Western University
Faculty of Health Sciences
School of Kinesiology

KIN 3330F - Laboratory in Exercise Physiology
Fall 2019

Instructor: Michael Agnew, PhD **Office:** Arts & Humanities Bldg Rm 3G02 **Email:** magnew8@uwo.ca **Phone:** 519/661-2111 x88385 **Office Hrs:** MWF 11:30-12:30 or by appointment (preferable) **LABS** **Instructor:** Michael Herbert **Office:** Arts & Humanities Bldg Rm 3G04 **Email:** mherber5@uwo.ca **Phone:** 519/661-2111 x88675 **Office Hrs:** TBD **TAs:** Sydney Isbell sisbell@uwo.ca Mariam Ismail mismail8@uwo.ca Jacob Kirk jkirk25@uwo.ca Crystal Lee plee263@uwo.ca Anthony Pokhoy apokhoy3@uwo.ca Sumeeta Prihar sprihar2@uwo.ca	**Lectures:** Mondays 8:30am - 9:30am **Room**: Arts & Humanities Bldg Rm 2B04 **Lab** 002 Mo 2:30pm - 4:30pm ~AHB 1R43 003 We 4:30pm - 6:30pm ~AHB 1R43 004 Fr 12:30pm - 2:30pm ~AHB 1R43

NOTE: All course information including grades, assignment outlines, deadlines, etc. are available via OWL. Check the website regularly for course announcements.

Calendar Course Description (including prerequisites/anti-requisites):
This course focuses on experiments designed to highlight the physiological response to exercise and to introduce basic techniques for fitness evaluation.

Prerequisite(s): Kinesiology 2230A/B. Priority to BSc Honors Specialization Kinesiology students.
Corequisite(s): Kinesiology 3337A/B.
Extra Information: 2 laboratory hours, 1 tutorial hour.

You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

NOTE: If you wish to enroll in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.

Calendar Description: This course focuses on experiments designed to highlight the physiological response to exercise, and to introduce basic techniques for evaluation and monitoring of these responses.

Course Description: This course introduces techniques used in exercise, research and fitness settings for evaluating and monitoring a person's physiological response to exercise of varying intensities to better understand how the laboratory protocols and techniques can be used to assess underlying physiological and metabolic responses to exercise. Laboratory protocols are designed as "mini-experiments" and students are required to collect and analyze data, and to describe and interpret the data to reflect the underlying "physiology and metabolism" of the response. Certain protocols will be written-up and submitted as a "manuscript-style" report, where data collected in the laboratory are analyzed and interpreted, and compared to the published literature. All students are expected to participate in all aspects of each of the laboratory protocols, including participating in actual exercise protocols, and in data collection and analysis. All students are expected to participate in discussions, and to ask and respond to questions during the lecture.

Course Format:
The lecture will serve as an introduction to each of the laboratory protocols and will provide an overview of the laboratory topic with a discussion of the physiology and theory pertaining to the laboratory, and to answer any questions that arise. All students are expected to attend and participate in the lecture discussions, and to have read relevant material in handouts (posted on the course OWL website), textbooks and suggested readings.

The laboratory protocols are intended to reinforce information covered in previous exercise physiology classes and to introduce new material important to the exercise physiology field and that possibly will be discussed in more detail in advanced courses. A brief overview describing the laboratory protocol will be presented at the beginning of each laboratory session and will emphasize set-up, use and care of equipment. Again, it is essential that students come to the laboratory having read the relevant material (posted on the course OWL website), textbooks, and suggested readings. A short summary session will be held at the end of each lab if time permits.

Students will work together in groups of 4-6, with approximately 4-5 groups per laboratory section. *All students are expected to participate in all aspects of the laboratory, including participating in actual exercise protocols, and in data collection and analysis. All students must arrive in each laboratory session dressed appropriately for exercise.* ***ALL students must actively participate in all components of the daily laboratory activity.*** Because of student numbers it will not be possible to attend any of the other laboratory sections.

In order to enhance the learning experience students will be responsible for collecting and analyzing their own data as well as data collected on other students. On occasion, individual student data will be collected and used for the laboratory report. For this to happen it will be necessary that each student provide the instructor with all required data as rapidly as possible (usually within 1 week of the laboratory session). The instructor will be responsible for summarizing and posting the class data. **It is important that students check the course OWL on a regular basis for information pertaining to the lecture and laboratory sessions and assignments.**

Course Recommended, Required and Supplementary Textbooks:
Course Laboratory Manual – individual laboratory protocols will be posted on the Kin 3330 course OWL
Textbook assigned in Kin 2230 (or any other suitable textbook in Exercise Physiology)

Learning Objectives:
Upon completion of this course students will be able to:
1. have a better understanding of the physiological and metabolic responses i) associated with non-steady-state and steady-state exercise, and ii) at different intensities and domains of exercise
2. understand and be competent at using specific laboratory equipment and techniques for measuring and monitoring the physiological and metabolic responses to exercise
3. understand the underlying physiological and metabolic principles underlying standard testing procedures
4. collect and analyze data in a laboratory setting, and interpret these data to help understand the underlying "physiology and metabolic" processes

5. communicating scientific information in a written report – i.e., describe and report data and findings collected in a laboratory setting and explain and compare these responses using information (i.e., data, ideas) from the published literature

Course Evaluation:
Theory Exam: 25% (set in examination period by Registrar's Office)
Laboratory Major Reports: 60% (2 major laboratory reports @ 30% each)
- Lab report #1 due date TBD
- Lab report #2 due date TBD
Laboratory Assignments: 10% (assignment @ 5% each – questions posted on OWL)
5% (completed and approved data sheets and calculations)

Assignments are due as stated in the course syllabus and will not be accepted late, except under medical or other compassionate circumstances. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. A missed mid-term examination, without appropriate documentation will result in a zero (0) grade. Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents, illness or death) or similar circumstances

Course/University Policies

1. **Statement on Use of Personal Response Systems ("Clickers")**
If Personal Response Systems ("Clickers") are used in the course, a reference to the Guidelines for their use (Guidelines are shown below). Instructors are to communicate clearly to students information on how clickers are used including: how the student's privacy will be protected, how clickers may be used by the instructor for data gathering and for evaluating the students, and why they cannot be used by anyone but the student (since the students involved in misuse of a clicker may be charged with a scholastic offence).

