THE UNIVERSITY OF BRITISH COLUMBIA
School of Kinesiology
Kinesiology 211 (previously KIN 230)
Fall 2020: Term 1

Human Motor Behaviour

Instructor: Professor Nicola Hodges

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ZOOM LINK:
https://ubc.zoom.us/j/65306281009

Meeting ID: 653 0628 1009
One tap mobile
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Please Note: *In these extraordinary times of social distancing, quarantine, misinformation, loss, online learning and so many other challenges, it is important to remember to be kind and patient with yourselves, with each other, with the TAs and with me. I know we will be losing human connection, but we will try and make "live" time available for you through chat functions during live lectures, TA tutorials/office hours, motorlab time etc. While this course is mediated through the web and various digital tools and each one of us is experiencing some sort of disruption, we can choose to be intentional about supporting each other. This is a very large class, so please use the discussion board for each module to ask content questions which are not addressed in class. DO NOT EMAIL the instructor with CONTENT questions. Where possible, try and set up a small support group of class mates to help you study and navigate the material. If the TAs can help you establish support groups please reach out so they can connect you to others.*

Lectures and seminars: Tuesday, Thursday: 9:30 – 11am (**Lectures will be online via Zoom**). There will be a combination of live/synchronous and recorded /asynchronous style lectures. Typically live lectures will only be on Tuesdays, but these will also be recorded.

Office Hours: *TBD*
* All course information can be found at https://canvas.ubc.ca/
* If you need help/ have questions ACT early. Please follow the 5 steps below.

Step 1: Read the book/check class notes/check notes on Canvas
Step 2: Discuss questions and cross-check notes with class/studymates
Step 3: Post questions on the Canvas "Discussion board" or chat and engage in Q&A forum
Step 4: Email TA
Step 5: Email Me

Course Description
KIN 230 provides a foundation for understanding the characteristics and principles of motor learning and control and how different factors influence learning and performance with a focus on sport application. This course is an introduction to the area of human motor learning/motor skill acquisition and control. It introduces students to the visual-cognitive processes that underlie human movement, the process of learning motor skills and the factors that influence acquisition, performance, and control. Students of this course will gain knowledge, appreciation, and understanding of the conceptual and empirical foundations in motor learning and control.

Rationale
This course exists to give you basic knowledge concerning how and why we move and acquire motor skills. It is designed to make you think about how and why we respond, plan and organize actions and attend to and process visual and verbal information in order to move, learn and teach motor skills. This course is a foundational course in motor behavior, which provides a background for KIN 330. This course fits generally with neuro-mechanical related courses and sport psychology/sport performance courses. Concepts covered in this course have broad application to the field of Kinesiology with respect to workplace design, coaching, rehabilitation, physical education, strength and conditioning and sport performance.

Required Course Text
Schmidt, R.A., and Lee, T.D. (2019). *Motor Learning and Performance (6th Ed.)*. Champaign, Illinois: Human Kinetics (and web study guide). You can use the 5th edition, but it does not include the study guide & narratives. If you use an old version of the book, it is up to you to make sure you have the right chapters/content and page numbers (organization is different). Permalink: https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller_id=16&Course=KIN+211.001&t=permalink

Course Learning Objectives
-- As part of the learning objectives of this course, students will:
1. Discuss fundamental principles and concepts in motor learning and control.
2. Define and explain the essential terms and language used in motor learning and control.
3. Understand the role of cognition, attention, and memory in motor learning and control.
4. Know the roles of augmented feedback and practice organization in motor skill acquisition.
5. Know how the information-processing framework is applied to motor learning and control.
6. Demonstrate understanding of how and why certain research methods and experiments aid our knowledge of motor learning and control.
7. Apply concepts and principles in motor learning and control to teaching, coaching, skill development, and overall motor performance.

Structure
This is a 3-credit course with mostly lectures and labs on Tuesdays and Thursdays. The lectures will focus upon the concepts, principles, and research in human motor behaviour and will ***complement*** the readings from the text and other posted materials. Students are responsible for reading the text book and any assigned readings.

Formative quizzes: For every section/module of the course there are "test yourself" quizzes. These are 5-10 questions designed to test knowledge of the material. These are formative quizzes

only and are not graded. Feedback is provided through the canvas quiz function and you can take the quiz up to 3 times. The quizzes are not available until AFTER the last lecture related to the module. You are also strongly encouraged to use the online/study quizzes from the course-text, web study-guide to test your knowledge of the readings*.*

Lecture notes: Class notes will be made available in .pdf file-format through the canvas course website (.ppt slides will also be available for ~24 hours, if students wish to use these in class for note taking). I will likely use powerpoint to record lectures and will post the mp4 version of the lecture. If the lecture is live then I will record using the zoom function. I will also use Camtasia for editing and providing online lectures.

