

University of Toronto Scarborough – Department of Biological Sciences  
**BIOB35 – Essentials of Human Physiology – Winter 2019**

**Course Instructor:** **Dr. Jason Brown**  
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Office: Portable 104, Room 110 (for now)  
Office Hours: Mondays 12:30-2:30pm, 3:30-5:30pm  
Wednesdays 5:30-7:30pm

**Teaching Assistant:** **Kirthana Sathiyakumar**  
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**Course Description:** An exploration of the normal physiology of the human body. Emphasis will be placed on organ systems associated with head and neck, especially nervous, respiratory, muscular, digestive, cardiovascular, and endocrine. The interrelationship among organ systems and how they serve to maintain homeostasis and human health will also be discussed.

**Prerequisites:** BIOA01H3, BIOA11H3, or Grade 12 Biology

**Exclusions:** BIOC32H3, BIOC33H3, BIOC34H3, PSL201Y1, BIO210Y5

**Lectures:** Wednesdays 2:10-5pm, SW143

NOTE: Beginning Jan. 16, the last hour of each lecture (4-5pm) will be used for Clinical Connections Quizzes (see below).

Lecture Topics:

- 1 – Respiratory Physiology
- 2 – Nervous Physiology
- 3 – Digestive Physiology
- 4 – Muscular Physiology
- 5 – Circulatory Physiology
- 6 – Endocrine Physiology
- 7 – Speech Physiology
- 8 – Auditory Physiology

We will spend three hours on each of these topics and, in that time, we will cover as much content as we can; however, in the interest of satisfying the requirement of a general human physiology course, any content that we are unable to cover within the allotted time will be omitted and will not be subject to examination.

Lecture notes will be posted (in PowerPoint format only) on Quercus at least 24 hours before each lecture. NOTE: I reserve the right to make changes to the lecture notes after they are posted.

**Textbook:** There is no required textbook for this course; however, in my experience, many students enjoy having a textbook to supplement their lecture notes. If you so desire, I would recommend the following textbook:

*Applied Anatomy & Physiology for Speech Language Pathology and Audiology*, 2012, by D. R. Fuller et al.

➔ This book is available at the UTSC Bookstore.

This textbook does not address all of the content covered in this course, but it has been chosen because it will be a more valuable resource to students going forward than a general human physiology textbook, particularly students seeking to pursue careers in speech language pathology, which are the target students for this course. I will post suggested readings, where applicable, from this textbook; however, this textbook may discuss material not covered in class, and I may discuss material in class not covered by the textbook. You are only responsible for the material covered in class.

### **Evaluation:**

Term Tests	35% (25% best; 10% worst)
Clinical Connection Quizzes	up to 33% (3% for each perfect quiz)
Final Exam	up to 65% (subtract 3% for each perfect quiz)

### **Important Notes Regarding Evaluations:**

#### **Term Tests**

There are two Term Tests in this course, which are held outside of class time. The dates and times of the Term Tests will be determined by the Registrar's office during the first few weeks of the semester, and I will post this information on Quercus as soon as it is available.

Term Tests may examine any material covered in this course, but the lectures emphasized on each Term Test will be announced in class and on Quercus. Term Tests will be 2 hours and will comprise of multiple-choice questions only. Students will have choice with regards to which questions they answer (e.g., answer 24 of 30 multiple choice questions). Each Term Test will be divided into two parts: one part will assess whether students have a thorough understanding of the course concepts, and one part will assess whether students can relate course concepts to other disciplines, or analyze and interpret data, which are skills that will be developed via the Clinical Connections Quizzes (see below).

To help students prepare for the Term Tests, optional quizzes (here optional means not worth any marks) will be posted on Quercus each week. Students are strongly encouraged to discuss these quizzes with the course instructor when they encounter any difficulties, either by email or during office hours (preferred).

