

Biology 30

School Year - 2011-2012

Pre-requisites: Science 10; Biology 20

Credits: 5

Hours: 125

Textbook/Resources

- Inquiry into Biology, McGraw-Hill Ryerson

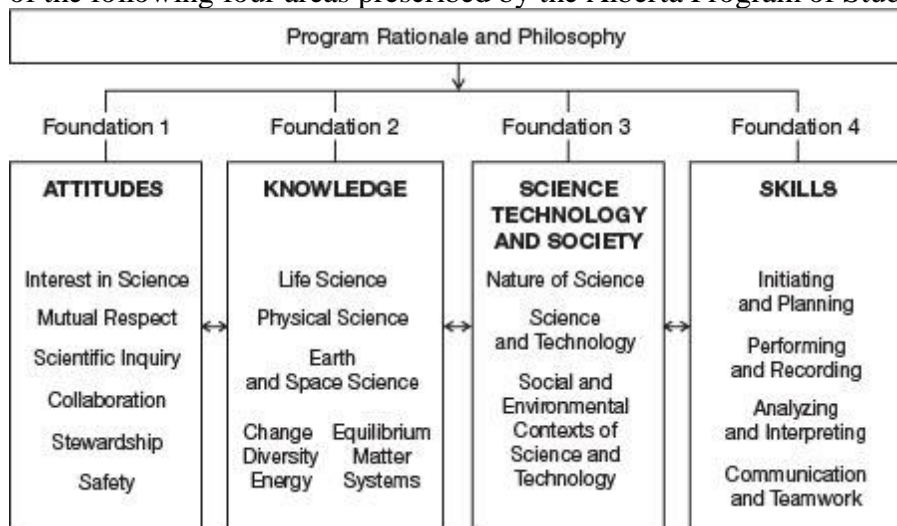
Students are responsible for attaining book(s) and paying the textbook rental caution fee at the CBe-learn reception desk. Reception is located in Ernest Manning High School (20 Springborough Blvd SW) and is open 9:00 am – 4:00 pm school days.

Instructor

All CBe-learn courses will have a news item on the course homepage that will include an introduction to the teacher. Some courses may have more than one instructor. We believe this team teaching approach is advantageous to students in terms of receiving timely feedback and completing course materials. Since CBe-learn teachers are not on-site at school five days a week, and they do not have local phone extensions, all of the communication will be online within D2L using private discussions. Other communication tools including Elluminate and/or email may also be used on occasion. Each of these tools are explored in the e-learn introductory to online learning course.

Course Overview

In Biology 30 you will learn more than facts. You will be encouraged to develop positive attitudes and to acquire and use knowledge and skills in responsible ways. Your studies will lead you to achievements in each of the following four areas prescribed by the Alberta Program of Studies.



Course Structure and Organization

This course builds upon the scientific concepts from:

Grade 8 Science, Unit B: Cells and Systems
Grade 9 Science, Unit A: Biological Diversity
Science 10, Unit C: Cycling of Matter in Living Systems
Biology 20, Unit A: Energy and Matter Exchange in the Biosphere
Biology 20, Unit B: Ecosystems and Population Change
Biology 20, Unit D: Human Systems

Biology 30 is composed of four units. These units are:

Unit A: Nervous and Endocrine Systems
Unit B: Reproduction and Development
Unit C: Cell Division, Genetics, and Molecular Biology
Unit D: Population and Community Dynamics

Assessment/Evaluation

There will be lesson assessments in the form of :

- assignments to be completed, saved and submitted via the course dropbox,
- quizzes found in the course and in an online environment that are to be marked by the teacher,
- discussion assignments in which your response includes interaction with your classmates
- self-checks that occur regularly throughout the course content pages whereby questions are posed and students may check their answers through the “Check your work” link.

There will also be two in person, face to face exams for this course:

- One exam at the midterm time frame of the course. This Midterm exam will cover Unit A and Unit B. This Midterm exam is worth 25% of your final course grade.
- One exam at the end of the course. This Final exam will cover Unit C and Unit D. This Final exam is worth 25% of your final course grade.

There will also be the Biology 30 Diploma Exam written in person after the course is completed at a specific time as set out by Alberta Education. The Biology 30 Diploma Exam will then be worth 50% of your overall final grade.

Accommodations

Since CBe-learn is an online school with a diverse population of students, it is not always evident which students need accommodations and/or for what course subject. We need you, the student, to bring your exam accommodation needs to our attention!

- Are you an ESL student?
- Did you arrive to Canada from another country?

