

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

## **BIOLOGY 12 COURSE OUTLINE**

### **Introduction:**

The curriculum of Biology 12 covers a wide range of topics related to how the human body functions at the cellular and systems level. This is an extremely fast paced, academic course. During the next 5 months, we will be covering a **large** amount of information very quickly.

In order to get through all the required material, two or more concepts may be covered in a single class. You can expect to do approximately **45 to 60 minutes** of homework for each class. This would include reviewing class notes, reading, taking notes and answering questions from the text, worksheets, and practice exam questions.

Weekly quizzes will be given to ensure that you are keeping up with the work. Major tests will be given at the end of each unit. Together, these will make up a significant portion of your mark (see below).

In order to do well in this course, you have to **understand** the different concepts covered and the processes that occur in our bodies. One way to make sure you understand and remember the information is by asking yourself "why" or "how" things happen.

### **Materials:**

- 3-ring binder containing only *Biology 12* course material
- Pencils, pens, eraser, ruler, highlighter
- Pencil crayons/felt pens, scissors, glue (will be needed occasionally)
- Textbook
- Agenda (**mandatory for hall pass**)

### **Evaluation:**

<b>Term Mark</b>		<b>Term 1</b>	<b>40%</b>
▪ Tests	50%	Term 2	40%
▪ Quizzes	20%	Final Exam	20%
▪ Labs/Assignments	30%		

### **Learning Outcomes:**

You will be given a comprehensive package of the prescribed learning outcomes for this course. It is **YOUR** responsibility to refer to these on a regular basis and ask questions about any PLO's that you don't understand after they have been discussed in class. It is important to remember that any information covered by the PLO's is "fair game" for my tests and the provincial exam.

In addition to these PLO's, we will also be discussing other material related to these PLO's in order to give you a better understanding of the material and hopefully spark an interest in this area of science.

**Helpful Suggestion:** Change the PLO's for each unit into questions and answer them. This will provide great study packages for the unit tests, midterm, and provincial exams.

## COURSE CONTENT

<u>TOPIC</u>	<u>SECTION</u>
1. Cell Biology (18% of provincial exam)	A. Cell Structure B. Cell Compounds C. Biological Molecules D. DNA
2. Cell Processes & Applications (18%)	A. Protein Synthesis B. Cancer C. Cell Membrane Transport D. Enzymes
3. Human Biology (64%)	A. Digestive System B. Circulatory System C. Respiratory System D. Nervous System E. Urinary System F. Reproductive System

### PROPOSED BIOLOGY 12 CLASS SCHEDULE

Topics	# of Classes	Chapters
<b><u>Part 1 - Biochemistry and Cell Biology</u></b>		
▪ Introduction to Biology 12, Safety, Scientific Method, Experimental Design	4	1
▪ Basic Chemistry, Biological Compounds and Molecules	5	2
▪ Cells - Structures and Functions, Cell Membrane, Transport across the membrane	10	3, 4, (7)
▪ DNA, Protein Synthesis, Biotechnology, Enzymes, (Cancer)	10	2, 25, 26
▪ Midterm	1	
▪ <b>Total Classes for Part 1</b>	<b>30</b>	
<b><u>Part 2 - Human Anatomy and Physiology</u></b>		
▪ Human Organization	1	11
▪ Digestive System	7	12
▪ Cardiovascular System, Lymphatic System	9	13, 14, 22
▪ Respiratory System	5	15
▪ Excretory/Urinary System	5	16
▪ Nervous System	10	17
▪ Reproductive System	6	21, 22
▪ <b>Total Classes for Part 2</b>	<b>43</b>	
<b><u>Other</u></b>		
▪ Fetal Pig Dissection, Review for Provincial	3	
▪ Mock Provincials	4	

This leaves us with only 3 - 4 classes for extra review, assemblies or other school related activities.