

FITNESS ASSESSMENT & EXERCISE PRESCRIPTION

APK 4125C

3 CREDITS

SPRING 2019

WELL ITS NOT GOING TO LIFT ITSELF



INSTRUCTOR:

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OFFICE HOURS:

Weekly office hours will be posted in CANVAS and may change week to week. Students may also request private meetings via CANVAS email.

COURSE TIME/LOCATION: MW Period 6 (12:50-1:40pm) / FLG 0270

SECTION	LAB TIME	LAB LOCATION
4590	M Period 4 - 5 (10:40 AM - 12:35 PM)	FLG 107D
5813	W Period 4 - 5 (10:40 AM - 12:35 PM)	FLG 107D
06G2	W Period 8 - 9 (3:00 PM - 4:55 PM)	FLG 107D
2081	T Period 8 - 9 (3:00 PM - 4:55 PM)	FLG 107D
06G4	F Period 6 - 7 (12:50 PM - 2:45 PM)	FLG 107D

PREREQUISITE: Students taking this course must have earned a C or better in APK 3110c (Exercise Physiology).

COURSE DESCRIPTION: This is a lecture and laboratory course designed to provide students with a basic understanding of laboratory and field assessment techniques used in exercise physiology, fitness/wellness facilities, and--to a minor extent—clinical situations. This course will emphasize fitness assessment and exercise program design principles for cardiovascular fitness, muscular strength and endurance, body composition, balance, and flexibility for apparently healthy individuals.

GENERAL COURSE FORMAT: Students will attend lectures twice a week. Students are expected to utilize top hat (tophat.com), a web based and mobile friendly app to retrieve slides as well as engage and participate in class. Students will meet once a week for a hands-on lab in which fitness assessments and exercise prescription assignments will be completed in small groups.

TEXTBOOKS: I recommend getting both books, but you'll be fine with one or the other.

1. Heyward and Gibson. *Advanced Fitness Assessment and Exercise Prescription, 7th ed.* 2014. Human Kinetics. ISBN 978-1-4504-6600-4. This book is an excellent resource if you plan to be in any health-related field in which you plan to do any form of fitness assessment or exercise prescription.
2. *ACSM's Guidelines for Exercise Testing and Prescription, 9th ed.* Wolters Kluwer (Health). Lippincott, Williams, and Wilkins. 2014. ISBN 978-1-60913-605-5. This manual is an inexpensive must-have for all fitness professionals. (The 10th edition of this book JUST released...so if you prefer to get that, it would be better for you professionally to have the most recent edition.)

PURPOSE OF COURSE: The purpose of this course is to provide students with knowledge and basic skills to assess the physical fitness of apparently healthy individuals. Also, this course aims to introduce students to standards and accepted practices for prescribing exercise to apparently healthy individuals based on fitness levels as determined through a variety of assessments. This course is intended to provide students with weekly opportunities to practice these techniques under the guided supervision of qualified teaching assistants. The integrated and cumulative nature of this course is intended to facilitate long-term retention of the concepts covered and prepare students for internship experiences and careers they may seek/obtain in health and/or fitness fields.

COURSE GOALS: At the end of this course, students should be able to:

1. Select, justify, and perform a variety of fitness assessments on apparently healthy adults.
2. Utilize the results from fitness assessments as well as knowledge of professional and medically accepted standards to prescribe safe and effective exercise.
3. Explain anatomical, physiological, and psychological components to both fitness assessments and exercise programs.

4. Discuss and evaluate trends in health/fitness with regard to safety and effectiveness.

In addition to these content-specific goals, this course assesses students on all nine of the Student Learning Objectives (SLO's) used by the Department of Applied Physiology & Kinesiology (APK) to determine preparedness for internship and graduation. These SLO's are:

Content

1. Integrate and apply principles and methods of math, social sciences, and arts and humanities to applied physiology and kinesiology, wellness, and/or fitness environments.
2. Identify and relate the nomenclature, structures, and locations of components of human anatomy to health, disease, and physical activity.
3. Identify, examine, and explain physiological mechanisms of homeostasis at various levels of an organism (i.e., cells, tissues, organs, systems).
4. Investigate and explain the effects of physical activity on psychological health as well as the perspectives used to enhance adherence to healthier lifestyles.
5. Identify and explain the acute and chronic anatomical and physiological adaptations to exercise, training, and physical activity.

