



CAMOSUN COLLEGE
School of Arts & Science
Department of Environmental Technology

ENVR-209-001A/B
Waste Management - Remediation
Winter 2019

COURSE OUTLINE

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

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) Instructor	Michael Kory		
(b) Office hours	Thursday 10:30-12:30 or by appointment		
(c) Location	F344D		
(d) Phone	250-370-3506	Alternative:	
(e) E-mail	KoryM@camosun.bc.ca		
(f) 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. Although the text is not required, there are two copies on special reserve in the library; students might find purchase of the book worthwhile for 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 includes invited speakers. There is no formal laboratory component to ENVR 209. Due to scheduling for multiple sections of this course and professional obligations, dates for field trips and speakers will be announced as visits are formalized. As much notice as possible will be given. Field trips will be scheduled on Wednesdays (Sec A) and Fridays (Sec B) to accommodate both ENVR 209 sections. Guest speakers will visit during Tuesday's lecture class.

For field trips, wear clothing that will keep you warm and dry. Proper shoes with closed toes and practical heels are particularly important. Waterproof boots with good tread are recommended for the visit to the Saanich Peninsula Wastewater Treatment Plant, Hartland Road Engineered Landfill, and any other field trip scheduled inadvertently on rainy days. Please be prepared to fill out a question sheet and take notes on field trips. Please attempt to meet at the bus at or before the scheduled class start times on field trip days to ensure we get as much time as possible at the field site.

Attendance will not be taken; however, be aware that 5% 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; with a minor contribution from information gained during field trips and presentations by guest lecturers directly related to lecture material. 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 2019 SCHEDULE.

Note: Dates for guest speakers and class events may be subject to change.

Week	Date	Tuesday (1:30-3:20) F338	Sec A Tuesday (12:30- 3:20) WT 202 Sec B Friday (9:30- 12:20) E 344
1	Jan 8/9/11	Course introduction; outline; grading:	Science refresher/ Introduction to Air Quality
2	Jan 15/16/18	Air Quality Issues	Air Quality Monitoring
3	Jan 22/23/25	Air Quality Emission Controls	Field Trip:Topaz AQ station
4	Jan 29/30 Feb 1	Air Quality Quiz	Air Quality Standards; Calculations Liquid Wastes introduction.
5	Feb 5/6/8	Liquid Wastes	Field Trip: Saanich Peninsula Wastewater Treatment Plant
6	Feb 12/13/15	CRD Source Control presentation	Liquid Wastes
7	Feb 19/20/22	READING BREAK	READING BREAK
8	Feb 26/27 March 1	Liquid Wastes quiz	Solid Waste-Recycling: Composting
9	March 5/6/8	Solid Waste-Recycling: Plastics	Field Trip: Hartland Rd. Engineered Landfill
10	March 12/13/15	Solid Waste/Recycling quiz	Contaminated Sites

11	March 19/20/22	Contaminated Sites	Contaminated Sites
12	March 26/27/29	Contaminated Sites/ Assessments quiz	Petroleum Industry-Marine pollution
13	April 2/3/5	Environmental impact Assessments	Student presentations
14	April 9/10/12	Pollution prevention Environmental Management Systems	Environmental discussions Final Reviews
	April 17-26	EXAM period EXAM TBA	EXAM TBA

5. Basis of Student Assessment (Weighting)

Please note that all quizzes, assignments, papers and presentations must be completed; as well, field trips and guest speaker presentations must be attended to fulfill the requirements of the course. Exceptions will only be made following a written medical doctor's exemption or previous arrangement with your instructor.

Component	Grade %
Quizzes (X 4)	40
Assignments (X 2)	15
Research Paper (15%) and Presentation (5%)	20
Class Participation; field questionnaires; class/lab exercises	5
Final Exam	20
TOTAL	100

6. Grading System

Standard Grading System (GPA)

Competency Based Grading System

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

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and

writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. 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		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. 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 at <http://camosun.ca/about/policies/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> 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	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> 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.