

FACULTY OF HEALTH
KINESIOLOGY AND HEALTH SCIENCE
HH/KINE 2011 3.00 Human Physiology I

Course Description

The focus of this course is on basic principles of physiology from the sub-cellular to cellular components including their functions and their mechanisms of function. KINE 2011 provides students with a sound basis for understanding the cellular basis of human physiology. KINE 2011 provides the background necessary for understanding the complexity of human health and disease covered in subsequent courses. KINE 2011 covers the following subject matter in depth: Cell physiology, plasma membrane potentials, muscle physiology, neuronal pathways, blood and its components.

Prerequisite / Co-requisite

Honours Standing, Course Credit Exclusions: AS/HH/SC/KINE 3011 3.00.

Term: Fall 2016

Course Web Page: Moodle is used to transmit important information including the dates and the results of exams. Slides are posted as PDF files on Moodle.

Format

Lectures: MWF 8:30-9:30am for Section A in ACE 102

MWF 9:30-10:30am for Section B in ACE 102

Note: You must attend the section you are registered in. If fire code violations occur (too many students in the room, students in the aisles, and such) class will be cancelled and you will be responsible for covering that day's course material on your own.

Tutorials (Optional): TBA

Course Director Dr. Olivier BIROT

Instructors Dr. Olivier BIROT and Dr. Ali ABDUL-SATER
Office Hours: By appointment only

Instructors Do **NOT** email professors directly.
Email kine2011@yorku.ca
Indicate last name, first name, student number, and your section (A or B). Message not respecting this format will not be addressed.

Additional details of course content

Human Physiology KINE2011 is divided into **4 modules**:

Module #1 - Cell physiology includes basic cell structure, cell organelles, basic metabolism, cytoskeleton elements, cell adhesion, membrane transport systems.

Module #2 - Intercellular communication - Focus on neural communication, and Peripheral nervous system - Focus on the somatic system. The nervous system and neuromuscular junction includes equilibrium potentials, graded potentials, action potentials, electrical conduction, neurotransmitters, neuromodulators, neuropeptides, chemical and electrical synapses, inhibitory and excitatory synapses, synaptic integration, presynaptic inhibition and facilitation, nervous system organization, autonomic nervous system, parasympathetic and sympathetic neural pathways, somatic neural pathway, adrenal medulla, adrenergic receptors and neuromuscular junction structure and function.

Module #3 - Muscle physiology includes muscle structure, excitation-contraction coupling, sarcomere structure, sliding filament mechanisms.

Module #4 - Blood and Immunology includes blood component structure and function, overview of the immune system organization and function.

Organization of the Course

There are **three lecture hours a week**; there are no required laboratories. It is expected that each student will review the material to be presented in the class *before the class*.

Tutorial hour sessions are optional but highly recommended. The students bring questions or concepts about which they need more information, and the TA's work to clarify the concepts for the students.

PASS Sessions: Note that the PASS sessions are NOT under the professors' supervision and responsibility. Any outdated material or outdated evaluation format from PASS leaders is NOT under the professors' supervision and responsibility.

Course Learning Objectives

- 1) **Brief statement of the purpose:** To understand how the human body works.
- 2) **Brief list of specific learning objectives of the course:**

Graduates will demonstrate an understanding of the research on the human body influencing human health and performance. The students will be able to transfer the knowledge gained to other Health Science areas, and to communicate their knowledge orally and in writing with both professionals or lay people. The skills acquired include the ability to apply high school arithmetic to understand human physiology concepts and the ability to read and understand complex concepts in the working of the human body. As this is a large format lecture class (average is 450 per section) and as it covers many concepts in the working of the human body, the student will become adapt at reading ahead, time management, and self-study. This knowledge and study methods will transfer to any course at University and in life.

Specifically, the students will be able to use their knowledge and skills to advocate for the fundamentals of human health, from general to specific situations. They will use appropriate academic terminology and notation when preparing and presenting information. They will understand and appreciate the dynamic and uncertain nature of information in the discipline and will develop strategies to maintain or enhance their knowledge in the KAHS field.

