



## 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		
(b)	Office Hours:	Tu, W, Th 10:30-11:20; M,Tu,W 11:30-12:20; other times by appointment		
(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) Disposable Lab Coat for use in Microbiology Lab only
- (b) Lecture outlines and all Laboratories will be posted on the course D2L website:  
<https://online.camosun.ca>

### 4. Course Content and Schedule

Lectures:	Monday, Thursday:	3:30-4:20	Dental Bldg 015
Laboratory:	Thursday:	5:00 – 6:50	Fisher 222

## Biology 104: Infectious Disease Fall 2014

Week	Dates	LECTURE TOPIC	LAB EXERCISE
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		Monday / Thursday	Thursday
1	Sept 4	<i>Labour Day</i> Lec. 1: Relevance and History of Infectious Disease	Introduction to the Microbiology Lab and Lab Safety
2	Sept 8/11	Lec. 2: Classification and Diversity of Infectious Agents	Lab 1: Transfer and Isolation Techniques
3	Sept 15/18	Lec. 3: Bacterial Cell Structure and Function	Lab 2: Microscopy / Diversity
4	Sept 22/25	Lec. 4: Epidemiology	Lab 3: Bacterial Stains
5	Sept 29 Oct 2	Lec. 5: Growth and Control	Lab 4: Controlling Microbial Growth – Physical Parameters
6	Oct 6/9	Lec. 6: Antibiotic Resistance Lec. 7: Bacterial Metabolism	Lab 5: Controlling Microbial Growth – Chemical Parameters
7	Oct 16	<i>Thanksgiving Day</i> <b>Midterm Exam (20%) (October 16)</b>	Lab 6: Microbial Contamination of Food and Water
8	Oct 20/23	Lec. 8: Bacterial Genetics Lec. 9: Viruses	<b>Lab Midterm (10%) Labs 1-5 (October 23)</b>
9	Oct 27/30	Lec. 10: Influenza Lec. 11: Host Defence: Innate	Lab 7a: Diagnostic Microbiology
10	Nov 3/6	Lec. 11: Host Defence: Innate	Lab 7b: Diagnostic Microbiology
11	Nov 10/13	<i>Remembrance Day on Tuesday</i> Lec. 12: Host Defence: Adaptive	Lab 7c: Diagnostic Microbiology
12	Nov 17/20	Lec. 13: HIV/AIDS	Lab 8: Normal Flora / Pathogens of the Nose and Throat
13	Nov 24/27	Lec. 14: Pathogenesis of Infectious Disease	Lab 9: ELISA for Tracking an HIV Epidemic
14	Dec 1/4	Lec. 15: Emerging Infectious Diseases /Review	<b>Lab Final (15%) Labs 6-9 (December 4)</b>

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 be docked 1% 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.

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)

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

- |                                    |     |                       |                     |
|------------------------------------|-----|-----------------------|---------------------|
| (a) Assignments and lab write-ups: | 12% |                       |                     |
| (b) Prelab quizzes:                | 6%  |                       |                     |
| (c) Pathogen Book Project:         | 12% |                       |                     |
| (d) Exams:                         |     | Lecture Midterm (15%) | Lecture Final (30%) |
|                                    |     | Lab Midterm (10%)     | Lab Final (15%)     |

#### 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. <i>(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.)</i>
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