

# School of Arts & Science BIOLOGY DEPARTMENT

BIOL 104-001 Infectious Disease F2006

# **COURSE OUTLINE**

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

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

(a)	Instructor:	Linda Scotten	
(b)	Office Hours:	Tues 9:30-11:20, Wed 1:30-3:20, Thurs 2:00-3:20	
(C)	Location:	F342A	
(d)	Phone:	370-3482	Alternative Phone:
(e)	Email:	lscotten@camosun.bc.ca	
(f)	Website:	http://scotten.disted.camosun.bc.ca	

#### 1. Instructor Information

#### 2. Intended Learning Outcomes

Upon 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)	Texts	Microbiology for the Health Sciences, 7 <sup>th</sup> ed. by Burton and Engelkirk Lab Manual for Biology 104
(b)	Other	Disposable lab coat

I <del></del>	4. Course Content and Schedule			
Week	LECTURE TOPIC	Text Chap.	LAB EXERCISE	
1	Relevance and History of Microbiology	1	Lab Safety LAB 4: Physical Methods of Control: Media Preparation (Chap 8)	
2	Diversity and Classification of Infectious Agents	4, 5	LAB 1: Isolation Technique	
3	Bacterial Cell Structure and Function	3	LAB 2: Microscopy/Diversity (Chap 2, 18)	
4	Growth and Control	8	LAB 3: Bacterial Stains (Chap 4)	
5	Antibiotic Resistance	9	LAB 5: Growth Parameters (Chap 8)	
	Bacterial Metabolism	7	LAB 6: Controlling Microbial Growth by Chemical Means (Chap 9)	
6	Bacterial Genetics	7	LAB 7: Culture Media (Chap 8)	
7	Midterm Exam (20%) Oct. 17 Viruses	4	LAB 8: Microbial Contamination of Food and Water (Chap 11, 17)	
8	Viruses	4	Lab Quiz (10%) Oct. 27 Labs 1-7	
9	Host Defence	15,16	LAB 9: Normal Flora and Pathogens of the Nose and Throat (Chap 10, 17)	
10	Host Defence	15,16	LAB 10a: Diagnostic Microbiology (Chap 13)	
11	Host Defence	15,16	LAB 10b: Diagnostic Microbiology	
12	Pathogenesis of Infectious Disease	14	LAB 10c: Diagnostic Microbiology	
13	Epidemiology	11,12	LAB 11: ELISA for Tracking an HIV Epidemic (Chap 16)	
14	Emerging infectious Diseases / Review		Lab Quiz (15%) Dec. 8 Labs 8-11	

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. Please do not schedule vacations during final exam period.

## 5. Basis of Student Assessment (Weighting)

(a)	Assignments and lab write- ups	5%
(b)	Prelab Quizzes	5%
(c)	Exams	Lecture midterm 20%, Lecture final 25% Lab midterm 10%, Lab final 15%
(d)	Other (eg, Attendance, Project, Group Work)	Pathogen Book Project 20%

### 6. Grading System Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	А		8
85-89	A-		7
80-84	B+		6
75-79	В		5
70-74	B-		4
65-69	C+		3
60-64	С		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** 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** 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 <u>camosun.ca</u>.

## 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