

	<p><i>School of Arts & Science</i> SOCIAL SCIENCES DEPARTMENT</p> <p>ENVR 107 Physical Geography Winter 2015</p>
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COURSE OUTLINE

1. Course Description

This course will provide students with a first exposure to physical geography. Topics will include a fairly detailed introduction to atmospheric processes, weather and climate, and some basics of hydrology and biogeography. Through weekly lab exercises, students will get to try some practical applications of lecture concepts.

My classes tend to be quite informal, and I encourage participation and discussion. My goal is to have you think and understand, so please speak up if you are confused! Group work is encouraged, and you should help each other learn. But this does not mean you can copy! Each student must do their own individual assignment reports, and if I catch people copying, all parties involved will get a mark of zero.

Note: The official Approved Course Description is available on the web at <http://camosun.ca/learn/calendar/current/web/envr.html#ENVR107>

Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.

2. Instructor Information

Instructor:	Chris Ayles
Office Hours:	Mon - Fri. approx. 11:30 - 12:30, minus a few minutes for lunch. Other times available by chance or appointment.
Location:	Fisher 342B
Phone:	370-3393
Email:	cayles@camosun.bc.ca
Website:	faculty.camosun.ca/chrisayles

3. Intended Learning Outcomes

At the end of this course, students will be able to:

1. Describe the properties of Earth's atmosphere.
2. Explain temperature, pressure and wind patterns.
3. Explain atmospheric uplift and precipitation.
4. Explain the occurrence of air masses and weather fronts.
5. Interpret weather maps and predict weather changes.
6. Explain the major causes of weather and climate in British Columbia.
7. Describe the controls on climate and climate change.
8. Describe major processes of the hydrologic cycle.
9. Explain characteristics and environmental causes of different ecosystem types.

4. Course Materials

(a)	Textbook	<p><u>Required:</u> Christopherson, R.W. and M. Byrne, 2013. <i>Geosystems, 3rd Canadian Edition</i>. Toronto: Pearson Education Canada, 720 pp. plus appendices.</p> <ul style="list-style-type: none"> This book will be on reserve in the library. Older versions are around, but ultimately you are responsible for the material from the new edition.
(b)	Other	<u>Required:</u> ENVR 107 Lab Manual.

5. Course Content

- Lectures:** This class has a 1.5-hour lecture on Thursdays. Lectures will generally provide the theory you need to understand the labs and pass the tests, so attendance is essential. I mostly use PowerPoint, and I will post basic lecture outlines on my web site: faculty.camosun.ca/chrisayles.
- Readings** are an essential part of your learning in this course – they provide indispensable depth and context. Reading assignments are detailed below.
- Labs:** You must buy a lab manual at the bookstore! There are ten labs. Each will be given two hours of class time, but may take longer to complete. You may work in groups, but each student must write their own individual answers unless instructed otherwise. **Attendance is crucial.** No credit will be given for wrong answers or missed activities due to unexcused absence from lab. Labs are generally due the following lab day; late submissions are subject to a penalty of 10% per day, and will not be accepted after I have returned them marked. On lab days, you should bring pencils, paper, graph paper, calculator and ruler. Some labs involve outdoor field work. Read labs ahead of time and be prepared with warm clothes, rain gear, snacks and water.
- Exams:** There will be a midterm and a final exam. The format for these will be a combination of multiple choice, short answer and long answer questions. They mainly will emphasize the lecture material, though lab material will also be covered. The final exam will be cumulative.
- Illness, etc.:** If you miss a lab or exam due to illness or some other serious reason, I must ask you to provide a doctor's note or other documentation. Otherwise, a mark of zero for the missed assignment will be given. Exams and field trips are hard to reschedule, so try not to miss them unless you are too sick to perform at a normal level. Students who are absent for a valid reason must contact me within 24 hours. In such cases, one makeup exam time will be scheduled, and all students needing it will be expected to attend.

6. Basis of Student Assessment

Evaluation will be based on accuracy, thoroughness, and neatness. Always show your work and keep track of units of measure! When grading, I look for proof of your understanding, so work clearly and carefully. I endeavour to mark fairly and consistently, but if you have a question about my assessment, feel free to come to my office and ask about it.

(a)	Labs	40% (4% each)
(b)	Midterm exam	20%
(c)	Final exam	40%

7. COURSE SCHEDULE (Subject to change):

<u>Week of</u>	<u>Monday Lab</u>	<u>Thursday</u>	<u>Friday Lab</u>
Jan. 5	Course Intro	Atmospheric Structure & Composition <i>Reading: Ch. 2, 3</i>	Lab 1: Weather Data Meet in computer lab
Jan. 12	Lab 1: Weather Data Meet in computer lab	Radiation and Temperature <i>Reading: Ch. 4, 5</i>	Lab 2: Solar Radiation
Jan. 19	Lab 2: Solar Radiation	Pressure and Wind <i>Reading: Ch. 6</i>	Lab 3: Temperature and Pressure
Jan. 26	Lab 3: Temperature and Pressure	Atmospheric Circulation <i>Reading: Ch. 6</i>	Lab 4: Weather Monitoring
Feb. 2	Lab 4: Weather Monitoring	Humidity and Precipitation <i>Reading: Ch. 7</i>	Lab 5: Humidity
Feb. 9	Family Day	Reading Break	Reading Break
Feb. 16	Lab 5: Humidity	Weather Systems <i>Reading: Ch. 8</i>	Lab 6: Weather Maps
Feb. 23	Lab 6: Weather Maps	Midterm exam	<i>Lab 7: Weather Analysis</i>
	All students: make weather observations for Lab 7 this week!		
Mar. 2	Lab 7: Weather Analysis	Climate <i>Reading: Ch. 10</i>	Climate Change (Lecture)
Mar. 9	Climate Change (Lecture)	Ecosystem Classification <i>Reading: Ch. 19, 20</i>	Lab 8: Ecosystem Maps
Mar. 16	Lab 8: Ecosystem Maps	Ecosystem Description <i>Reading: Meidinger & Pojar Ch. 2</i>	Lab 9: Site Description Outside – dress for it!
Mar. 23	Lab 9: Site Description Outside – dress for it!	Hydrology 1 <i>Reading: Ch. 9</i>	Lab 10: Groundwater
Mar. 30	Lab 10: Groundwater	Hydrology 2 <i>Reading: Ch. 9</i>	Good Friday
Apr. 6	Easter Monday	Review for final exam	Optional review session
Exam Week	Final Exam		

8. 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		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 at camosun.ca or 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
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.

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 for information on conversion to final grades, and for additional information on student record and transcript notations.

8. 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.

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 on the College web site in the Policy Section.