Critical Thinking

6. Select and apply the appropriate scientific principles when assessing the health and fitness of an individual and prescribing physical activity based on those assessments.
7. Solve applied physiology and kinesiology problems from personal, scholarly, and professional perspectives using fundamental concepts of health and exercise, scientific inquiry, and analytical, critical, and creative thinking.
8. Collect, analyze, and interpret qualitative or quantitative data in an applied physiology and kinesiology context.

Communication

9. Effectively employ written, oral, visual, and electronic communication techniques to foster inquiry, collaboration, and engagement among applied physiology and kinesiology peers and professionals as well as with patients, clients, and/or subjects.

COURSE POLICIES:

ATTENDANCE POLICY: Make every effort to attend all lectures. Lecture attendance will only be taken every-day using TopHat. Attend the lab section for which you are enrolled, not the one most convenient for you on any particular day. If you have to miss your lab for any reason, please make arrangements with your TA to attend another lab.

Attendance will be recorded at every lab. Unexcused absences are not permitted. For every unexcused lab absence that is not made-up, the student will receive a partial letter grade penalty. For example, if you earned a B+ in the course but have an un-made up lab, you will receive a B.

PERSONAL CONDUCT AND PROFESSIONALISM POLICY: 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. Skinner”)
- Use of professional, courteous standards for all emails and discussions:
 - Descriptive subject line
 - 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 instruction time
- No personal conversations during class 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
 - Plagiarism will result in a zero on the assignment **and** a potential whole letter grade penalty in the course (e. g., B → C)
 - Any use, access, or handling of technology during an exam will result in a zero on the exam **and** potential failure of the course
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation and processing

Important: In this course, all lab reports are group lab reports. That means that all the analysis and write-up is to be the group’s own work. Information (including data) may not be shared among groups. You may discuss lab concepts and procedures with classmates, and you may get help on how to perform an analysis, but **whatever work you turn in, ultimately must be work performed only by members of the group.** You may *not* share tables, graphs, spreadsheets, etc., with other groups. You may not refer to or use old lab reports in any way. Equally important, **all group members must contribute to every lab report.** Failure of an individual to contribute will result zeros on labs in which no contribution was made and individual lab reports for that person thereafter.

EXAM MAKE-UP POLICY: Unexcused missed exams will result in a zero on the exam (this includes contacting the instructor **after** the exam if you are ill). If you are sick or have an emergency that prevents you from taking the exam 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.** If you need to schedule a make-up exam, please submit a make-up exam request form (posted in CANVAS). Make-up exams will be given at the discretion of the instructor. Scheduling make-up exams is the responsibility of the student and should be done—if at all possible—before the scheduled exam time. If you have a serious emergency (e.g., friend/family death), please contact the Dean of Students Office (www.dso.ufl.edu). Requirements for class attendance and make-up exams, assignments, and other work are consistent with the university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

UF POLICIES:

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.

Students registered with the DRC: The midterm and final exams can be taken at the DRC. Please make your exam requests to the DRC for those early in the semester to ensure they are approved on time. The practical exam cannot be taken at the DRC, so please work with your course instructor and/or TA to schedule that exam accordingly.

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.

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 make-ups 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 a make-up.

Other resources are also available for you:

- Disability resources
<https://www.dso.ufl.edu/drc/>
- 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>

GRADING POLICIES:

The following table outlines the point-accruing components of the course. The total points earned will be summed and divided by the total points in the course: 480.

Evaluation Components	Points Possible	Approx. % of Total Grade
Midterm Lecture Exam (1)	80 pts	80/480 = 16.5%
Comprehensive Lecture Final (1)	100 pts	100/480 = 20.75%
Lab Reports (7)	15 pts each = 105 pts	105/480 = 21.75%
Prescription Assignments (2)	15 pts each = 30 pts	30/480 = 6.25%
BP/HR/Skinfold Log (1)	50 pts	50/480 = 10.5%
End of Term Practical Exam (1)	45 pts	45/480 = 9.5%
Class Activities (5)	9 pts each = 45 pts	45/480 = 9.5%
Attendance	25 pts	25/480 = 5.25%

Lecture Exams – The **midterm lecture exam** will consist of **40 multiple choice** and true/false questions and will cover the first half of the course material. The **comprehensive lecture final** will consist of **80 questions** and will cover all course material. This exam scheme was intentionally selected to prepare students for certification-style examinations, like ACSM’s Exercise Physiologist certification.

