FITNESS ASSESSMENT IN EXERCISE SCIENCE

APK 5127 ~ 3 CREDITS ~ FALL 2018

INSTRUCTOR: Joslyn Ahlgren, Ph.D.

Office: FLG 108

Office Phone: 352-294-1728

Email: <u>jahlgren@ufl.edu</u> Preferred: CANVAS email

OFFICE HOURS: Office hours will be posted in CANVAS and students may

request private meetings or moving meetings (walk and

talk) via CANVAS email.

LECTURE TIME/LOCATION: R | Period 6 - 8 (12:50 PM - 3:50 PM) / FLG 107D

COURSE DESCRIPTION: This course is designed to allow students the opportunity to experience, discuss, and critically evaluate a wide variety of fitness assessments. While most of the class will address physical fitness assessments for apparently healthy individuals, we will also cover some psychological, clinical, and population-specific assessments and the related anatomy and physiology.

PREREQUISITE KNOWLEDGE AND SKILLS: There are no prerequisites for this course; however, previous experiences in exercise physiology, undergraduate-level fitness assessment, or any familiarity with exercises and/or exercise equipment may be helpful.

COURSE GOALS:

- Feel comfortable selecting and performing appropriate fitness assessments, including all related equipment manipulation, calculations, conversions, data collection/summary, and interpretation of results.
- Explain the anatomy, physiology, and biomechanics underlying various fitness assessments.
- Consider scope of practice when selecting fitness assessments and interpreting data from assessments.
- Appreciate the historical development of modern fitness assessments, especially with regard to trends and technology.
- Appreciate the value of the methods section of a scientific publication.
- Appreciate how and why fitness assessments are used in various settings: fitness industry, sports, clinical, and even basic sciences (including animal studies).

REQUIRED MATERIALS: Please obtain the lab manual below before the first day of class.

- Exercise Physiology Laboratory Manual, Beam and Adams, 7th Ed. ISBN: 978-0-07-802265-4
- Journal articles will be posted as PDF documents or links in CANVAS

COURSE AND UF POLICIES:

ATTENDANCE: Because students will be participating in physical labs and because class only meets once per week, unexcused absences are not permitted. If you have a planned absence, that must be approved within the first week of classes (if at all possible) and documentation to verify the reason for the request will be required. Please email your course instructor via CANVAS to discuss make-up options for planned absences. Unapproved absences will result in a partial letter grade penalty. For example, if a student earned enough points for a B+ in the class, but had an unexcused absence, they would receive a B instead. If you have a serious emergency or life event, please contact the Dean of Students Office (www.dso.ufl.edu) and they will contact your instructor so that you do not have to provide documentation of the event/circumstance. Requirements for class attendance are consistent with UF policies: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

PERSONAL CONDUCT: Students are expected to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus
- Arrive to lecture and lab on time (a few minutes early)
- Show respect for the authority of the course instructor and graduate TAs through politeness and use of proper titles (e.g., "Dr. Ahlgren" or "Doc. A")
- Use of professional, courteous standards for all emails and discussions:
 - Descriptive subject line
 - o Address the reader using proper title and name spelling
 - Body of the email should be concise but have sufficient detail
 - Give a respectful salutation (e.g., thank you, sincerely, respectfully)
 - No textspeak (e.g., OMG, WTH, IMO)
- No texting or checking Face Book (or the like) during class/lab instruction time
- No personal conversations during class/lab instruction time
- Adherence to the UF Student Honor Code: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/
 - Honor code violations of any kind will not be tolerated and sanctions will be determined by the course instructor for first-time violators
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation and processing

UNIVERSITY POLICY ON 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.

<u>Students registered with the DRC:</u> Please email the course instructor during the first week of classes to make arrangements for needed accommodations on in-class weekly reading assessments.

UNIVERSITY POLICY ON COURSE EVALUATIONS: Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

GRADING:

The following table outlines the point-accruing components of the course. The total points earned from each component will be summed and divided by the total in order to determine each student's final course grade.

