CAMOSUN COLLEGE



School of Arts & Science Biology Department

BIOL 104 Infectious Disease Winter 2013

COURSE OUTLINE

1. Instructor Information

(a) Instructors: Ed Ishiguro

(b) Office hours: By appointment

(c) Location: F352

(d) Phone with voice mail: 250-370-3909

(e) E-mail: <u>ishiguro@uvic.ca</u> (contact by email preferred)

(f) Web site: D2L http://online.camosun.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.
- 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) Lab Manual for Biology 104 and Pearson Custom BIOL 104 textbook
- (b) Disposable Lab Coat for use in Microbiology Lab only
- (c) Lecture outlines will be posted on the course website:

4. Biology 104: Course Content and Schedule Winter 2013

Week	LAB EXERCISE Monday	Reading assignment No. *	L ECTURE TOPIC Thursday
1	January 7 Introduction to Microbiology Lab and Lab Safety	1	Relevance and History of microbiology and infectious Disease; Cell structure and function
2	Lab 1: Isolation Technique	2	Cell structure and function, cont'd
3	Lab 2: Microscopy Lab 3: Bacterial Stains	3	Growth and control
4	Lab 5: Growth Parameters	4	Drug resistance
5	Lab 6: Chemical Control Lab 7: Culture Media	5	Epidemiology
6	Family Day Holiday Feb 11	6	Metabolism Lecture Midterm Feb 14
7	No lab; Lecture 7 instead (Viruses)	7	Reading Break
8	Lab 8: Microbial Contamination of Food and Water	8	Bacterial Genetics
9	Lab 9a: Diagnostic Microbiology	10	Pathogenic mechanisms
10	Lab 9b: Diagnostic Microbiology	11	Host defences
11	Lab 9c: Diagnostic Microbiology	12	Host defences, cont'd
12	Lab 10: Normal Flora	13	Selected contemporary problems
13	Easter Monday Holiday	14	Selected contemporary problems, cont'd
14	Lab Final (20%) All Labs		Emerging Infectious diseases

^{*} Note that list of Reading Assignments and associated learning outcomes are described on separate documents.

The schedule on the previous page is provided to allow you to prepare for your lectures and labs in advance. **The schedule dates are subject to change as need arises.** Since this is a laboratory based course attendance in the lab is mandatory, and a passing mark in the lab component is required for passing the course. Students who miss more than 2 hours of lab without a valid medical excuse will be docked 15% 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.

Dates for lecture and lab quizzes will be announced a week in advance. Lecture quizzes may be on material covered in lectures as well as in reading assignments. 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

(a) Lab quizzes and write-ups: 15%

(b) Lab final exam: 20%

(c) Lecture quizzes: 10%

(d) Lecture midterm (20%) and final exam (35%)

6. Grading System

The following percentage conversion to letter grade will be used:

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 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.

Temporary Grade	Description	
I	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, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)	
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.	

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