



Anatomy and Physiology 12

Course Outline

Course Overview

Anatomy and Physiology 12 is a course which studies cell structure, function and processes as well as the human body. It focuses on big ideas related to homeostasis, DNA and cells, and organization of organ systems.

Course Content and Suggested Timelines

The suggested timeline is for students aiming to complete the course in one semester (5 months). Double the timeframes for two semesters (10 months).

Introductory Unit- Cell Structure (Suggested time: 0.5-1 week)

You will review the organelles and their inter-relationships.

Unit 1- Biochemistry (Suggested time: 1.5 weeks)

Examination of the structures and functions of cell compounds and biological molecules.

Unit 2- DNA, RNA and Proteins (Suggested time: 2 weeks)

You will learn about how DNA is structured and replicates. Structure and functions of proteins are also covered, as well as how they are synthesized.

Unit 3- Cell Membrane and Enzymes (Suggested time: 2 weeks)

You will examine how the cell membrane works as well as its structure. The role that enzymes play in biochemical reactions is also covered.

Unit 4- Digestive and Urinary Systems (Suggested time: 4 weeks)

A review of the structures of each system will be covered. You will also learn about the layers of the digestive tract wall and the various hormones and enzymes used in the digestive process. The urinary system material covers how blood is filtered, how our water-salt and pH balances are achieved, and the roles of hormones in this system.

Unit 5- Circulatory and Respiratory Systems (Suggested time: 4 weeks)

Structure and function of the different blood vessels are covered. You will examine the parts of the heart and how it beats. Composition of blood and disorders of the circulatory system are also examined. The connection to the lymphatic system is discussed. When looking at the respiratory system, the mechanism of breathing is covered, along with the process of gas exchange.

Unit 6- Nervous and Reproductive Systems (Suggested time: 4 weeks)

Nervous tissue and nerve impulses are covered in this unit. We also look at the central nervous system, the limbic system, and the peripheral nervous system. The male and female reproductive systems are reviewed. You will also learn about how homeostasis is achieved through many different hormone.

Course Materials/Resources

You will be able to start on the first two units as the textbook has been scanned and placed into the course. Once you have completed the Introductory Unit, an online copy of the textbook (BC Biology 12) will be sent via email.

The prescribed learning outcomes for this course are available at: [Anatomy and Physiology 12](#)

Some of the assignments require you to take pictures of your work, so you will need to be able to do that - preferably as jpegs that are not too large in size. A few assignments are online activities and are done right on the computer. Some assignments are WORD documents or form fill-able PDFs. You can simply type into them and save onto your computer and then upload into the assignment section. My suggestion is that you create a file called Anatomy and Physiology 12 on your computer so you know where to save them and find them when uploading. If you do not have Adobe Pro, you may not be able to save your working file. Some school districts use the program Foxit which is a free downloadable program that allows for you to save your form fill-able PDFs. You might decide to print out the assignment and hand write

on them. You then need to be able to scan your work into your computer (preferably as a PDFs but tiffs and jpegs work too) and then upload. Faxing is not permitted during the summer session as there will be no office staff to receive your files and pass them on to me.

Assessment Information

	Total value for course
Assignments and Quizzes	70%
Midterm 1 and 2	30%

The course has been divided into 6 units and a case study. Within each unit are assignments to complete. There are two midterms. Midterm 1 covers units 1-3 and Midterm 2 covers units 4-6.

You are required to read through the section's information BEFORE accessing the assignment. The assignment will not be shown to you until this has been met.

For each unit, there is an overview that you can use to review the material with as you read. A key will be provided to compare your notes to. There will also be crosswords, word searches and links to practice quizzes and interactive games for you to try. They are not mandatory but are useful for reviewing/understanding the material.

Invigilated Exams

Midterm 1 and Midterm 2 are to be invigilated.

Invigilated exams need to be invigilated by an EBUS approved invigilators. Please contact your course teacher if you have questions or concerns about invigilated exams.

You can view EBUS' Invigilation map [HERE](#)

When students are not meeting the learning outcomes/ falling behind

When students fall behind the expected pace or plan, they will be contacted via email or phone and if there is no improvement or response, parents will also be contacted. If deemed necessary, contact with the student's home school may also occur to help determine a solution.

Students are expected to let the course teacher know when they are struggling with course content. In response, the course teacher will provide appropriate help or strategies to support learning. The course teacher will also provide feedback on course work to support learning and help students improve. Parents will be made aware if their child is actively working but struggling to meet the learning outcomes of the course.

Students falling behind in a manner where it does not appear that they will complete the course within a year will be sent reminder emails. Without a response or renewed efforts in the course, the student may be assigned an F or withdrawn. Should they begin actively working in the course, the student may be given an alternate completion date.

Inactivity and Communication

Students are expected to login and submit work in their online courses on a weekly basis. EBUS teachers monitor student participation, work submission and periods of inactivity in their courses. Students who have not accessed their course for a period of two weeks or longer will receive an online gentle reminder email to inquire about progress and reasons for inactivity; parents will also receive a copy of the email. Students who receive a reminder email must contact their teacher to communicate their intentions for the course and any other information that will help support their learning. If a student has been inactive for a period of eight consecutive weeks or longer, has received three online reminders and has not responded to communications from their online teacher, the student may be withdrawn from the course.

Communication between students and teachers is important. EBUS Academy offers a flexible learning environment and we understand that various circumstances can arise that prevent students from engaging in their courses. When students anticipate being absent from their online course, they should contact their teacher in advance, whenever possible.

Expectations

- Adhere to the EBUS Academic Integrity Policy
- Contact your teacher when help is needed
- Review feedback from assignments and tests, where applicable
- Work to complete the course in a timely manner

- Communicate respectfully
- Review weekly progress reports

Reporting to Parents:

There are 4 term report cards that can be downloaded from the student dashboard. A notice will go out when these report cards are available.

Every week that EBUS is in Session the teacher will send out a progress report showing the student's progress.

Contacting Your Teacher:

Lisa Zukewich: lzukewich@sd91.bc.ca

Julie MacDonald jmacdonald@sd91.bc.ca