

Springbank Community High School
Biology 20 Course Outline

Teacher: Mr. Matthews

Text: Inquiry into Biology (McGraw-Hill Ryerson); Replacement Cost: \$100.00

Welcome to Biology 20! The major science themes developed in this course are diversity, energy, equilibrium, matter and systems. These major concepts allow connections to be drawn among the four units of this course and the following course in Biology 30, a Diploma Examination course at the grade 12 level. It is a challenging, but richly rewarding course for students interested in the Biological sciences.

There will be four major units of study involving:

Unit 1: Energy and Matter Exchange in the Biosphere

- **Focuses on the dynamic equilibrium that exists for matter and energy in the biosphere and the systems that regulate that equilibrium.**

Unit 2: Ecosystems and Population Change

- **Focuses on the interaction of organisms in ecosystems, how matter and energy are exchanged, and how organisms have evolved characteristics that allows them to fill available ecological niches.**

Unit 3: Photosynthesis and Cellular Respiration

- **This unit looks at how solar energy is converted into chemical energy by the process of photosynthesis and how the energy in carbohydrates is released for use by organisms in the process of cellular respiration.**

Unit 4: Matter and Energy Exchange in Humans

- **Focuses on how humans use the physiological systems of digestion, circulation, respiration, muscles and excretion to help maintain metabolic equilibrium.**

Final Evaluation:

Assignments:	20%
Quizzes:	10%
Unit Exams:	40%
Final Exam:	30%

Online Student Textbook: https://paris.mcgraw-hill.com/sites/0070960526/information_center_view0/online_student_text.html

**Username: biostudent
Password: text07**

Expectations:

Students are expected to be on time for class and have all the appropriate materials.
Students are expected to treat themselves, others and materials with respect.
Students are expected to make good use of class time to complete assigned tasks.
No food or drinks (water excluded) are allowed in class.
IPODS and Cell Phones are to be turned off in class.

Homework and Assignments:

Just do it! Expect to be spending one half hour per school night working on biology homework, completing assignments, reading your text and going over material from the day's class.
Assignments will be posted on the calendar in the moodle course. There is no such thing as a school night with no Bio homework! All assignments are to be handed in at the **beginning of class** on the day they are due. Do not wait until the night before an assignment is due to test your printer!

Lates and Absences:

Please be on time for class. If you are late quietly, wait at the door until you are let into class. Quizzes will often be given at the beginning of class so if you are late you will have less time to finish. Excessive tardiness will be dealt with by administration if we are unable to resolve the issue. **If you are absent from class it is your responsibility to find out what you missed.** A missed class is not an excuse for not handing in assignments or being prepared for quizzes and tests. Frequent absences from class will make it difficult to be successful in this class. Refer to the calendar in my moodle course for assignments/quizzes or tests.

Exams and Quizzes:

If you are going to be away for an exam or quiz, you must notify the teacher prior to your absence, by way of a phone call, message, or telling the teacher you will be away. The phone call and/or message must reach the teacher prior to the class writing the exam or quiz. An unexcused absence on the day of an exam or quiz will result in a mark of **zero**. If you have been excused you are expected to write the exam the first day you are back in class and it is your responsibility to approach me about it. If the test/quiz is not written upon your return or at an agreed upon time an incomplete will be given.

Lab Safety:

Lab safety is of the utmost importance! Unsafe conduct will not be tolerated and may result in removal from the lab and a mark of zero for the lab.

Required Materials:

Laptop, Pen, Pencil, Eraser, Ruler, Calculator, Paper, Binder, Text, Coiled notebook

Extra Help:

Extra help is available to those who show initiative and who cooperate and work well in class. Please let me know ahead of time so we can schedule a tutorial. Generally, I will be available after school Monday through Thursday.

If you have any questions, comments or concerns please come and see me in class or email me at imatthews@rockyview.ab.ca . Your ideas, input and participation in class are valued and appreciated.