If you know in advance that you cannot write a Term Test at the scheduled time because it conflicts with some other valid activity, please notify the course instructor as soon as possible so that arrangements can be made for you to write the Term Test at an alternative time. Any such alternative time must be before the scheduled date of the Term Test.

If you miss a Term Test due to medical illness, then you must submit a detailed UTSC Medical Certificate filled out by the physician who saw you on the day of the Term Test. This note must be submitted to the course instructor as soon as possible following the Term Test, whether in person or via email. Other medical notes will not be accepted, and if the UTSC Medical Certificate is not completed to the satisfaction of the course instructor, it may be refused. The UTSC Medical Certificate can be found via the following link:

[http://www.utsc.utoronto.ca/~registrar/resources/pdf\\_general/UTSCmedicalcertificate.pdf](http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf)

If you miss a Term Test for any other valid reason, please consult with the course instructor as soon as possible. The course instructor will determine whether the reason given for a missed Term Test is valid in accordance with university policies. Also, the course instructor may ask for any documentation required to verify the reason given.

Students who miss one Term Test for a valid reason (medical or otherwise) will not be permitted to write a make-up Term Test; rather, the weight of their Final Exam will be increased by 10%. (The weight of their remaining Term Test will be 25%).

Students who miss both Term Tests for valid reasons will not be permitted to write make-up Term Tests; rather, the weight of their Final Exam will be increased by 35%.

Students who miss a Term Test for any invalid reason will receive a grade of zero for that Term Test.

### **Clinical Connections Quizzes**

This course was conceived largely so that students in the Specialist Program in Psycholinguistics could meet their requirements for a general human physiology course; however, it seems that this course has attracted students from a wide variety of programs, both outside and within science.

The purpose of these Clinical Connections Quizzes is to provide students with an opportunity to integrate their existing knowledge of psycholinguistics (or other programs) with their newfound knowledge of human physiology. At the same time, these Clinical Connections Quizzes are intended to help students develop interdisciplinary research and data analysis/interpretation skills, which are among the skills sought for development by students in Psycholinguistics, Biological Sciences, and most other programs.

For each Clinical Connections Quiz, students will be presented with a primary journal article and a 5-question multiple choice quiz. The journal article will be made available at least 48 hours in advance, but the quiz will only be made available during class. The primary journal article will be related to either psycholinguistics or another program (students can choose which journal article and associated quiz to complete), and a recently-taught concept in human physiology. Students

will have 60 minutes to submit their quiz answers via Quercus, i.e., by the end of class. (Students should, therefore, have access to Quercus, via either their phone or laptop.) Each student will submit their own quiz, but students are permitted to work together, as well as consult any external resources, as they decide their answers. Students are only permitted to submit each quiz once.

As outlined above, for every quiz where students achieve a perfect score, they will receive 3% towards their final grade, and the weight of their Final Exam will be reduced by 3%. Students who do not submit a particular quiz—for whatever reason (medical or otherwise)—will not be permitted to complete a make-up quiz since they are not losing any marks. Therefore, students do not need to submit a Self-Declaration of Illness Form.

### **Final Exam**

The Final Exam will be scheduled by the Registrar's office (April 10-27). It will be 3 hours and will cover all course material, though it will place emphasis on the material discussed since the last Term Test. It will have the same format as the Term Tests.

## Accessibility Needs:

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or [ability@utsc.utoronto.ca](mailto:ability@utsc.utoronto.ca).

## Academic Integrity:

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

*In papers and assignments:*

- using someone else's ideas or words without appropriate acknowledgement
- submitting your own work in more than one course without the permission of the instructor
- making up sources or facts
- obtaining or providing unauthorized assistance on any assignment.

*On tests and exams:*

- using or possessing unauthorized aids;
- looking at someone else's answers during an exam or test
- misrepresenting your identity

*In academic work:*

- falsifying institutional documents or grades
- falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. There are other offences covered under the Code, but these are the most common. ***Please respect these rules and the values that they protect.***