

COURSE OUTLINE

TERM: Fall 2013	COURSE NO.: BBIO 053
INSTRUCTOR:	COURSE NAME: ABE Provincial Biology Level I
OFFICE:	COURSE CREDITS: 1.0

COURSE FORMAT: A minimum of 1.5 hours in class and 1.5 hours in another mode of delivery such as tutorial in the ABE Learning Lab, on-line using Moodle or in the ABE Biology lab. Students may complete this course in less or more than 15 weeks in the self-paced mode.

PREREQUISITES: BBIO 036 and BCHM 036 **or** Science 10 with a minimum grade of C+ and completion of ABE Science Assessment.

RECOMMENDED PREREQUISITES: BENG 041 and BCHM 043.

RECOMMENDED FOLLOW-UP COURSES: BBIO 054.

LEARNING OUTCOMES:

Upon completion of both BBIO 053 and BBIO 054, students will be able to demonstrate functional scientific skills at the ABE Provincial Biology level, which is articulated in the *Adult Basic Education in British Columbia Articulation Handbook* which can be found at <http://www.aved.gov.bc.ca/abe/docs/handbook.pdf>. Note that laboratory skills are part of the essential learning outcomes, and a total of at least 7 lab activities must be completed by the end of BBIO 053 and BBIO 054.

Specifically, upon completion of BBIO 053, learners will be able to:

- Demonstrate familiarity with common lab and field equipment and its use.
- Conduct lab and field procedures safely and ethically.
- Demonstrate microscope skills.
- Collect and record data effectively.
- Analyze and interpret data collected.
- Communicate results and conclusions.
- Write a formal lab report.
- Explain the role of molecules in life activities, including water, carbohydrates, proteins, lipids, and nucleic acids.
- Describe major structures and functions of cells and their components, including
 - the basic mechanisms of protein synthesis.
 - the basic mechanisms of membrane transport.
 - the basic mechanisms of DNA replication.
- Describe the role of enzymes and their importance to cellular processes.
- Outline the processes of cellular respiration.
- Describe and compare mitosis and meiosis.
- Describe the principles of inheritance.
- Solve basic genetics problems.
- Describe the role of DNA.

REQUIRED TEXT: Mader, S. *Inquiry into Life*. 13th edition. New York: McGraw Hill, 2011. Previous editions are acceptable, but be aware that the assigned readings may be different.

EVALUATION PROFILE:

Quizzes (10 x 1%)	10%
Unit Tests (4 x 10%)	40%
Labs (4 x 5%)	20%
Assignment	10%
Final exam	<u>20%</u>
	100%

GRADING PROFILE:

Final letter grades will be determined from your total final mark according to the following schedule:

A+	90-100%	B+	77-79%	C+	67-69%	D	50-59%
A	85-89%	B	73-76%	C	63-66%	F	0-49%
A-	80-84%	B-	70-72%	C-	60-62%		

* Students may be assigned “NC” (No Credit) if they require more time to finish the course.

OPERATIONAL DETAILS:

Laboratory:

- Consult with your instructor for information relating to laboratory safety.
- The area of the lab in which you perform your experiment must be left clean and all equipment thoroughly washed **and** rinsed. Equipment should be returned to the location in which it was found.
- Remember to leave time for clean up when planning an experiment.
- Students must demonstrate responsible and respectful behavior in the lab at all times.
- All laboratory data must be checked and initialed by the instructor before cleaning up after the lab work is completed.

University Policies:

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.

Attendance and Progress:

Students who will be absent for any reason should leave a voice or email message for their instructor **prior** to the start of class. ABE department policy is to place students attending less than 75% of classes in a subject on a “non-priority list”. Students on this list register last (after all other students have registered). A student may enroll in a self-paced ABE Biology course for a maximum of 2 terms.

Cheating/Plagiarism:

All forms of cheating including plagiarism are serious offences. The instructor has the right to assign a “0” on the assignment or a grade of “NC” on the course. A second offence in any course may result in expulsion from the program.

Computer use policies:

The misuse of a computer system (such as unauthorized access to other computer accounts or unauthorized use of system software) is not only unfair to other students but can result, at the instructor's discretion, in suspension of the offender's computer access in a course, which may result in an “NC” grade. Repeated offences may result in a permanent revoking of all computer privileges.

Emergency Procedures:

Please read the emergency procedures posted on the wall of the classroom.