VANCOUVER COMMUNITY COLLEGE

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BIOL 0983: Biology 12 - Part 1

EFFECTIVE DATE

January 2017

DEPARTMENT

CF - Science

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.

CREDITS

4.0

YEAR OF STUDY

ABE Provincial Level(Grade12)

PREREQUISITES

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

COREQUISITES

None

COURSE LEARNING OUTCOMES

Upon successful completion of this course, students will be able to:

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

PRIOR LEARNING ASSESSMENT & RECOGNITION (PLAR)

None

HOURS

Lecture: 96
Lab: 96
Other: 96

INSTRUCTIONAL STRATEGIES

Option 1: Self-paced - one-to-one individualized instruction Option 2: Class-based - lecture and small group workshops

GRADING SYSTEM

Letter Grade (A-F)

PASSING GRADE

D

EVALUATION PLAN

Type	Percentage	Assessment activity
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	
Other		Or Self-paced Option: Lab 30%, 4 Tests 70%

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

LEARNING RESOURCES

None

Notes:

- Course contents and descriptions, offerings and schedules are subject to change without notice.
- Students are required to follow all College policies including ones that govern their educational experience at VCC. Policies are available on the VCC website at: https://www.vcc.ca/about/governance--policies/policies/.
- To find out how this course transfers, visit the BC Transfer Guide at https://www.bctransferguide.ca.