CAMOSUN COLLEGE	**School of Arts & Science** **ENVIRONMENTAL TECHNOLOGY DEPARTMENT** **ENVR 209** **Waste Management - Remediation** **Quarter or Semester/Year**

COURSE OUTLINE

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

1. Instructor Information

Instructor:	Michael Kory		
Office Hours:	Friday 10:00 -12:00 or by appointment		
Location:	F344D		
Phone:	(250) 370-3506	Alternative Phone:	(250) 516-2415
Email:	KoryM@camosun.bc.ca		
Website:	D2L		

2. Intended Learning Outcomes

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

1. Discuss basic waste management technology.
2. Demonstrate skills in contingency planning, basic training in marine oil spill response, and oil spill management.
3. Discuss provincial and federal legislation on:
   - Solid, liquid and gaseous waste management.
   - Transportation of hazardous wastes.
   - Environmental impact assessment.
   - Contaminated site remediation.
   - Management of hazardous and toxic wastes.
   - Marine pollution.
4. Outline how to conduct a preliminary site investigation and develop a site profile for a potentially contaminated site.
5. Discuss environmentally sound waste management options such as:
   - Pollution prevention (PP or P2).
   - Environmental management systems (EMSs).
   - Waste reduction, recycling and reuse (WR3).
6. Discuss the analytical techniques for some of the more common pollutants.
7. Participate in an oral discussion of environmental pollution and monitoring of the environment.
8. Discuss the role and response of society to environmental issues.

3. Required Materials

(a) **Texts:** The Following text is optional: Nathanson, J., "Basic Environmental Technology", 4th or 5th Edition. Prentice Hall, Columbus, Ohio.2008. There are two copies on special reserve in the library; students might find purchase of the book worthwhile however, both for this course and a general reference. The text can be ordered through the Camosun Bookstore.

Other: Recommended reading links provided in lectures.

4. Course Content and Schedule

The course will consist of lectures, field trips and include invited speakers, most of which occurring on the Tuesday class (9:30-12:20). Due to availability, classrooms for guest lecturers may vary throughout the course. There is no formal laboratory component to ENVR 209.

For field trips, wear clothing that will keep you warm and dry and which you don't mind getting a bit grubby. Proper shoes with closed toes and practical heels are particularly important. Waterproof boots with good tread are recommended for the visit to the Hartland Road Solid Waste Facility, Saanich

Wastewater Treatment Plant, Esquimalt graving dock and any other field trip scheduled inadvertently on rainy days. Please be prepared to take notes while on field trips.

Attendance will not be taken; however, be aware that 10% of your final grade will be based in part on field trip/guest speaker feedback forms and class discussions. Keep in mind that the examinations will be based on all of the lectures, field trips and presentations by guest lecturers. Please be welcoming to guest lecturers who have generously volunteered time from their busy schedules, and since they are experts in their fields, lots of questions are encouraged. This course covers a lot of material in a wide variety of topics. I hope we will all enjoy it.

ENVR 209 - WINTER 2014 SCHEDULE.
Note: Dates for guest speakers and class events are tentative and subject to change.

Week	**Date**	**Tuesday (9:30- 12:20)**	**Thursday F336 (2:30-4:20)**
1	Jan 7/9	Course introduction; outline; grading: student presentations and group selection.	Biology/chemistry review
2	Jan 14/16	Introduction to Air Quality	Air Quality
3	Jan 21/23	Air Quality field trip: Topaz station	Air quality/Liquid Waste
4	Jan 28/30	Saanich Peninsula Sewage Treatment Plant field trip	**Air Quality quiz**/ Liquid Waste guest speaker
5	Feb 4/6	Liquid Waste Source Control: guest speakers- CRD (free lunch)	Liquid Waste
6	Feb 11/13	Solid Waste Management	Reading Break
7	Feb 18/20	Hartland Landfill field trip	BC Ferries presentation
8	Feb 25/27	**Liquid Waste quiz**/ Solid Waste	Contaminated Sites
9	Mar 4/6	Contaminated Sites	Contaminated Sites
10	Mar 11/13	Contaminated sites	Petroleum Industry-Marine pollution
11	Mar 18/20	**Solid Waste/Contaminated sites quiz;** Oil Spill management-guest speaker	Marine pollution
12	Mar 25/27	Shipyards field trip	Pollution prevention/Recycling
13	Apr 1/3	Student presentations	Pollution prevention/Recycling
14	Apr 8/10	Student presentations	**Marine Pollution/Recycling quiz**
15	Apr 16-	EXAM period N/A	N/A

5. Basis of Student Assessment (Weighting)

Component	**Grade %**
Quizzes	60
Assignments	10
Class Research Papers and Presentations	20
Class Participation	10
TOTAL	**100**

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		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 3rd 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.

Please note that plagiarism will be treated with zero tolerance. Do not copy anything from published sources or another student in any way that violates policy. Student(s) violating policy will be given a zero grade for work(s) submitted.