Physics 121
Introductory Physics for the Physical Sciences II

2023 – 2024, Winter Term 2

General Info

Course:	Physics 121 (3 credits)
Pre-reqs:	One of MATH 100, MATH 116 & one of PHYS 111, PHYS 112.
Co-reqs:	One of MATH 101, MATH 103
Lecture:	MWF 10:00–11:00 (EME 0050)
Tutorial:	You **must** register in one of the tutorial sections.
Laboratory:	You **must** register in one of the laboratory sections.
URL:	https://cmps-people.ok.ubc.ca/jbobowsk/phys121.html

Instructor:	Jake Bobowski
Office:	SCI 266
Email:	jake.bobowski@ubc.ca

Calendar Entry

Physics primarily for students majoring in the physical sciences. Simple harmonic motion, sound, physical and wave optics, electricity, electric circuits, and magnetism with applications to the physical sciences. Experimental laboratory investigations in electricity, magnetism, waves and optics. Credit will be granted for only one of PHYS 121 and PHYS 122. Students with Physics 12 may opt out of the tutorial by self-enrolling in the XM2 tutorial section.

Overview

Electromagnetism is one of the most fundamental and well-developed theories in physics. This course will introduce the foundations of electricity and magnetism. At first, electricity and magnetism may appear to be distinct and unrelated concepts. However, by the end of the course, we hope to show that the two are fundamentally connected. For example, see Fig. 1 which shows the various paths followed by charged particles moving through a uniform magnetic field.