Lab Reports – Students will participate in seven labs and generate a lab report for each. Lab reports are due in the first 10 min of the next lab meeting. Reports turned in after the first 10 min of your lab’s start time will be considered late. **Late labs will be deducted 5 points.** Labs should be typed and stapled. Math work can be handwritten as long as it is legible and neat. Points will be deducted for illegible handwriting at the discretion of the TA. Labs turned in without all group member names located on the front page of the lab report will be deducted 2 points. Lab documents and grading rubrics will be posted in CANVAS.

Prescription Assignments – There will be two exercise prescription assignments that you will work on in groups of 3-4 people during lab. You will have the entire lab as well as

any resources you bring to lab with you (computer, textbooks, etc.) to complete the assignment. Like lab reports, the assignments are due during the first 10 minutes of the next lab meeting. All lab report guidelines and penalties apply to these assignments.

BP/HR/Skinfold Log – Students will complete a log of resting heart rates (HR), blood pressures (BP), and skinfolds to be turned in with the final lab report. Each student is responsible for collecting these measurements from 10 male and 10 female subjects. No more than five male and five female classmates may be used as subjects for this project. Students should aim to assess a wide range of ages and body types for this assignment.

End of Term Practical Exam – There will be a comprehensive lab exam at the end of the semester where you will demonstrate a basic knowledge and ability to perform fitness assessments on actual individuals. As the semester advances, you will have an opportunity to sign up for a lab exam time. Most of these times will be during your normal lab time, but some may need to be scheduled outside of that time. **Students must earn a 3 out of 5 on each of the student learning objectives assessed by this exam in order to graduate with an APK degree.** If you fail to meet this standard, you will be asked to remediate the exam, but you will not be allowed to gain more points on it. For example, if you score 25 on the exam, that will be used to calculate your course grade. You will still have to retake the exam to demonstrate proficiency, but you cannot increase your grade.

Class Activities – Students will arrive to lecture prepared to engage in small group discussion or a physical activity. Students who are unable to participate physically will be offered an alternate activity. Failure to participate activities will result in a letter grade penalty for each missed activity (e.g., if only 3 activities are participated in, an earned B+ would become a C+). For physical activities, full points will be awarded for presence and at least one attempt at the exercise/activity. For discussions, points will be awarded based on the following rubric:

Preferred (8-9 pts)	Acceptable (6-7 pts)	Won't ask you to leave (4-5 pts)	May ask you to leave (2-3 pts)	Will ask you to leave (0-1 pts)
Arrives on time Comments are relevant and reflect understanding and good preparation Clear enthusiasm Discussion summary reflects higher level discourse, curiosity, scientific exploration, evident effort to discover new information from reliable resources	Arrives no more than 5 min late Comments are mostly relevant, but understanding may be slightly lacking Not overly enthusiastic, but positive Discussion summary was sufficient, but somewhat minimal; reflective of some discovery of new information from reliable resources	Arrives no more than 10 min late Comments are minimal ("yeah", "uh huh") and demonstrate poor preparation Demeanor is sluggish Discussion summary was overly brief and reflected the bare minimum in terms of effort to discover new information from reliable resources	Arrives more than 10 min late No comments are made Sleeping, texting, disengaged Discussion summary was poor or non-existent and reflected no effort to explore scientific sources for discovery of new information	Absent Disruptive or rude comments Drawing others into disrespectful behaviors (showing texts, passing notes, joking to the point of distraction, etc.)

GRADING SCALE: All grades will be posted directly into the CANVAS gradebook. Any discrepancies with points displayed in the gradebook should be pointed out to the instructor or TA before the last day of class. There is no curve for this course and grades will not be rounded up under any circumstance. See the UF undergraduate catalog web page for information regarding current UF grading policies: www.registrar.ufl.edu/catalog/policies/regulationgrades. Any requests for 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.

