

School of Arts & Science BIOLOGY DEPARTMENT

BIOL 104-001 Infectious Disease W2008

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 1:30-3:20, Tues & Thurs 12:30-1:20, Fri 10:30-11:20	
(c)	Location:	F342A	
(d)	Phone:	370-3482	Alternative Phone:
(e)	Email:	Iscotten@camosun.bc.ca	
(f)	Website:	http://scotten.disted.camosun.bc.ca	

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	Lab Manual for Biology 104, includes Anthology Text
(b)		Disposable lab coat for use in Microbiology Lab only
		Lecture outlines will be posted as PDF files on my website

	4. Course Content and Schedule			
Week	LECTURE TOPIC	Text pages	LAB EXERCISE	
1	Lec.1: Relevance and History of Microbiology	1-7	Lab Safety LAB 1: Isolation Technique	
2	Lec. 2: Classification and Diversity of Infectious Agents	8-18	LAB 4: Physical Methods of Control: Media Preparation	
3	Lec. 3: Bacterial Cell Structure and Function		LAB 2: Microscopy / Diversity	
4	Lec. 4: Growth and Control /	19-28	LAB 3: Bacterial Stains	
5	Antibiotic Resistance	29-36	LAB 5: Growth Parameters LAB 6: Controlling Microbial Growth by Chemical Means	
6	Lec. 5. Dacterial Metabolish / 37-47		Reading Break Feb. 14, 15	
7	Lec. 6: Viruses	48-60	Lab Quiz (10%) Labs 1-6 Lab 7: Culture Medium	
8	Midterm Exam (20%) Feb. 19 Influenza	61-68	LAB 8: Microbial Contamination of Food and Water	
9	Lec. 7: Host Defence: Innate	69-80	LAB 9: Normal Flora and Pathogens of the Nose and Throat	
10	Lec. 8: Host Defence: Adaptive	81-99	LAB 10a: Diagnostic Microbiology	
11	Lec. 9: HIV/AIDS	100-106	LAB 10b: Diagnostic Microbiology	
	Lec. 10: Emerging Infectious Diseases	107-115		
12	Easter Monday		LAB 10c: Diagnostic Microbiology	
13	Lec. 11: Pathogenesis of Infectious Disease	116-124	LAB 11: ELISA for Tracking an HIV Epidemic	
14	Lec. 12: Epidemiology / Review	125-135	Lab Quiz (15%) 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

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
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		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

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
1	Incomplete: 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	In progress: 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	Compulsory Withdrawal: 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 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