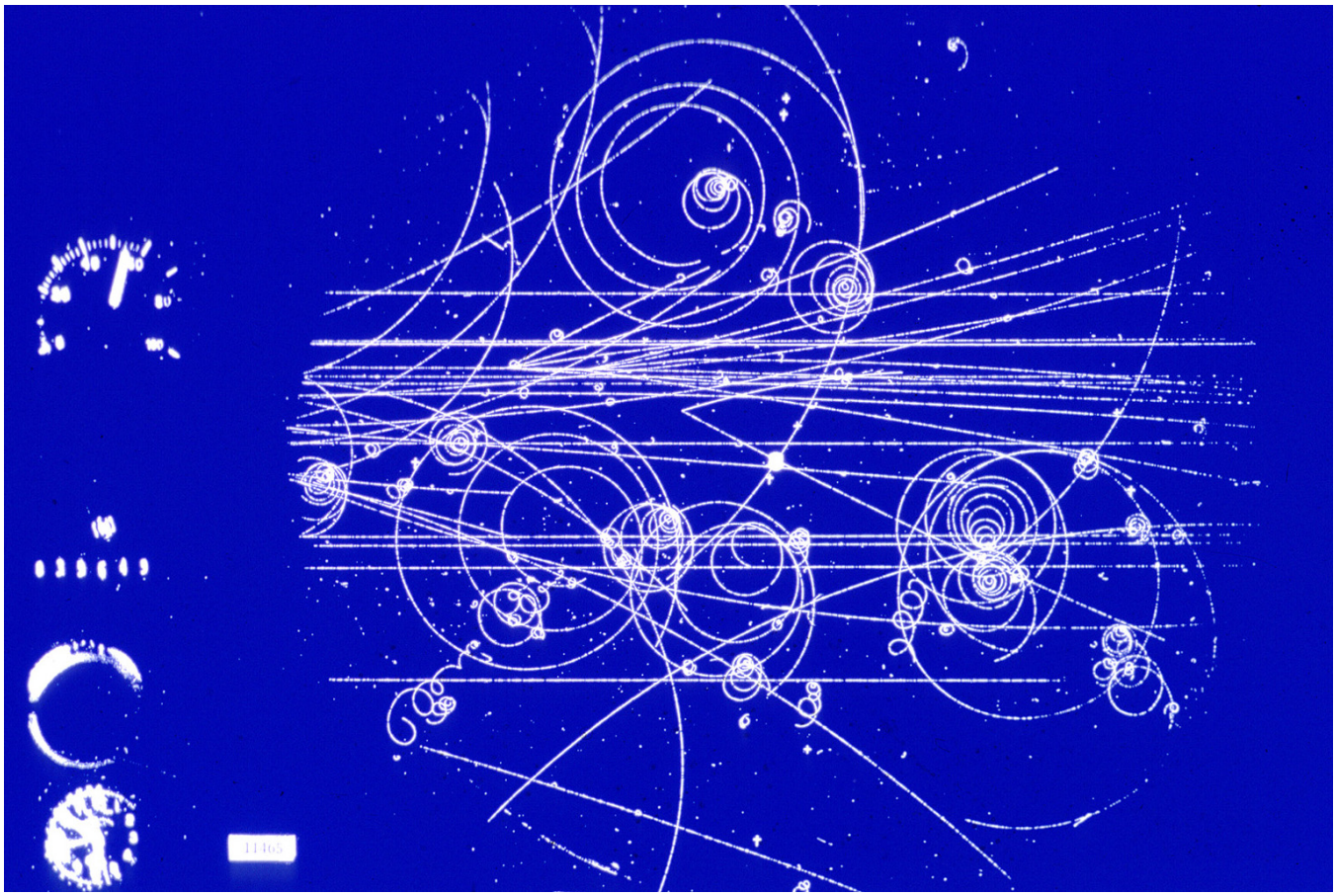

Figure 1: Charged particles moving through a magnetic field.

The original caption from CERN's document server:

"This image from 1960 is of real particle tracks formed in CERN's first liquid hydrogen bubble chamber to be used in experiments. It was a tiny detector by today's standards at only 32 cm in diameter. Negatively charged pions with an energy of 16 GeV enter from the left. One of them interacts with a proton in the liquid hydrogen and creates sprays of new particles, including a neutral particle (a lambda) that decays to produce the "V" of two charged particle tracks at the centre. Lower-energy charged particles produced in the interactions spiral in the magnetic field of the chamber. The invention of bubble chambers in 1952 revolutionized the field of particle physics, allowing real particle tracks to be seen and photographed, after releasing the pressure that had kept a liquid above its normal boiling point."

"The decay of a lambda particle in the 32 cm hydrogen bubble chamber" (1960).
`https://cds.cern.ch/record/39474`

This is a calculus-based course that will focus primarily on the concepts of electricity and magnetism. An effort will be made to relate the material covered in class to applications and research. While this course will require you to solve numerical problems involving multiple (algebraic) steps, you will also be required to demonstrate a conceptual understanding of the material.

It is difficult to overstate the importance electricity and magnetism as it greatly impacts almost every aspect of our daily lives. From power generation to advanced computing, electricity and magnetism is an integral part of nearly all recent technological advances. More fundamentally, at the microscopic level electrical forces are responsible for bonding atoms together to form bulk materials.

In this course we will begin by describing the forces between charged particles. We will then use the concept of *electric fields* to describe the interaction between charges. Next, we will explore ways in which we can calculate the electric field due to various distributions of charges. The electric force is a conservative force, and just like we have gravitational potential energy, we will define the electric potential energy and the electric potential. With these concepts, we will then be able to design and analyze simple circuits. In the last part of PHYS 121 we will study magnetic fields and the fascinating interactions between electric charges and magnetic fields. The laboratory portion of the course will allow you to gain some hands-on experience in planning and executing experiments and analyzing the resulting data. The lab manuals have been prepared using Jupyter Notebooks and will be provided to you at no charge.

