

# BIOLOGY FOR HEALTH

HSCI 1115

PSI 3330

Applications due January 9

## PROGRAM DESCRIPTION

This course focuses on concepts relevant to understanding human health and disease. The various foundational topics of anatomy and physiology provide students with the ability to apply their knowledge to the many health-related disciplines. The course begins with a look at terminology because this is critical for understanding what is being said as well as interpreting documents and research. As the content builds from a cellular to a systemic level, it shows how the human body is organized and how systems become reliant on one another.



## Student Eligibility & Prerequisites

This program is available to all CESD students:

Prerequisite: Biology 20

1. Who are excited about learning and sharing their ideas
2. Who are in grades 10, 11 or 12 and who have an interest in learning about the Financial sector.
3. Who are able to commit to the duration of the program, participating in learning activities and completing assignments and tests as scheduled, and who can meet regularly with the Off Campus Teacher to communicate about progress in the course and to identify strategies for success.

## Course Outline

1. Employ a disciplined approach to the process of biology, including scientific inquiry, experimental design, and problem solving.
2. Apply biological concepts, principles, and theories to cellular biology and genetics.
3. Explain the role of the various human organ systems in maintaining homeostasis.
4. Interpret and communicate scientific and technical information effectively.
5. Recognize the need for laboratory safety and biosecurity.
6. Examine the interrelationships of biological, personal, workplace, and societal issues.



## Cost

Tuition - \$0  
(savings of approx \$500)

Textbooks and materials - \$0

Five 30 level HS credits  
Three PS credits

## ADDITIONAL INFORMATION

- Students' marks will appear on their high school transcript as well as their post-secondary transcript.
- Students should have the support and guidance of their parents if they are to pursue online dual credit opportunities.
- Deadlines Matter! Students must be able to communicate with the instructor and the key school contact when alternative arrangements need to be made.
- The student understands the expectations of the dual credit program by realizing that they should be working on these opportunities for a minimum of 5-10 hours a week.

## TOPICS:

1. Study Success
2. Terminology and Body Positions
3. Imaging
4. Biochemistry:
5. Cellular Biology and Metabolic Functions
6. Tissues and Systems
7. Examining the structure and function of Body systems including:
  - Integumentary System
  - Endocrine System
  - Skeletal System
  - Muscle System
  - Nervous System and the Senses
  - Cardiovascular System
  - Respiratory System
  - Lymphatic and Immune Systems
  - Gastrointestinal System
  - Urinary System
  - Reproductive System