

# COURSE SYLLABUS



COURSE TITLE: GEOG-272: Weather and Climate

CLASS SECTION: 001

TERM: Winter 2023

COURSE CREDITS: 3

DELIVERY METHOD(S): Face-to-face

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](#).

---

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

---

NAME: Emrys Prussin

EMAIL: [prussine@camosun.bc.ca](mailto:prussine@camosun.bc.ca)

OFFICE: Fisher 250C

HOURS: Mondays 12:30-1:30 and Wednesdays 12:30-1:30

*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

---

This course explores the nature and function of Earth's atmosphere. Topics include atmospheric composition and structure, insolation, atmospheric circulation, humidity and precipitation, and weather systems. Climate diversity and change (natural and anthropogenic) will be examined in detail. Lab activities will introduce methods for sampling and analyzing weather and climate data.

### PREREQUISITE(S):

One of:

- C in ENGL 151
- C in ENGL 161
- C in ENGL 163
- C in ENGL 164

### CO-REQUISITE(S):

Not Applicable

### EXCLUSION(S):

Not Applicable

## COURSE LEARNING OUTCOMES / OBJECTIVES

---

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

1. Describe the structure and function of Earth's atmosphere in order to understand weather and climate systems.
2. Describe the influence of water and the hydrologic cycle on weather and climate.
3. Discuss human influence on the atmosphere.
4. Collect and analyze weather and climate data in order to interpret atmospheric conditions.

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

---

### Optional

Ahrens, C.D., P.L. Jackson and C.E. Jackson, 2016. Meteorology Today: An Introduction to Weather, Climate and the Environment, Second Canadian Edition. Toronto, ON: Nelson Education Ltd., 598 pp. plus appendices.

- Similar introductory atmospheric science texts by Ahrens (American editions), Aguado & Burt, Lutgens & Tarbuck, Ross or others could be substituted, but details and examples will vary.
- This online text is not bad: Fundamentals of Physical Geography.
- The key thing is to be reading on the subject matter at hand!

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

---

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

Week	Lecture Topic	Lab Activity	Reading
09-Jan	None - Work on Lab 0	Course Introduction	-
16-Jan	Atmospheric Composition / Structure	Lab 1: Weather Data (Comp. Lab)	Ch. 1
23-Jan	Radiation and Temperature	Lab 2: Radiation	Ch. 2
30-Jan	Pressure and Wind	Lab 3: Temperature	Ch. 3
06-Feb	Tutorial	<b>Quiz 1</b>	Ch. 8
13-Feb	Atmospheric Circulation	Lab 4: Pressure and Wind	Ch. 9, 10
20-Feb	<b>No Class (Reading Week)</b>		-
27-Feb	Water in the Atmosphere	Lab 5: Humidity and Precipitation	Ch. 4, 5
06-Mar	Weather Systems	Lab 6: Uplift and Stability	Ch. 6, 7
13-Mar	Tutorial	<b>Quiz 2</b>	Ch. 11, 12
20-Mar	Climate Classification	Lab 7: Weather Maps	Ch. 13, 14
27-Mar	Natural Climate Change	Weather Project	Ch. 16
03-Apr	Global Warming	Tutorial	Ch. 17
10-Apr	<b>No Class (Easter)</b>	<b>Quiz 3</b>	IPCC excerpt

Lecture material will be posted on D2L.

### **Readings**

Readings are optional but provide indispensable depth and context, and a different perspective on the subject matter. Reading assignments are detailed below. If you opt to use a textbook other than Ahrens, Jackson and Jackson, make sure you are reading the relevant chapters for the week's material.

### **Labs**

There are seven labs to complete, plus Lab 0, which is a self-guided warm-up exercise. We have scheduled lab time from 10:30 to 12:20 on Wednesdays, where I will introduce the labs and you will have the chance to ask questions as you work. Consistent participation will improve the learning experience, and increase the odds of success for you and everyone else. Please read the lab assignments ahead of time.

You are welcome to collaborate with others, but each student must write their own individual answers unless instructed otherwise. Please submit answers via D2L, in the Assignments section of our course D2L page. If you want to work by hand, you can scan your answers, as long as they are legible. Labs are generally due the following week. Late assignments will not be accepted after I have returned them marked.

Most labs involve basic math, computer and/or map skills - simple formulas, conversions, graphing, scale calculations, etc. Lab 0 will help you assess your lab skills, and if you find any weak spots, I am happy to provide coaching. Just ask. Some labs may require you to go outside.

Please note that I have scheduled a few tutorials during lab times. These will be opportunities to clarify any course material, including lecture content as well as labs.

### **Weather Project**

Students will monitor the local weather for a week and analyze what happened using weather data and maps. The project requires a formal written report. See details in the project handout.

### **Tests**

There will be three non-cumulative quizzes on recently covered lecture material, and a cumulative final exam that covers both lecture and lab content. The format for these will be a combination of multiple choice, short answer, and long answer questions.

### **Illness, etc.**

If you miss a lab or test due to illness or some other valid reason, contact me ASAP so we can discuss and adjust. Otherwise, a mark of zero for the missed assignment will be given.

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 notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

## EVALUATION OF LEARNING

---

DESCRIPTION	WEIGHTING
Labs	36% (1% for Lab 0, 5% for others)
Weather Analysis Project	14%
Quizzes	30% (10% each)
Exam	20%
TOTAL	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](#) policy for more information.  
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

---

## SCHOOL OR DEPARTMENTAL INFORMATION

---

## STUDENT RESPONSIBILITY

---

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

---

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

<http://camosun.ca/advising>

---

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

---

### 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/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.