Course Text / Readings

REQUESTED

Title: HUMAN PHYSIOLOGY: FROM CELLS TO SYSTEMS 3rd CANADIAN EDITION

Author: SHERWOOD, KELL and WARD

Publisher: Nelson

Calendar

Monday	Wednesday	Friday	
-	-	Sept. 09	Course introduction Dr. ABDUL-SATER Dr. BIROT
Sept. 12	Sept. 14	Sept. 16	Module #1 Cell Physiology Dr. ABDUL-SATER
Sept. 19	Sept. 21	Sept. 23	
Sept. 26	Sept. 28	Sept. 30	
Oct. 03 In-Class Evaluation #1 (31%)	Oct. 05	Oct. 07	Module #2 Neural Physiology Dr. BIROT
Oct. 10 Thanksgiving	Oct. 12	Oct. 14	
Oct. 17	Oct. 19	Oct. 21	
Oct. 24	Oct. 26	Oct. 28 Fall Reading Days	
Oct. 31 In-Class Evaluation #2 (30%)	Nov. 02	Nov. 04	Module #3 Muscle Physiology Dr. BIROT
Nov. 07	Nov. 09	Nov. 11	
Nov. 14	Nov. 16 In-Class Evaluation #3 (20%)	Nov. 18	
Nov. 21	Nov. 23	Nov. 25	Module #4 Immunology Dr. ABDUL-SATER
Nov. 28	Nov. 30	Dec. 02 In-Class Evaluation #4 (19%)	
Dec. 05 Deferred	Dec. 06 Study Day (Backup date for Deferred)	-	-

Evaluation

All evaluations are **multiple-choice exams**.

All module evaluations are **mandatory**.

You are required to bring a good pencil, excellent eraser, and your York ID card to the exam. You must “bubble” in your student ID correctly in the Scantron.

Module	% Of the final grade	Duration	Date	Cumulative
Cell physiology	31	40 min	OCT 03	NO
Neural Physiology	30	40 min	OCT 31	NO
Muscle physiology	20	40 min	NOV 16	NO
Blood and Immunology	19	40 min	DEC 02	NO
DEFERRED IF ONE EVALUATION MISSED	TBD	40 min	DEC 05	NO
DEFERRED IF MORE THAN ONE EVALUATION MISSED	TBD	2 hours	JANUARY 2017	YES

FREQUENTLY ASKED QUESTIONS - READ!!!

1. I am registered in one section (A at 8:30am for example). Can I show up to write my evaluation with the next section (B at 9:30am)?

=> **No**. Your name will NOT be on the attendance sheet. You will be asked to leave the room and you will receive **0%**. No deferral.

2. I don't have any ID. What will happen?

=> You will be asked to write down your last name and first name, and you will be asked if you accept to be photographed. You will have to bring your student ID to the professor at the next class, he will verify your ID and that you were writing the evaluation in the appropriate section (see Question 1 above). After verification, the photograph will be deleted. **If you have not been writing with the appropriate section, or if you refuse to be photographed (this is your choice), you will be then asked to leave the exam room and you will receive 0%.**

3. I kept my exam booklet with me, and only gave back my scantron. What's next?

=> Students receive an exam booklet containing the questions and a scantron. Both should be labeled with last name, first name, and student number. **Unlabeled documents will result in 10% of the grade removed.** At the end of the exam time, students walk down the exam room and drop their documents (booklet and scantron) into a designed carton box. **This is the student's responsibility to give both documents back. Missing one of the two documents will result in 0% at the evaluation.**

4. I have missed one evaluation. What's next?

=> In order to get permission to write a deferred evaluation, you need to fulfill two conditions:

(1) You have **one week** to bring to the **KINE office (Bethune 341)** to the attention of the **course director** your documentation. Do **NOT** email the professors directly. **Beyond this delay, you will receive 0%**. If providing a doctor note, only the official Attending Physician Statement from YorkU will be accepted. Note that the dates referring to your severe incapacity to write exams should match the date of the missed evaluation. We also ensure that you did not write any other evaluation in other courses.

(2) Your documentation has to be reviewed and approved by the course director.

Missing an evaluation due to weather will be excused **ONLY** if the University closes/cancels classes. In all other cases, **it is YOUR responsibility to get to class on time**. Transit and/or traffic issues are never an excuse to miss exams. Plan to be at exams early.

Religious accommodations must be arranged **at least 3 weeks** prior to the midterm or exam period

5. Overall in KINE2011, I have only missed one evaluation. I have submitted my documentation on time and the course director has approved it. What's next?

=> you will write a deferred evaluation on **Monday December 05 ONLY** for the module evaluation that you have missed. Like any other evaluation, it will be **NON cumulative**.

For example, you missed the In-Class Evaluation #2 scheduled on Monday October 31. You submitted your documentation before Monday November 07 (within one week). It was approved. You will write a DEFERRED Evaluation #2 on Monday December 05.

