



## COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/biol.html>

Ω Please note: the College electronically stores this outline for five (5) years only.  
 It is **strongly recommended** you keep a copy of this outline with your academic records.  
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

### 1. Instructor Information

(a)	Instructor:	Ed Ishiguro		
(b)	Office Hours:	By appointment		
(c)	Location:	F106E		
(d)	Phone:	(250) 7217071	Alternative Phone:	
(e)	Email:	<a href="mailto:ishiguro@uvic.ca">ishiguro@uvic.ca</a>		
(f)	Website:	D2I		

### 2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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 Pearson Custom Publishing text for BIOL 104
- (b) Other BIOL 104 lab Manual

### 4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

Week	LAB EXERCISE Monday	Reading assignment No. *	LECTURE TOPIC Thursday
1	Introduction to Microbiology Lab and Lab Safety (Jan 6)	1	Relevance and History of microbiology and infectious Disease; Cell structure and function
2	Lab 1: Isolation Technique; Lab 2: Microscopy (Jan 13)	2	Cell structure and function, cont'd

Week	LAB EXERCISE	Reading assignment No. *	L ECTURE TOPIC
	Monday		Thursday
1	Introduction to Microbiology Lab and Lab Safety <b>(Jan 6)</b>	1	Relevance and History of microbiology and infectious Disease; Cell structure and function
3	Lab 3: Bacterial Stains <b>(Jan 20)</b>	3	Growth and control
4	Lab 5: Growth Parameters <b>(Jan 27)</b>	4	Drug resistance
5	Lab 6: Chemical Control ; Lab 7: Culture Media <b>(Feb 3)</b>	5	Epidemiology
6	<b>Family Day Holiday (Feb 10)</b>	6	<b>Reading Break</b>
7	<b>No lab; (Feb 17) Lecture on viruses instead</b>	7	Metabolism <b>Lecture Midterm Feb 20</b>
8	Lab 8: Microbial Contamination of Food and Water <b>(Feb 24)</b>	8	Bacterial Genetics
9	Lab 9a: Diagnostic Microbiology <b>(Mar 3)</b>	10	Pathogenic mechanisms
10	Lab 9b: Diagnostic Microbiology <b>(Mar 10)</b>	11	Host defenses
11	Lab 9c: Diagnostic Microbiology <b>(Mar 17)</b>	12	Host defences, cont'd
12	Lab 10: Normal Flora <b>(Mar 24)</b>	13	Selected contemporary problems
13	Lab 10: Normal Flora <b>(Mar 31)</b>	14	Selected contemporary problems, cont'd
14	<b>Lab Final (20%) All Labs (Apr 7)</b>		Emerging Infectious diseases

**\* Note that list of reading assignments and their associated learning outcomes are described on separate documents. The learning outcomes are examinable.**

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

*(This section should be directly linked to the Intended Learning Outcomes.)*

- (a) Lab journal (deadline for submission April 7): 10%
- (b) Lab final exam (April 7): 20%
- (c) Quizzes: 15%
- (d) Lecture midterm (Feb 20; 20%) and final exam (35%)

## 6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

### Standard Grading System (GPA)

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

### 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 E-1.5 at [camosun.ca](http://camosun.ca) for 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, 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 <sup>rd</sup> course attempt or at the point of course completion.)
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.

## 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](http://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 the College web site in the Policy Section.

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.* Note that you will also be responsible for the material you missed due to an absence.

***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, quizzes or exams is a serious offense and is considered to be an academic misconduct.***

Dates for lecture and 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.