

# Winston Churchill Collegiate Institute

## Course Syllabus



### General Information

|                 |                       |
|-----------------|-----------------------|
| Course Title    | BIOLOGY 11 UNIVERSITY |
| Course Code     | SBI3U                 |
| Department      | SCIENCE               |
| Office Location | A112                  |
| Office Hours    | 8 :45 am – 3 :30 pm   |

### Course Description

This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation.

**Prerequisites:** Science, Grade 10 Academic

### Curriculum Strands

#### *Diversity of Living Things*

- Analyze the effects of various human activities on the diversity of living things;
- Investigate, through laboratory and/or field activities or through simulations, the principles of scientific classification, using appropriate sampling and classification techniques;
- Demonstrate an understanding of the diversity of living organisms in terms of the principles of taxonomy and phylogeny.

#### *Genetic Processes*

- Evaluate the importance of some recent contributions to our knowledge of genetic processes, and analyze social and ethical implications of genetic and genomic research;
- Investigate genetic processes, including those that occur during meiosis, and analyze data to solve basic genetics problems involving monohybrid and dihybrid crosses;
- Demonstrate an understanding of concepts, processes, and technologies related to the transmission of hereditary characteristics.

#### *Evolution*

- Analyze the economic and environmental advantages and disadvantages of an artificial selection technology, and evaluate the impact of environmental changes on natural selection and endangered species;
- Investigate evolutionary processes, and analyze scientific evidence that supports the theory of evolution;
- Demonstrate an understanding of the theory of evolution, the evidence that supports it, and some of the mechanisms by which it occurs.

#### *Animals: Structure and Function*

- Analyze the relationships between changing societal needs, technological advances, and our understanding of internal systems of humans;
- Investigate, through laboratory inquiry or computer simulation, the functional responses of the respiratory and circulatory systems of animals, and the relationships between their respiratory, circulatory, and digestive systems;

- Demonstrate an understanding of animal anatomy and physiology, and describe disorders of the respiratory, circulatory, and digestive systems.

***Plants: Anatomy, Growth, and Function***

- Evaluate the importance of sustainable use of plants to Canadian society and other cultures;
- Investigate the structures and functions of plant tissues, and factors affecting plant growth;
- Demonstrate an understanding of the diversity of vascular plants, including their structures, internal transport systems, and their role in maintaining biodiversity.

**Course Materials & Replacement Costs**

**Textbook**

Nelson Biology 11, Fraser et al (replacement cost \$90.00)

It is the responsibility of the student to return the same textbook they signed out at the beginning of the semester. If a textbook is not returned, the replacement cost must be paid before a new textbook is issued. Students failing to return their textbook or pay the replacement fee will not receive their report cards and timetables for the following school year, until their textbook is returned or the replacement cost is paid.

**Expectations**

- Students are expected to take responsibility for their own learning, to attend all classes, to use their class time effectively and to complete homework on a daily basis.
- Students are expected to come to class with the following materials: Textbook, Binder, Paper, Graph Paper, Pen(s), Pencil(s), Calculator & Ruler.
- No food or drink is allowed in the classroom.

**Evaluation**

Seventy percent of a student’s final grade will be based on assessments and evaluations conducted throughout the term. Thirty percent of the final grade will be based on a final evaluation administered towards the end of the course.

***Term Work (70%)***

|                                                                           |                        |
|---------------------------------------------------------------------------|------------------------|
| ▪ Knowledge & Understanding<br>(Includes tests, quizzes & homework)       | 35% / 24.5% final mark |
| ▪ Thinking & Investigation<br>(Includes lab reports & tests)              | 20% / 14% final mark   |
| ▪ Communication<br>(Includes classroom/homework assignments, ISU & Tests) | 20% / 14% final mark   |
| ▪ Application<br>(ISU, assignments & tests)                               | 25% / 17.5% final mark |

***Final Evaluation (30%)***

Details of the final summative evaluation will be available towards the end of the semester.

If a student misses the Final Exam or any component of the final summative evaluation, they must bring in a medical certificate explaining their absence in order to avoid a mark of zero.

All information above is tentative and may change as the Science department deems

## Learning Skills & Work Habits

Students are evaluated not only on the content they have learned, but also by the six (6) learning skills and work habits that evaluate key student habits and are considered essential skills. These learning skills and work habits evaluated on your report card are:

|                  |                 |
|------------------|-----------------|
| Responsibility   | Collaboration   |
| Organization     | Initiative      |
| Independent Work | Self-Regulation |

These six (6) attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) and Needs Improvement (N).

## Missed Quiz, Test & Assignment Policy

If a student is absent for a quiz, the student will be permitted to write the quiz if:

-  A signed note is provided from the parent/guardian of the student excusing he/she for the missed class due to illness or an appointment.
-  A student is excused due to an excursion or athletic activity

A student will only be allowed to write the quiz if it has not yet been marked and returned to the other students. If the student is excused from the quiz for the above two (2) reasons and the quiz has been returned the student will be granted a "no mark."

It is the student's responsibility to make arrangements ahead of time for any tests/quizzes that are missed. Failure to do so may result in a mark of zero for the student.

### Late Assignments/Work Policy

Teachers will assign due dates for various assignments, work and presentations. Students are expected to submit their work on or before the assigned due date. Late assignments and work will be accepted if:

-  A signed note is provided from the parent/guardian of the student excusing him/her for the missed class due to illness or appointment. The reason for the absence, the date of the absence and contact information for the parent/guardian must be included on the note.

If the student is absent in class due to an excursion/sporting activity, it is still the responsibility of the student to deliver the assignment/work prior to the due date/time.

If the assignment is late, 2% will be deducted from the mark for every day the work is late. Once the assignment has been marked and returned students will no longer be allowed to submit an assignment and will receive a mark of zero (0).

**Note:** The policies applicable to late assignments are in line with the guidelines as outlined in the Ministry of Education Policy document *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools* (page 43). Should a student wish to appeal the decision of the teacher as a result of extenuating circumstances he/she can bring it to the attention of the teacher, department Assistant Curriculum Leader and Vice Principal for review.

## Missed Test and Final Exam Policy

If a student is absent for a unit test or final exam a doctor's note must be provided for the student's absence. The doctor's note should identify the date(s) of the absence(s) and medical office contact information. The note must be received by the teacher and office the day upon his/her return.

Upon receipt of the note the teacher will enter a 'no mark' or provide an alternative test. If a doctor's note is not provided, the student will be given a mark of zero (0).

Should a student miss a test or final exam for vacation purposes a mark of zero (0) will be assigned.

## Academic Honesty (Plagiarism) Policy

Students are expected to demonstrate academic honesty on all assignments, presentations, tests and examinations. Cases of academic dishonesty will be dealt with on a case-by-case basis, and will involve an investigation, communication with the student and the parent/guardian, and a mark of zero (0) for the plagiarized work.

Students will be taught that plagiarism or cheating is:

-  Copying, reproducing or paraphrasing significant portions of someone else's published or unpublished material, and
-  Representing these as one's own thinking by not acknowledging the appropriate source, or by failing to use appropriate quotation marks

Students will also be taught how to accurately and appropriately document the information and ideas of others to avoid plagiarizing.

This applies to all assignments including lab reports, diagrams, essays, and computer projects. Different forms of writing require different types of acknowledgement and/or documentation. Whether the student has an opportunity to demonstrate his/her learning in another assignment will be at the discretion of the teacher and/or Vice Principal/Principal