The following table describes the grade scale and GPA impact of each letter grade.

Grade	Points Needed to Earn Each Grade	Percent of Points Needed for Each Grade	GPA Impact of Each Grade
A	432-480	90.00-100%	4.0
B+	417.6-431.99	87.00-89.99%	3.33
B	384.00-417.59	80.00-86.99%	3.0
C+	369.6-383.99	77.00-79.99%	2.33
C	336-369.59	70.00-76.99%	2.0
D+	321.6-335.99	67.00-69.99%	1.33
D	288-321.59	60.00-66.99%	1.0
E	0-287.99	0-59.99%	0

TENTATIVE COURSE SCHEDULE:

Any changes to this schedule will be announced in CANVAS.

Week	Date	Lecture Schedule	Lab Schedule
1	Jan 7th	Benefits and Risks of Physical Activity	No Labs
	Jan 9th	Pre-participation Screening	
2	Jan 14th	No Class	Intro to lab and professionalism
	Jan 16th	Risk Stratification	
3	Jan 21st	Martin Luther King Holiday	Lab 1 - HR, BP, ECG (Mon labs attend a diff lab)
	Jan 23 rd	Risk Stratification continued	
4	Jan 28 th	Class Activity – Risk Stratification (Group)	Lab 2 - VO2 Max
	Jan 30th	Cardiorespiratory Fitness Assessment	
5	Feb 4th	Cardiorespiratory Fitness Assessment	Lab 3 - VO2 Submax
	Feb 6th	Class Activity – Rockport (Group)	
6	Feb 11th	Body Composition Assessment	Lab 4 - RMR and ACSM Metabolic Equations
	Feb 13th	Body Composition Assessment	
7	Feb 18th	Muscular Fitness Assessment	Lab 5 - Skinfolds, WHR, BMI, BIA
	Feb 20th	Muscular Fitness Assessment	
8	Feb 25th	Flexibility and Balance Assessment	Lab 6 - Muscular Strength/Endurance
	Feb 27th	Exam 1 (40 questions, 80 pts)	

9	Mar 4 th	Spring Break	No Labs
	Mar 6 th		
10	Mar 11 th	Special Presentation/Class Activity	Lab 7 - Flexibility and Balance
	Mar 13 th	General Principles of Exercise Prescription	
11	Mar 18 th	Designing Cardio Programs	Aerobic Exercise Prescription
	Mar 20 th	Designing Cardio Programs	
12	Mar 25 th	Designing Resistance Programs	Resistance Exercise Prescription
	Mar 27 th	Designing Resistance Programs	
13	Apr 1 st	Designing Resistance Programs	Open Lab for Practice Sign up for your practical!
	Apr 3 rd	Class Activity – Flexibility (Group)	
14	Apr 8 th	Weight Loss Programming	Practical Exams
	Apr 10 th	Weight Loss Programming	
15	Apr 15 th	Flexibility Programming	Practical Exams
	Apr 17 th	Special Topics Lecture	
16	Apr 22 nd	Class Activity – (Group)	Study Week
Exam 2 – Comprehensive Final – April 29th – 4/29/2019 @ 10:00 AM - 12:00 PM– FLG 0270			

STUDY TIPS:

- Read from the text BEFORE attending lecture. Do not take notes, underline, highlight, or attempt to memorize anything...JUST READ and enjoy!
- Snow-ball the lecture notes. Begin studying lecture material immediately after the first lecture. Then, after the second lecture, begin your studies with day one lecture material. Continue this all the way up to the exam.
- Engage with your classmates. This material is meant to be discussed and used... and you can't do that well with just yourself.
- If there is something in the textbook that was NOT covered in lecture, you are not expected to know it. There is a lot in the text that we don't have time to cover.
- Rather than memorizing tables and charts, look at data tables and graphs and see what trends or themes you can determine from those. Can you describe what you see and what the significance is? Dr. Skinner will let you know if there are specific tables, numbers or formulae you need to memorize for the exam. 😊

PERSONAL NOTE FROM INSTRUCTOR:

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!