Evaluation Components	Points Per	Approximate % of	
(number of each)	Component	Total Grade	
Class participation (14)	5 pts x 14 = 70 pts	70 / 185 = ~38%	
Weekly reading assessments (10)	5 pts x 10 = 50 pts	50 / 185 = ~27%	
Literature review project (1)	65 pts	65 / 185 = ~35%	

Class Participation – All students who arrive on time will begin with 5 points. The following list outlines behaviors that will result in point deductions.

- Lateness -1 pt for every 5 minutes late
- Lack of professionalism (on phone, interruptions, sleeping, etc.) -1 pt
- Not participating (avoiding discussions, not asking questions) -1 pt

Any participation deductions will be communicated directly to the student at the time of the deduction or will be noted in the gradebook. If a student's lack of participation is causing a distraction or a disturbance to the overall flow or good energy of the class, the instructor will ask the student to leave, resulting in zero participation points and a

written warning. Should that happen more than once, the student will receive a letter grade penalty and their faculty advisor will be notified.

Weekly Reading Assessments – These will be multiple choice, true/false, and short-answer questions given at the beginning of each class. Students will be given 10-15 minutes to complete the assessment, which will cover the reading assignment for that day's activities. Any hand/written notes taken by the student can be used on these assessments, but cannot be shared with other students. Students are encouraged to focus on the Chapter Preview/Review boxes at the close of each chapter, although that is not a comprehensive study guide for each chapter. The goal of these reading assessments is to ensure that students have adequately prepared for the day's discussion and activities. If there are journal article readings included in the assessment, the course instructor will notify students via in-class announcements and/or CANVAS announcements.

Literature Review Project – The following steps outline this project. A more detailed grading rubric will be published for each step in the CANVAS gradebook.

- **Step 1:** Identify a health/fitness question/theory/topic that is largely unanswered or controversial in some way. This question should interest you personally. Your topic must be approved by the course instructor, but changes might be necessary...so, make sure to have those changes approved if needed. [Topic DUE via CANVAS submission Week 2] **3 pts**
- Step 2: Generate a <u>template</u> for a summary table similar to Table 1 in this article: Mathai, ML et al. Selective reduction in body fat mass and plasma leptin induced by angiotensin-converting enzyme inhibition in rats. International Journal of Obesity (2008) 32, 1576-1584. Outline types of methods used to study the question. Then, generate a list possible variables that should be evaluated. Review of the literature (next step) will likely help with this. [Rough draft of template DUE via CANVAS submission Week 3] 8 pts
- Step 3: Begin reviewing the literature to populate your table. Your literature review should include at least 10 peer-reviewed journal articles. [Citations for three articles DUE Week 4; Citations for three additional articles DUE Week 5; Citations for three additional articles DUE Week 6; fully populated summary table including final citation (10 total) DUE Week 7 all through CANVAS submissions] 2 pts for each citation = 20 pts
- **Step 4:** Generate a brief summary statement that attempts to answer and explain the initial question. Alternately, generate a hypothesis for a research study and give an outline of a study design that would help elucidate the issue. [DUE via CANVAS submission Week 8] **15 pts**
- **Step 5:** Generate a 10-15 minute presentation that introduces your topic/question, highlights the main points of literature review, and concludes with your final evaluation/opinion/suggestions. There will be 5-10 minutes of questions and discussion following each presentation. Student presenters

should aim to feel comfortable leading that discussion. [Power point slides DUE via CANVAS submission Week 9; Presentations will be Weeks 10-12] **PPT Slides Submission = 4 pts; Presentation = 15 pts**

GRADING SCALE: Any discrepancies with points displayed in the gradebook should be pointed out to the instructor before the last day of class (before finals). **There is no curve for this course and final grades will not be rounded up**. See the UF undergraduate catalog web page for information regarding current UF grading policies: www.registrar.ufl.edu/catalog/policies/regulationgrades. 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.

Minus grades are not assigned for this course unless it is the result of a grade penalty. There is no extra credit for this course. A minimum grade of C is necessary to satisfy the requirements of the APK graduate curriculum.