Learning Outcomes

At the end of PHYS 121, students will be able to:

- Qualitatively analyze problems in electrostatics and magnetostatics.
- Demonstrate a conceptual understanding of concepts in electrostatics and magnetostatics.
- Set up problems using diagrams, estimate answers, predict qualitative outcomes of problems, and analyze graphs.
- Identify real-world applications of the electricity and magnetism concepts covered in class.
- Perform quantitative calculations to solve problems involving charges, electric fields, electric potentials, currents, basic circuits, magnetic fields, and electromagnetic induction.
- Solve problems involving vectors using vector notation.
- Apply basic calculus to solve problems.
- Design & conduct experiments to investigate phenomena in electrostatics and magnetostatics.
- Iterate and revise data-collection methods to improve the precision of experimental data.

Textbook

The course textbook in Volume 2 of OpenStax University Physics. The textbook is entirely *free* and can be accessed at:
https://openstax.org/details/books/university-physics-volume-2

Other Required Materials

- Links to the PHYS 121 Lab Manuals will be given in the PHYS 121 Laboratory Canvas page.
- Access to the free on-line homework system **PrairieLearn**. Login to PHYS 121 Canvas page (https://canvas.ubc.ca/) to get a direct link to the PHYS 121 PrairieLearn page.
- Access to the free Piazza learning management system to receive course information and notifications. Here is a link to the PHYS 121 Piazza page:
  https://piazza.com/ubc.ca/winterterm22023/phys121/home
  You will need to retrieve an access code from the PHYS 121 Canvas page (https://canvas.ubc.ca/) to join.

Lectures

I will do my best to present the material in a clear and logical way. However, you must take responsibility for your own learning. Come to class prepared. *Do* the assigned readings, *ask* questions, *ask* for clarification, *contribute* to discussions,... Science education research has clearly demonstrated that the more *active* you are in the classroom the more you will benefit from the lectures.

Be considerate of fellow students: no cell phones, texting, reading email, web browsing, social networking,... during class.

I hope to use at least part of the Friday classes to:

- preview the next week's lab
- work on example problems
- discuss applications of the course concepts
- discuss research that makes use of course concepts

Office Hours

My office is SCI 266. Formal office hours will be announced in class and published online:
(https://people.ok.ubc.ca/jbobowsk/schedule/Jake%20-%202023-2024%20schedule%20-%20Term%202.pdf)
Otherwise, drop by my office, or email me to schedule an appointment.

PrairieLearn

We will use the PrairieLearn on-line home work system. Login to PHYS 121 Canvas page (https://canvas.ubc.ca/) to get a direct link to the PHYS 121 PrairieLearn page.

There will be weekly homework assignments typically due on Fridays that will count towards your final grade. All homework assignments will be completed on-line using the PrairieLearn system. I *strongly* recommend that you write out your homework solutions using pen and paper before entering your answers into the on-line system. Don't try to solve the problems in your head or using only your calculator, you will learn and retain far more information by writing out your solutions in detail. Keep your written solutions as a study reference.

Tutorial

You must register in one of the tutorial sections of PHYS 121. Students that have completed grade 12 Physics have the option of self-registering in the XM2 section and being exempted from the PHYS 121 tutorial. The records of students registered in the XM2 tutorial section will be checked to confirm that they have completed grade 12 physics.

In the TA-led tutorials, you will be given problems related to material recently covered during lectures. You will first discuss and solve the problems in small groups. In the last 10 to 15 minutes of the tutorial, there will be a short quiz on the tutorial material. Each student will complete the quiz individually. Unless you've been exempted from the tutorial and have registered in the XM2 section, tutorial attendance is mandatory. The work that you do in the tutorial will count towards your final grade. For each tutorial there will be 1 attendance mark, 2 group problem solving marks, and 2 quiz marks.

Midterm & Quizzes

There will be one midterm and two short multiple-choice quizzes. The tests will be in class. There will be multiple versions of the midterm and quizzes. There will not be a make-up midterm or make-up quizzes.

Laboratory

You must register in one of the laboratory sections of PHYS 121. The labs are an important part of the course and will be synchronized with the lectures as closely as possible. *You must earn at least 50% of the laboratory marks to pass PHYS 121.* You will have a separate course syllabus for the laboratory component of PHYS 121.