Motor labs: There are 9 motor labs associated with this course which you will do on your own and time will be made available for help with these labs and any other questions from the course 5 times throughout the course. Only 5 of the labs will be graded (5/lab), the rest are for practice and study. Note, the final exam will be on material covered after midterm 2 and ALL material from the motor labs. To download motor labs please go to: https://motorlab.ca/. All the details you will need for each motor lab are listed in canvas for each module, where you will be told the name of the lab., you will be given a powerpoint with instructions, an excel sheet to enter and graph your data and a lab. activity to make sure you understand the lab and material. AFTER you have completed the lab., you can then do the quiz. The quiz for the lab will only be available for 45 mins after you start and the graded labs can only be completed once (all others 3 attempts).

Supplementary resources: I have added many podcast, video and reading resources associated with the text (e.g., application narratives) to canvas to help you understand the material and know how it may apply. I will not be testing you on this additional material, but it definitely helps if you can understand and apply your knowledge when it comes to studying and remembering for the long term.

Assessments and Examinations

Assessment of learning objectives will be conducted through online quizzes/exams (2 Midterms and 1 Final). Exams will cover material from all lectures and readings and Motor Labs. Examinations will include multiple choice, true/false and short-answer or numeric answer questions. *All assessments will be conducted through the Quizzes online in canvas.

Summary of Assignments and grading (please see canvas modules for details)

Motor Labs (20%) – 5% /lab; 4 in total will be graded out of 9 total labs. Graded Labs = Hicks Law, Sep 22nd; Slater-Hammel/anticipation, Fitts Law -both Oct 27th and Contextual Interference, Nov 24th. These can be open book. Note, you only have 45 min to complete the quiz once started.

Midterms 1 and 2 (50% total) - The midterms are closed book. You will not have time to look up material, so please study in advance. I will give formulas where needed to prevent the temptation to make a cheat sheet. Questions and answers will be random and there will be different versions of the midterms to avoid cheating during the exam time.

- Midterm 1 (25%) –all material up until midterm 1; Oct 8th (50 min)
- Midterm 2 (25%) -all material between midterm 1 and midterm 2; Nov 10th (50 min)

Final exam (30%) -all material between midterm 2 and final and all Motor Labs (graded and ungraded labs); date tbd

Missed exams: Individuals who do not write a mid-term exam will get a 0 for the exam unless acceptable supportive documentation is provided to the instructor. If an exam is missed, then any concessions to write a make-up exam or get reweighting of grades, need to be conveyed to the instructor BEFORE the missed exam and will only be available in exceptional circumstances. The instructor reserves the right to decide on any concessions regarding make-up exams or changing the weighting for other exams (only with valid reasons/documentation).

Academic Accommodation for Students with Disabilities
The University's goal is to ensure fair and consistent treatment of all students, including students with a disability, in accordance with their distinct needs and in a manner consistent with academic principles. Students with a disability who wish to have an academic accommodation should contact Access and Diversity without delay.

Academic Integrity
All UBC students are expected to behave as honest and responsible members of an academic community. Breach of those expectations or failure to follow the appropriate policies, principles, rules, and guidelines of the University with respect to academic honesty may result in disciplinary action. It is your responsibility to become familiar with the University of British Columbia's Academic Honesty and Plagiarism Policies, as well as the Student Declaration and the consequences of violating these policies.

Honesty Pledge (to be reaffirmed before all exams)

I hereby pledge that I have read and will abide by the rules, regulations, and expectations set out in the UBC Academic Calendar, with particular attention paid to:

1. The Student Declaration (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,285,0,0)
2. The Academic Honesty and Standards (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,286,0,0)
3. The Student Conduct During Examinations (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,41,90,0)
4. And any special rules for conduct as set out by the examiner

I affirm that I will not give or receive any unauthorized help on this examination, that all work will be my own, and that I will abide by any special rules for conduct set out by the examiner.

Remote Access to Some University Services

A Virtual Private Network (VPN) allows users to access networks and services over a secure connection. Please note that some university services, including library access, may require you to connect to the library servers by VPN. To download and install the Cisco VPN software, please visit the UBC VPN Website.

