- 11:20 on Fridays.

The lecturer is:

Professor Margot E. Mandy Office: 8-412 (New Lab Building) Telephone: 960-6676 E-mail: mandy@unbc.ca

My schedule is posted on my door. I am available for consultation by mutual convenience.

# LABORATORY

The laboratory time will be used to the place the lecture material in the context of particular environmental issues. You must pass the laboratory in order to pass the course. Over the term there will be a mixture of wet and computer-based laboratories. If you miss a laboratory, you must contact the Professor in advance to schedule a makeup. If more than one laboratory period is missed without permission of the professor you will automatically fail the course. The first lab will be held Tuesday 7 January 2002. Lab periods will be in Rooms 4-420 and 4-421 in the lab building or in Room 5-161 (Computer Lab). For the first laboratory period, you are required to have a hard-covered lab book, a lab coat, safety glasses, computer disks, and a valid Student Safety Orientation card. If you do not have a Student Safety Orientation card, you must complete the web-based test to obtain one.

## Using Excel in Chem 302

The Excel spreadsheet program will be used extensively in this course. Instruction to the necessary level will be provided. For the "spreadsheet" labs, sample calculations must be shown handwritten in the lab report. It is your responsibility to back up all your files on a floppy disk and ensure that the disk is virus free. For the spreadsheet labs, a disk must be submitted as part of your lab report. All disks submitted:

- must be labeled clearly with your name, student number, and lab number.
- have file names that correspond to those stated on the label or in lab report.
- must be readable by Excel 5.0. This means that the file is saved to this version.
- must be virus checked.
- must be write-protected

If your disk fails virus checking or your file format is unreadable, you will lose the marks associated with the disk for that lab report.

## TERM TESTS AND PROBLEM SETS

There will be several problem sets and two midterms in this course.

## MARKS

The mark in this course will be assigned as follows:

Problem Sets	25%
Two Term Tests	10% each
Laboratory	25%
Final Exam	30%
Total	100%

Penalties for Academic Offenses will be in accordance with UNBC Regulations and Policies. See page 171 of the 2002-2003 UNBC Undergraduate Calendar.