Western University Faculty of Health Sciences School of Kinesiology

KIN 1080B - Introduction to Psychomotor Behaviour Winter 2021

Instructor: Dr. Matthew Heath
Email: mheath2@uwo.ca
Office Hrs: Wednesday, 12:30-2:30pm via Zoom

TAs: TBA
Instruction Mode: Online

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

Calendar Course Description (including prerequisites/anti-requisites):

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 voluntary movement. Students will learn about the basis for movement skill and variables that can be used to improve level of skill.

Extra Information: online instruction only

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.

My Course Description:

To provide an overview of the neural control of human movement and how cognition and sensory feedback influence normative and pathological movement states.

Copyright:

The course instructor owns the intellectual property and asserts copyright protection over the lecture videos and all course materials. Accordingly, you may stream – but not download or record – lecture videos and you may not post or repurpose any lecture materials (i.e., overheads, discussion questions, practice questions etc.).

Learning Outcomes/Schedule:

Upon completion of this course students will be able to:

- Identify and understand the nervous system structure and function: emphasis placed on relevant motor system structures.
- Understand relevant issues associated with measurement and evaluation in the human movement neurosciences.
- Describe the cognitive and sensorimotor factors influencing purposeful movement.
- Define the sensory systems associated with the regulation of skilled movement (e.g., vision, proprioception).
- Describe the neuromuscular factors influencing skilled movement.
- Write succinctly yet comprehensively.

Course Material/Text:

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

This textbook is NOT required. A copy of this text has been placed 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 responsibility to download and print these materials. Overheads should not be considered a replacement for class lectures.

Course Evaluation:

Test 1 (February 3: 9 to 9:30 am EST online via OWL)
 Test 2 (March 10: 9 to 9:30 am EST online via OWL)
 Final Exam (date: TBA)

4. Lab/Discussion Assignments (see below for details) 20%

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 test, without appropriate documentation will result in a zero (0) grade. Acceptable reasons might include hospital stays, serious illness, family emergencies (e.g., serious accidents, illness or death) or similar circumstances.

In the event that you have missed a test for a valid reason, the policy for this course is to not schedule a make-up test. Accordingly, if you miss a test for a valid reason then your final grade will be determined from your remaining test, lab/discussion assignemnts and final exam scores. It is the policy for this course that at least one Test (i.e., Test 1 or 2) be written. If a test is not written, you will not be provided a final grade at the end of the course.

Distribution of Student Load:

Online video lectures: ~3 hours/wk
Private study and discussion groups: ~3 hours/wk

Course Content:

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)

Assistance with Class Material:

- 1. The instructor and your assigned teaching assistant will hold weekly drop in Zoom meetings (see above Instructor Office Hours). The drop in Zoom meetings serve as the preferred means for assistance with all course materials.
- 2. An email to the instructor or teaching assistant is not a preferred means of communication.
- 3. 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). The instructor will not provide an ancillary lecture in the case of a missed class.

Lab/Discussion Assignments:

This component of the course will contribute 20% to your final grade. The timeline and due dates for lab/discussion assignments are found here: XXXXXX. Completed assignments are to be posted to your OWL discussion board prior to 4:30 pm EST on the due date. If you do not post your answer prior to 4:30 pm EST then you will receive a grade of zero (0) for that assignment. There are not exceptions to this course rule.

NOTE: there are 13 lab/discussion assignments. For this course, you are required to complete 10 of the 13 lab/discussion assignments. You can elect to complete all 13 assignments, and in such a case the 10 assignments with highest graded will be used to derive your lab grade.

Lab/Discussion assignments are predicated on the completion of readings and videos. For example, at the end of the first lecture (see video for Lecture 1) you will read a research article and answer four questions related to the article. For this, and subsequent assignments, you will post your answers to your assigned small group OWL discussion board. Each group will have approximately 25 members from the class (see OWL for your assigned discussion group). The goal of this component is to collect/analyze interpret data, think critically, synthesize information, write efficiently and effectively and critique the work of others.

