



CAMOSUN COLLEGE
School of Arts & Science
Department of Environmental Technology

ENVR-210-002
Aquatic Environments
Fall 2019

COURSE OUTLINE

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.

1. Instructor Information

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|------------------|----------------------|--------------------|
| (a) Instructor | Steve Gormican | _____ |
| (b) Office hours | M-F 13:30-14:20 | _____ |
| (c) Location | F340A | _____ |
| (d) Phone | 250 370-3423 | Alternative: _____ |
| (e) E-mail | gormicans@camosun.ca | _____ |
| (f) Website | _____ | _____ |

2. Intended Learning Outcomes

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

1. Utilize the specialized vocabulary of aquatic sciences.
2. Describe and measure lake and ocean morphological features.
3. Compare the physical and chemical properties of fresh and marine waters.
4. Describe lake and ocean layering and vertical mixing processes.
5. Identify the processes for surface circulation patterns in oceans and the linkages with atmospheric processes.
6. Identify the components of waves and tides; utilize standard tide and current tables and software.
7. Compare the chemical components of lakes and oceans.
8. Describe nutrient limitation in lakes and oceans and compare the processes involved.
9. Identify the components of light and its relationship with primary production.
10. Identify processes which affect lake and marine primary production.
11. Compare lake and ocean phytoplankton and zooplankton groups and the factors which affect population abundance.

3. Required Materials

- (a) Texts – none, material on D2L

4. Course Content and Schedule

Week	Date	Lecture (Monday Friday)	Lab
1	Sept. 2	Labour Day no Monday lecture Course Intro Unit 1	Ice Kings video
2	Sept. 9	Morphology of Oceans & Lakes Unit 2 Guest Lecture from ONC	Sound & Light
3	Sept. 16	Charts, Maps and Navigation Unit 4 Physical Properties of Water Unit 3	Charts and Navigation
4	Sept. 23	Temperature & Salinity Unit 5 Cont.	Benthic animal diversity – NEPTUNE
5	Sept. 30	Surface Circulation Tides	Deep Water Masses
6	Oct. 7	Waves	Tides
7	Oct. 14	Thanksgiving no Monday Lecture Estuaries and BC Oceanography	Waves
8	Oct. 21	Review - Monday MID TERM Friday	TBA
9	Oct. 28	Dissolved Ions and Gases Water Quality	Hypoxia in Saanich Inlet
10	Nov. 4	Nutrients I Nutrients II	Lab # 9x. Water & Sediment Standards Lab
11	Nov. 11	No Lecture Monday – Remembrance Day Light	TBA
12	Nov. 18	Primary Production	Submarine Light and Primary Production
13	Nov. 25	Primary Production cont. Zooplankton/Secondary Production	People of a Feather
14	Dec. 2	Local Marine Issues and Review	Zooplankton in Saanich Inlet

5. Basis of Student Assessment (Weighting)

- (a) Assignments
 - a. Weekly labs 40%
- (b) Exams
 - a. Midterm exam 25%
 - b. Final exam 35%

6. Grading System

Standard Grading System (GPA)

7. Recommended Materials to Assist Students to Succeed Throughout the Course

8. 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.

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)

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)

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.