



**CAMOSUN COLLEGE**  
**School of Arts & Science**  
**Department of Environmental Technology**

**ENVR 107-001A and 001B**  
**Physical Geography**  
**Winter 2018**

**COURSE OUTLINE**

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The course description is online @ <http://camosun.ca/learn/calendar/current/web/envr.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

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**1. Instructor Information**

Instructor:	Chris Ayles
Office Hours:	Mon., Fri. 12:30 – 1:30 Other times available by chance or appointment.
Location:	Fisher 342C
Phone:	370-3393
Email:	cayles@camosun.bc.ca
Website:	D2L (online.camosun.ca)

**2. Intended Learning Outcomes**

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

1. Identify and describe the properties of the major layers of Earth's atmosphere.
2. Explain the mechanisms that cause temperature, pressure and wind patterns.
3. Infer wind speed and direction from barometric maps.
4. Explain the major causes of atmospheric uplift and precipitation.
5. Define and explain the occurrence of air masses and weather fronts.
6. Interpret weather maps and predict weather changes.
7. Explain the major causes of weather and climate in British Columbia.
8. Describe the controls on climate and climate change.
9. Describe and the major processes of the hydrologic cycle.
10. Interpret soil moisture budgets.
11. Explain how environmental factors give rise to different ecosystem types.
12. Interpret maps and perform field-based assessments conforming to the BC system for Biogeoclimatic Ecosystem Classification.

### 3. Required Materials

(a)	Textbook	<p><u>Required:</u> Christopherson, R.W. and M. Byrne, 2016. <i>Geosystems, 4<sup>th</sup> Canadian Edition</i>. Toronto: Pearson Education Canada, 669 pp. plus appendices.</p> <ul style="list-style-type: none"><li>• 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.</li><li>• A different first-year physical geography text or an online resource such as <a href="http://www.physicalgeography.net">http://www.physicalgeography.net</a> may be a suitable substitute. The key thing is to be reading in support of the lecture material.</li></ul>
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### 4. Course Content and Schedule

- **Lectures:** This class has a 1.5-hour lecture on Mondays. Lectures will 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 the lecture slides on D2L. Be warned, however: the slides are heavy on images and light on words, so you must come to class and take your own detailed notes!
- **Readings** are an essential part of your learning in this course – they provide indispensable depth and context. Reading assignments are detailed below.
- **Labs:** Labs are on Fridays. There are ten lab assignments, which you must download from D2L. Each lab 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 due the following lab period unless otherwise noted; please submit a paper copy of your answers. 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.

- **Course Schedule** (Subject to change at instructor's discretion):

<b>Week</b>	<b>Monday</b>	<b>Friday</b>
8 Jan	Atmospheric Composition and Structure <i>Reading: Ch. 2, 3</i>	Lab 1: Weather Data <b>Meet in E112 computer lab</b>
15 Jan	Radiation and Temperature <i>Reading: Ch. 4, 5</i>	Lab 2: Radiation
22 Jan	Pressure and wind <i>Reading: Ch. 6</i>	Lab 3: Temperature and Wind
29 Jan	Water in the Atmosphere <i>Reading: Ch. 7</i>	Lab 4: Humidity and Uplift
5 Feb	Lab 5: Weather Sampling <b>Outside</b>	Atmospheric Circulation (lecture) <i>Reading: Ch. 6</i>
12 Feb	<b>Family Day</b>	<b>Reading Break</b>
19 Feb	Weather Systems <i>Reading: Ch. 8</i> <b>Start weather notes for Lab 7!</b>	Lab 6: Weather Maps
26 Feb	<b>Midterm</b>	Lab 7: Weather Analysis <b>Meet in E112 computer lab</b>
5 Mar	Climate <i>Reading: Ch. 10</i>	Climate Change (lecture) <i>Reading: Ch. 11</i>
12 Mar	Ecosystem Classification <i>Reading: Ch. 19, 20</i>	Lab 8: Ecosystem Maps
19 Mar	Ecosystem Description <b>Outside</b> <i>Reading: Meidinger &amp; Pojar Ch. 2</i>	Lab 9: Site Description <b>At Mount Tolmie</b> <b>(Meet at the college bus)</b>
26 Mar	Hydrology 1 <i>Reading: Ch. 9</i>	<b>Good Friday</b>
2 Apr	<b>Easter Monday</b>	Lab 10: Groundwater
9 Apr	Hydrology 2	Movie day

Exam week: review session, final exam (schedule TBA)

## 5. Basis of Student Assessment (Weighting)

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	46% (4% each, except 10% for Lab 7)
(b)	Midterm exam	20%
(c)	Final exam	34%

## 6. Grading System

Standard Grading System (GPA)

Competency Based Grading System

### A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

#### 1. Standard Grading System (GPA) (WE ARE USING THIS ONE.)

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

#### 2. Competency Based Grading System (Non GPA) (NOT THIS ONE.)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

## B. 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 <http://camosun.ca/about/policies/index.html> 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 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.

## 7. College Supports, Services and Policies



### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

### College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

### College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.