- Do you have an IPP?
- Do you have a chronic medical condition(s) or learning disability?
- Do you have an acute medical condition or illness?

If you answered yes to any of the questions above, then you may qualify to receive accommodations. Please notify and explain to your teacher within the first week of accessing your online course that you may require accommodations. It is important that you start this dialogue with your teacher.

Roles and Responsibilities of Teachers and Students

Teachers are responsible to respond to your communication within 24 hours Monday to Friday and provide feedback on submitted work within a week.

Students are responsible to check their course home page and private discussion area every two days (minimum) as well as meet the weekly recommended deadlines and read assignment feedback. Students are also expected to respond to teacher communication.

Interactions between instructors and classmates are expected to be mutually respectful at all times.

Learning Outcomes

Within the course Units, students will...

Unit A: Nervous and Endocrine Systems

- describe how the nervous and endocrine systems maintain homeostasis
- explain how the human body maintains equilibrium between its internal and external environments
- describe what physiological processes and control systems are involved in maintaining homeostasis
- analyze what medical technologies are available to treat disorders of the nervous and endocrine systems

Unit B: Reproduction and Development

- explain how species survival is ensured through reproduction
- identify and describe the structures and functions of the human reproductive systems
- explain how human reproduction is regulated by chemical control
- describe how cell differentiation and development are influenced by genetic, endocrine, and environmental factors
- analyze how sexually transmitted infections and reproductive technologies can prevent or enhance fertility

Unit C: Cell Division, Genetics, and Molecular Biology:

- explain the rules and steps involved in mitosis and meiosis that regulate the transmission of genetic information from one generation to the next
- describe the similarities and differences that exist in mitosis and meiosis that allow for growth, healing, and reproduction of organisms
- hypothesize how the understanding of the molecular nature of genes and DNA can help explain the transmission of traits, and how mutation at the molecular level results in changed proteins

- analyze how the knowledge of the molecular nature of genes and DNA has led to new biotechnologies and treatment of genetic disorders

Unit D: Population and Community Dynamics

- explain how populations can change overtime
- describe in ways that members of populations interact with each other and members of other populations
- analyze quantitatively how populations change overtime
- analyze the technologies used by society in controlling and managing populations

Academic Honesty/Plagiarism Guidelines

Academic honesty is expected of all students. Work submitted for a grade that is not your own, is an act of academic dishonesty. Any materials taken from other sources must clearly be identified and properly referenced. Intentional deception, plagiarism, copying from another student, obtaining information about exams, and other violations of academic honesty are not acceptable.

Plagiarism is the most common violation. It is the practice of taking the writings or ideas of another person and presenting them as your own. Students should be aware of the forms that plagiarism can take. Any of the following, without reference or acknowledgement of the original source, can be considered as plagiarism:

- Direct duplication of another person's work, from a book, article, web site, another student's assignment etc.
- Paraphrasing of another person's work, making only minor changes to the wording but with the essential meaning, form or progression of ideas maintained
- Piecing together sections of another person's work into a new whole

The typical consequences for first time academic honesty offenders are:

- Contact with parent or guardian
- Contact with guidance counsellor and or/assistant principal if the student attends another CBE high school
- Failure on the assignment, paper or exam (an academic dishonesty grade is assigned ("AD" with a zero percentage)

If a violation of academic honesty occurs a second time, the typical consequence is withdrawal from the course or a final grade of "AD", indicating the nature of the grade as academic dishonesty.

The circumstances and evidence in each case are reviewed by the instructor, student, parents and CBe-learn administrators. Consequences in each case are at the discretion of the school staff.

Inactive Student Guidelines

CBe-learn students must demonstrate an active commitment to their online courses, which involves regular communication with their online teachers, and successful completion of course assessment requirements within a reasonable time frame. If a student is unable to remain academically active in their online course during any 15 school day period, and fails to communicate with their teachers, then they risk losing access to their course. As a result, their user role in the associated course will be changed by their instructor from “Student – CBe-learn” to “Inactive – CBe-learn”. Once a student has been designated as inactive, they are no longer eligible to continue in the course; however they are invited to re-register for the next term if they feel they can succeed at a later date. Transfers will not be considered.

The following criteria will be used to identify a student as being inactive within any 15 school day period:

- Has not logged in or accessed the content of the course beyond the introductory material.
- Has not submitted course work for assessments within a reasonable time frame.
- Has not responded to the teachers request for contact via email, private discussions and/or phone on at least 3 occasions.
- Has not participated in a mandatory introductory online or face-2-face session.

This criteria is applied at the teacher and administrators discretion at CBe-learn.

