BIOL4510 / KINE4510
Cellular and Molecular Basis of Muscle Physiology
19:00 – 22:00
Tuesday – LAS C

Dr. Robert Tsushima – Course Director (sensei@yorku.ca)
Lumbers Building, Room 324

Course Outline

1. Introduction
2. Cardiac Physiology
3. Cell Biology: Structural and Morphological Properties of Cardiac Myocytes
4. Contractile Proteins
5. Sarcoplasmic Reticulum
6. Ion Channels, Exchangers and Pumps
7. Extracellular Matrix
8. Excitation-Contraction Coupling
9. Cell Signalling Regulation of Heart Function
10. Embryonic Basis of Heart Development
11. Stem Cells and Regenerative Medicine
12. Circadian Rhythms/Aging

Textbook
There is no assigned textbook. All material (lecture notes, reading material) will be posted on Moodle.

Office Hours
By appointment only
Students must schedule an appointment in advance by email only (sensei@yorku.ca).
Marking Scheme

Midterm Test 1

**TUESDAY OCTOBER 8 (in class)**
Material covered from September 10 – September 24

Midterm Test 2

**TUESDAY NOVEMBER 5 (in class)**
Material covered from October 1 – October 22

Any requests for remarking of exams must be dealt with by the Course Director within 14 days of the exam paper being returned. Any discrepancy after that period will not be considered. Any exam written in pencil or where liquid paper was used will be **not** re-evaluated.

**There are no deferred midterm exams.**
Anyone who misses a midterm exam and receives approval from the Course Director, the **percent weighting** and **material from the missed midterm** will be put on the Final Exam.

Final Examination

Non-cumulative; date to be determined by the Registrar’s Office
Material covered from October 29 – December 3

The format of all exams will be:
- One word or short answers
- Label diagrams
- One page answers

There will be no sample exams posted, so please do not ask me for any.

**Policy on Missed Midterm and Final Examinations**

Midterm exams are **not** optional.

1) The student must contact the Course Director in person by email within **48 hours** of the missed examination. The student must clearly state the following:
- full name
- student number, course and section
- reason for missing the exam

2) If the student cannot contact the course director during this 48-hour period, documentation in writing accounting for the delay **must** be provided.

3) Appropriate documentation verifying the circumstances for the missed test or examination must be provided at the time specified by the course director. Failure to provide appropriate documentation will result in a grade of zero on the missed exam.
What is appropriate documentation?

a) Medical circumstances – exams missed due to medical circumstances must be supported by an attending physician’s statement or a statement by a psychologist or counselor. The physician’s statement must include the following:

i. full name, mailing address, telephone number of the physician.
ii. state the nature of the illness and its duration (i.e., specific dates covered), and
iii. an indication of whether the illness and/or medication prescribed would have SERIOUSLY affected the student’s ability to study and perform over the period in question.

NOTE: the physician’s office may be contacted to verify that the forms were completed by the physician.

b) non-medical circumstances – exams missed due to non-medical circumstances must be supported by appropriate documentation, i.e., death certificates, obituary notice, automobile accident reports, airline/bus ticket/receipt for emergency travel (with date of booking on ticket), etc. Airline/train/bus ticket/receipts for emergency travel must indicate destination, departure, and return dates. Having to work at the time of the exam or forgetting the room number are not considered to be valid excuses for missing the exam.

4) The manner in which the missed test (which has been legitimately documented) is handled will be at the discretion of the course director.

You should be aware that if you miss the tests before the official drop date, you will not have the requisite 10% feedback on your course work to determine if you need to drop the course or not. As a result, it is in your best interest to write the tests at the time they are scheduled by the course director.

University Policy on Plagiarism

“Plagiarism is the representation of another person’s ideas or writing as one’s own. The most obvious form of this kind of dishonesty is the presentation of all or part of another person’s published work as something one has written. However, paraphrasing another’s writing without proper acknowledgement may also be considered plagiarism”

See http://www.yorku.ca/acedmicintegrity/ for more information on York University policies and penalties on plagiarism.