

## LIFE SCIENCES 11 (BIOLOGY 11) COURSE OUTLINE (2nd Semester Class Spring 2019)

The Life Sciences 11 course is designed to allow students the opportunity to further develop their scientific knowledge and critical thinking abilities, through the study of a great variety of organisms. This course is divided into three **BIG IDEAS** :

Characteristics of Living Things	Process of Evolution	Taxonomy
<b>Life</b> is the result of interactions at the molecular and cellular levels.	<b>Evolution</b> occurs at the population level.	<b>Organisms</b> are grouped based on common characteristics.

In addition to these themes, the learning areas for Life Sciences 11 are grouped under the following curriculum groupings:

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| <ul style="list-style-type: none"> <li>• <b>Processes of Science</b></li> <li>• <b>Taxonomy</b></li> <li>• <b>Evolution</b></li> <li>• <b>Ecology</b></li> </ul> | <ul style="list-style-type: none"> <li>• <b>Microbiology (Viruses/Bacteria/Protists)</b></li> <li>• <b>Fungi</b></li> <li>• <b>Plant Biology</b></li> <li>• <b>Animal Biology</b></li> </ul> |
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**WEEKLY SCHEDULE:** Six classes will be held in a normal school week. Students should plan on a **minimum of three hours a week outside of class time** for the completion of assignments, projects and general studying. Homework will be assigned on a **daily** basis. **STUDENTS ARE RESPONSIBLE** for keeping track of when assignments are due.

**TEXTS:**

1. McGraw-Hill Biology (Glencoe Science). Columbus, Ohio: Biggs, et al. 2012
2. Holt, Rinehart, Winston. Modern Biology. Austin: Harcourt, Brace and Jovanovich, 1993

**NOTE:** Students are responsible for the care of their own textbooks. Charges will be issued to any student who has lost or damaged them. Contact the office for replacement costs.

**WEEKLY HANDOUTS:** Other reference materials will be provided regularly. **STUDENTS** are responsible for collecting those handouts or assignments which were provided during their absence(s).

**COURSE ASSESSMENT:** Throughout the course, various assignments will be given to the class to check for understanding of course material. Written assignments, quizzes, chapter questions, labs, projects and oral presentations will make up a substantial portion of the total grade for each student.

**BS:** There will be both formal and completion type labs in this course. Formal labs will be written up in standard scientific format, as outlined in class.

## TESTS AND EXAMS MUST BE WRITTEN ON THE SCHEDULED DATES

Students absent due to Work experience/Extra-curricular/Curricular activities, please take note of the following:

1. You are expected to be in class whenever a test is scheduled. Work experience, extracurricular and outside curricular commitments should not cause you to miss a test. In cases of a legitimate absence, you will write a retest over lunch on your return.
2. If the activity will cause you to miss a scheduled lab, you must notify the teacher in advance.
3. Any submitted written assignment which is not complete or legible will be returned, and you will be asked to complete or rewrite it.

**LAB WRITE-UPS AND WRITTEN ASSIGNMENTS:** Any submitted lab or assignment which is not legible or complete will be returned. You will be asked to complete the assignment or rewrite it.

**TEST PREPARATION:** Please seek help whenever you require concepts clarified. Also, I am willing to help you refine your test taking strategies which will better reflect your understanding of course material. This can be done during class or during my office hours.

**EVALUATION:** Knowledge and understanding of ongoing lecture material will be evaluated by a series of formative unit tests during the course. These tests will be held at the beginning of designated classes. Students will have the opportunity to **rewrite one unit test each term. Students must correct his/her test, and conference with the teacher, before writing the retest. The student will write the retest when the instructor and student are confident that he/she can demonstrate their best performance.**

<b>COURSE WEIGHTING:</b>	<b>TERM 1: .....</b> 35 %	• Chapter/unit tests	65 %
		• Course work	35 %
	<b>TERM 2: .....</b> 35 %	• Chapter/unit tests	65 %
		• Course work	35 %
	<b>FINAL EXAM: .....</b> 30 %	• Written portion	25 %
		• Lab exam	5 %
	<b>TOTAL: .....</b> 100 %		

**STUDENT PROGRESS:** As assignments and tests are completed, marks will be updated and posted in the science room.

## **DTSS Science Department Philosophy**

**The Science Department is committed to creating a learning environment that is safe and conducive to learning. We are also committed to ensuring that students have opportunities to demonstrate their best performance. This will look different depending on the course and teacher, but may include retests, opportunities to correct submitted work, and/or resubmission of course work.**

