

Biology 12

Welcome to Biology 12! Biology 12 deals with the components that make up the human body. The course begins at the cellular level looking at the components of the cell and the processes and applications that certain cells carry out. The course then examines the systems of the body in detail. Through this study it is possible to gain a greater applications of our creator's awesome insight, for each piece of the body has been perfectly created for it's purpose. Psalms 139:14 says "I praise you because I am fearfully and wonderfully made; your works are wonderful, I know that full well."

BIOLOGY 12 TOPICS

1. INTRODUCTION
Unit S: Scientific Method – this is not covered in class, but you are expected to know it.
Homeostasis
2. CELL BIOLOGY: STRUCTURES, PROCESSES & APPLICATIONS
Units B-D: Cellular molecules – structure and function of water, carbohydrates, lipids, proteins and nucleic acids.
Units A & G: Cell structures and transportation of materials – structure and function of organelles within a cell. Methods of molecular movement across the cell membrane.
Units E & H: Protein synthesis and metabolism – process of protein production within a cell. How enzymes are utilized by cells to regulate cellular activity.

3. HUMAN BIOLOGY
Unit I: Digestion – structure and function of the digestive system. Describing how each organ contributes to, or regulates, the digestive process
Unit J: Circulation – structure and function of the circulatory and lymphatic systems. The heart, blood vessels and blood.
Unit L: Respiration – structure and function of the respiratory system.
Units M & N: Nervous system – structure and function of the nervous system. Detailed look at nerve impulses, synaptic gaps, reflex arcs and the brain.
Unit O: Excretory System – structure and function of the nervous system. Detailed look at the components of a nephron and how each contributes to homeostasis
Unit P: Reproduction – structure and function of the reproductive system.

Note: Topics may not be taught in the order shown

Evaluation

•Your grade will be made up from the following categories and mark breakdown:

Exams	65%	Semester 1	40%
Quizzes/Assignments	25%	Semester 2	40%
Midterm(1 per sem)	10%	Final Exam	20%
Total	100%	Total	100%

Important Note.

1. Biology 12 is a very intensive course that covers a lot of material, it is easy to fall behind so it is essential that students do home study
2. **Be seated and ready to work at the sound of the bell.** If you are late, enter the classroom **quickly and quietly** and take your seat. See the teacher after class to explain yourself. Also note that you will be marked late if you come to class, place your books on your desk, and leave the class on an errand.
3. If you are absent from class(es), it is **your** responsibility to obtain any missed notes and assignments **on your own time**
4. Students missing a quiz, lab or test **will receive a grade of zero** unless medically or officially excused
5. Excused students must be prepared to make up missed assignments, quizzes or tests (daryl.klassen@kcschool.ca)
6. Extra help occurs outside of regular class time (lunch hours and after school. It is assumed that students experiencing difficulties will seek extra help as soon as the difficulties arise
7. Understand concepts before trying to memorize. Break vocabulary words down to help understand them.
8. Review daily, don't wait for a test to be announced.
9. Use the Prescribed Learning Outcomes (PLO's) as your study guideline
10. If you're a visual learner....draw pictures!
11. Be involved in class – ask questions

Enjoy!