Pre-Lab Assignments

All labs have an associated pre-lab assignment (located in the lab manual). You must complete pre-lab assignments before the lab begins.

Laboratory Exemption

If you previously completed the PHYS 121 lab and earned a laboratory grade of 60% our higher, you can register for the PHYS 121 XM1 lab section. Doing so will allow you to transfer your previously-obtained lab score to the current course without having to repeat the lab. Physics XMT Lab Waiver application forms are available online https://cmps.ok.ubc.ca/undergraduate/student-resources/forms/. Complete the online form no later than **Jan. 19 at noon**.

Surveys

At the beginning and end of term you will asked to complete an online survey. **ALL** PHYS 121 students are expected to participate in the surveys. 1% of your final grade in the course will be based on survey participation (0.5% for the survey at the beginning of term and 0.5% for the survey at the end of term).

Your course instructor will provide the class with a link to the online survey both at the beginning and end of term.

Hands-On Bonus Project

In PHYS 121 will will have the opportunity to complete an optional *independent* hands-on bonus project. You can earn a maximum of 3 bonus marks. You may complete the project on our own or with a partner (no more than two to a group). The project must be completed independently. You *cannot* use or borrow physics equipment, tools, or lab space to complete your project. You may not work on your hands-on project during the PHYS 121 lab. The main reason that we want you to complete the bonus project independently, is because we want you to engage in all of the steps that a professional physicists would follow when pursuing a project. These tasks include:

- establishing project goals
- assessing the feasibility of the project
- designing the experiment/demonstration
- acquiring and assembling the required equipment
- constructing the experiment/demonstration
- testing the setup and then iteratively assessing the results and repeating the measurements
- presenting the results and explaining the relevant physics

We are also unable to accommodate a large number of requests that could arise if a large portion of the class decides to take on the bonus the project. We also want to you see that it is possible to do interesting physics using simple equipment. In fact, as you will see, a number of the PHYS 121 labs do not require fancy equipment. With some thoughtful planning and a little ingenuity, it is possible to assemble an engaging demonstration using materials that are commonly available or relatively easy to acquire.

You may consider making use the UBC Okanagan Makerspace (https://makerspace.ok.ubc.ca/). The UBC Okanagan Makerspace "is an interdisciplinary, peer facilitated work space designed to foster creative thinking through design and making, serving as a hub for innovation, cross-discipline collaboration and entrepreneurship".

You must prioritize safety when working on your project. You are responsible for your own safety and the safety of those around you. Any projects deemed to have been completed in an unsafe manner will not receive credit.

The project must be related to electricity and/or magnetism. It must involve a hands-on component (i.e. building and exhibiting a demonstration). You must provide a link to a YouTube video in which you demonstrate your project and explain the relevant physics. The YouTube video does not need to be public, but you must consent to have the link to your video posted on the PHYS 121 Canvas page so that your instructor and classmates can view it. Your video should be between 5 and 10 minutes long.

To participate in the hands-on project, you must:

- Send me an email that outlines your idea (jake.bobowski@ubc.ca). Your email must be received no later than **23:59 on Monday, February 12**.
- Send me a YouTube link to your video no later than **23:59 on Monday, April 8**.

Academic Supports

–MATH & SCIENCE CENTRE

You have free access to math and science tutors at the UBCO Math & Science Centre. Feel free to drop in. They are open five days a week. The Math & Science Centre is located on the second floor of the University Centre building (UNC 201).

For more information about the Math & Science Centre, visit their website:
https://students.ok.ubc.ca/academic-success/learning-support/math-science-centre/.

Evaluation

	Tutorial	No Tutorial
Survey Participation:	1	1
Homework Assignments:	9	14
Tutorial:	5	N/A
Laboratory:	20	20
Quizzes:	7.5×2	7.5×2
Midterm:	17.5	17.5
Final Exam:	32.5	32.5
Total:	100	100

⋆⋆⋆**IMPORTANT**⋆⋆⋆
To pass this course you must achieve at least 50% in both the lecture and the laboratory components of the course **and** receive a score of at least 40% on the final exam.