**We also believe that it is crucial for student success to receive timely and relevant feedback. We will make every effort to mark and return students' work to them quickly so that remarks on their assignment/tests have meaning to them. We ask that students respect this process and their peers by doing everything in their power to hand in assignments on their due dates.**

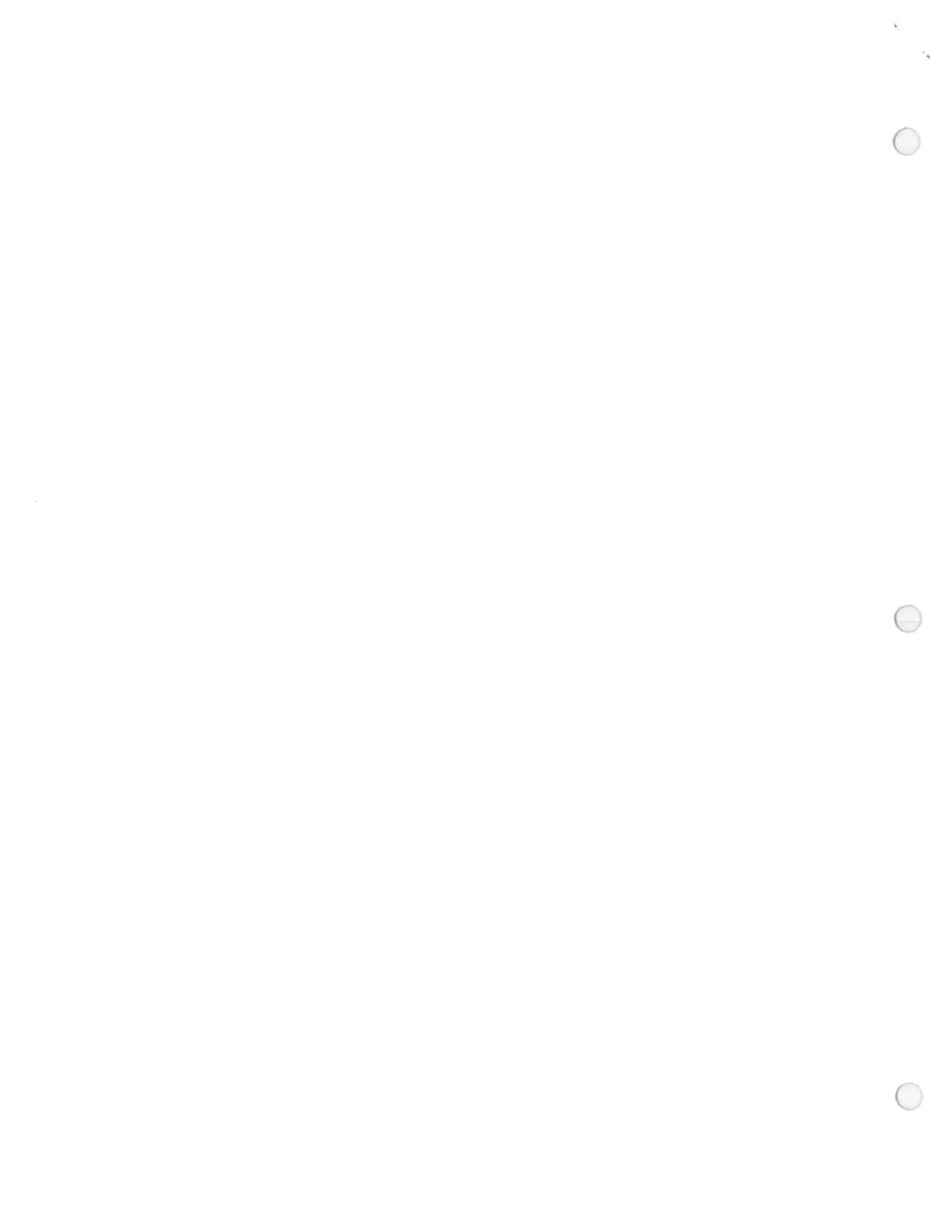
**In addition, students are asked to communicate with their teachers, in advance, if they are unable to meet a specific deadline. These policies are designed to help develop students' responsibility and time management skills, and to foster a positive learning experience in all science classes.**

### **NOTE TO PARENTS/GUARDIANS:**

**Your son or daughter should bring home the Marks Record Sheet whenever a unit has been completed (approximately every two weeks). Please sign and date this sheet and have your child return it to school. This will be one of my primary methods of communicating your child's progress to you. Your child can seek help whenever they require clarification of class material. Students can see me outside of class during my office hours, which will be posted within the first week of classes. Please feel free to e-mail or call me anytime to discuss your child's progress in this course.**

