

School of Arts & Science CHEMISTRY AND GEOSCIENCE DEPARTMENT CHEM 253

Environmental Chemistry

Quarter or Semester/Year

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/chem.html

Please note: the College electronically stores this outline for five (5) years only.
 It is strongly recommended you keep a copy of this outline with your academic records.
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Neil J. Meanwell		
(b)	Office Hours:	Mon: 9.30 -10.30 am, 1.30 -2.30 pm Tues: 1.30 -2.30 pm: Wed, Thurs 12.30 -1.30 pm		
(c)	Location:	F 348B		
(d)	Phone:	(250) 370-3448	Alternative Phone:	(250) 729-3838
(e)	Email:	meanwen@camosun.bc.ca		
(f)	Website:	N/A		

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

Upon completion of this course the student will be able to:

- 1. Describe the natural physical and chemical processes that occur in the environment, especially those pertaining to the atmosphere and the hydrosphere.
- 2. Use the specialized language and terminology of environmental chemistry.
- 3. Describe the effects of human activity upon the environment and comment on the properties of specific organic and inorganic pollutants.
- 4. Utilize the knowledge of the chemical and physical properties of substances to determine how various pollutants exert their effects on the environment both qualitatively and quantitatively.
- Classify hazardous substances according to their properties and describe the approaches to their safe disposal.
- 6. Classify toxic substances according to type and use the terminology associated with chemical toxicology.
- 7. Perform numerous laboratory procedures involving the monitoring of various pollutants in the environment.

3. Required Materials

(a) Texts

Environmental Chemistry, 4th Edition, (Freeman), Colin Baird and Michael Cann Laboratory Manual (In-house)

(b) Other

4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

Scheduled Lectures: Mon, 10.30 am – 11.50 am (F 222). Tue, 10.30 am – 11.50 am (F 310).

Scheduled Labs: Wednesday: 1:30 pm - 4:20 pm (F 356).

Assignments

The first assignment will be based on topics learned in Chem 120 and Chem 121 which

are most relevant to environmental chemistry. It will be distributed in week #2 and taken in and marked at the beginning of week #5. Further assignment questions will be distributed periodically to keep pace with the course material. The questions will be chosen from the questions given at the end of each chapter of the textbook. Some additional questions will also be given. The assignments will **not** be taken in for marking. Solutions will be supplied to you office.

Exams

You will be required to take the following exams:

Midterm Exam #1 Week 7 - 120 minutes duration. Written exam on the lecture material presented from Week 1 to Week 6 of the course. Scheduled for the lab period of Week 7.

Midterm Exam #2 Week 12 - 120 minutes duration. Written exam on the lecture material presented from Week 7 to Week 11 of the course. Scheduled for the lab period of Week 12.

Final Exam 180 minutes duration. Written exam on **all** the lecture material presented in the course. Scheduled for the week immediately following the end of the semester.

Note: If you have to miss an exam through illness you must inform me as soon as possible to allow me to make alternative arrangements.

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

Review assignment 5%
Midterm exams (@ 15%) 30%
Final exam 35%
Laboratory work 30%

6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
cw	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED