UF | College of Health & Human Performance

Department of Applied Physiology and Kinesiology

UNIVERSITY *of* FLORIDA

NATURE AND BASES OF MOTOR PERFORMANCE

APK 6205 ~ 3 CREDITS ~ FALL 2020

INSTRUCTOR:	**Professor Evangelos A. Christou**
	Office: FLG 132 E
	Office Phone: 352-294-1719
	Email: eachristou@ufl.edu
	Preferred Method of Contact: email
OFFICE HOURS:	By appointment
MEETING TIME/LOCATION:	Period 6-8 (12:50 – 3:50 pm); Although FLG 280 is our assigned classroom location, for everyone's safety, we will meet on ZOOM during the class time. There will be some one-to-one meetings, if needed.

https://ufl.zoom.us/j/99713729934?pwd=TUZRLzBNREFmY05ncFVtNWZjbVJSdz09
Passcode: 678303

COURSE DESCRIPTION: University of Florida Course Description: Principles relating to development of motor skill, with emphasis on conditions affecting its development and retention in activities. This class will address the physiological principles that underlie current concepts in motor control and learning.

REQUIRED AND RECOMMENDED MATERIALS: RM Enoka. Neuromechanics of Human Movement. 5th edition. Human Kinetics. ISBN 978-1-4504-5880-1 (optional – not required). Handouts and review papers will be provided for specific topics (see schedule).

COURSE FORMAT: The typical structure of this 3-period class that occurs every Monday is the following: Lecture on the topic of the week followed by a relevant presentation from a student. After that there will be Discussion on each topic.

COURSE LEARNING OBJECTIVES:
1. Knowledge: Discuss, explain, and defend subject matter relevant to physiological principles that underlie motor performance.
2. Skills: Discuss, explain, and compare specific skills related to physiological principles that underlie motor performance.
3. Professionalism: Present and explain vital, relevant concepts of motor performance in a professional manner.

COURSE AND UNIVERSITY POLICIES:

ATTENDANCE POLICY: Make every effort to attend all lectures. Although attendance will not affect your grades directly, it could influence them indirectly. Numerous concepts that will be discussed only during class (and are not in the book) will be part of your weekly quizzes.
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

PERSONAL CONDUCT POLICY:
Technology: The use of cell phones* (and the like) is strictly prohibited during lectures and exams. Any cell phone or other electronic device used during an exam will be considered a violation of the student honor code (i.e., cheating) and will result in stiff penalties. Laptop computers are welcome in class as long as you are using it for class-related work. Surfing the web, checking your email, making Facebook posts, or anything of that nature is strictly prohibited. Violation of this policy will result in point deductions at the discretion of the instructor.

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

Academic Honesty: 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."
Any student found violating this honor code will receive a zero for that exam or assignment and may be assigned other educational sanctions at the instructor's discretion.
https://sccr.dso.ufl.edu/process/student-conduct-code/

EXAM MAKE-UP POLICY: Unexcused absences on quiz/exam days will result in a zero on the quiz/exam. If you are ill or have an emergency that prevents you from taking the quiz at the scheduled time, it is your responsibility to contact the instructor as soon as possible. Documentation of the illness or emergency will be required. It is in the discretion of the instructor to provide a make-up quiz/exam or count the next one twice.
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.

HONORLOCK:

Honorlock System Requirements (exam proctoring): Exams will be proctored using HonorLock. You will not need to sign-up or schedule a testing time, nor will you need to create an account. To ensure your device is compliant with HonorLock, a series of pre-assessment checks must be performed before gaining access to the exam. Please do so in advance of the exam; we are unable to further accommodate for individual technological issues that may detract from your exam time. Specifications necessary for HonorLock to work are listed below:

System compatibility and setup:

o   HonorLock is only supported through Google Chrome web browser on Mac, PC (no other mobile devices or tables are supported)

o   Students must install the HonorLock Extension within Chrome

o   HonorLock will not support Windows 8, Windows 8.1, Mac OSX 10.11 and Mac OSX 10.12. You can find the updated Minimum System Requirements and a system compatibility test at www.honorlock.com/support.

•   Additional considerations using HonorLock for exams:

o   You will need to take the exam on a desktop computer or laptop with a webcam and microphone set up on your chosen device. This will not work on mobile devices or tablets, including iPads and smart phones.

o   You need to make sure that the camera is facing YOU at all times – if the camera does not stay facing you or if you are out of frame, the exam will pause, preventing you from continuing even midway through. This will detract from your exam time.

o   You need to open Canvas on the Google Chrome internet browser and to download the HonorLock Chrome Extension. Other internet browsers will not be compatible with HonorLock.

o   Make sure you have a stable Internet connection wherever you are taking the exam (i.e. good Wi-Fi).

o   A 360-degree scan of your testing room/environment will be required. If you are using a laptop, you will need to pick up your laptop and rotate it for the room scan, including your examination surface (i.e. desk, table), floor space, your lap, etc. The testing environment should be cleared of any clutter, no notes, or textbooks laying out. These could constitute a violation of the Honor Code (i.e. academic dishonesty).

o   Make sure the room you are taking the exam in is well-lit and that you are by yourself. Rooms that are not bright enough may get flagged as "blurry" or "unclear". Avoid posters or photographs on the wall behind you; try to minimize noise (i.e. talking aloud). These will also flag your exam, which will be reviewed by a member of the instructor team for the course to confirm or refute any academic dishonesty.

o   You must have a valid and clear photo identification (ID) card (Gator ID, driver's license, passport) to show at the start of the exam. Make sure the image is clear.