Throughout the term you *are* strongly encouraged to discuss and compare concepts, data, and analysis with others (expect during midterms and the final exam!). Doing so will benefit both you and the people that you have your discussions with. However, all work that you ultimately submit for grading must be your own.

Note that there will be multiple versions of the homework assignments, quizzes, midterms, and final exam. Copying from your neighbour will result in an incorrect answer.

Midterm & Quiz Schedule:

Quiz #1 – Wed. Jan. 31
Midterm – Wed. Feb. 28
Quiz #2 – Wed. Mar. 20

Late Policy

Homework assignments submitted by the due date will be graded out of 100%. Homework assignments submitted after the due date and before April 13 at 23:59 (the last day of classes) will receive a maximum grade of 67%. Please do not request extensions. Extensions will not be granted for any reason.

There will **not** be a make-up midterm or make-up quizzes.

If you miss the midterm or a quiz for a legitimate reason come see me with **documentation** that explains your absence (a doctor's note explaining that illness prevented you from completing the midterm, for example) *within one week of the date of the test*. If you miss a midterm or a quiz for a valid and documented reason, your final exam will be adjusted for compensate of the missed test. If you miss a test for an invalid or undocumented reason, you will receive a score of zero.

Tentative Course Schedule

The next page presents a course schedule. This schedule is only a guide and represents the schedule that I'd *like* to follow, not necessarily the schedule that will be followed. Changes to the schedule will be made during the term as needed.

Class	Date	Lecture Topic	Reading	HW Due	Tutorial	Lab
1	Mon. Jan. 8	Welcome	5.1		*no tut.*	*no lab*
2	Wed. Jan. 10	Simple Pendulum				
3	Fri. Jan. 12	Charging	5.2			
4	Mon. Jan. 15	Coulomb's Law	5.3		*no tut.*	*no lab*
5	Wed. Jan. 17	Electric Field	5.4	HW1 (intro)		
6	Fri. Jan. 19	Calculating Electric Fields	5.5	HW2		
7	Mon. Jan. 22	Electric Field Lines	5.6		**1**	**0**
8	Wed. Jan. 24	Electric Flux	6.1			
9	Fri. Jan. 26	Gauss's Law	6.2	HW3		
10	Mon. Jan. 29	Gauss's Law	6.3 – 6.4		**2**	**1**
11	Wed. Jan. 31	**Quiz #1**				
12	Fri. Feb. 2	Electric Potential	7.1 – 7.2	HW4		
13	Mon. Feb. 5	Calculating Electric Potentials	7.3		**3**	**2**
14	Wed. Feb. 7	Determining $\vec{\mathbf{E}}$ from Potentials	7.4			
15	Fri. Feb. 9	Equipotential Surfaces	7.5	HW5		
16	Mon. Feb. 12	Capacitance	8.1		**4**	**3**
17	Wed. Feb. 14	Series & Parallel Capacitors	8.2			
18	Fri. Feb. 16	Energy & Capacitors	8.3	HW6		
	Mon. Feb. 19	*Family Day . . . no class*				
	Wed. Feb. 21	*Term Break . . . no class*				
	Fri. Feb. 23	*Term Break . . . no class*				
19	Mon. Feb. 26	Current	9.1 – 9.2		*no tut.*	**4**
20	Wed. Feb. 28	**Midterm**				
21	Fri. Mar. 1	Resistance	9.3	HW7		
22	Mon. Mar. 4	Ohm's Law & Power	9.4 – 9.5		**5**	**5**
23	Wed. Mar. 6	Electromotive Force & Resistor Combinations	10.1 – 10.2			
24	Fri. Mar. 8	Kirchhoff's Rules	10.3	HW8		
25	Mon. Mar. 11	Magnetism	11.1 – 11.2		**6**	**6**
26	Wed. Mar. 13	Charges & Currents in Magnetic Fields	11.3 – 11.4			
27	Fri. Mar. 15	Biot-Savart Law	12.1 – 12.2	HW9		
28	Mon. Mar. 18	Parallel Currents & Current Loops	12.3 – 12.4		**7**	**7**
29	Wed. Mar. 20	**Quiz #2**				
30	Fri. Mar. 22	Parallel Currents & Current Loops	12.3 – 12.4	HW10		
31	Mon. Mar. 25	Ampère's Law	12.5		**8**	**8**
32	Wed. Mar. 27	Solenoids	12.5			
	Fri. Mar. 29	*Good Friday . . . no class*				
	Mon. Apr. 1	*Easter . . . no class*			*no tut.*	*no lab*
33	Wed. Apr. 3	Faraday's Law	13.1 – 13.2			
34	Fri. Apr. 5	Motional Emf	13.3	HW11		
35	Mon. Apr. 8	Induced Electric Fields	13.4		**9**	*no lab*
36	Wed. Apr. 10	Eddy Currents	13.5			

