



ALTERNATIVE EDUCATION

Contact Information	Teacher Name: Site Phone Number: Teacher Email:
Prerequisite	A mark of at least 50% in Biology 20.
Required Materials & Resources	<ul style="list-style-type: none"> • ADLC Biology 30 Program – Twelve modules • Textbook: Inquiry into Biology (McGraw-Hill Ryerson) • Tutorial Booklet

Course Overview

Biology 30 consists of four units of study, as outlined below. These units emphasize the nature of science, science and technology and science in societal and environmental contexts.

Unit	Topics of Study	Weighting
A. Nervous and Endocrine Systems	<ul style="list-style-type: none"> • Neuron • Nerve impulse transmission • Central and peripheral nervous systems • Reflex arcs • Sensory receptors • Endocrine system and hormones • Homeostasis and feedback systems • Endocrine and nervous system interactions 	25%
B. Reproduction and Development	<ul style="list-style-type: none"> • Male and female reproductive systems • Reproductive hormones • Reproductive technologies • Embryonic and fetal development • Parturition • Lactation 	20%
C. Cell Division, Genetics and Molecular Biology	<ul style="list-style-type: none"> • Cell cycle • Mitosis and meiosis • Chromosome number • Karyotype • Alternation of generations • Mendel's laws of heredity • Probability • Monohybrid, dihybrid and sex-linked inheritance • Incomplete dominance and codominance • Polygenic and multiple allelic traits • Gene linkage • Model of DNA • Replication • Transcription • Translation • Mutation • Genetic engineering 	40%
D. Population and Community Dynamics	<ul style="list-style-type: none"> • Hardy-Weinberg principle 	15%

	<ul style="list-style-type: none"> • Determiners of population size: natality, mortality, immigration, emigration • Population growth rate and population growth curves • R- and K-selected reproductive strategies • Gene pool • Natural selection • Symbiotic relationships and other interactions • Succession • Determiners of population size: natality, mortality, immigration, emigration • Population growth rate and population growth curves • R- and K-selected reproductive strategies 	
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Assessment	<p>The student's grade will be calculated based on the following:</p> <table border="1" data-bbox="321 632 1224 705"> <tr> <td data-bbox="321 632 943 667">Coursework</td> <td data-bbox="943 632 1224 667">20%</td> </tr> <tr> <td data-bbox="321 667 943 705">Unit Evaluations – quizzes, exams, labs, projects</td> <td data-bbox="943 667 1224 705">80%</td> </tr> </table> <p>*Final Grade: 70% School awarded mark + 30% provincial diploma exam mark.</p> <p>Parents and students are encouraged to keep up to date on PowerSchool and contact their teacher if there are any issues.</p>	Coursework	20%	Unit Evaluations – quizzes, exams, labs, projects	80%
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Important Note Regarding Assessment	<p>A wide range of assessment information is used in the development of a student's final grade. In Edmonton Catholic Schools, individualized assessments provide specific information regarding student progress and overall performance in class. Assessment may vary from student to student, differentiating for various student needs. It should also be noted that not all assignments are used to determine the final grade, and that scale factors may have been used to determine the weight of individual assignments.</p>				