



COURSE OUTLINE

Course Name: Biology 12 - Part 1

Course Number: BIOL 0983

Number of Credits: 4.0

Effective Date: January 2017

Course Description:

This course introduces the student to the study of the cell. Students examine cell structure, metabolism and genetics. The course explores diets and family hereditary patterns, linking both to the blueprint of life itself, DNA. Topics addressed include basic chemistry, biochemistry, nutrition, immunology, cancer, the human genome, genetic engineering, and metabolic pathways.

Both Biology 0983 and Biology 0993 are required for completion of ABE Provincial level Biology.

Biology 0983 and Biology 0993 can be taken at the same time or in any order.

School or Centre:

School of Arts and Science

Year of Study:

ABE Provincial Level (Grade 12)

Course History:

Click arrow for options

Name of Replacing Course (if applicable):

Course Pre-requisites (if applicable):

Biology 11 (BIOL 0861/0871 or equivalent), English 10 (ENGL 059, an ELA score of 127, or equivalent); Math 10 (Foundations of Mathematics & Precalculus 10, MATH 0750/0751, or equivalent).

Chemistry 0861/0871 is recommended.

English 11 is strongly recommended

Course Co-requisites (if applicable):

PLAR (Prior Learning Assessment & Recognition)

No Yes (details below):

Instructional Strategies:

Option 1: Self-paced - one-to-one individualized instruction

Option 2: Class-based - lecture and small group workshops

Course Learning Outcomes:

Students will meet the learning outcomes for ABE Provincial Level Biology as stated in the most recent ABE Articulation Handbook.

Program Learning Outcomes:

If this course is taken as part of the ABE Graduation Certificate program, see the Program Content Guide for the program learning outcomes.

Evaluation/Grading System

Grading System	Specify if 'Other':	Specify Passing Grade:
Letter Grades		D

Components and Weighting of the Assessment/Evaluation Plan:

Type	Percentage	Evaluation Plan (provide a brief explanation for each component especially if value exceeds 35%):
Quizzes/Tests	40	2 tests at 20% each
Lab Work	30	approximately 30% for various lab related activities including at least one formal lab write-up
Assignments	10	approximately 10% for various assignments, which may include genetics and/or nutrition
Final Exam	20	
		Or Self-paced Option: Lab 30%, 4 Tests 70%
	Total	100

Learning Environment/Type

Instruction Type	Hours Per Instruction Type	Comments
L - Classroom	64	approximate classroom and lab
E - Seminar	32	approximate seminar hours
S - Self-paced		
	Total	96

Resource Material(s):

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

Course Topics:

Basic Chemistry
Biochemistry - Carbohydrates, Proteins, Lipids, Nucleic Acids
Microscopy
Cell Biology
Histology
Nutrition
Enzymes
Bioenergetics - Cellular Respiration/Photosynthesis
Cell Division - Meiosis/Mitosis
Genetics
DNA/RNA Protein Synthesis
Biotechnology
Immunity and Disease

VCC Education and Education Support Policies

There are a number of **Education** and **Education Support** policies that govern your educational experience at VCC, please familiarize yourself with them.

The policies are located on the VCC web site at:

<http://www.vcc.ca/about/governance--policies/policies/>

To find out how this course transfers, visit the BC Transfer Guide at www.bctransferguide.ca.

FOR COMMITTEE USE ONLY

Approved by Curriculum Committee:	October 25, 2016	Approved by Education Council:	
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