**mail [ron.norquay@sd6.bc.ca](mailto:ron.norquay@sd6.bc.ca)**

**Phone: (250) 342-9213, ext. 4533**



# BIOLOGY 11 STUDENT MARK RECORD

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

CHAPTERS/TOPICS	Retest written (Yes/ No)	PARENT/GUARDIAN SIGNATURE	DATE
1/2/3/5 Life/Methods of Science Ecosystems	____ % ____	_____	_____
6 & 7 Cell Structures and Functions	____ % ____	_____	_____
8/9/12 Photosyn./Cell Resp./Nuc. Acids	____ % ____	_____	_____
14/15 Origins of Life/Evolution	____ % ____	_____	_____
17/18 Classification/Viruses	____ % ____	_____	_____
<b>TERM MARK</b>	____ %	_____	_____

CHAPTERS/TOPICS	Retest written (Yes/ No)	PARENT/GUARDIAN SIGNATURE	DATE
18/19 Bacteria/Protists	____ % ____	_____	_____
19 Algae	____ % ____	_____	_____
20 Fungi	____ % ____	_____	_____
21 Importance of plants/ Plant Evolution/Adaptations	____ % ____	_____	_____
22 Plant Structures and Functions	____ % ____	_____	_____
23 Reproduction in Plants	____ % ____	_____	_____
<b>TERM MARK</b>	____ %	_____	_____

I have read and understand the material covered in this course outline.

DATE \_\_\_\_\_

Student: \_\_\_\_\_

Parent: \_\_\_\_\_

## LIFE SCIENCES 11 (2nd Semester Class) - TENTATIVE COURSE SCHEDULE 2019

Week	Date	Unit / Chapters	Main Topics Covered
<b>UNIT 1 THE STUDY OF LIFE / UNIT 10 ECOLOGY</b>			
22.	Jan. 28 - Feb. 1	1	- Looking at life/ Methods of Science/ Microscopy
<b>UNIT I ECOLOGY</b>			
23.	Feb. 4 - 8	2	- Structure of ecosystems / Energy flow / Biogeochemical cycles
24.	Feb. 11 - 15*	3 & 5	- Biotic relationships/ Rhythmic patterns/ Succession patterns - Biodiversity
<b>UNIT 2 CELLS &amp; UNIT 3 GENETICS</b>			
25.	Feb. 18 - 22	6 & 7	- The Cell Theory / Cell organelles/ Functions of the cell membrane
26.	Feb. 25 - Mar. 1	8/9/12	- Cells use of energy (Photosynthesis and Aerobic Cellular Respiration)
27.	Mar. 4 - 8	8/9/12	- Cell cycle / Nucleic acids / Protein synthesis
<b>UNIT 4 EVOLUTION</b>			
28.	Mar. 11 - 15	14 & 15	- Origin of life / Darwin's Theory of Evolution by Natural Selection
29/30	Mar. 18 - 29	<b>SPRING BREAK</b>	
<b>UNIT 5 CLASSIFICATION AND MICROORGANISMS</b>			
31.	Apr. 1 - 5	14 & 15	- Evidence of evolution / Speciation
32.	Apr. 8 - 12*	17	- Patterns of classification / Classification and identification / - Domains and Kingdoms
33.	Apr. 15 - 19*	18	- Viruses / Bacteria and their environment/ Homeostasis
33.	Apr. 19	<b>TERM 3 ENDS</b>	
34.	Apr. 22 - 26*	19	- Protist types/ Methods of locomotion/ Ecological roles in food chains
35.	Apr. 29 - May 3	19	- Characteristics, diversity, reproduction and ecological roles of algae
36.	May 6 - 10	20	- Characteristics of Kingdom Fungi / Adaptations and ecological roles of fungi
<b>UNIT 6 PLANTS</b>			
37.	May 13 - 17	21	- Importance of plants / Plant ecology/ Plant evolution and adaptations of terrestrial plants
38.	May 20	<b>VICTORIA DAY</b>	
38.	May 20 - 25*	21	- Plant classification / Non vascular / Seedless and seeded vascular plants
39.	May 27 - 31	22	- Plant tissues/ Root systems / Stem structures/ Leaf structures and functions
40.	June 3 - 7	23	- Introduction to plant reproduction
41.	June 10 - 14	23	- Plant life-cycles/ Structures of flowers
42.	June 17 - 21	<b>COURSE REVIEW &amp; TERM 4 ENDS June 21</b>	
43.	June 24 - 27	<b>SEMESTER 2 EXAMS</b>	

**NOTE: an (\*) indicates a week which contains one or more non-instructional day(s).**