CAMOSUN COLLEGE	***School of Arts & Science*** ***BIOLOGY DEPARTMENT*** **BIOL 103- 005A and 005B** **Non-Majors Biology 1** **2014 Fall**

COURSE OUTLINE

The Approved Course Description is available on the web @ D2L Biology 100

Ω *Please note: this outline will be electronically stored for five (5) years only.*
It is strongly recommended students keep this outline for your records.

1. Instructor Information

(a)	Instructor:	Geoffrey Haywood, Ph.D.		
(b)	Office Hours:	Mon ,10.30 – 11.20 AM , 2.30-3.20 Thurs, 2.30-3.20		
(c)	Location:	F246		
(d)	Phone:	370-3196	Alternative Phone:	
(e)	Email:	haywoodg@camosun.bc.ca		
(f)	Website:	D2L		

2. Intended Learning Outcomes

1. Work in a culture of scientific endeavor and use critical thinking skills.
2. Identify the critical roles played by water in the maintenance of life on earth.
3. Explain the structures and roles of biological macromolecules, particularly carbohydrates, proteins and lipids.
4. Describe the complexity and diversity of cellular ultrastructure and the functions of significant
5. Cellular organelles, in particular: chloroplasts, mitochondria, ribosomes, Golgi apparatus, cilia and flagellae.
6. Describe basic metabolism and energy producing pathways within the cell.
7. Explain the concept of the gene in the contexts of both Mendelian inheritance as well as the biochemical expression of genetic information.
8. Relate the structure of nucleic acids to the storage and replication of genetic information.
9. Explain the mechanisms used to regulate and translate genetic information into the assembly of functional proteins.
10. Describe the interactions between the environment and long-term changes in genetic information, particularly
11. Describe the anatomy of the human digestive, cardiovascular and excretory systems and explain how the physiology of these organ systems is related to organization at the molecular and cellular level.

12. Describe the structure and explain the functions of the human immune system. Apply this knowledge to immune dysfunction, particularly allergies and AIDS.

3. Required Materials

(a) Textbook: T Audesirk, Audesirk, G and Byers, B. 2008. *Biology: Life on Earth*, 9h ed., Pearson Education, San Francisco or Campbell, *Essential Biology with Physiology* – loose-leaf version 2013

(b) Lab Manual Biology 103, Camosun College 2013

4. Course Content and Schedule

Timetable of lectures and Labs.

Biology 100 (Fall 2009) – Tentative Schedule

WK	DATE	LECTURE TOPICS	TEXT Chap.	LAB #	LAB TOPICS
1	Sep.2– 5 (2 lectures)	Course Introduction Chemistry, bonding	1 & 3		**No Scheduled Lab**
2	Sep.8 - 12	Water, pH, Organic Macromolecules	3 & 4	1	Microscopes & Measurements
3	Sep.15 - 19	Cell Biology Energetics	4 ,5, 6	2	Eukaryotic and Prokaryotic Cells
4	Sep.22 – 26	Enzymes Photosynthesis Cellular Respiration	6, 7, 8	3	Macromolecules
5	Sep 29- Oct 3	Cell Division: Mitosis Meiosis	9	4	Diffusion & Osmosis
6	Oct.6 - 10	Cancer Mendelian Genetics	10, 11	5	Enzymes
7	Oct.14 – 17	**Mid term review** **MID-TERM Exam**			**No labs (Thanksgiving)**
8	Oct.20 – 24	Inheritance Patterns Human Genetic	11		**Lab Exam I**
9	Oct 27 - 31	DNA Replication Transcription/Translation Mutations	12	6	Mitosis Onion Root

10	Nov 3 – 7	Gas Exchange/Resp	32	7	Inheritance video
11	Nov 10 – 14	Circulation	32		**No Scheduled Lab**
12	Nov 17 – 21	Nutrition Digestion	34	8/9	Catlab-Nutrition
13	Nov 24 – 28	Homeostasis	31	10	Human Organ Systems
14	Dec 1 – 05	Catch-up & Review			**LAB EXAM II**

(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)

(Should be linked directly to learning outcomes.)

(a) Assignments, Quizzes and reports: Theory 10% Lab 10%

(b) Exams: Midterm Theory 1 20% Final Theory 30%
Lab Exam 1 15% Lab Exam 2 15%

6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO 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** 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 3rd 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 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 on the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED

STUDENT ASSIGNMENTS

Theory assignments will be given out on the Wednesday of each week and are due in on the following Monday – by the end of the lecture period.

Assignments received on the day due will be marked out of 100% - but if not received until the following day will be marked out of 80%. There will be a further drop of 20% for any assignment not received until Wednesday. Any assignment not received by then (1 week after given out) will receive a zero mark.

Assignments MUST be printed as hard copies. Assignments will NOT be accepted as emails unless there is a serious illness involved in their tardy return – for which a doctor's note will be mandatory.