



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

**ENVR-210-002**  
**Aquatic Environments**  
**Fall 2018**

**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   | Emrys Prussin  |              |  |
| (b) Office hours | Mondays 11:30 – 12:20, Thursdays 10:30 – 11:20, or by appointment  |              |  |
| (c) Location     | Paul 237   |              |  |
| (d) Phone        | 250-370-3352   | Alternative: |  |
| (e) E-mail       | <a href="mailto:prussine@camosun.bc.ca">prussine@camosun.bc.ca</a> |              |  |
| (f) Website      | See D2L for course 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**

All materials on D2L

#### 4. Course Content and Schedule

| Week | Lecture  | Lab  |
|------|--|--|
|      | Monday (Ewing 201)<br>Friday (Fisher 334)  | Wednesday<br>(Section 001: Ewing 110, Section 002:<br>Ewing 100) |
| 1    | M: Labour Day<br>F: Introduction to Aquatic Science  | Lab 1: Video Ice Kings   |
| 2    | M: Morphology of Oceans and Lakes<br>F: Physical Properties of Water                         | Lab 2: Sound & Light   |
| 3    | M: Charts and Navigation<br>F: Temperature and Salinity in Oceans                            | Lab 3: Charts & Navigation                                       |
| 4    | M: The Atmosphere<br>F: Guest Lecture Ocean Networks Canada                                  | Lab 4: Benthic animal diversity – NEPTUNE                        |
| 5    | M: Surface Currents<br>F: Waves  | Lab 5: Deep Water Masses   |
| 6    | M: <i>Thanksgiving – no Class</i><br>F: Tides  | Lab 6: Waves   |
| 7    | M: Estuaries<br>F: Chemical Solutions  | Lab 7: Tides   |
| 8    | M: Review<br><b>F: Midterm</b>   | TBA  |
| 9    | M: Dissolved Ions and Gases<br>F: Water Quality  | Lab 8: Hypoxia in Saanich Inlet                                  |
| 10   | M: Nutrients<br>F: Nutrient cont.  | Lab 9: Water Quality   |
| 11   | M: <i>Remembrance Day – No Class</i><br>F: Light   | Lab 10: Case Study Elk Lake Water Quality                        |
| 12   | M: Phytoplankton and Primary Productivity<br>F: Phytoplankton and Primary Productivity cont. | Lab 11: Submarine Light and Primary Production                   |
| 13   | M: Zooplankton<br>F: Zooplankton cont.   | Lab 12: People of a Feather                                      |
| 14   | M: Local Marine Issues<br>F: Review  | Lab 13: Zooplankton in Saanich Inlet                             |

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

(a) Assignments

Weekly Labs 40%

(b) Exams

Midterm Exam 25%

Final Exam During Exam Period (cumulative) 35%

#### 6. Grading System

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               | <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. |