



Dr. E. P. Scarlett High Sch Biology 20



Course	
Pre-Requisite	Recommended 60% in Science 10 Minimum 50% in Science 10
Textbook	<i>Inquiry into Biology</i>
Supplies	Binder, loose-leaf paper, scientific calculator, pens, pencil, eraser

Teacher(s)	E-mail	Room
Ashleigh Young	adyoung@cbe.ab.ca	149
Mike McKillop	mdmckillop@cbe.ab.ca	158

TEACHER COMMUNICATION: Teachers will respond to e-mail within two business days. E-mail is the best way to contact teachers.

COURSE DESCRIPTION: Biology 20 is an academic program that helps students develop knowledge and skills to better understand the world around them. The focus of this course is to understand the biological principles behind the natural events they experience, human body systems, **and technology used in your daily life.**

Fees	Description
\$5.00	Lab Goggles – goggles are provided but students can purchase their own.
\$6.00	Dissection Fee – in order to ensure quality dissection specimens, this fee will be charged to students interested in participating in dissections.

LEARNER OUTCOMES:

- **Attitudes** - Students will be encouraged to develop attitudes that support the responsible acquisition of application of scientific and technological knowledge to the mutual benefit of self, society and the environment - interest in Biology, mutual respect, scientific inquiry, collaboration, stewardship & safety
- **Knowledge** - Students will construct knowledge and understandings of concepts in life science, and apply these understandings to interpret, integrate and extend their knowledge
- **Science, Technology and Society (STS)** - Students will develop an understanding of the nature of science and technology, the relationships between science and technology and the social and environmental contexts of science and technology
- **Skills** - Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively and for making informed decisions.
- Alberta Learning: <https://www.alberta.ca/programs-of-study.aspx>

EXTRA SUPPORT:

- Students should make use of class time to ask for help.
- Teachers are available in their classrooms at 8:30am (Mon – Thurs) for extra help
- Science Help Room is open mornings from 8-8:30am (Monday – Thursday), and Tuesdays at lunch from 12-12:30 in room 151 (back hall).
- If additional support is needed, students should make appointments with teachers.

LEARNER ASSESSMENT:

- Learning is an ongoing process. Teachers will use a variety of instructional tools and assessments to help students understand the Program of Study outcomes.
- Teachers will post grades in PowerSchool which is available for students and parents to view.

	Unit	Weighting	Chapters
A	Human Digestive and Excretory Systems	14%	6, 9
B	Photosynthesis, Energy and Ecosystems	14%	1, 2, 3, 5
C	Human Circulatory and Immune Systems	14%	8
D	Cellular Respiration, Human Respiratory and Muscular Systems	14%	5, 7, 10
E	Evolution and Mechanisms of Population Change	14%	3, 4
	Final Exam	30%	

The full curriculum can be found at: http://www.education.gov.ab.ca/k_12/curriculum/bySubject/science/bio2030.pdf

CLASS EXPECTATIONS:

- Regular attendance and a readiness to actively engage with the course content
- This is an in-person course. D2L is used for online support and may include instructions and resources.
- Learning is a process which builds on prior knowledge, as a result effective study habits are required.
- When learning complex ideas, sustained motivation and cognitive engagement are required to maintain considerable mental effort. As a result, cell phone use should be minimal and appropriate for the school environment
- Academic Integrity - a commitment to the regular and honest completion of work (ie. no cheating or copying from peers or the internet). Students and parents are required to be familiar with academic integrity policies found on the school website (<https://school.cbe.ab.ca/school/DrEPScarlett/teaching-learning/program-approach/academic-integrity/Pages/default.aspx>).
- Students are required to complete all assessments, even when absent.
- Reasons for unavoidable absences should be communicated to teachers. It is the student's responsibility to arrange with their teacher to make up missed assessments.

SAFETY:

- Students will follow all Laboratory Safety rules each time they are in a science classroom
- Laboratory safety rules are posted in classrooms and in D2L shells
- Students will complete a Laboratory Safety course in D2L prior to conducting any labs.

LABORATORY OPPORTUNITIES:

- Students will have the opportunity to participate in the following labs:
 - Enzyme Lab
 - Heart Sounds/Blood Pressure Activity
 - Heart Dissection
 - Lung Capacity Lab
 - Photosynthesis Lab
- Additional labs may be included if resources and time allow.

POSSIBLE ADDITIONAL RESOURCES:

- HHMI educational resources; Ted Talks; PBS videos; articles from published sources such as The New York Times, National Geographic, Nature; Full-length movies with curricular applications such as Sharkwater, Outbreak, And The Band Played On.