Official Policies of the Faculty of Science & CMPS Department

Missed Graded Work

Students who, because of unforeseen events, are absent during the term and are unable to complete tests or other graded work should generally discuss with their instructors how they can make up for missed work, according to written guidelines given to them at the start of the course (see Grading Practices). Instructors are not required to make allowance for missed tests or incomplete work not satisfactorily accounted for. If ill-health is an issue, students are encouraged to seek attention from a health professional. Campus Health and Counselling will usually provide the documentation only to students who have been seen previously at these offices for treatment or counselling specific to conditions associated with their academic difficulties. Students who feel that requests for consideration have not been dealt with fairly by their instructors may take their concerns first to the Head of the discipline and, if not resolved, to the Office of the Dean. Further information can be found at: http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0. There will be no make-up midterm exams. If the absence is satisfactory, the weight of the student's final exam will be increased.

Grading Practices

Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record: http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014.

Final Examinations

The examination period for this term will be from Sunday, December 11th, 2022, to Thursday, December 22nd, 2022. Students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job. An examination hardship is defined as the occurrence of an examination candidate being faced with three (3) or more formal examinations scheduled within a 27-hour (inclusive) period.

Further information on Academic Concession can be found under Policies and Regulation in the Okanagan Academic Calendar: http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0.

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise, and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at:
https://okanagan.calendar.ubc.ca/campus-wide-policies-and-regulations/student-conduct-and-discipl
discipline-academic-misconduct.

Cooperation versus Cheating

Working with others on assignments is a good way to learn the material and we encourage it. However, there are limits to the degree of cooperation that we will permit. Any level of cooperation beyond what is permitted is considered cheating.

When working on programming assignments, you must work only with others whose understanding of the material is approximately equal to yours. In this situation, working together to find a good approach for solving a programming problem is cooperation; listening while someone dictates a solution is cheating. You must limit collaboration to a high-level discussion of solution strategies and stop short of writing down a group answer. Anything that you hand in, whether it is a written problem or a computer program, must be written by you, from scratch, in your own words. If you base your solution on any other written solution, you are cheating. If you provide your solution for others to use, you are also cheating.

Copyright Disclaimer

Diagrams and figures included in lecture presentations adhere to Copyright Guidelines for UBC Faculty, Staff and Students (http://copyright.ubc.ca/requirements/copyright-guidelines/) and UBC Fair Dealing Requirements for Faculty and Staff (http://copyright.ubc.ca/requirements/fair-dealing/). Some of these figures and images are subject to copyright and will not be posted to Canvas. All material uploaded to Canvas that contain diagrams and figures are used with permission of the publisher; are in the public domain; are licensed by Creative Commons; meet the permitted terms of use of UBC's library license agreements for electronic items; and/or adhere to the UBC Fair Dealing Requirements for Faculty and Staff. Access to the Canvas course site is limited to students currently registered in this course. Under no circumstance are students permitted to provide any other person with means to access this material. Anyone violating these restrictions may be subject to legal action. Permission to electronically record any course materials must be granted by the instructor. Distribution of this material to a third party is forbidden.

