

Department of Applied Physiology and Kinesiology

UNIVERSITY of FLORIDA

MOTOR LEARNING

APK 3200 ~ **3 CREDITS** ~ **SUMMER A 2021**

INSTRUCTOR: Paul A. Borsa, PhD, ATC

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OFFICE HOURS: Scheduled Zoom time (W 11:30am – 12:30pm) or by appointment

MEETING TIME/LOCATION: MTWRF 4th period (12:30 - 1:45pm; HyFlex delivery accessed

through Zoom and/or CANVAS)

COURSE DESCRIPTION: The course will provide theoretical concepts on how we learn to control our movements and become skilled at performing movements. The course provides background for understanding, analyzing, and teaching skills in sports, rehabilitation and instructional settings with attention given to aspects of psychomotor developments and theoretical models of skill acquisition. Although the emphasis of this course will be behavioral, it will include elements from neurophysiology and neuroscience.

PREREQUISITE KNOWLEDGE AND SKILLS: junior standing or above; majors only.

COURSE LEARNING OBJECTIVES:

Upon completion of this course, the student will be able to:

- 1. Differentiate and explain learning theories applicable to skill acquisition and retention
- 2. Apply knowledge of instructional strategies for basic skill acquisition
- 3. Appraise current evidence and trends in motor learning and motor control
- 4. Recognize general (classic) research paradigms used in motor learning and control research

REQUIRED AND RECOMMENDED MATERIALS: Magill, R.A. (2011). <u>Motor Learning and Control:</u> <u>Concepts and Application</u> (10th Ed.). Boston, MA: McGraw Hill.

COURSE FORMAT: Lecture material will be available to students on e-Learning CANVAS. The course will be taught using the HyFlex platform. Most, if not all, lectures will be available for

asynchronous learning. Lectures are pre-recorded and will be uploaded to the Modules section on CANVAS. Lectures can be viewed on most personal electronic devices (desktop & laptop computer, tablets, etc.) using Mediasite or other related audio/video platforms. Students are expected to take notes using the lecture notes provided. Lecture notes can be found in the files section.

COURSE AND UNIVERSITY POLICIES:

ATTENDANCE POLICY: N/A

PERSONAL CONDUCT POLICY: Students are expected to exhibit behaviors that reflect highly upon themselves and our University. UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel.

EXAM MAKE-UP POLICY: No makeup examinations or quizzes will be given without a serious and/or compelling reason. A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an illness, family emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment (https://care.dso.ufl.edu/instructor-notifications/). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO. "Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx."

ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for a disability must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retro-active, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

ELECTRONIC DEVICES: N/A

COMMUNICATION: You are responsible for checking announcements and course postings on CANVAS. This is how your course instructor will communicate with you. All course grades (quizzes and examinations) will be posted on CANVAS. Any discrepancies should be pointed out to the instructor on or before the last day of finals week.

COURSE EVALUATIONS: Students in this class are participating in GatorEvals. This evaluation system is designed to be more informative to instructors so that teaching effectiveness is enhanced and to be more seamlessly linked to UF's CANVAS learning management system. Students can complete their evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Thank you for serving as a partner in this important effort.

COVID-RELATED: For face-to-face courses a statement informing students of COVID related practices such as:

- We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.
- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (<u>Click here for guidance from the CDC on symptoms of coronavirus</u>), please use the UF Health screening system and follow the instructions on whether you are able to attend class. <u>Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms</u>.
- Course materials will be provided to you with an excused absence, and you will be given
 a reasonable amount of time to make up work. <u>Find more information in the university</u>
 attendance policies.

PRIVACY: For online course with recorded materials a statement informing students of privacy related issues such as: Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image

recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

GETTING HELP:

Health and Wellness

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

Academic Resources

- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/
- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/ On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

GRADING:

Evaluation Components (number of each)	Points	Weighting %
Lecture Exams (6)	380	95
Group Discussions	20	5
Total	400	100

Lecture Exams: Questions will be in multiple choice, matching and true/false format. Students are not permitted access to any kind of materials or notes during these exams. Exam questions are generated by the course instructor and the focus should be given to the lecture notes when studying. Exams are NOT cumulative and there is no final comprehensive examination.

