

**ALTERNATIVE EDUCATION**

Contact Information	Teacher Name: Site Phone Number: Teacher Email:
Prerequisite	A mark of at least 50% in Science 10.
Required Materials & Resources	• 4 module books and seven assignment books • Textbook: Inquiry into Biology, McGraw-Hill Ryerson, 2007 • Scientific or graphing calculator

Course Overview

Biology 20 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. Energy and Matter Exchange in the Biosphere	• biosphere • equilibrium • trophic levels • food chains, food webs and ecological pyramids (energy, biomass and numbers) • carbon, nitrogen, oxygen and phosphorus cycles • water properties	20%
B. Ecosystems and Population Change	• ecosystem • niche • biotic/abiotic characteristics • limiting factors • binomial nomenclature • adaptation and variation • population • natural selection • species • evidence for evolution	25%
C. Photosynthesis and Cellular Respiration	• absorption of light by pigments • light-dependent and independent reactions • glycolysis • Krebs cycle • electron transport systems • aerobic and anaerobic respiration	15%
D. Human Systems	• structure and function of major systems: respiratory, digestive, excretory, circulatory and motor • chemical nature of carbohydrates, proteins, lipids • chemical and physical digestion • digestive enzymes • gas exchange • composition of blood • immune response • renal function • muscle contraction	40%

Assessment	The student's grade will be calculated based on the following: <table border="1" data-bbox="318 163 1224 243"> <tr> <td>Coursework</td><td>20%</td></tr> <tr> <td>Unit Evaluations – quizzes, exams, labs, projects</td><td>80%</td></tr> </table> *Final Grade: 80% School awarded mark + 20% District Common Summative Assessment. Parents and students are encouraged to keep up to date on PowerSchool and contact their teacher if there are any issues.	Coursework	20%	Unit Evaluations – quizzes, exams, labs, projects	80%
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Important Note Regarding Assessment	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.				