

# COURSE SYLLABUS



COURSE TITLE: CHEM-251: Immunology

CLASS SECTION: 001

TERM: 2021F

COURSE CREDITS: 4

DELIVERY METHOD(S): In Person

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

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For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

*Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.*

## INSTRUCTOR DETAILS

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NAME: Jamie Doran, Ph.D.

EMAIL: [jdoran@camosun.ca](mailto:jdoran@camosun.ca)

OFFICE: F350, Fisher Building, Lansdowne Campus

OFFICE HOURS: Mondays 7:30 – 8:30 pm on Zoom

Tuesdays 7:30 – 8:30 pm on Zoom

Wednesdays 7:30 – 8:30 pm on Zoom

Thursdays 7:30 – 8:30 pm on Zoom

Fridays 7:30 – 8:30 pm on Zoom

Feel free to contact me by email, including in the evenings and on weekends, to correspond by email or to set up a Zoom chat.

*As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.*

## CALENDAR DESCRIPTION

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This course describes the basic concepts of immunology and the application of immunochemistry to molecular, medical and veterinary biotechnology. Topics include: antigens and antibody-based, immune responses, vaccines, antibody diagnostics, immunosuppression, hypersensitivity, transplants, cancer, auto-immune diseases, immunodeficiencies (including AIDS) and current immunological techniques.

## PREREQUISITE(S):

All of:

- C in CHEM 120

## COURSE LEARNING OUTCOMES / OBJECTIVES

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Upon completion of this course a student will be able to:

1. Evaluate fundamental aspects of the human immune system, and relate these to a wide variety of immunologically-based clinical conditions including allergies, transplant rejections, autoimmune diseases, and immunodeficiencies including AIDS.
2. Compare and contrast various types of antibody-based diagnostic tests, and various vaccine formulations.
3. Have hands-on experimental skills required to conduct the most commonly used immunological techniques including enzyme-linked immunosorbent assays (ELISA), latex bead agglutination assays, and Western-blotting detection of antigens.
4. Evaluate experimental design, design control experiments, and interpret data arising from basic immunological technologies.
5. Work in a biosafety level-1 laboratory.
6. Prepare, handle and store many types of solutions, buffers, reagents, and equipment used immunological experimentation.

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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### **Textbook**

**Parham, P. *The Immune System*. 5<sup>th</sup> Ed. W.W. Norton & Company, New York, NY, 2021.**

This *required* textbook can be purchased from the Lansdowne Campus bookstore. It is available in hardcopy in both bound and loose-leaf forms, and as an eText

( [https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller\\_id=290&Course=PSYC+110&frame=YES&t=permalink](https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller_id=290&Course=PSYC+110&frame=YES&t=permalink) ). Also, a copy of the textbook is available on loan through the Lansdowne Campus Reserve Library.

### **Laboratory Manual, Selected Course Notes and Lecture Slides. 2021 Edition.**

This *required* course pack contains the laboratory manual, selected course notes, and lecture slides. It can be purchased from the Lansdowne Campus bookstore.

### **Safety glasses**

Safety glasses are required when handling hazardous chemicals, and are recommended when handling laboratory glassware. Each student is required to provide her or his own pair of safety glasses. Students lacking safety glasses when they are required will not be permitted in the laboratory. Prescription glasses will suffice.

### **Lab coats**

Lab coats are required for all experimental work in the laboratory. Each student is required to provide her or his own lab coat.

### **Disposable plastic gloves**

Disposable, plastic, 'non-allergenic' gloves will be available in the laboratory and are to be used when appropriate to protect the skin from potentially hazardous chemicals or to protect biochemicals from degradative enzymes found on the skin.

### Calculator

A scientific calculator is required at times in the laboratory, in lecture, and during term tests and the final exam. Each student is required to provide her or his own calculator. Cell phone-based, tablet-based or computer based calculators, or graphing calculators, cannot be used during term tests or the final exam.

### COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

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#### Course Times:

Monday 12:30 – 1:20 pm F360  
Tuesday Lab 2:30 – 5:20 pm F360  
Thursday 12:30 – 1:20 pm F360  
Friday 8:30 – 9:20 am F360