Students will take exams using Honorlock and will be allowed 30-50 minutes to complete each exam depending on the number of questions.

Exam	Unit	Chapters	Questions/Points Possible	Time allotted (minutes)
1	1	1-3	30/60	30
2	2	4-8	50/100	50
3	3	9-10	20/40	20
4	4	11-13	30/60	30
5	5	14-15	20/40	20
6	6	16-19	40/80	40

Group Discussions: Students are required to participate in all discussion board assignments. The quality of engagement in this activity will be noted and graded accordingly. There will be 4 discussion boards posted during the semester each worth 5 pts $(4 \times 5 = 20 \text{ pts})$.

Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

Final grades will NOT be calculated using CANVAS. The instructor will calculate your grade using separate software and uploaded to CANVAS once the final tabulations have been made.

GRADING SCALE: Quiz and exam scores will be entered or uploaded directly into canvas within 12-24 hrs after completion. If you feel there is an error in grade calculation, please bring it to the attention of the instructor ASAP. "More detailed information regarding current UF grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/."

Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
Α	90.00-100%	4.0
B+	87.00-89.99%	3.33
В	80.00-86.99%	3.0
C+	77.00-79.99%	2.33
С	70.00-76.99%	2.0
D+	67.00-69.99%	1.33
D	60.00-66.99%	1.0
E	0-59.99%	0

WEEKLY COURSE SCHEDULE:

Week	Dates	Lecture Topics	Readings
1 May 10-14	Unit 1: Introduction to Motor Skills and Abilities		
	Classification of Motor Skills	Ch. 1	
	Measurement of Motor Performance	Ch. 2	
		Motor Abilities	Ch. 3
		Exam 1 (Unit 1: Ch. 1-3)	
		<u>Unit 2: Introduction to Motor Control</u>	Ch 4/6
2 M	May 17 21	Neural Basis for Motor Control	Ch. 4/6 Ch. 5
	May 17-21	Motor Control Theories	Ch. 6
		Sensory Components of Motor Control (Vision)	CII. 0
		Performance & MC Characteristics of Functional Skills	Ch 7
		Action Preparation	Ch. 7
3	May 24-28	Exam 2 (Unit 2: Ch. 4-8)	Ch. 8
		Unit 3: Attention & Memory	Ch O
		Attention as a Limited Capacity Resource	Ch. 9
		Mon, May 31 is a holiday (Memorial Day) – no class	Ch. 10
		Memory Components, Forgetting, and Strategies	Cn. 10
4 May 31-Ju	May 21 June 4	Exam 3 (Unit 3: Ch. 9-10)	Ch. 11
	iviay 31-June 4	Unit 4: Introduction to Motor Skill Learning	Ch. 12
		Defining & Assessing Learning	CII. 12
		Stages of Motor Learning	
	June 7-11	Transfer of Learning	Ch. 13
		Exam 4 (Unit 4: Ch. 11-13)	Cii. 13
5		Unit 5: Instruction & Augmented Feedback	
		Demonstration & Verbal Instructions	Ch. 14
		Augmented Feedback	Ch. 15
		Exam 5 (Unit 5: Ch. 14-15)	Cii. 13
		<u>Unit 6: Practice Conditions</u>	
6	June 14-18	Practice Variability	Ch. 16
		The Amount & Distribution of Practice	Ch. 17
		Whole & Part Practice	Ch. 18
		Mental Practice	Ch. 19
		Exam 6 (Unit 6: Ch. 16-19)	

SUCCESS AND STUDY TIPS:

- Read and familiarize yourself with all aspects of the course syllabus
- Complete required readings from the chapters in the textbook, watch pre-recorded lectures and take impeccable notes, and attend synchronous lectures/office hours on a regular basis
- Learning over time approach will help with comprehension of course material