Tentative Course schedule (note; this is the planned schedule as of AUG 2020, but there may need to be adjustments. Any changes will be announced through canvas)

Date	Topic Outline		Textbook Readings(s)
1. **(wk1)** Sep8 (tu)	Lecture 1	**Intro (live), Lecture 1a** What is Motor Behaviour (1b) (recorded)	Ch1
2. Sep 10 (th)	Lecture 2	Classification of Motor Skills (2a) and Measuring Motor Performance(2b) (all recorded)	Ch1 & Ch 2
3. **(wk2)** Sep 15 (tu)	Lecture 3	**3a Measuring Motor Performance (live)** and 3b Information Processing I (recorded)	Ch2
4. Sep 17 (th)	Lecture 4	Information Processing II (recorded)	Ch2
(wk3) Sep 22 (tu)	**TUTORIAL & LAB SESSION 1**	**MOTOR LABS & TUTORIAL TIME; COURSE MATERIAL 1-4 1 = Errorcalculation; 2 = Hicks Law GRADED (5%) Available for live discussion/chat *(Recommend also doing Donders, S-R compatibility, simple RT)***	
5. Sep 24 (th)	Lecture 5	5a =Memory and 5b = Attention I (recorded)	Ch2 & Ch3
6. **(wk4)** Sep 29 (tu)	Lecture 6	**Attention II 6a = attention (live)** and 6b PRP, recorded.	Ch3 (*ch4*)
7. Oct 1	Lecture 7	Sensory Contributions to Skill (recorded)	Ch4
(wk5) Oct 6th	**TUTORIAL & LAB SESSION 2**	**MOTOR LABS & TUTORIAL TIME; COURSE MATERIAL 5-7 3 =Memory, 4 =PRP, NOT GRADED Available for live discussion/chat *(Recommend also doing Probe RT, Stroop)***	
Oct 8th	**MIDTERM #1 (9:30am)**		
8. **(wk 6)** Oct 13th	Lecture 8	**Vision (8a, live)** & 8b &c sensory systems (recorded)	Ch4
9. Oct 15th	Lecture 9	9a & b -Open-loop & motor programs (recorded)	Ch5
10. **(wk8)** Oct 20	Lecture 10	**10a (live)** GMPs and 10b GMPs/schema theory (recorded)	Ch5
11. Oct 22	Lecture 11	Principles of Speed and Accuracy (recorded)	Ch6
(wk9) Oct 27	**TUTORIAL & LAB SESSION 3**	**MOTOR LABS & TUTORIAL TIME; COURSE MATERIAL 8-11 5 = Slater-Hammel anticipation; 6 = Fitts Law ALL GRADED (10%) Available for live discussion/chat *(Recommend also Henry & Rogers/response complexity)***	
12. Oct 29th	Lecture 12	12a&bLearning Defined & Measured (recorded)	Ch8

13. **(wk10)** Nov 3rd	Lecture 13	Learning & Transfer (**live**)	Ch8&9
Nov 5th	**TUTORIAL & LAB SESSION 4**	**MOTOR LABS & TUTORIAL TIME; COURSE MATERIAL 12-13** **7 = Practice Variability (not graded)** **Available for live discussion/chat**	
(wk11) Nov 10th	**MIDTERM #2**		
14. Nov 12th	Lecture 14	14a,b & c Conditions of Practice 1 (organization)	Ch9 &10
15. **(wk12)** Nov 17th	Lecture 15	Conditions of Practice2 (methods) **15a, live** (15b recorded)	
16. Nov 19th	Lecture 16	16a, Conditions of Practice3/ 16b, ChallengePt (recorded)	Ch10
(wk13)Nov 24th	**TUTORIAL & LAB SESSION 5**	**MOTOR LABS & TUTORIAL TIME; COURSE MATERIAL 14-16** **8 = CI 9= Feedback/KR (ONLY CI LAB IS GRADED, 5%)** **Available for live discussion/chat**	
17. Nov 26th	Lecture 17	Augmented Feedback (post practice info.) (recorded)	Ch11
18. **(wk14)** Dec 1st	Lecture 18	**Review Class (live)**	RELEVANT CHAPTERS Postmidterm2 & labs

International Students and Censorship

From: Andrew Szeri, Provost and Vice-President Academic, UBC Vancouver

"During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0 for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom). Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: http://academic.ubc.ca/support-resources/freedom-expression"