## School of Kinesiology Faculty of Health Sciences Western University KIN 1080 – Introduction to Psychomotor Behaviour Winter 2018

Course instructor:	Dr. Matthew Heath
	Office: Somerville House 2369
	Email: mheath2@uwo.ca
	Office Hours: Wednesday TBA
	Additionally times can be scheduled, please do not hesitate to ask
Laboratory Instructor	s: TBA

# Course Information:

Course Number/Name:	KIN 1080b, Introduction to Psycho-Motor Behaviour		
Course Meeting Information:	Monday, Wednesday, Friday: 8:30 am – 9:20 am		
	Health Sciences Building, 040		
Course Website:	https://owl.uwo.ca/		

# **Calendar Course Description**

Fundamental concepts and theories related to movement learning and control will be introduced. The material will address many of the factors that affect the production of motor behaviour. Students will learn about the basis for movement skill and variables that can be used to improve level of skill.

# My Course Description:

Fundamental concepts and theories related to the movement neuroscience will be introduced. The material will address the factors that affect the production of motor behaviour. Students will learn about structures of the central nervous system that relate to skilled movement.

# Learning Objectives:

- i. To introduce students to the structure and function of the central and peripheral nervous systems: emphasis placed on relevant motor system structures.
- ii. To understand the relevant issues associated with the measurement and evaluation of human motor behaviour.
- iii. To understand the cognitive- and sensorimotor factors influencing purposeful movement.
- iv. Define the sensory systems associated with the regulation of skilled purposeful (e.g., vision, proprioception).
- v. To understand the neuromuscular factors influencing skilled purposeful movement.
- vi. To acquaint students with scientific writing techniques, including the need to write succinctly yet comprehensively.

# Course Materials:

Schmidt, R. A., & Wrisberg, C. A. (2014). *Motor Learning and Performance,* 5<sup>th</sup> Edition. Champaign, IL: Human Kinetics.

## This textbook is not required. I have placed a copy on reserve at the Weldon Library.

Course materials (e.g., Course Outline, Lecture Overheads, Laboratory Assignments, Assigned Readings) are exclusively available via OWL - it is your responsible to download and print these materials. Overheads **Should not** be considered a replacement for class lectures.

Supplementary reading materials will be assigned during class.

## Course Methods of Evaluation and Assignments:

The course involves two tests, a final exam and two graded lab assignments. Grades will be rounded according to the scientific method. **Note: the final exam in not cumulative.** 

i.	Test 1 (Friday, February 2: regular class time)	25%
ii.	Test 2 (Wednesday, March 7: regular class time)	25%
iii.	Final Exam (date: TBA)	35%
iv.	Lab Assignments (see Lab Outline for details)	15%

Test 1 and 2 dates are tentative and will be confirmed by the end of the second week of the semester. In the event a snow day or other unexpected university closure occurs on a test day, the test will be held on the next regularly scheduled class.

## Course Performance and Grade Expectations:

In the past, the class average for the course has been between 70-75% (i.e., B- to B). It is anticipated that this will be the case for 2018 semester as well. Many students will likely perform in the C to B range, with fewer in the A or D and below categories. General characteristics of students in each grade category include:

- A students who do well in all tests and the lab assignments they understand a majority of the concepts from lectures and the text; labs are written clearly and professionally good performance begins in the first lab assignment and on the first test. Students in this category regularly attend lectures and keep up-to-date on course readings.
- B generally students who do well in one aspect of the course (labs or tests), but not both – often these are students who do well in most of the course with the exception of the first test.
- C generally students whose performance is inconsistent in demonstrating they understand important concepts often these students put minimal effort into test preparation or the completion of lab assignments in many instances poor performance can be directly attributed to spotty class attendance.
- D (or less) students do not demonstrate in their tests or written work that they understand key concepts.

