



## COURSE OUTLINE

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

Ω Please note: the College electronically stores this outline for five (5) years only.  
 It is **strongly recommended** you keep a copy of this outline with your academic records.  
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

### 1. Instructor Information

(a)	Instructor:	Steve Gormican		
(b)	Office Hours:	Mon-Thurs 13:30-14:20; Fri 11:30-12:20 or by appointment		
(c)	Location:	F248B		
(d)	Phone:	250 370-3423	Alternative Phone:	
(e)	Email:	gormicans@camosun.ca		
(f)	Website:			

### 2. Intended Learning Outcomes

*(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)*

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) Materials available on D2L

### 4. Course Content and Schedule

*(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)*

Week	Date	Lecture	Lab
1	Sept. 5	Intro (Unit 1)	Labour Day – no labs
2	Sept. 12	Properties of Water (Unit 2) Charts, Maps and Navigation (Unit 4)	Sound & Light
3	Sept. 19	Lake Circulation (Unit 3) Guest Lecture from ONC (Dr. Dave Riddell)	Charts and Navigation (#3A OR #3B)
4	Sept. 26	Tides (Unit 9) Water Masses Mixing Processes (Unit 5)	Benthic animal diversity – NEPTUNE A lab LLC 136 B Lab E110
5	Oct 3	Surface Circulation (Unit 7)	Deep Water Masses
6	Oct. 10	No Monday Lecture Estuaries and BC Oceanography (Unit 10)	Thanksgiving no labs
7	Oct. 17	Waves (Unit 8)	Tides (Lab #7)
8	Oct. 24	Review - Monday MID TERM Friday	Lab #6 Waves
9	Oct. 31	Dissolved Ions and Gases (Unit 11 and Unit 12)	Hypoxia in Saanich Inlet A lab LLC 136 B Lab E110
10	Nov. 7	Water Quality (Unit 9x) No Lecture Friday – Remembrance Day	Lab # 9x. Water & Sediment Standards Lab A lab E200 B Lab E110
11	Nov. 14	Nutrients (Unit 14) Light (Unit 15)	Case Study Elk Lake Water Quality
12	Nov. 21	Primary Production (Unit 16) Primary Production cont.	Lab #11. Submarine Light and Primary Production
13	Nov. 28	Zooplankton/Secondary Production (Unit 17)	People of a Feather
14	Dec. 5	Local Marine Issues and Review	Zooplankton in Saanich Inlet A lab E200 B Lab E110

### 5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

- (a) Assignments
  - a. Weekly labs 30%
  - b. Assignment 10%
- (b) Exams
  - a. Midterm exam 25%
  - b. Final exam 35%

## 6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

### 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	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	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 E-1.5 at [camosun.ca](http://camosun.ca) 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, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 <sup>rd</sup> course attempt or at the point of course completion.)
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. 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](http://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 the College web site in the Policy Section.

### ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED