CAMOSUN COLLEGE
School of Arts & Science
Department of Environmental Technology

ENVR-210-D01A/B
Aquatic Environments
Fall 2020

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

(a) Instructor	Steve Gormican	
(b) Office hours	Tuesdays 10-11:00 via Collaborate or by arrangement	
(c) Location	I will not be working on campus this semester so email is the only way to contact me.	
(d) Phone	n/a	**Alternative:**
(e) E-mail	Gormicans@camosun.ca E-mail is best ways to get in contact with me. I will try to respond to all course-related e-mails within 24 hours, but also remember that life can be busy and chaotic for everyone (including me!), so if I don't respond right away, don't worry!	
(f) Website	ENVR 210 D2L site	

2. Intended Learning Outcomes

(If any changes are made to this part, then the Approved Course Description must also be changed and sent through the approval process.)

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 required, readings, notes and lectures will be posted on D2L

4. Course Content and Schedule

The following schedule is subject to change, any alterations will be announced through D2L. Lectures will be asynchronous and will be posted each week. We will try to do the labs in the scheduled time (Mondays am or pm) and I will be available via Collaborate at these times. Lab assignments are due the week after they were assigned. A late penalty of 10% per day will be assessed for labs.

Labs are synchronous meaning that I will be available online during those periods to answer questions. I hope to start other discussions during these sessions.

- Lectures will be recorded and posted each week. This an asynchronous approach and the college has stated: 'Note that "asynchronous" does not mean "self-paced". Students are expected to be engaged in learning until the end of the Fall semester. Many students are new to online learning. If all content and assignments are uploaded all at once, students may interpret this as a chance to work through all the material rapidly and finish early. They need to understand that they are "in class" until the term ends in December.'

Week	Date	Lecture	Lab
1	Sept. 7	Course Intro	Labour Day no Monday labs
2	Sept. 14	Morphology of Oceans & Lakes Introduction to Ocean Networks Canada	Wiring the Abyss
3	Sept. 21	Charts, Maps and Navigation Physical Properties of Water	Sound & Light
4	Sept. 28	Temperature & Salinity Cont.	Benthic animal diversity – NEPTUNE
5	Oct. 5	Surface Circulation Tides	Deep Water Masses
6	Oct. 12	Cont. Tides Waves	Tides
7	Oct. 19	Estuaries and BC Oceanography	Waves
8	Oct. 26	MID TERM	Ice Kings video
9	Nov. 2	Dissolved Ions and Gases Water Quality	Hypoxia in Saanich Inlet
10	Nov. 9	Nutrients I Nutrients II	Water & Sediment Standards
11	Nov. 16	Light	People of a Feather
12	Nov. 23	Primary Production	Submarine Light and Primary Production
13	Nov. 30	Primary Production cont. Zooplankton/Secondary Production	Zooplankton in Saanich Inlet
14	Dec. 7	Local Marine Issues and Review	TBA

5. Basis of Student Assessment (Weighting)

(Should be directly linked to learning outcomes.)

(a) Assignments

Weekly labs 40%

(b) Quizzes

Online quizzes 10%

(c) Exams

Midterm exam 25%
Final exam 25%

(d) Other (e.g. Project, Attendance, Group Work)

6. Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)
(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)

[X] Standard Grading System (GPA)

[ ] Competency Based Grading System

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	*Incomplete*: 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	*In progress*: 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	*Compulsory Withdrawal*: 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.