

BIOC34: Human Physiology II Lecture (2017)

Description: This course will cover the cardiovascular, respiratory, renal and digestive systems as well as acid-base balance.

Pre-Requisites: BIOB30 or BIOB34 or NROB60 or BIO217

Instructor: Dr. Stephen Reid; Office, S526; e-mail, sgreid@utsc.utoronto.ca

Office hours: Monday and Wednesday, 11:15 to 12:30 or by appointment (e-mail for an appointment). Additional office hours will be announced at the beginning of February.

Teaching Assistants: Aeen Ebrahim Amini, Peter Perri and Sadek Shorbagi (contact information and office hours will be announced)

Lecture Times: Monday, 10-11AM (AA112) and Wednesday, 10-11AM (SY110)

Potential (not required) Textbook(s):

1. "Human Physiology" by D.U. Silverthorn (used in BIOB30)
2. "Human Physiology" by R. Rhodes and R. Pflanzer
3. "Principles of Human Physiology" by W.J. German and C.L. Stanfield
4. "Principles of Human Physiology" by C.L. Stanfield

Over the past years, many students found that the textbook was not really necessary as long as they attended the lectures. Most of the standard human physiology textbooks on the market are suitable for this course with the exception of a couple that are not detailed enough. If you have a book that was (is) used in another human physiology course at another university, it is likely to be suitable for this course.

Lecture Slides: All slides will be posted at least one day prior to the lecture.

Lecture Notes: Notes to accompany each lecture will be posted.

Study Guides: Study guides, complete with sample exam questions from previous years will be available on the course web site.

Evaluation

Midterm Exam, 35% (date to be announced; covers lecture material only)

5 Informal Simulated Laboratory Reports, (5 X 4% = 20%; see below)

Final Exam, 45% (during the final exam period; covers lecture material only)

If your mark on the final exam is greater than your mark on the midterm exam, then the mid-term mark will be discarded and final exam mark will count in its place. However, you must write the midterm exam for this policy to apply. This shouldn't be taken as a reason to dismiss the mid-term exam as being unimportant. The final exam is generally harder than the midterm exam. Note; the mid-term exam will be held during a scheduled term test period. I will announce the date once the Scheduling Office releases the term test schedule. This usually occurs in the third or fourth week of the semester.

A make-up midterm exam will be scheduled for those students who miss the midterm exam for a legitimate reason.

All exams will consist of multiple choice questions. The final exam is cumulative.

BIOC34 Computer Simulated Laboratory Exercises

Required Lab Book and Software

PhysioEx. Laboratory Simulations in Physiology (available in the bookstore)

The PhysioEx software package contains 11 simulated laboratory exercises. The following exercises are relevant to this course

Cardiovascular Physiology

Lab 5; Cardiovascular Dynamics

Lab 6; Cardiovascular Physiology

Respiratory Physiology

Lab 7; Respiratory System Mechanics

Lab 10; Acid-Base Balance

Renal Physiology

Lab 1; Cell Transport Mechanisms and Permeability

Lab 9; Renal System Physiology

Lab 10; Acid-Base Balance

Digestive Physiology

Lab 8; Chemical and Physical Processes of Digestion

You will be required to submit five informal laboratory reports:

- 1) Lab 6, Cardiovascular Physiology; Friday, January 27
- 2) Lab 5, Cardiovascular Dynamics, Friday, February 10
- 3) Lab 7, Respiratory System Mechanics, Friday, March 3
- 4) Lab 9, Renal System Physiology, Friday March 17
- 5) Lab 10, Acid-Base Balance, Friday, March 31

Note that the due dates have been selected so that there is plenty of time to complete the assignments after the associated topic has been covered in the lecture.

Instructions on the format of the report are posted in the assignments folder on Blackboard.

You are encouraged to complete the exercises for which no reports are due.

- Reports are due by 4 PM at the latest on the due date mentioned above. They can also be submitted prior to the due date (for those who are not necessarily on campus on the due date).
- Electronic versions sent as e-mail attachments will not be accepted (unless warranted by exceptional circumstances).
- Late reports will be penalised minus 25% per day late.
- Submit reports to S526. There will be drop-boxes for the reports or the reports can be pushed under the door if it is closed.