For each lab/discussion assignment your answers posted to OWL will be graded by your assigned TA, and each assignment is evaluated out of 10 points. The discussion board will also allow you to comment/interact with the answers of your fellow group members and this board will be moderated by the assigned TA.

As mentioned above, each lab/discussion assignment will be evaluated out of 10 points. The breakdown of the 10-point evaluation is based on the following:

- 4 points awarded based on writing efficiency and effectiveness (i.e., writing quality),
- 4 points awarded based on the answer content and/or the appropriate analyses/presentation of data (i.e., did you answer the question correctly),
- 1 point awarded based on integration of external evidence supporting your answer and/or position statement, and
- 1 point awarded based posting a commentary to a peer response.

Course/University Policies

1. Test and Exam Policy

Tests and examinations in this course may be conducted using both Zoom and the remote proctoring service, Proctortrack.

When Zoom is used for exam invigilation, you will be required to keep your camera on for the entire session, hold up your student card for identification purposes, and share your screen with the invigilator if asked to do so at any time during the exam. The exam session using Zoom will **not** be recorded.*

Proctortrack will require you to provide **personal information** (including some biometric data). The session will be **recorded.** By taking this course, you are consenting to the use of this software. More information about remote proctoring is available in the Online Proctoring Guidelines at the following link:

https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf.

Completion of this course will require you to have a reliable internet connection and a device that meets the system and technical requirements for both Zoom and Proctortrack. Information about the system and technical requirements are available at the following links:

https://www.proctortrack.com/tech-requirements/,

https://support.zoom.us/hc/en-us.

- * Please note that Zoom servers are located outside Canada. If you would prefer to use only your first name or a nickname to login to Zoom, please discuss this with your instructor in advance of the test or examination.
- 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 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/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/assignments 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. 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.

4. Support Services:

There are various support services around campus,6 and these include, but are not limited to:

- Student Development Centre -- http://www.sdc.uwo.ca/ssd/
- Student Health & Wellness -- http://www.health.uwo.ca/
- Registrar's Office -- http://www.registrar.uwo.ca/
- Ombudsperson Office -- http://www.uwo.ca/ombuds/

5. Accommodation Policies:

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: Academic Accommodation for Students with Disabilities.

Academic Consideration for Student Absence

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or, provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For Western University policy on Consideration for Student Absence, see Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs

and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar.

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.

At least three days prior to the deadline for withdrawal from a 1000- or 2000-level course without academic penalty, students will receive assessment of work accounting for at least 15% of the final grade.

- □ November 12th, 2020 (for first term half-courses)
- □ November 30th, 2020 (for full-year courses)
- □ March 14th, 2021 (for second term half courses)

A+	90-100	One could scarcely expect better from a student at this level
Α	80-89	Superior work that is clearly above average
В	70-79	Good work, meeting all requirements and eminently
С	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. <u>Please do not provide requests for a grade 'bump"</u>; the response will be "please review the course outline where this is presented".

7. 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

8. Netiquette for online discussions

This course entails online discussion and critiquing of student responses. For that reason, it is important to use appropriate language for online discussion. Accordingly,

- Keep in mind the different cultural and linguistic backgrounds of the students in the course.
- Be courteous toward the instructor, your colleagues, and authors whose work you are discussing/critiquing.
- Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. "Flaming" is never appropriate.
- Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

Inappropriate online behavior may be subject to disciplinary measures under the Code of Student Conduct.

9. Examination conflicts:

A student with examinations having flexible submission times (e.g., where one or more examination is a take-home examination) cannot request alternative arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time within the window specified by the instructor. This applies to direct conflicts as well as "heavy load" conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request accommodation with their academic counselling unit prior to the deadline to drop a course without academic penalty.

In the case of online examinations, an "Examination Conflict Room," which may be assigned when a student is scheduled to write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.