Letter Grade	Points Needed to Earn Each Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
Α	166.50-185.00 90.00-100%		4.0
B+	160.95-166.49	87.00-89.99%	3.33
В	148.00-160.94	80.00-86.99%	3.0
C+	142.45-147.99	77.00-79.99%	2.33
С	129.50-142.44	70.00-76.99%	2.0
D+	123.95-129.49	67.00-69.99%	1.33
D	111.00-123.94	60.00-66.99%	1.0
Е	E 0-110.99 0-59		0

GETTING HELP:

For issues with technical difficulties for CANVAS, please contact the UF Help Desk at:

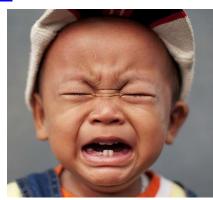
- helpdesk@ufl.edu
- (352) 392-HELP select option 2
- https://request.it.ufl.edu/

Any requests for extensions due to technical issues MUST be accompanied by the ticket number received from Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request an extension.

Other resources are also available for you:

- Disability resources <u>https://www.dso.ufl.edu/drc/</u>
- Library Help Desk http://guides.uflib.ufl.edu/content.php?pid=86973&sid=686381
- Counseling and Wellness http://www.counseling.ufl.edu/cwc/Self-Help-Library.aspx

PERSONAL NOTE FROM DOC. A: If you are totally overwhelmed by the stresses of your semester and feel like you just can't handle the pressure, please contact me or someone at UF's Counseling and Wellness center. I genuinely care for my students' wellbeing. Without you, I would have no one to teach...and that's uncool. Please take care! ~Doc. A



COURSE SCHEDULE:

Any changes to this plan will be posted in CANVAS as an announcement.

Week	Date	Weekly Topics/Activities	Reading
1	Aug 23	Introductions, syllabus review, pre-screening, basics of assessment lab, project descriptionwill meet at 2pm this day only	
2	Aug 30	Reading Assessment #1 (5 pts) Muscular Fitness Assessment Literature Review Topic Due	Ch. 4-6
3	Sep 06	Reading Assessment #2 (5 pts) Power Assessment – Horizontal/Vertical/Anaerobic Rough Draft of Summary Table Template Due	Ch. 7-11
4	Sep 13	Reading Assessment #3 (5 pts) Basic Cardiovascular Assessments: HR/BP Three Articles Due	Ch. 16-19
5	Sep 20	Reading Assessment #4 (5 pts) TBA Three More Articles Due	ТВА
6	Sep 27	Reading Assessment #5 (5 pts) Submaximal Aerobic Fitness Assessment Three More Articles Due	Ch. 12-14
7	Oct 04	Reading Assessment #6 (5 pts) VO2 max Testing Final Draft of Summary Table Due	Ch. 15

		Reading Assessment #7 (5 pts)	No
8	Oct 11	VO2 max Testing	Additional
		Summary Statement Due	Reading
		Reading Assessment #8 (5 pts)	
9	Oct 18	Pulmonary Fitness Assessment	Ch. 20-21
		Power Point Slides Due	
		Student Presentations	No
10	Oct 25	Participation points based on submission of peer	Additional
		evaluation and attentiveness	Reading
		Student Presentations	No
11	Nov 01	Participation points based on submission of peer	Additional
		evaluation and attentiveness	Reading
		Student Presentations	No
12	Nov 08	Participation points based on submission of peer	Additional
		evaluation and attentiveness	Reading
		Flexibility Assessment	
13	Nov 15	Guest Presenter: Laura Noyes – Flexibility Script	Ch. 22
		Reading Assessment #9 – online following class (5 pts)	
			No
14	Nov 22	Holiday – No Class	Additional
			Reading
		Reading Assessment #10 (5 pts)	
15	Nov 29	Body Composition Assessment	Ch. 23-26
		body composition Assessment	
16	Dec 06	Reading Day – No Class	

SUCCESS TIPS FOR CLASS:

- Reference the syllabus often.
- Stay on top of your reading. You can use hand-written notes on your assessments, so spend some time on this each week.
- Stay organized. Keep track of all important due dates and do not procrastinate.
- Check CANVAS announcements/emails daily...just pretend it is social media for school. Your instructor will post important and helpful information (such as friendly reminders of due dates) as announcements.