- 1. The preferred means for students to get assistance with course material, labs, or procedural requirements is to ask questions during lectures. *Remember, it is unlikely that you are the only one with the question/problem.*
- 2. A second option is to ask the course instructor or lab instructors during office hours, or before or after class. It is also possible to contact the course instructor via email; however, the sheer number of students in this course may not allow for a timely response.
- 3. Note: it is the student's responsibility to obtain ancillary lecture notes/materials when they have missed a class (i.e., students must get this information from a colleague in the class). It is not the instructor's responsibility to provide an ancillary lecture in the case of a missed class.

## Missing Tests/Exams or Assignment Deadlines

Students do miss exams and/or assignment deadlines due to illness or other uncontrollable emergencies. If this happens, the following steps should be taken:

- 1. Lateness/Absences. Assignments are due on the assigned due date and will not be accepted late without penalty, except under medical or other compassionate circumstances. Submitting a late assignment without appropriate documentation will result in the grade deductions as specified in the Lab Assignments section (see below). Appropriate documentation for assignments worth less than 10% should be submitted to the Undergraduate office. A missed test or examination without appropriate documentation will result in a grade of zero (0). The course policy is not to allow make-ups for scheduled tests, nor to assign a grade of Incomplete without acceptable and verifiable medical (or equivalent compassionate) reasons. Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents or illness, death) or similar circumstances.
- 2. Written documentation. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. stating specific reasons and dates. Students must follow up with their professors and their Academic Counselling office in a timely manner (i.e., within 48 hours). Documentation for any request for accommodation shall be submitted directly, as soon as possible, to the appropriate Academic Counselling Office of the student's Faculty/School of registration and not to the instructor, with a request for relief specifying the nature of the accommodation being requested. In the event of a medical request, documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. An "Accommodation Consideration Request Form" found online or in the Undergraduate Office" for ALL such accommodation requests must be submitted into the appropriate Academic Counselling Office of the student's Faculty/School of registration. 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. See

http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_medi cal.pdf for specific policy and forms relating to accommodation. 3. 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.

15% of course grades will be posted by the last day to drop a course.

- 4. If medical, see a physician <u>on or before</u> the assignment deadline in question to get the necessary documentation verifying your illness. As specified above, I request that documentation be provided within the first 48 hours and submitted to the to the *appropriate Academic Counselling Office* of the student's Faculty/School of registration, after the test/exam/assignment date or a grade of zero may be recorded.
- 5. Note: medical exemptions are not automatic (e.g., having a headache on the day an assignment is due may still result in marks deducted or grade of zero if the assignment is handed in late).
- 6. If you are to miss a test/exam due to a sanctioned university varsity or club team event then you must notify the instructor at least 48 hours in advance of the test and provide official documentation for your team/club event to the to the *appropriate Academic Counselling Office* of the student's Faculty/School of registration. Failure to provide at least 48 hours advance notification (via email) combined with failure to write the test/exam will result in a grade of zero. In addition, the student (and not the coach) must contact the course instructor.
- 7. <u>Make-up tests are not rescheduled</u>. If a student provides an authorized reason for missing a test, then their grade will be determined based on the cumulative grade associated with completed labs and tests. If a test is missed without a valid reason, then a grade of zero will be applied.
- All laboratory assignments are to be uploaded to OWL on the date specified. <u>There are no exceptions to this policy.</u> Computer problems or other "situations" apart from medical and/or compassionate reasons do not represent justification for a late lab.
- 9. A student must complete at least one of the mid-term tests. Failure to complete at least one of the mid-term tests will be considered as not meeting the course requirements and will result in a grade of Incomplete.

NOTE: in the above "test" and "exam" are used interchangeably.