Grievances & Complaints Procedures

A student who has a complaint related to this course should follow the procedures summarized below:

The student should attempt to resolve the matter with the instructor first. Students may talk first to someone other than the instructor if they do not feel, for whatever reason, that they can directly approach the instructor.

If the complaint is not resolved to the student's satisfaction, the student should e-mail the Department Head Dr. Sylvie Desjardins at cmps.depthead@ubc.ca.

Student Service Resources

Disability Resource Centre

The Disability Resource Centre (DRC) facilitates disability-related accommodations and programming initiatives that ameliorate barriers for students with disabilities and/or ongoing medical conditions. If you require academic accommodations to achieve the objectives of a course, please contact the DRC at:

- room: UNC 215
- phone: 250.807.8053
- email: drc.questions@ubc.ca
- web: https://students.ok.ubc.ca/academic-success/disability-resources/

Equity & Inclusion Office

Through leadership, vision, and collaborative action, the Equity & Inclusion Office (EIO) develops action strategies in support of efforts to embed equity and inclusion in the daily operations across the campus. The EIO provides education and training from cultivating respectful, inclusive spaces and communities to understanding unconscious/implicit bias and its operation within in campus environments. UBC Policy 3 prohibits discrimination and harassment on the basis of BC's Human Rights Code. If you require assistance related to an issue of equity, educational programs, discrimination or harassment please contact the EIO.

- room: UNC 325H
- phone: 250.807.9291
- email: equity.ubco@ubc.ca
- web: `www.equity.ok.ubc.ca`

Office of the Ombudsperson for Students

The Office of the Ombudsperson for Students is an independent, confidential and impartial resource to ensure students are treated fairly. The Ombuds Office helps students navigate campus-related fairness concerns. They work with UBC community members individually and at the systemic level to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Ombuds helps students gain clarity on UBC policies and procedures, explore options, identify next steps, recommend resources, plan strategies and receive objective feedback to promote constructive problem solving. If you require assistance, please feel free to reach out for more information or to arrange an appointment.

- room: UNC 328
- phone: 250.807.9818
- email: ombuds.office.ok@ubc.ca
- web: `www.ombudsoffice.ubc.ca`

Sexual Violence Prevention and Response Office (SVPRO)

A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide.

Visit `https://svpro.ok.ubc.ca` or call us at 250-807-9640.

Independent Investigations Office (IIO)

If you or someone you know has experienced sexual assault or some other form of sexual misconduct by a UBC community member and you want the Independent Investigations Office (IIO) at UBC to investigate, please contact the IIO. Investigations are conducted in a trauma informed, confidential and respectful manner in accordance with the principles of procedural fairness.

You can report your experience directly to the IIO by calling 604-827-2060.

- email: director.of.investigations@ubc.ca
- web: https://investigationsoffice.ubc.ca/

Student Learning Hub

The Student Learning Hub is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include **tutoring in math, sciences, languages, and writing, as well as help with academic integrity, study skills and learning strategies**. Students are encouraged to visit often and early to build the skills, strategies and behaviours that are essential to being a confident and independent learner. For more information, please visit the Hub's website.

- room: LIB 237
- phone: 250.807.8491
- email: learning.hub@ubc.ca
- web: https://students.ok.ubc.ca/academic-success/learning-hub/

Student Wellness

At UBC Okanagan health services to students are provided by Student Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Student Wellness for more information or to book an appointment.

- room: UNC 337
- phone: 250.807.9270
- email: healthwellness.okanagan@ubc.ca
- web: https://students.ok.ubc.ca/health-wellness/

Safewalk

Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call Safewalk at 250-807-8076.

For more information, visit https://security.ok.ubc.ca/safewalk/