**Course Length:** 14 weeks

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 1	<p>Labour Day Holiday - Monday, September 6<sup>th</sup></p> <p>Course orientation and organization; The phenomenon of immunity - some perspective, concepts, and immunological terminology; Basic tenants of adaptive immunity; The nature of antibodies; Early evidence of vaccination; Variolation &amp; Jenner's smallpox vaccine; Pasteur, Mechnikoff and the development of immunology; Humoral and cellular immunity.</p> <p>Tuesday Lab, September 7<sup>th</sup></p> <p>Introduction to experimental immunology.</p> <p>Lab-lecture: <i>The structural characteristics of antibodies.</i></p>	Please refer to D2L for helpful information.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 2	<p>Types of vaccines; The nature of antigens; Challenges to health: infectious microbes, toxins, cancer, allergens; Innate immunity &amp; adaptive immunity; Nonspecific physical barriers, skin and mucous membranes; Defensive chemicals: reactive oxygen species, acids, lysozyme, iron-binding compounds, defensins, pentraxins &amp; other host defense peptides, acute phase proteins; human microbiota and microbial antagonism.</p> <p>Tuesday Lab, September 14<sup>th</sup>            Lab-lecture: <i>The nature of antigens.</i>            Pre-Lab Talk: <i>The identification of antigens by precipitin reactions.</i></p> <p><b>Experiment 1. The Ouchterlony Reaction</b>  <b>Experiment 2. The Radial Immunodiffusion (RID) Assay</b></p>	Please refer to D2L for helpful information.
Week 3	<p>White blood cells (leukocytes) involved in innate immunity; Phagocytic cell types: monocytes, macrophage, neutrophils, dendritic cells, Langerhans cells; Nonphagocytic leukocytes: eosinophils, natural killer cells; Inflammatory leukocytes: mast cells, basophils, innate lymphoid cells; Lymphocytes: B-cells and T-cells; Origins of myeloid, erythroid cells and lymphoid cell lines; The innate, acute, inflammatory responses; Role of the lymphatic system in immunity; The classical complement system.</p> <p>Tuesday Lab, September 21<sup>st</sup>            Lab-lecture: <i>Classes of antibodies.</i></p> <p><b>Experiment 1. Interpretation of Ouchterlony reactions.</b>  <b>Experiment 2. Interpretation of RID results.</b>            Pre-Lab Talk: The nature of agglutination reactions.  <b>Experiment 3. Identification of <i>Aeromonas salmonicida</i> by Latex Bead Agglutination Assay.</b>  <b>Experiment 4. Detection of <i>Aeromonas salmonicida</i>. Antigens, and Determination of Anti-<i>A. salmonicida</i> Polyclonal Antibody Titer, Using an Indirect ELISA.</b>            Part 1. Coating the ELISA plates with antigen.</p>	Please refer to D2L for helpful information.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 4	<p>Pathways of complement activation; Professional antigen presenting cells; Chemical and biochemical mechanisms of macrophage killing &amp; prevention thereof; Macrophage and obesity; Fever.</p> <p>Tuesday Lab, September 28<sup>th</sup> Pre-Lab Talk: Principles of ELISA.</p> <p><b>Experiment 4. Detection of <i>Aeromonas salmonicida</i> Antigens, and Determination of Anti-<i>A. salmonicida</i> Polyclonal Antibody Titer Using an Indirect ELISA.</b> Part 2, <i>Conducting the ELISA</i> <i>Interpretation and discussion of ELISA results will occur in the following lecture period.</i></p> <p>National Day for Truth and Reconciliation - Thursday, September 30<sup>th</sup></p>	Please refer to D2L for helpful information.
Week 5	<p>Neutrophil cytotoxic activity; Cytokines; Type 1 interferon; Toll-like receptors; NK (natural killer) cells; ILC's; Eosinophils.</p> <p>Tuesday Lab, October 5<sup>th</sup> Pre-Lab Talk: SDS-PAGE in Western Blotting for the Detection of Specific Antigens.</p> <p><b>Experiment 5. Western Blotting Analysis of <i>Aeromonas salmonicida</i> Proteins.</b> Part 1, <i>SDS-polyacrylamide gel electrophoresis separation of proteins</i>  (the following <u>lecture</u> period) <b>Experiment 5. Western Blotting Analysis of <i>Aeromonas salmonicida</i> Proteins.</b> Part 2, <i>Electrophoretic transfer of proteins onto nitrocellulose</i></p>	Please refer to D2L for helpful information.
