

Bio 30 Course Outline

Senior High Science Program Philosophy

The senior high science programs are designed to help all students attain the scientific awareness needed to function as effective members of society. The expected student knowledge, skills and attitudes are approached from a common philosophical position in each science course.

In the senior high science programs, students focus on learning the big interconnecting ideas and principles, which provide continuity with the junior high program and build on students' previous learning. The senior high science programs place an increased emphasis on developing methods of inquiry that characterize the study of science.

Students will be expected to show an appreciation for the roles of science and technology in understanding nature. The learning context is an integral part of the senior high science programs. Learning opportunities will be made meaningful by providing concrete experiences that students can relate to their world. The senior high science programs place students at the centre. Students are active learners and will assume increased responsibility for their learning. They will appreciate the value of teamwork and make a positive contribution when working with others to solve problems and complete tasks.

Course Timeline

Unit	Topics	Course Percent %
Nervous System	1. Nervous CNS 2. Senses 3. Endocrine	25
Reproduction	1. Reproductive Structures 2. Hormones 3. Conception and Birth	20
Genetics	1. Cell Cycle and Mitosis/Meiosis 2. Medelian Genetics 3. Molecular Genetics	40
Populations	1. Hardy-W Equilibrium 2. Populations and Communities	15

Course Evaluation

Category	Description	Course Percent
Formative	Quizzes/Concept Checks	N/A
Tests	Topic Tests	20
Coursework	Labs/Lab Quizzes Collaborative Problem Solving Projects	20
Cumulative Exams	Unit Exams (4)	30
Diploma		30

Text: Nelson Biology – Ritter, et al (2007); \$119.90

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Note to Students: Use Teams chat whenever possible to get a timely response. Communications received Friday afterschool through Sunday will be returned on Monday.

Student-Friendly Language (1-6 Scale)

Expert	6	Near perfect demonstration of understanding/skill; high confidence; mastery of learning standard.	"You could teach this!"
	5	Strong demonstration of understanding/skill; high confidence; slight error involved.	"Almost perfect, just one little error!"
Apprentice	4	Good demonstration of understanding/skill; confidence evident; a few errors	"Good understanding, with just a few errors."
	3	Satisfactory demonstration of understanding/basic skills; key concepts are lacking; errors common	"You are on the right track, but a key concept is lacking."
Novice	2	Minimal understanding of key concepts and rudimentary demonstration of basic skills; many errors	"You have achieved the bare minimum to pass learning outcome."
	1	Inadequate understanding key concepts and little to no demonstration of basic skills; errors throughout	"Has not met minimal proficiency on learning outcome or skill"