



## COURSE OUTLINE

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

Instructor:	Don MacRae
Office Hours:	Mon and Wed (2:30-4:00 PM), Tue (12:30-1:30 PM) and Thu (3:30-4:30)
Location:	F346A
Phone:	370-3437
Email:	dmacrae@camosun.bc.ca
Website:	D2L

### 2. Intended Learning Outcomes

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

1. Describe the concept of homeostasis and explain how it operates in the major physiological systems of the human body.
2. Demonstrate an understanding of the functioning of the major physiological systems of the human body at the cellular and systemic levels.
3. Explain how the major physiological systems of the body interact to bring about biological behaviors.
4. Understand how physiological processes are altered in injury or disease.
5. Apply anatomical vocabulary in a physiological context.
6. Perform laboratory procedures relevant to physiology (observe physiological phenomena, measure physiological data, organize / record / analyze results of physiological experiments).
7. Utilize critical thinking to apply physiological concepts to specific problem solving situations.

### 3. Required Materials

The Physiology Coloring Book (2<sup>nd</sup> edition), Kapit, W., Macey, R.I and Meisami, E.  
Addison Wesley Longman, 2000.

Lab Manual available on-line via D2L

#### 4. Course Content and Schedule

Wk	Dates	Lecture Topic	Lab Activity
1	Jan 6-10	Cell Physiology	Introduction
2	Jan 13-17	Nerve, muscle and synapse	Exp 1: Cell viability
3	Jan 20-24	Circulation	Ex 2: Movement of molecules
4	Jan 27-31	Respiration	Ex 3: Enzyme activity Ex 4: Muscle mechanics
5	Feb 3-7	Kidney <b>Lecture test 1 (Feb 3)</b>	Ex 3: Enzyme activity Ex 4: Muscle mechanics
6	Feb 10	Family Day (College closed)	
	Feb 11-12		
	Feb 13-14	Reading Break	
7	Feb 17-21	Digestion	Ex 5: Electromyography
8	Feb 24-28	Nervous System	Ex 6: Cardiovascular action
9	Mar 3-7	Endocrine and Hormonal Regulation	Ex 7: Respiration
10	Mar 10-14	Metabolic Physiology <b>Lecture test 2 (March 10)</b>	Ex 8: Sense organ action
11	Mar 17-21	Blood and Defense	Ex 9: Urinalysis Student designed experiment
12	Mar 24-28		Lab Review
13	Mar 31-Apr 4	Reproduction	Lab exam
14	Apr 7-11		Poster Presentations
	April 14-17	<b>Final Exam– scheduled by registrar</b>	
	April 22-25		

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

Labs	15%
Lab test	15%
Lecture Assignments	10%
Lecture test 1	15%
Lecture test 2	15%
Lecture test 3	30%

## 6. Grading System

### 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>d</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.

## 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.

## General Information for Students

Physiology is about how things work. This subject requires more thought than Anatomy (memorization, however, is still needed). There are reasons that each topic is included in this course. These may not be obvious to you but you should ask yourself why. You should ask yourself lots of questions! You will be able to answer some just by thinking, many by reading, and others by talking to fellow students and occasionally, an instructor. Most of the really good questions have no answers so don't expect perfection. Asking questions will help you to understand as well as remember.

We are using The Physiology Coloring Book as a text. It's shorter, lighter and less expensive than most 1<sup>st</sup> year college textbooks. It does, however, include about as much information as its larger, longer and more expensive competitors. Use it differently from the Anatomy Coloring Book. If you want to colour the plates on the right hand pages, do so, but no marks are awarded for this. Read the text. The left side pages describe the topics of the course; the right side pages refer to the illustrations. Read both. You should read everything in the book! That is your obligation as a student. Some of it is review – you will need this to understand what follows. A very small amount of it will be omitted from this course. Pay particular attention to Figures – these are ways of illustrating and summarizing information visually. They are an important part of communicating scientifically and you should become practiced in extracting information from them.

During the lab component of the course, you will work in small groups to perform demonstrations and experiments. These activities illustrate some of the topics that are covered during lecture and also give you experience in some aspects of experimentation. Group work is fundamental to the lab activities. Aim for equal (not necessarily identical) participation of all group members. Discuss individual responsibilities within the group and include the instructor in these discussions as needed.

A goal in the lecture component of the course is to promote active engagement with the subject matter while, at the same time, striving for full coverage of topics. Group work is an effective and usually enjoyable way to encourage involvement and will be used during lecture time. Marks will be awarded for in-class group activities. Students for whom regular group work is a hardship should discuss alternate activities with the instructor.

My hope is that all students will get something useful out of this course. It is a requirement for a range of programs in the health professions. Aside from that, the topics can be related to many aspects of day to day life. Not only can it be intellectually satisfying to gain a deeper understanding of a subject but there can be added value if that understanding leads to modified behavior and increased quality of life.

Science is a cultural activity that only a small minority of people become directly involved in. Yet the advances in understanding that it yields affects us all in many ways. This course affords an opportunity to learn a little more about how scientific information is accumulated and used.