6. Unfortunately I have missed more than one evaluation. For each of the missed evaluation I have submitted documentation on time, and the professor has approved all of them. What's next?

=> You will be eligible to write a **2-hours DEFERRED** evaluation later in **JANUARY 2017**. This evaluation will be **cumulative of the 4 modules** (not only the ones you missed).

For example, you missed the In-Class Evaluation #2 scheduled on Monday October 31 (30%) and the In-Class Evaluation #4 (19%) scheduled on Friday December 02. Each time you submitted your documentation on time. It was approved. You will write a DEFERRED Evaluation in JANUARY 2017 that will be CUMULATIVE of all 4 modules. Weight will be 30+19=49%, and duration will be 2 hours.

7. I have missed two evaluations (for example one weighting 30% and one weighting 20%). I have only submitted or only get approval from the course director for the one weighting 30%. Either I have not submitted any documentation for the second missed evaluation, or I did but not on time, or the course director did not approve it. What's next?

=> You get 0% for the evaluation weighting 20%. You will **NOT** be eligible to write on Dec 05 since you missed the evaluation of two modules. You will have to write the

CUMULATIVE 2-hours deferred exam in January 2017. This cumulative exam will only weight 30% since you will receive 0% for the evaluation weighting 20% for which you did not submit any documentation, or not on time, or that was not approved by the course director.

Grading

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Exams will bear either a letter grade designation or a corresponding number grade. (For a full description of York grading system see the York University Undergraduate Calendar - <http://calendars.registrar.yorku.ca/2013-2014/academic/grades/index.htm>)

Accommodations

York senate policy on Academic Accommodation for Students with Disabilities:
<http://www.yorku.ca/secretariat/policies/document.php?document=68> *“York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs”*

Students who feel that there are extenuating circumstances that may interfere with the successful completion of their exams or other course requirements are encouraged to discuss their concerns with Dr. Da Sylva as soon as possible. Students with learning, mental health, physical, sensory and medical disabilities who require accommodations in teaching style or evaluation methods should discuss the matter with Counselling and Disability Services (CDS - N110 Bennett Centre; <http://www.yorku.ca/cds/>) and the Course Director (Dr. Da Sylva) early in the term so that appropriate arrangements can be made. Please note: you are not required to disclose the nature of your condition. If you are registered with CDS, Dr. Da Sylva will work with CDS to ensure all reasonable accommodations are met.

Academic Honesty

York's policy on Academic Honesty can be found here:

<http://www.yorku.ca/secretariat/policies/document.php?document=69>

Note: If students gain unpermitted access to, use, facilitate access to, distribute or make any attempt to attain previous midterms and exams this constitutes a breach of academic honesty and will be taken seriously. No previous midterms or exams have been officially released.

ANY suspected violations of academic honesty will be taken seriously and immediately referred to the Dean's Office.

Additional Information

Audio recording (ONLY audio) of the lecture is permitted. Recordings CANNOT be uploaded to public websites or otherwise shared publicly. Students in violation of these policies may have legal action taken against them.

IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents) -

<http://www.yorku.ca/univsec/senate/committees/ascp/documents/CourseInformationForStudentsAugust2012.pdf>

York's Academic Honesty Policy and Procedures/Academic Integrity Website
Ethics Review Process for research involving human participants
Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
Student Conduct Standards
Religious Observance Accommodation

It is your responsibility to familiarize yourself with all York Senate Policies.

Course Communication Policies

Moodle will be used to communicate urgent or otherwise important information to the class. You should check Moodle often.

Email: the course email address is kine2011@yorku.ca; your professor/TAs will regularly check this email address when the course is running.

Email must include your full name and student number and should include a descriptive subject line. Emails that do not conform to this standard may not be answered.

Email is NOT a substitute for office hour or tutorial attendance.

Expect an average response time of 48 hours. Email will not routinely be replied to on weekends or holidays.

Please **do not** email the instructor/TAs asking for your grades – they will be posted to Moodle as soon as possible. Emails asking for your grade will be ignored.

Please **do not** email the instructor asking for grade ‘bumping’ or ‘curving’. It is unethical to individually alter a student’s grade. All such emails will be ignored.

Please **do** read your syllabus before emailing; many common questions on course policies/administration can be answered by reading the syllabus.

Please **do** treat email as a professional communication; rude emails may not be answered. Harassment is unacceptable and violates numerous student codes of conduct. All instances of harassment will be reported.