

CAMOSUN COLLEGE
School of Arts & Science
Department

BIOL 104 Infectious Disease
Fall 2004

COURSE OUTLINE

1. Instructor Information

- (a) Instructor: Linda Scotten
- (b) Office hours: Mon. 2:00-3:30, Tues. 2:30-3:30, Wed. & Fri. 10:30-11:30
- (c) Location: F342A
- (d) Phone with voice mail: 370-3482
- (e) E-mail: lscotten@camosun.bc.ca

2. Intended Learning Outcomes

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

1. differentiate between bacteria, viruses, fungi, parasites and prions based on structural differences.
2. analyze the different patterns of transmission and virulence mechanisms used by microorganisms to produce disease.
3. describe how the nonspecific and specific host defenses work against a variety of organisms.
4. categorize appropriate methods for treatment and control of infectious agents including physical methods, antibiotics and disinfectants and vaccinations.
5. demonstrate the ability to practice aseptic technique in the microbiology lab and to use a variety of diagnostic tests to identify infectious agents.

3. Required Materials

- (a) Text: G.R.W. Burton, P.G. Engelkirk. 2004 *Microbiology for the Health Sciences*, 7th Edition
- (b) Lab Manual for Biology 104
- (c) Disposable Lab Coat for use in Microbiology Lab only.

4. Course Content and Schedule

Week	LECTURE TOPIC	Text Chap.	LAB EXERCISE
1	Relevance and History of Microbiology	1	Lab Safety LAB 1: Isolation Technique
2	Classification of Microorganisms	4, 5	LAB 2: Microscopy/Diversity (Chap 2,18)
3	Bacterial Cell Structure and Function	3	LAB 3: Bacterial Stains (Chap 4)
4	Bacterial Cell Structure and Function Bacterial Metabolism	7	LAB 4a: Diagnostic Microbiology: Selective/Differential Media Chap 13
5	Bacterial Metabolism Growth and reproduction	8	LAB 4b: Diagnostic Microbiology: Biochemical Testing
6	Viral Replication Cycle	4 +	LAB 4c: Diagnostic Microbiology: Antibiogram LAB 5: Growth Parameters (Chap 8)
7	Midterm Exam-20% Viral Replication Cycle		LAB 6: Physical Methods of Control: Media Preparation (Chap 8)
8	Epidemiology	11, 12	Lab Quiz Labs 1-5 LAB 7: Simulated Epidemic Chap 11
9	Pathogenesis of Infectious Disease	14	LAB 8: Microbial Contamination of Food and Water (Chap 11,17)
10	Pathogenesis Host Defence	15	LAB 9: Normal Flora of the Nose and Throat (Chap 10)
11	Host Defence	16	LAB 10: Diagnostic Immunology (Chap 16)
12	Host Defence	9	Poster Presentations (4)
13	Prevention, Treatment and Control		Poster Presentations (4) Review
14	Review		Lab Quiz Labs 6-10

Lecture: 2 hours/week
Tuesday 6:30-8:10

Lab: 2 hours/week
Thursday 6:30-8:30

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

- (a) Assignments and lab write-ups 5%
- (b) Prelab quizzes 5%
- (c) Exams: Lecture Midterm and Final Exam 50%
Lab Midterm and Final Exam 30%
- (d) Case study and poster presentation on chosen pathogen 10%

6. Grading System

The following percentage conversion to letter grade will be used:

A+ = 95 - 100%	B = 75 - 79%	D = 50 - 59%
A = 90 - 94%	B- = 70 - 74%	F = 0.0 - 49%
A- = 85 - 89%	C+ = 65 - 69%	
B+ = 80 - 84%	C = 60 - 64%	

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