

# School of Arts & Science BIOLOGY DEPARTMENT BIOL 126

Physiological Basis of Life Quarter or Semester/Year

### **COURSE OUTLINE**

The course description is online @ http://camosun.ca/learn/calendar/current/web/biol.html ☐ 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 Instructor: (b) Office Hours: (c) Location: Phone: Alternative Phone: (d) Email: (e) (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. Classify and describe the unique structure and function of the four groups of macromolecules and discuss how these relate to their properties within living cells.
- Differentiate among the various transport mechanisms available to mobilize molecules across cell membranes.
- 3. Name and outline the pathways utilized by cellular respiration and photosynthesis and explain the importance of these processes to living organisms.
- 4. Describe the basic steps of DNA replication and indicate its role in cell division and inheritance.
- 5. Demonstrate knowledge of the basic steps of protein synthesis, identifying the roles of DNA, mRNA, tRNA, amino acids and proteins in the processes of transcription and translation.
- 6. Identify and explain the principles and consequences of the cell cycle, including both mitosis and meiosis.
- 7. Examine the basic principles of Mendelian genetics and describe how these relate to other topics encompassed in this course.
- 8. Describe and explain the role of growth regulators in the control of plant growth, development and physiology.
- 9. Describe and explain the diversity of control mechanisms in animal systems, including the role of the endocrine and nervous systems.
- 10. Conduct experiment tests and use analytical techniques in the laboratory to demonstrate a few biological properties of macromolecules, cellular respiration, photosynthesis, DNA technology and plant and animal control systems.

## 3. Required Materials

- (a) Texts
- (b) Other

#### 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.)

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

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

- (a) Assignments
- (b) Quizzes
- (c) Exams
- (d) Other (e.g., Attendance, Project, Group Work)

#### 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	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		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** 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, 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	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.

#### 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 <a href="mailto:camosun.ca">camosun.ca</a>.

### 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.

A	ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED