Biology 20 Course Syllabus

Resource Text: Inquiry into Biology, McGraw-Hill Ryerson (2007)
Program of studies reference: Alberta Educations 2007

Textbooks are provided through the library. It is the student's responsibility to keep the rental text in good order. Please check through your book when you first obtain it. Any damages are to be noted and reported the librarian. Once the book is returned at the end of the semester, you will be held accountable to any damages to the text. You will be required to either pay for repairs to the book or to pay for a book replacement.

Course Overview:
The major science themes developed in this course are systems, equilibrium, energy, and matter. The goals of Biology 20 are for students to develop a solid understanding of the fundamental principles of biological sciences, of the nature of science, and of the interaction between biological sciences and technology. Students are encouraged to appreciate science as an endeavour with practical impact on their own lives and on society as a whole.

Evaluation:
Your final grade is determined by the following:

Assignments, Quizzes, Labs	10%
Unit Exams	50%
Final Exam	40%
	100%

Materials:
In addition to the regular supplies, you will need:
- a sturdy 2" (or bigger) binder
- 5 different colored pencils or pens
- lined paper, graph paper, dividers
- pencil/pen/calculator

Academic Behaviour Policy

Assignments
Assignments are designed to help develop an understanding of a topic and are an opportunity for students to demonstrate their knowledge and understanding. Assignments are carefully planned to help reinforce concepts that are taught in class, which means that they are most effective in enhancing learning when they are completed in a timely manner. It is important that assignments are handed in on their due date. This allows the teacher to mark the assignment and provide feedback to the students.

The following procedure will be in place for **late assignments:**

1) Students may hand in late assignments without penalty up until the day that the corrected assignment is handed back to students.

2) A student that has not submitted an assignment by the time it is passed back to the other students will still have an opportunity to complete it for marks. However, the assignment must be completed in front of the teacher. The opportunity to complete these late assignments will be at lunch on Tuesday and Wednesday. Students should be prepared to spend their lunch-hour in the classroom working.

3) Communication regarding late assignments will be done through PowerSchool, so it is important to regularly check your marks.

Exams
Exam dates are set for the end of each unit. Students who miss an exam for **any reason** will be required to attend a mandatory tutorial session (choice of 2 dates) before writing a make-up exam. The date of the make-up exam will be set ahead of time. Students who miss the mandatory tutorial session of the make-up exam for **any reason** will receive a mark of zero for that exam. At the end of the semester the student will have the opportunity to write a replacement exam, which will replace the zero for that missed exam.

Lab Policy
All students are responsible for acquiring and wearing personal protective equipment (PPE) in the science laboratory. PPE includes safety glasses, an apron, and rubber gloves. If you did not keep your PPE from Science 10, you will need to purchase a new set for $5.00. PPE should be kept in its labelled ziplock baggie in the classroom when not in use. All equipment is required for all Biology 30 labs.

Long hair must be tied back. Closed toed shoes must be worn; sandals are **not permitted**. Those students who do not wear their safety equipment will not participate in the lab and will not receive a grade until the lab is completed.

The course is divided into four areas of study:

1. Energy Transfer in the Biosphere (Chp1) Cycles of Matter (Chp 2)	• Flow of energy through the biosphere • Cycling of matter through the biosphere • Maintanence of equilibriium in the biosphere
2. Ecosystems and Their Diversity (Chp 3) Mechanisms of Population Change (Chp 4)	• Abiotic and biotic characteristics of ecosystems • Mechanisms of population change over time
3. Photosynthesis and Cellular Respiration (Chp 5)	• Relate photosynthesis to storage of energy on organic compounds • Explain the role of cellular respiration in releasing potential energy from organic compounds
4-6.Human Systems (Chp 6-10)	• Ciirculation, blood, immunity, digestion, respiratory system, excretion, muscles

Homework –
Success with the Biology 20 course will require daily review of the material covered in class. Homework assignments and text readings will accompany this review. Extra help is available at lunch time and after school.