

LIFE SCIENCES 11

INSTRUCTOR:	Stanley Lau	
EMAIL:	stlau@sd43.bc.ca	
PHONE:	604-945-4211	
SCHEDULE:	Monday	4:00pm-9:00pm
	Tuesday	10:00am-2:00pm
	Wednesday	4:00pm-9:00pm
	Thursday	10:00am-2:00pm
LEARNING CENTRE HOURS:	Monday-Friday	10:00am-2:00pm
	Monday-Thursday	4:00pm-9:00pm

The Learning Centre is closed all statutory and school holidays.

INTRODUCTION

Life Sciences 11 (formerly called Biology 11) is the study of living organisms and life processes. The content of Life Sciences 11 is the facts, concepts, principles, and theories resulting from careful observation of the living world. Life Sciences 11 provides an overview of living things. It surveys a sample of organisms and introduces you to a variety of biological concepts and scientific processes.

PRESCRIBED LEARNING OUTCOMES

Students are expected to know the following:

- levels of organization
- cell structure and function
- sexual and asexual reproduction
- energy transformations in cells
- viruses
- First Peoples understandings of interrelationships between organisms
- microevolution:
 - adaptation to changing environments
 - changes in DNA
 - natural selection
- macroevolution:
 - speciation
 - processes of macroevolution
 - evidence for macroevolution
- artificial selection and genetic modifications
- single-celled and multi-celled organisms
- trends in complexity among various life forms
- evidence for phylogenetic relationships
- taxonomic principles for classifying organisms
- binomial nomenclature
- First Peoples knowledge on classification
- similarities and differences between domains and kingdoms

LEARNING RESOURCES

text: Biology (Miller & Levine)

The textbook contains far more information than is required for credit in Life Sciences 11. The concepts to be mastered in each unit and the corresponding page references are listed in each unit assignment. These assignments will be very useful to you in focusing your study and determining your readiness for the individual unit tests.

Life Sciences 11 at Coquitlam Learning Opportunity Centre

Life Sciences 11 at Coquitlam Learning Opportunity Centre is a self-paced, self-directed course. You will be expected to work independently and to manage your time productively. If needed, individual help is available from an instructor at the Learning Centre.

An important element for success in Life Sciences 11 will be your study skills. Successful students establish a study schedule and stick to it. One of the best ways to learn new concepts and vocabulary is with flash cards. Write each new word on one side and its meaning on the other. Do the same with concepts and diagrams. There is a glossary at the back of the textbook and vocabulary lists in each chapter review to help you create your flash cards. In addition, you should take detailed notes on all material listed in the individual unit assignments.

EVALUATION

Evaluation in Life Sciences 11 includes unit tests, midterm tests, and a final exam. ONE REWRITE will be available for each unit test. There are NO REWRITES for the midterm tests or the final exam. The tests will be weighted as follows:

<u>TEST</u>	<u>CONTENT</u>	<u>PERCENT</u>
Unit 1	Classification	5
Unit 2	Adaptation and Evolution	5
Unit 3	Viruses, Kingdom Monera	4
Unit 4	Kingdom Plantae: Algae, Mosses, Ferns	4
Unit 5	Kingdom Plantae: Gymnosperms, Angiosperms	4
Midterm #1	Units 1-5	14
Unit 6	Kingdom Animalia: Porifera, Cnidaria	4
Unit 7	Kingdom Animalia: Platyhelminthes, Nematoda, Annelida	4
Unit 8	Kingdom Animalia: Mollusca, Arthropoda, Echinodermata	4
Unit 9	Kingdom Animalia: Fish, Amphibians, Mammals	4
Unit 10	Ecology	4
Midterm #2	Units 6-10	14
Final Exam	Units 1-10	30
		<hr/>
		100