Week 6	<p>Thanksgiving Day Holiday - Monday, October 11<sup>th</sup></p> <p>Roles of antibodies as 'adaptor' molecules. Antibody structure-function; Epitope recognition by CDR's; Primary and secondary humoral responses; Ab isotypes and subtypes.</p> <p>Tuesday Lab, October 12<sup>th</sup> Pre-Lab Talk: <i>Western Blotting for the Detection of Specific Antigens.</i></p> <p><b>Experiment 5. Western Blotting Analysis of <i>Aeromonas salmonicida</i> Proteins</b> Part 3, <i>Immuno-detection of antigens on western blots</i></p>	Please refer to D2L for helpful information.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 7	<p>Term test 1 review; Genetics of antibody diversity; Recombinational diversity; Class switching.</p> <p>Tuesday Period Lab, October 19<sup>th</sup>  <b>Term Test 1.</b> 2:30 PM to 4:20 PM in F360</p>	Please refer to D2L for helpful information.
Week 8	<p>Antigen binding and processing of B-cells; Antibody production by B-cells; Plasma cells; Memory B-cells; Ab affinity &amp; avidity; B-cell epitopes; Idiotypes; Clonal selection; Affinity maturation; Memory B-cell formation; Secondary responses &amp; vaccination; Idiotypes.</p> <p>Tuesday Lab, October 26<sup>th</sup>  <b>Experiment 6. Propagation of CHO Cells in Tissue Culture</b>            Lab lecture &amp; demonstrations - <i>Introduction to techniques for the propagation of tissue cultures and use of laminar flow hood and biosafety hoods for sterile tissue culture work. Logistical organization of the experimental work in the following period.</i></p>	Please refer to D2L for helpful information.
Week 9	<p>T-independent antigens; Super-antigens; T-cell subsets; T-cell receptors (TCR); CD4+ helper T-cells (Th), CD8+ cytotoxic T-cells (Tc); Endogenous Ag processing; Exogenous Ag processing; Th1 - Th2 paradigm.</p> <p>Tuesday Lab, November 2<sup>nd</sup>  <b>Experiment 6. Propagation of CHO Cells in Tissue Culture</b>            Part 1, <i>Subculturing tissue cultures</i></p>	Please refer to D2L for helpful information.
Week 10	<p>Primary immunodeficiencies; Secondary immunodeficiencies; HIV and AIDS; Challenges to the development of a vaccine for HIV/AIDS.</p> <p>Tuesday Lab, November 9<sup>th</sup>  <b>Experiment 6. Propagation of CHO Cells in Tissue Culture.</b>  <i>Part 3, Examination of tissue cultures</i>  <b>Experiment 7. ELISA Detection of Hsp70 Expression in CHO Cells Treated with Heat or Oxidative Stress.</b>  <i>Part 1, Cell treatment, harvesting and lysis</i>  <i>Part 2, Coating of ELISA plates</i></p>	Please refer to D2L for helpful information.
Week 11	<p>Term test 2 review; Type I hypersensitivity (allergy); The hygiene hypothesis; Type II, III &amp; IV hypersensitivities.</p> <p>Tuesday Lab, November 16<sup>th</sup>  <b>Experiment 7. ELISA Detection of Hsp70 Expression in CHO Cells Treated with Heat or Oxidative Stress.</b>  <i>Part 3, Conducting the ELISA for Hsp70</i></p> <p>Remembrance Day Holiday - Thursday, November 11<sup>th</sup></p>	Please refer to D2L for helpful information.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 12	<p>Autoimmunity; Tissue-specific autoimmune diseases; Systemic autoimmune diseases SLE (lupus), multiple sclerosis, and rheumatoid arthritis.</p> <p>Tuesday Lab, November 23rd  <b>Term Test 2</b> 2:30 to 4:20 PM in F360</p>	Please refer to D2L for helpful information.
Week 13	<p>Immunotolerance; Fetal hemolytic disease; ABO blood antigens; Transplantation immunology; Hyperacute, acute and chronic tissue rejection; Immunological approaches to prevention of transplant rejection; Vaccines and vaccination; COVID-19 vaccines.</p> <p>Tuesday Lab, November 30<sup>th</sup>            Pre-Lab Lecture: <i>Creating Hybridomas for Producing Monoclonal Antibodies (MAB's)</i>  <b>Experiment 10. Monoclonal Antibody Production and Characterization.</b> Part 1, <i>Propagation of Monoclonal Antibody Producing Hybridoma Cell Tissue Cultures</i></p>	Please refer to D2L for helpful information.
Week 14	<p>Flu, Malaria, smallpox, measles, polio, tuberculosis, rotavirus, Zika and Ebola vaccines and other vaccines.</p> <p>Cancer immunology and immunotherapeutics for cancer; Cancer vaccines. Final exam review.</p> <p>Tuesday Lab Period, December 7<sup>th</sup>  <b>Experiment 10. Monoclonal Antibody Production and Characterization.</b> Part 2, <i>Immunochromatography Isotyping of the Monoclonal Antibodies (MAB's) in the Hybridoma Cell Tissue Culture Supernatants</i>            Post-lab Lecture - <i>Comparison of immunodiagnostic formats for lab-based, field-based and OTC assays</i>  <b>Final exam review</b></p>	Please refer to D2L for helpful information.
Final Exam Week	<p><b>Final Exam</b></p> <p>The date &amp; time of the final exam will be posted by the College during the 2021F semester.</p>	Please refer to D2L for helpful information.

