



Westside Secondary School

Orangeville, Ontario, Canada



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www.ugdsb.on.ca/westside

Course: SBI3C	Teacher	Phone Extension	Email
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Course Description: This course focuses on the processes that occur in biological systems. Students will learn concepts and theories in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment.

Prerequisite: Grade 10 Applied Science (SNC2P)

Big Ideas: The curriculum in each unit targets “Big Ideas” that are laid out by Ontario’s Ministry of Education and adapted by Westside teachers. The following chart outlines the Big Ideas being explored and evaluated in each unit of this course. For more information on the overall course expectations, visit the following website:

http://www.edu.gov.on.ca/eng/curriculum/secondary/science910_2008.pdf

Unit of Study	Big Ideas
Cellular Biology	<ul style="list-style-type: none">• Structure facilitates function.• Life processes are determined by the structures and functions of biochemical compounds, cell organelles, and body systems.• Technological devices that support cellular functions and processes can be used to improve human health.• Substances that are present in our everyday lives can affect cellular functions and processes in positive and negative ways.
Microbiology	<ul style="list-style-type: none">• Groups of microorganisms have common characteristics, and these characteristics enable them to interact with other organisms in the environment.• Microorganisms can have both positive and negative effects on the environment.• The technological use of microorganisms raises many ethical issues.
Genetics	<ul style="list-style-type: none">• Genetic research and biotechnology have social, environmental, and ethical implications.• Variability and diversity of living organisms result from the distribution of genetic materials during the process of meiosis.
Anatomy of Mammals	<ul style="list-style-type: none">• Groups of organs with specific structures and functions work together as systems, which interact with other systems in the body.• Technologies that are used to maintain human health have social and economic benefits and costs.• Environmental factors, including natural factors and those resulting from human activity, can have a wide range of effects on human health.
Plants in Their Natural Environment	<ul style="list-style-type: none">• Plants have specialized structures with distinct functions that enable them to respond and adapt to their environment.• Plants are critical to the survival of ecosystems.• Humans affect the sustainability of ecosystems when they alter the balance of plants within those ecosystems.

Instructional Strategies: Westside teachers use a variety of instructional strategies to help students develop and improve skills in the following areas: character, citizenship, communication, critical thinking and problem solving, collaboration and teamwork, and creativity and imagination.

Achievement Categories: Student learning is assessed and evaluated in a balanced manner with respect to the following four interrelated categories of knowledge and skills:

Knowledge and Understanding
Thinking and Inquiry
Communication
Application

Assessment and Evaluation: Assessments for and as learning are used to improve student success by providing opportunities to demonstrate understanding of course expectations prior to the evaluation of learning. Evaluations of learning are where students demonstrate their understanding of Big Ideas and key expectations. Failure to complete an evaluation of learning may result in the credit not being granted because certain expectations of the course have not been met.

<p>Term Work Evaluations: 70% Cellular Biology Unit: Test and Inquiry Activity Microbiology Unit: Test and Inquiry Activity Genetics Unit: Test and Inquiry Activity Anatomy of Mammals Unit: Test and Lab Activity Plants in the Natural Environment Unit: Test and Lab Activity</p>	<p>Final Evaluation(s): 30% Culminating Activity (10%) Exam (20%)</p>
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Late Work

- Students are expected to complete all assigned work and submit it by the teacher's established due date. Every attempt will be made to encourage students to complete all assigned work on time so their grade represents their actual achievement. For late and missed summative assessments, please see the *Westside Students' Contract for Missing Evidence of Learning*.

Safety Agreement

- All students will receive a safety agreement and will sign and return the UGDSB Student Safety Record.

Enhancement Fee

- Voluntary enrichment fees may apply to this course. If a student does not pay, he/she will not be able to complete the activity but will still be able to meet the course expectations.
- \$10.00 for a fetal pig dissection (\$30/pig working in a group of 3)

Electronic Devices

- The science department at Westside S.S. has a policy that no electronic devices (e.g. cell phones, tablets, iPods, mp3 players, etc.) are allowed during evaluations. For this reason, students are reminded to bring a scientific calculator when needed.

Classroom Rules

- Students are expected to follow the rules of conduct, as referenced on the school's web site: <http://www.ugdsb.on.ca/westside/>.
- In addition to these general rules of Westside Secondary School, the rules for the science classroom are as follows:
 - no food or drink of any kind is allowed in a science classroom
 - respect the people, equipment, and furnishings of the science classroom
 - immediately stop any activity and give your attention to the teacher when asked to do so
 - summative evaluations of learning will not leave the classroom, but are available for students to discuss with the teacher