



## **COURSE OUTLINE**

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*Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for your records.*

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### **1. Instructor Information**

- (a) Instructor: Linda Scotten
- (b) Office hours: Mon. 10:30-12:30, Tues. 12:30-1:30, Wed. 10:30-11:30
- (c) Location: F342 A
- (d) Phone: 370-3482
- (e) E-mail: [lscotten@camosun.bc.ca](mailto:lscotten@camosun.bc.ca)
- (f) Web site: <http://www.scotten.disted.camosun.bc.ca/>

### **2. Intended Learning Outcomes**

Upon successful completion, the student will be able to:

- use their knowledge of sterile lab technique to work safely with microorganisms in a lab environment.
  
- apply their understanding of the critical role of microorganisms in maintaining and remediating the environment to assess the consequences of human activities.

### **3. Required Materials**

- (a) ENVR 103 Lab Manual, includes Anthology Text
- (b) Lab Coat (may be supplied by the department)
- (c) Lecture note outlines, print from course web site:  
<http://www.scotten.disted.camosun.bc.ca/>

### **4. Course Content and Schedule**

Lecture: 1 hour / week  
Wednesday 9:30-10:20

Lab: 2 1/2 hours / week  
Monday 1:30 - 4:00 or  
Tuesday 9:30 - 12:00 or  
1:30 - 4:00

**ENVR.103 SCHEDULE  
WINTER 2009**

<b>Week</b>	<b>LECTURE TOPIC</b> Wednesday	<b>TEXT REF.</b>	<b>LAB EXERCISE</b> Monday or Tuesday
1	Lec. 1: Relevance and History of Microbiology	1-13	Lab Safety LAB 1: Microscopy
2	Lec. 2: Bacterial cell structure and function	14-33	LAB 2: Isolation Techniques
3	Structure and Function (continued)	34-41	LAB 3: Bacterial Stains
4	Lec. 3: Growth and Control	42-58	LAB 4: Chemical Control of Growth
5	Lec. 4: Metabolism	59-70	LAB 5: Physical Methods of Control
6	<b>Midterm Exam</b>		LAB 6: Growth Parameters LAB 7: Culture Media
7	Lec. 5: Biogeochemical Cycling	71-78 106-110	<b>Lab Midterm (Labs 1-5)</b>
8	Lec. 6: Microbial Ecology	79-91	LAB 8: Soil Bacteria: The Nitrogen and Sulfur Cycles
9	Microbial Ecology (continued)	79-91	LAB 9: Bioremediation: Isolation of Oil Degrading Bacteria
10	Lec. 7: Sanitary Microbiology: Water Testing, BOD	92-106	LAB 10: Enterobacteriaceae
11	Sanitary Microbiology: Sewage Treatment	92-106	LAB 11: Detecting Coliform Bacteria in Water
12	Sanitary Microbiology: Drinking Water	92-106	Lab 11 continue EI Identification
13	Lec. 8: Biotechnology	111-121	Lab 11 continue EI Identification
14	Biotechnology (continued) Review	111-121	<b>Lab Final (Labs 6-12)</b>

The course schedule 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 lab-based course, attendance in the lab is mandatory. Students who miss labs without a valid medical excuse may be required to repeat the course. *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.*

*Although labs are performed with a partner, all written material to be handed in for grading is to be presented individually. Plagiarism, including the copying of any part of assignments, laboratory reports, quizzes or exams is a serious offense and is considered to be an academic misconduct.*

The final lecture exam will be comprehensive; however emphasis will be placed on previously untested material.

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. Please do not schedule vacations during final exam period.

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

- (a) Assignments: 10% of grade
  - Environmental Isolate Project 4%
  - Assignments and Lab Reports 6%
- (b) Quizzes: 5% of grade
  - Weekly prelab quizzes
- (c) Exams:
  - Lecture exams: Midterm 20%, Final 30%
  - Lab exams: Midterm 15%, Final 20%

## 6. Grading System

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

## 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, Registrar's Office or the College web site at <http://www.camosun.bc.ca>

### ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

[www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html](http://www.camosun.bc.ca/divisions/pres/policy/2-education/2-5.html)