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines scan be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

DESCRIPTION	WEIGHTING
<p><b>Term Test 1</b>  This term test covers relevant material from approximately the first third of the course. The delineation of material that students are responsible for, including that from the laboratory section of the course, will be provided in class about one week prior to the date of the test. This is a <b>110-minute</b> test that will be written during the lab period on <b>Tuesday, October 19<sup>th</sup></b> from <b>2:30 to 4:20 PM</b> in F360. If this term test is missed due to illness, or a similarly justifiable reason, with accompanying documentation the percentage value of that term test will be added to the value of the final exam.</p>	25%
<p><b>Term Test 2</b>  This term test covers relevant material from approximately the second third of the course. The delineation of material that students are responsible for, including that from the laboratory section of the course, will be provided in class about one week before the date of the test. This is a <b>110-minute</b> test that will be written during the lab period on <b>Wednesday, November 22<sup>nd</sup></b> from <b>2:30 to 4:20 PM</b> in F360. If this term test is missed due to illness, or a similarly justifiable reason, with accompanying documentation the percentage value of that term test will be added to the value of the final exam.</p>	25%
<p><b>Laboratory Experiments</b>  Laboratory participation and performance contributes <b>10%</b> to the final grade. <b>Attendance in the lab periods is mandatory.</b> No laboratory experiment can be missed without an acceptable reason submitted in writing, such as a letter from a MD. Pre-lab assignments and flowcharts also contribute to a total of <b>5%</b> of the final grade. <i>Please come to each lab period prepared for the experiment.</i> Understanding of the principles, scientific and technical bases, and results of each experiment is subject to examination on term tests and the final exam.</p>	15%



DESCRIPTION	WEIGHTING
<p><b>Final Exam</b></p> <p>The final exam is a comprehensive exam that includes components from the laboratory section of the course. The time and location of the final exam will be published by the College during the semester.</p> <p><b>Attendance at the final exam is mandatory.</b></p> <p>Appropriate documentation must accompany an explanation for absence if an incomplete grade (I grade) is warranted.</p>	35%
<b>TOTAL</b>	100%

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information.  
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

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Students may **not** use recording devices in the classroom without the prior permission of the instructor or the Centre for Accessible Learning. The instructor's permission is not required when the use of a recording device is sanctioned by the College's Centre for Accessible Learning in order to accommodate a student's disability, *and* when the instructor has been provided with an instructor notification letter which specifies the use of a recording device. Such recordings made in the classroom are for the student's personal use only, and distribution of recorded material is prohibited. Recordings made during the course would include statements, questions and comments made by students in the class, and these are not to be disseminated or repeated in any manner based on the recordings. Otherwise, **please have cell phones turned off and put away while in lectures.** *Thank you.*

## SCHOOL OR DEPARTMENTAL INFORMATION

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Here is a link to the Science Help Centre.

<https://camosun.ca/services/academic-supports/help-centres/science-help-centres>

The schedule for the Chem Tutors will be posted during the semester.

Camosun College is a scent-free institution. **Please refrain from wearing scents.** Thank you.

## STUDENT RESPONSIBILITY

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Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## SUPPORTS AND SERVICES FOR STUDENTS

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Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

Academic Advising	<a href="http://camosun.ca/advising">http://camosun.ca/advising</a>
Accessible Learning	<a href="http://camosun.ca/accessible-learning">http://camosun.ca/accessible-learning</a>
Counselling	<a href="http://camosun.ca/counselling">http://camosun.ca/counselling</a>
Career Services	<a href="http://camosun.ca/coop">http://camosun.ca/coop</a>
Financial Aid and Awards	<a href="http://camosun.ca/financialaid">http://camosun.ca/financialaid</a>
Help Centres (Math/English/Science)	<a href="http://camosun.ca/help-centres">http://camosun.ca/help-centres</a>
Indigenous Student Support	<a href="http://camosun.ca/indigenous">http://camosun.ca/indigenous</a>
International Student Support	<a href="http://camosun.ca/international/">http://camosun.ca/international/</a>
Learning Skills	<a href="http://camosun.ca/learningskills">http://camosun.ca/learningskills</a>
Library	<a href="http://camosun.ca/services/library/">http://camosun.ca/services/library/</a>
Office of Student Support	<a href="http://camosun.ca/oss">http://camosun.ca/oss</a>
Ombudsperson	<a href="http://camosun.ca/ombuds">http://camosun.ca/ombuds</a>
Registration	<a href="http://camosun.ca/registration">http://camosun.ca/registration</a>
Technology Support	<a href="http://camosun.ca/its">http://camosun.ca/its</a>
Writing Centre	<a href="http://camosun.ca/writing-centre">http://camosun.ca/writing-centre</a>

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

## COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

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### Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](http://camosun.ca/services/accessible-learning/) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

### Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

### Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

### Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

### Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures" (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

### Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

### Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services->

and-support/e-2.9.pdf and [camosun.ca/sexual-violence](http://camosun.ca/sexual-violence). To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-3703841

### Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

**Changes to this syllabus:** Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.