## Academic Dishonesty

Scholastic offences 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: http://www.uwo.ca/univsec/handbook/appeals/scholastic discipline undergrad.pdf.. You must read the document identified in the aforementioned web link. Ignorance of what constitutes plagiarism or other offenses of academic dishonesty may not be used as an excuse in this class. In particular students are required to fully understand the term <u>plagiarism</u> and why protecting against this act represents an important academic process. In this class, any exam/test/assignment with an identified breach of academic misconduct (plagiarism, cheating etc.) will be reported to the appropriate Dean or Director's Office and handled via the university-wide resolution policy (see website above for details).

<u>Regarding assigned written work (i.e., laboratory assignments):</u> All required lab assignments 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 The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

<u>Regarding computer-marked multiple choice tests and exams:</u> Computer-marked multiple-choice tests and/or exams **will be** subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Regarding Final Exams: According to the **Examination Conflict policy**, "A student who is scheduled to write more than two examinations in any 24-hour period may request alternative arrangements through the appropriate Academic Counselling Office of the student's Faculty/School of registration. <u>\*This policy does NOT apply to mid-term</u> <u>examinations</u>. There will be no make-up for the mid-term exam.

## Disruption:

To protect the rights of all students to learn in an uninterrupted setting, students are expected to conform to the instructor's standard of appropriate classroom decorum. Students who disrupt the academic process will be asked to leave class, and may be involuntarily withdrawn from the course for repeated or serious offenses (see Code of Student Conduct).

In this class specific examples of student disruption include:

- 1. Eating in class.
- 2. Entering class late or leaving early. Class begins at 8:30 am, thus you should be prepared and in your seat before that time. If you ABSOLUTELY have to enter late or leave early make sure you sit, or will sit, in an aisle seat near the back of the room. Do not make a habit of this. Repeated offences will be reported to the appropriate Director's/Dean's Office for academic sanction, or sanctions.
- 3. Class ENDS at 9:20 am. Hence, it is not appropriate for a student to begin packing up their class materials before that time. If a student makes a habit of this, and it is recognized that it disrupts the class, then one warning will be provided. A subsequent infraction will be reported to the appropriate Director's/Dean's Office for academic sanction, or sanctions.

- 4. Talking to your neighbour during class. This is a big class, I strongly urge you to refrain from this activity. Note: in the past students have been involuntarily withdrawn from the course due to frequent in-class talking. I will provide individual students with <u>one warning</u> involving in-class talking. A second offense will be reported to the appropriate Director's/Dean's Office for academic sanction, or sanctions. My typical recommendation in such a case is that the student be involuntarily withdrawn from the course.
- 5. The usage of electronic equipment other than that specifically enhancing the learning environment is not permitted. Thus, if you are taking class notes with your computer that is fine; however, the use of your computer (or other electronic device) for other purposes (e.g., internet browsing, playing computer games etc.) is not allowed. If your electronic use is for purposes other than taking class notes, and if you are observed disrupting other students due to this use, then the offense will be reported to the appropriate Director's/Dean's Office for academic sanction, or sanctions.
- 6. THE USE OF PHONES/IPODS/MP3 PLAYERS ETC. IS NOT PERMITTED. PLEASE BE CERTAIN YOUR CELL PHONE HAS BEEN TURNED OFF PRIOR TO ENTERING CLASS.
- 7. AUDIO OR VIDEO RECORDING OF CLASS LECTURES IS NOT PERMITTED.
- 8. DO NOT TAKE PICTURES DURING CLASS.
- 9. ELECTRONIC EQUIPMENT OF ANY KIND IS NOT PERMITTED DURING EXAMS. ALL YOU NEED IS A PENCIL.
- 10. YOU MANY NOT USE ANY REPRODUCTION OF THE CLASS LECTURE OVERHEADS AND POST TO ANY ELECTRONIC MEDIUM

English Proficiency for the Assignment of Grades:

Visit the website: http://www.uwo.ca/univsec/pdf/academic\_policies/exam/english.pdf

# 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 -- http://www.shs.uwo.ca/student/studenthealthservices.html
- 3. Registrar's Office -- http://www.registrar.uwo.ca/
- 4. Ombuds Office -- http://www.uwo.ca/ombuds/