2. **Academic offences**: They are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

A) Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com http://www.turnitin.com

B) Computer marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

3. **Electronic Device Usage:**

During Exams - Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any of the following electronic devices during ANY of the tests, quizzes, midterms, examinations, or other in-class evaluations: cellphones, smart phones, smart watches, smart glasses, audio players or recorders of any sort, video cameras, video games, DVD players, televisions, laptop/notebook/netbook computers, flashlights or laser pointers.

During Lectures and Tutorials: Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. Please be respectful to your fellow students and turn the sound off. If the professor receives complaints from other students regarding noise or other disruptive behavior (e.g. watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom privileges will be revoked. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. **Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.**

4. **Health and Wellness:**
Information regarding health and wellness-related services available to students may be found at http://www.health.uwo.ca/.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/) for a complete list of options about how to obtain help.

5. **Support Services**
There are various support services around campus and these include, but are not limited to:
1. *Student Development Centre -- http://www.sdc.uwo.ca/ssd/*
2. *Student Health & Wellness --* http://www.health.uwo.ca/
3. *Registrar's Office -- http://www.registrar.uwo.ca/*
4. *Ombudsperson Office -- http://www.uwo.ca/ombuds/*

6. **Documentation for Academic Accommodation (Illness, Medical/Non-Medical Absences)**:
http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12

Students who experience an extenuating circumstance (illness, injury, or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:
(i) Submitting a Self-Reported Absence (see below for conditions)
(ii) For medical absences exceeding 48 hours, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner to their Academic Counselling in their Faculty of registration in order to be eligible for Academic Consideration; or
(iii) For non-medical absences exceeding 48 hours, submitting appropriate documentation (e.g., obituary, police report, accident report, court order, etc.) to Academic Counselling in their Faculty of registration in order to be eligible for academic consideration. Students are encouraged to contact their Academic Counselling unit to clarify what documentation is appropriate.
Students seeking academic consideration **must communicate with their instructors no later than 24 hours** after the end of the period covered by either the self-reported absence or SMC, or immediately upon their return following a documented absence.

The following conditions are in place for self-reporting of medical or extenuating circumstances:
a. **a maximum of two self-reported absences** between September and April and one self-reported absence between May and August;
b. any absences in excess of the number designated in clause a above will require students to present a Student Medical Certificate (SMC) or appropriate documentation supporting extenuating circumstances to the Academic Counselling unit in their Faculty of registration no later than two business days after the date specified for resuming responsibilities.
c. The duration of the excused absence will be for a maximum of 48 hours from the time the Self-Reported Absence form is completed through the online portal, or from 8:30 am the following morning if the form is submitted after 4:30 pm;
d. The duration of the excused absence will terminate prior to the end of the 48 hour period should the student undertake significant academic responsibilities (write a test, submit a paper) during that

time;
e. The duration of an excused absence will terminate at 8:30 am on the day following the last day of classes each semester regardless of how many days of absence have elapsed;
f. Self-reported absences will not be allowed for scheduled final examinations; for midterm examinations scheduled during the December examination period; or for final lab examinations scheduled during the final week of term;
g. Self-reporting may not be used for assessments (e.g. midterm exams, tests, reports, presentations, or essays) worth more than 30% of any given course;

For medical and non-medical absences that are not eligible for self-reporting Kinesiology students must submit an Academic Consideration Request form found online https://www.uwo.ca/fhs/kin/undergrad/files/accommodation_request.pdf in addition to an SMC or appropriate documentation in the event of a non-medical absence. These documents will be retained in the student's file, and will be held in confidence in accordance with the University's Official Student Record Information Privacy Policy.

7. **Grades**: Where possible assignment objectives and rubrics will be posted on OWL. Should you have a concern regarding the grade you received for an assignment or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor or TA. In doing so, please make an appointment and prepare in writing, with evidence, why you feel your grade is inappropriate. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same. Note that calculations errors (which do occur!) should be brought to my attention immediately.

Generally, students can expect some form of feedback on their performance in a course before the drop date.

- November 9th, 2019 (for first term half-courses)
- November 27th, 2019 (for full-year courses)
- March 4th, 2020 (for second term half-or full year courses)

A+	90-100	*One could scarcely expect better from a student at this level*
A	80-89	*Superior work that is clearly above average*
B	70-79	*Good work, meeting all requirements and eminently*
C	60-69	*Competent work, meeting requirements*
D	50-59	*Fair work, minimally acceptable.*
F	below 50	*Fail*

Rounding of Grades (for example, bumping a 79 to 80%):
This is a practice some students request. **This practice will not occur here.** The edges of this course are clear and sharp. The mark attained is the mark you achieved and the mark assigned; there is no rounding to the next grade level, or 'giving away' of marks. Please don't ask me to do this for you; the response will be "please review the course outline where this is presented".

8. **Classroom Behaviour**: Class will begin promptly at the time specified at the top of page one of this syllabus. In the event that you must arrive late, please enter the classroom with a minimal disturbance to the class. Please keep all electronic devices on silent and avoid distracting classmates.

9. **Student Code of Conduct**
The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit https://www.uwo.ca/univsec/pdf/board/code.pdf