

BIOC33, Human Physiology II: Lecture and Laboratory (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: Sankirthana Sathiyakumar, Michael Martin, Harsh Parikh and Eshan Naik (contact information and office hours will be announced during the first lab session).

Laboratory Technician: Chris Armstrong

Lecture Times: Monday, 10-11AM (AA112) and Wednesday, 10-11AM (HW216)

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 a 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 website.

Evaluation

Midterm Exam, 30% (date to be announced; covers lecture material only)

Informal Laboratory Reports, (6 reports; total of 20%; see below)

Laboratory Exam, 10% (held during the regularly scheduled lab periods in week 12)

Final Exam, 40% (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.

BGYC33 Laboratory

- Please attend the lab section in which you are registered.
- Although labs will be held for ten weeks, there will only be six lab reports to submit (see lab schedule below). Lab reports are due the week following the lab session in question (not including reading week)..
- Students are expected to attend all lab sessions (including those not associated with a lab report). Material from all of the labs will be on the lab exam. There will be a 5% penalty (out of the 20% allocated for the laboratory reports which equal 1% of final grade in the course) for not attending a lab session or not arriving within a reasonable time frame to begin the lab.
- There is no lab manual to purchase. Electronic copies of the lab manual will be placed on the course intranet site.
- Lab reports must be submitted at the beginning of the lab session that the report is due. Late reports will be penalised minus 25% per day late.
- There will be a lab exam worth 10% of the final course mark. This exam will be held in the last week of classes in your regularly scheduled lab section.
- The mark on each lab will be converted into a percentage score. The percentage scores on all six labs will be averaged and converted to a mark out of 20 for inclusion in the calculation of the final grade.
- Government regulations require that you wear a lab coat at all times within the teaching laboratory. In addition, food and drink (including bottled water) are prohibited. Students violating these rules will be asked to leave.

Laboratory Schedule

Week 1: No labs

Week 2: BIOPAC Tutorial; EMG 1; EMG 2 (no report)

Week 3: ECG 1 and ECG 2 (report #1)

Week 4: Cardiovascular Physiology Computer Simulations (no report)

Week 5: Blood Pressure (report #2)

Week 6: ECG and Pulse; Respiratory Cycle 1 (report #3)

Week 7: Pulmonary Function 1 and Pulmonary Function 2 (report #4)

Week 8: EEG 1 and EEG 2 (no report)

Week 9: Aerobic Exercise Physiology (report #5)

Week 10: GSR and Polygraph (report #6)

Week 11: Kidney Function and Acid-Base Balance Computer Simulations (no report)

Week 12: Lab Exam (held in the regularly scheduled lab periods)

Note: Reading week is not counted as a week in this schedule.