**Biology 30 –** Course Outline

Teacher: Mrs. MacKenzie

 Mr. Kirtzinger

**Required Text:** Ritter, Bob et.al. *Nelson Biology.* 2007 Nelson Canada.

**Topics to be covered:**

**Unit 1: Nervous and Endocrine Systems**

Reference chapters 13 – 15

Major Concepts:

* explain how the nervous system controls physiological processes
* explain how the endocrine system contributes to homeostasis.

**Unit 2: Reproduction and Development**

Reference chapters 16

Major Concepts:

* explain how survival of the human species is ensured through reproduction
* explain how human reproduction is regulated by chemical control systems
* explain how cell differentiation and development in the human organism are regulated by a combination of genetic, endocrine and environmental factors.

**Unit 3: Cell Division, Genetics and Molecular Biology**

Reference chapters 17 – 20

Major Concepts:

* describe the processes of mitosis and meiosis
* explain the basic rules and processes associated with the transmission of genetic characteristics
* explain classical genetics at the molecular level

**Unit 4: Population and Community Dynamics**

Reference chapters 21 – 23

Major Concepts:

* describe a community as a composite of populations in which individuals contribute to a gene pool that can change over time
* explain the interaction of individuals in a population with one another and with members of other populations
* explain, in quantitative terms, the change in populations over time.

**Evaluation:**

Quizzes 20%

Labs/Assignments 20%

Unit Tests 60%

Final Mark:

Term 1 + Term 2 50% (Your mark will be cumulative throughout the semester.)

Final Exam (Diploma)

**Required Supplies:**

1. A three ring binder and loose leaf paper.
2. Pencil, pen, pencil crayons and eraser.
3. Textbook.
4. Chromebook
5. Calculator

**Attendance:**

Attendance is **mandatory**, and successful completion of this course requires regular attendance. Attendance will be dealt with as stated in the student handbook.

If you miss a class for any reason, **YOU** are responsible for **ALL** class notes, assignments and content that you have missed.

**IT IS YOUR RESPONSIBILITY TO COME SEE ME!**

**Assignments:**

Assignments are given as tools to help you understand the concept being taught and to help the teacher assess your understanding of the concept being taught. Upon completion of the assignment, you should be familiar with new vocabulary and diagrams. As well, you should feel comfortable and confident in discussing, explaining and synthesizing new ideas concerning the topic.

**Help Sessions:**

To do well in Biology 30, regular attendance at help sessions may be necessary. Extra help is available and should be used. Lunch drop in dates will be discussed in class. As well, you may come see me and we can set up a mutual time that works for both of us.

**Student Expectations:**

1. To attend class regularly. Students are expected to be **on time** and **prepared**. Three unexcused lates will be considered as one unexcused class.
2. To complete assignments to the best of your ability.
3. To learn to the best of your ability.
4. To seek additional help from your teacher regarding any work you are having trouble with.
5. To **RESPECT** the rights of others. As young adults, you know what type of behaviour is expected in class. Disrespectful or rude behaviour will not be tolerated.
6. Hats, cell phones, mp3 players, phones or anything of the like should not be in your learning space (unless otherwise specified by the teacher) . **See student handbook.**



**Keys to Success:**

* Familiarize yourself well with the objectives stated at the start of each class and apply them to your regular studies.
* Do not get behind in your studying as this will lower your quiz marks – START REVIEWING NOW and CONTINUE THROUGHOUT THE SEMESTER.
* Attend regularly – pick up homework and lecture notes when absent.
* **Attend help sessions.**
* There is no such statement as “I have NO Biology homework – There is always reviewing to do.
* Hand in assignments complete and on time.
* Get help **before** exams.
* Active participation on your part makes the course a lot more fun.

**Contact Information:**

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 ***HAVE A GOOD SEMESTER!***