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

# Course Content:

Note: the chapters referred to below reflect that associated with the ancillary course text identified above (i.e., Schmidt and Wrisberg, 2014)

- A. Introduction to Psycho-Motor Behaviour (see lecture notes)
  - 1. What is Psycho-Motor Learning?
  - 2. Introduction to Motor Control and Motor Learning
  - 3. Measurement and Evaluation of Motor Performance

# B. The Nervous System (see lecture notes and web resources listed below)

- 1. Structure and Function of the Central Nervous System
  - Cortex
    - Basal ganglia, brain stem and cerebellum
  - Spinal cord
- 2. Structure and Function of Peripheral Nervous & Neuromuscular Systems
  - The motorneuron
  - The motor unit
  - Muscle spindles

http://www.med.harvard.edu/AANLIB/home.html http://www.pbs.org/wnet/brain/3d/index.html

- C. Motor Skill Classification (Chapter 1)
  - 1. Skills Classified by Task Organization
  - 2. Skills Classified by Cognitive Demands
  - 3. Skills Classified by Level of Predictability
- D. Cognitive-Motor Factors in Human Information Processing
  - 1. Attention (Chapter 3)
  - 2. Memory (Chapter 3)
- E. Fundamentals of Motor Control
  - 1. Sensory Contributions to Motor Control (Chapter 4)
  - 2. Central Contributions to Motor Control (Chapter 5)
  - 3. Principles of Simple Movements (Chapter 6)

## Laboratory Assignments

Four laboratory experiences are scheduled. The labs are "virtual" in the sense that the work for the lab is normally done by the students in their own home/residence. For some labs, data will be collected and students are required to write a brief lab report. The lab write-up (one week to complete) will follow formatting as specified by the American Psychological Association

Publication Manual (6<sup>th</sup> Ed), with a brief Introduction, Methods, Results, and a Discussion. Normally students will use the text and lectures as the background for the write-ups.

A maximum of 450 words is allotted in writing up your laboratory assignments (i.e., all text contained within Introduction, Methods, Results and Discussion; **figure/table captions and references are excluded from the word count**). Assignments <u>are not to exceed the word maximum</u>. <u>Assignments exceeding the 450-word maximum WILL receive a grade of zero.</u> Students who fraudulently report the number of words in their lab assignment will be charged with academic misconduct (see above) and will receive a grade of zero for their assignment.

Assignments submitted late will lose 50% per day (i.e., after 2 days the assignment will be given a grade of zero). <u>Assignments submitted after 4:00 pm on the due date are</u> <u>considered one day late. If you submit an assignment late. you MUST contact the</u> <u>instructor. via email. indicating that your lab will be late. Please note that a lab that is late</u> <u>because "my computer crashed" is not an acceptable justification. Back-up and store</u> <u>your work on multiple resources and ensure that it is completed and submitted on time</u>

# Assignments are to be submitted via OWL (details will be provided in class). Do not email your lab to the Instructor or TA's.

Plagiarism/Copying from others: Students must write their own labs in their own words. Plagiarism, copying, or handing in someone else's work is a major academic offence (see above section dealing with Academic Dishonesty). Complete your own lab report: do not use the same data as another student in the class. In a nutshell, make certain that your lab report is independent.

## **Evaluation of Laboratory Assignments:**

Lab #1 and Lab #4 will be included in Test #1 and the Final Exam, respectively. Lab #2 and Lab #3 will be handed in on the due dates outlined below. Lab #2 is worth 5% and Lab #3 is worth 10%. The specific grading scheme for Lab #3 is outlined in the individual lab assignment.

WEEK	LABORATORY #	DUE DATE
January 24	Lab #1	Test #1
Approx: February 5	Lab #2	February 14
March 12	Lab #3	March 19
April 4	Lab #4	Final Exam