



**School of Arts & Science**  
**ENVIRONMENTAL TECHNOLOGY DEPARTMENT**  
**ENVR 103-01A, 01B**  
**Environmental Microbiology**  
**2007W**

## COURSE OUTLINE

The Approved Course Description is available on the web @ \_\_\_\_\_

Ω Please note: this outline will be electronically stored for five (5) years only.  
It is strongly recommended students keep this outline for your records.

### 1. Instructor Information

(a)	Instructor:	Linda Scotten		
(b)	Office Hours:	Mon 10:30-12:20, Tues 2:30-3:20, Wed 3:30-4:20, Fri 9:30-10:20		
(c)	Location:	F342A		
(d)	Phone:	370-3482	Alternative Phone:	
(e)	Email:	lscotten@camosun.bc.ca		
(f)	Website:	www.lscotten.disted.camosun.bc.ca		

### 2. Intended Learning Outcomes

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

1. Use their knowledge of sterile lab technique to work safely with micro-organisms in a lab environment.
2. Apply their understanding of the critical role of micro-organisms in maintaining and remediating the environment to assess the consequences of human activities.

### 3. Required Materials

(a)	Texts	ENVR 103 Lab Manual and Anthology Text
(b)	Other	Lab coat (may be supplied by the department) Lecture note package – download from web site

#### 4. Course Content and Schedule

Week	LECTURE TOPIC	LAB EXERCISE
1	Lec. 1: Relevance and History of Microbiology	Lab Safety LAB 1 Microscopy
2	Lec. 2: Bacterial cell structure and function	LAB 2 Isolation Techniques
3	Structure and Function	LAB 3 Bacterial Stains
4	Lec. 3: Growth and Control	LAB 4 Chemical Control of Growth
5	Lec. 4: Metabolism	LAB 5 Physical Methods of Control
6	Metabolism	LAB 6 Growth Parameters <b>Lab Midterm (Labs 1-5)</b>
7	<b>Midterm Exam</b>	LAB 7 Culture Media
8	Lec. 5: Sanitary Microbiology: Water Testing, B.O.D	LAB 8 Enterobacteriaceae
9	Sanitary Microbiology: Sewage Treatment	LAB 9 Detecting Coliform Bacteria in Water, LAB 10 BOD (Sec1)
10	Sanitary Microbiology: Drinking Water	LAB 10 BOD (Sec 2), Continue Lab 9
11	Lec. 6: Microbial Ecology	LAB 11 Soil Bacteria, Continue Lab 9
12	Microbial Ecology	LAB 12 Bioremediation
13	Lec. 7: Biotechnology	Complete Lab 12 and E.I.
14	<i>Easter Monday</i>	<b>Lab Final (Labs 6-12)</b>

The schedule above is provided to allow you to prepare for your labs in advance. The schedule and exam dates are subject to change as need arises. Since this is a laboratory based course attendance in the lab is mandatory. *Students who miss more than 2 hours of lab without a valid medical excuse will be docked 1% of their course mark per lab hour missed.*

Students are expected to write all tests and exams when scheduled. It is the student's responsibility to notify the instructor *in advance* if an exam must be missed. The student will be required to provide verification of emergency circumstance (i.e. note from Doctor) in order to write a make-up exam

#### 5. Basis of Student Assessment (Weighting)

(a)	Assignments	5% of grade
(b)	Quizzes	5% of grade
(c)	Exams	Lecture Midterm 20%, Lecture Final 30% Lab Midterm 15%, Lab Final 25%
(d)	Other (eg, Attendance, Project, Group Work)	

## 6. Grading System

### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	A		8
85-89	A-		7
80-84	B+		6
75-79	B		5
70-74	B-		4
65-69	C+		3
60-64	C		2
50-59	D		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 at [camosun.ca](http://camosun.ca) or 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.

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](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

## 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](http://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 on the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED