



## 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:	Dr. Anna Colangeli and Geoff Morris (Sec 01C-lab)		
(b)	Office Hours:	Monday/Thursday 3:00-4:00; Wednesday/Thursday 10:30-12:00		
(c)	Location:	Fisher 252B		
(d)	Phone:	250-370-3388	Alternative Phone:	
(e)	Email:	colangel@camosun.bc.ca		
(f)	Website:	<a href="https://online.camosun.ca">https://online.camosun.ca</a>		

### 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) Lab Coat for use in Microbiology Lab only
- (b) Lecture outlines will be posted on the course D2L website: <https://online.camosun.ca>
- (c) Lab Manual: Purchase through Bookstore
- (d) Required Text: **Microbiology – The Human Experience**, Foster, Aliabadi and Slonczewski, Norton Publishing 2015.

### 4. Course Content and Schedule

Lectures: Friday 10:30 – 12:20 Fisher 100

Laboratory: Section 01A Tuesday 8:30 – 10:20 Fisher 222  
Section 01B Tuesday 11:30 – 13:20 Fisher 222  
Section 01C Tuesday 14:00 – 16:00 Fisher 222

## Fall 2016

Week	Dates	LAB EXERCISE Tuesday	LECTURE TOPIC Friday
1	Sept 6, 9	Introduction to the Microbiology Lab and Lab Safety Lab 1: Infection Control	Lec. 1: Relevance and History of Infectious Disease
2	Sept 13, 16	Lab 2: Transfer and Isolation Techniques	Lec. 2: Epidemiology
3	Sept 20, 23	Lab 3a: Bacterial Stains	Lec. 3: Classification and diversity of Infectious agents
4	Sept 27, 30	Lab 3b: Microscopy	Lec. 4: Bacterial Cell structure and taxonomy
5	Oct 4, 7	Lab 4: Controlling Microbial Growth – Physical Parameters	Lec. 5: Bacterial Physiology, Genetics and Metabolism
6	Oct 11, 15	Lab 5: Controlling Microbial Growth – Chemical Parameters	Lec. 6: Bacterial Growth and Control
7	Oct 18, 21	Lab 6: Microbial Contamination of Food and Water	<b>Midterm Exam (15%) (Oct 21)</b>
8	Oct 25, 28	<b>Lab Exam I (12.5%) Labs 1-5 (Oct 25)</b>	Lec. 7: Bacterial Drug Resistance
9	Nov 1, 4	Lab 7a: Diagnostic Microbiology	Lec. 8: Viruses
10	Nov 8 Nov 11	Lab 7b: Diagnostic Microbiology	<b>Remembrance Day....no Lecture</b>
11	Nov 15, 18	Lab 7c: Diagnostic Microbiology	Lec. 9: Host Defense: Innate
12	Nov 22, 25	Lab 8: Normal Flora / Pathogens of the Nose and Throat	Lec. 10: Host Defense: Acquired
13	Nov 28, Dec 2	Lab 9: ELISA for Tracking an HIV Epidemic	Lec. 11: Pathogenesis of Infectious disease
14	Dec 6, 9	<b>Lab Exam II (12.5%) Labs 6-9 (Dec 6)</b>	Lec. 12: Emerging Infectious Diseases; <b>Review</b>

### Important Dates:

**September 20:** fee deadline

**October 10:** Thanksgiving Day

**October 11:** Foundation Bursary Deadline

**November 8:** Withdraw Deadline – last day to withdraw or change to audit

**November 11:** Remembrance Day

**December 10:** Last day of classes

**December 12-20:** Final Exam period

The schedule on this page 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 not be allowed to complete any in-lab work for marks.*

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.

**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 (Weighting)

(a) Assignments (lecture and Lab):	16%	
(b) Prelab quizzes:	5%	
(c) Pathogen Book Project:	9%	
(d) Exams:	Lecture Midterm (15%)	Lecture Final (30%)
	Lab Exam I (12.5%)	Lab Exam II (12.5%)

## 6. Grading System

### 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.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED