

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

HSCI 1195: Human Biology of Aging

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 4 h + Seminar 0 h + Lab 0 h

Credits: 3

Transfer credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Students explore the physiological process of aging in humans. They study the fundamentals of human physiology and develop an understanding of current scientific theories on the process of normal human aging. Broader ideas of aging as a process in the wider biological world are also considered. Students examine expected manifestations of aging on key human systems such as the cardiovascular, nervous, endocrine, reproductive, muscular and skeletal, and immune systems.

Prerequisites: One of the following: LET with a minimum level 3; IELTS 6.5, with a minimum of 6.0 in each band; LPI with a minimum 26 on the essay and one of 5 in English usage, 5 in sentence structure, or 10 in reading comprehension; BC English 12 or equivalent with a minimum 80%; BC English Literature 12 with a minimum 80%; BC English First Peoples 12 with a minimum 80%; a university-level English or Communications course for which Langara awards transfer credit, with a minimum 'C-'; or 'C' in ENGL 1120; or an 'S' in one of ENGL 1107, 1108, or 1110

Priority registration for students admitted to the Diploma in Gerontology.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- outline the foundational concepts of human physiology; genes, cells, tissues, organs and systems;
- explain current theories of aging as it relates to human physiology;
- identify the causes and determinants of aging in humans and their effects;
- describe current controversies of aging as a normal, as opposed to a disease process, and as a programmed, as opposed to an externally driven process;
- identify and explain the normal and expected manifestations of aging on energy level, nervous and hormonal systems, resistance to infection and injury, and on mobility and strength

snəwəyət̚ leləm̚ Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

Instructor(s): TBA

Office: TBA **Phone:** 604 323 XXXX **Email:** TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam 30%

Other Assessments %

(An example of other assessments might be:) %

Midterm Exam: 2x20%

Quizzes/Tests: 2x10%

Participation: 10%

Participation format: group discussion of cases

Proportion of individual and group work:

Individual: 90%

Group: 10%

Grading System: Letter grade

Specific grading schemes will be detailed in each course section outline.

Passing grade: C (for Gerontology program)

This generic outline is for planning purposes only.

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Course Syllabus

Part I: Foundations

1. Basic concepts – how the biology of aging is studied; link between function and structure – genes, cells, tissues, organs and systems, scalability of basic life processes
2. Normal vs. abnormal processes; biological aging as a normal developmental stage.
3. Theories of aging of organisms and humans: programmed life, senescence and death; information and entropy; homeostasis and range of tolerance; metabolism and energy: complexity of influences (genetic and non-genetic): telomeres, genetic injury.

Part II: Normal age-related changes

4. Energy: cardiovascular and respiratory systems, digestion and metabolism
5. Integration and control: nervous (including senses), endocrine and reproductive systems
6. Resistance: defenses against infection and toxicity (immunity, detoxification systems, urinary system)
7. Mobility and strength: musculoskeletal system

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

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