o   Only one screen (I.e. cannot have multiple monitors) and one tab (i.e. the tab that is being used for the exam) in Chrome is allowed. HonorLock has an integrity algorithm that can detect search-engine use, so do not attempt to search for answers, even if it is on a secondary device.

o   An HonorLock Practice Quiz will be set up under Quizzes in Canvas. Please go through this practice test well in-advance of taking the exam. This practice quiz allows you to go through all of the pre-assessment checks so you will know what to expect when taking the exam itself. Take the practice quiz on the device you intend to take the exam on, in the same environment (building, room, etc).

o   Failure to meet the items above may result in a 0 grade. If you encounter any issues with the testing platform or the exam, you should immediately contact HonorLock for assistance. If this fails, you need to email your course instructor right away with specific details (i.e. screenshots of your chat conversation with HonorLock with time stamps) of what occurred so that they can assist you as quickly as possible.

ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities 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 retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

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.

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/

Course Examinations and Grading	
Activity/Assignment	**Points**
1. Presentation	30
2. Writing assignment	30
3. Exam 1	20
4. Exam 2	20
TOTAL POINTS	100

Presentation (30%)
This presentation will be based on a research article that I will provide for you. At the first class you will sign-up to a presentation slot.

The length of the presentation should be 20 minutes and should be in the format of a powerpoint presentation. The 20-minute limit is strict and you will be cut short if you go over your time. My suggestion, therefore, is to practice the presentation ahead of time. Conciseness, clarity, and information delivery will be part of your grade. There will be a 10-15 minutes question-answer session after each presentation. This presentation will worth 30% of your course grade.

Writing Assignment (30%)
You will select a topic directly related to any of the material covered in class. Following, you will discuss this topic with me. Once approved you can begin the literature review.

You will write a 15-page literature review of that topic (double spaced, 12 font size Arial) using 20 scientific papers. For example, you can write a literature review on the effect of aging on motor output variability. It is due on Monday Nov 16th.

This writing assignment will worth 30% of your course grade. You will be provided a template of a well-written review paper. I will encourage students with very well written papers to submit their paper for publication to a relevant journal.

Exams
Exam 1 (20%): This exam will cover the lectures and presentations from Aug 31st to Oct 12th. It will comprise of short answer questions. This exam will count for 20% of your grade.
Exam 2 (20%): This exam will cover the lectures and presentations from Oct 19th to Nov 16th. It will comprise of short answer questions. This exam will count for 20% of your grade.
For Fall 2020, exams will be taken online using honorlock.

GRADING SCALE: The total points earned from exams, quizzes, writing assignment, attendance, and presentation will be summed. There is no curve for this course. I reserve the right to round up grades for students who show exceptional participation in class. However, under most circumstances GRADES WILL NOT BE ROUNDED UP!!! If you earn a 79.94%, you will receive a C+, not a B. The following grading scale will be used to assess students in this course. For more detailed information on current UF grading policies, please see the undergraduate catalog web page:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies
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.

Letter Grade	Points Needed to Earn Each Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	≥ 93	90.00-100%	4.0
A-	90-93	90.00-100%	3.67
B+	87.00-89.99	87.00-89.99%	3.33
B	80.00-86.99	80.00-86.99%	3.0
C+	77.00-79.99	77.00-79.99%	2.33
C	70.00-76.99	70.00-76.99%	2.0
D+	67.00-69.99	67.00-69.99%	1.33
D	60.00-66.99	60.00-66.99%	1.0
E	0-59.99	0-59.99%	0

WEEKLY COURSE SCHEDULE:

This approximates what the semester will consist of. This outline is subject to change at any point during the semester.

Week	Date	Lecture Topic	Reading/Assign.
1	M – Aug 31	Syllabus explanation / Organization Introduction to course concepts **Lecture:** How to present scientific data **Lecture:** Synaptic transmission/ Movement Mechanics	
2	M – Sep 7	**No class – Labor Day**	
3	M – Sept 14	**Lecture:** Types of muscle contraction	*Presentation 1*
4	M – Sept 21	**Lecture:** Organization & activation of motor units	*Presentation 2*
5	M – Sept 28	**Lecture:** Modulation of multi motor units	*Presentation 3*
6	M – Oct 5	**Lecture:** Neural control of force	*Presentation 4*
7	M – Oct 12	**Lecture:** Voluntary control of movement REVIEW SESSION	*Presentation 5*
8	M – Oct 19	**EXAM 1**	
9	M – Oct 26	**Lecture:** Motor output variability	*Presentation 6, 7*
10	M – Nov 2	**Lecture:** Reflexes & Fast Responses	*Presentation 8*
11	M – Nov 9	**Lecture:** Acute Adjustments – Stress and Fatigue	*Presentation 9, 10*
12	M – Nov 16	**Lecture:** Chronic Adaptations - Motor learning	*Presentation 11, 12* *PAPER DUE*
13	M – Nov 23	**Lecture:** Chronic Adaptations – Aging	*Presentation 13,14*
14	M – Nov 30	REVIEW SESSION Presentations	*Presentations 15,16,17,18 +make up*
15	M – Dec 7	**EXAM 2**	

SUCCESS AND STUDY TIPS:

Successful students in my class typically do the following:

1. Do not miss classes throughout the semester. A lot of the test material are given in class. A significant amount of information is not on the slides or in the book.
2. Take the presentation very seriously and start preparing ahead of time. The presentation requires > 15 hours of outside class work.

3. Take the review paper very seriously and start preparing ahead of time. The paper requires > 25 hours of outside class work.

4. Come prepared to the review sessions before the exam. Many concepts are clarified in those sessions.