

# PHYSICAL FITNESS ASSESSMENT & EXERCISE PRESCRIPTION

APK4125 | 3 Credits | FALL 2022

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## Course Info

### INSTRUCTOR

Ben Gordon, Ph.D., NSCA-CSCS, ACSM C-EP  
Office: FLG 106I  
Office Phone: 352-294-1755  
Email: [bgordon1@ufl.edu](mailto:bgordon1@ufl.edu)  
Preferred Method of Contact: email

### OFFICE HOURS

Weekly office hours by appointment, schedule a zoom meeting with the instructor at your preferred time.

### MEETING TIME/LOCATION

Lectures on Mon/Wed Period 7 (1:55-2:40pm) in Computer Sciences/Engineering Room A101

CLASS #	LAB TIME	LOCATION	TA
10565	M 2-3 (8:30-10:25am)	Lab 107D	TBA
10566	M 4-5 (10:40am-12:35pm)	Lab 107D	TBA
10579	T 3-4 (9:35-11:30am)	Lab 107D	TBA
10580	T 5-6 (11:45a-1:40pm)	Lab 107D	TBA
18810	W 2-3 (8:30-10:25am)	Lab 107D	TBA
10567	Th 3-4 (9:35am-11:30am)	Lab 107D	TBA
22158	Th 8-9 (3:00-4:55pm)	Lab 107D	TBA

### TEACHING ASSISTANTS CONTACTS:

- MICHAEL RUA (LAB COORDINATOR) – [MICHAELRUA@UFL.EDU](mailto:MICHAELRUA@UFL.EDU)
- JESSICA HUBBARD – [JESSICA.HUBBARD@UFL.EDU](mailto:JESSICA.HUBBARD@UFL.EDU)
- FLORIAN ROTH – [FLORIAN.ROTH@UFL.EDU](mailto:FLORIAN.ROTH@UFL.EDU)
- WASANTI SHARMA (UNDERGRADUATE TA) – [WASANTISHARMA@UFL.EDU](mailto:WASANTISHARMA@UFL.EDU)
- JADE WHITCOMB (UNDERGRADUATE TA) – [JADEWHITCOMB@UFL.EDU](mailto:JADEWHITCOMB@UFL.EDU)
- FRANCISCO ZHOU (UNDERGRADUATE TA) – [FZHOU1@UFL.EDU](mailto:FZHOU1@UFL.EDU)

## COURSE DESCRIPTION

This course will introduce students to techniques of assessing physical fitness using traditional and state of the art processes. Students will also learn techniques of prescribing exercise programs based upon assessments of physical fitness. Students will participate in supervised practical lab experiences in assessment and prescription.

## PREREQUISITE KNOWLEDGE AND SKILLS

Students must be a student in the college of Health and Human Performance and must have earned a C or better in APK 3110 (Physiology of Exercise Training).

## REQUIRED AND RECOMMENDED MATERIALS

Students will need the following textbook for this course. It's not required, but it's highly recommended:

*American College of Sports Medicine. ACSM's guidelines for exercise testing and prescription. 11<sup>th</sup> Edition Lippincott Williams & Wilkins, 2021.*

## COURSE FORMAT

Students will attend one-period lectures twice a week and a two-period lab once a week.

## COURSE LEARNING OBJECTIVES:

The following table describes the UF General Education student learning outcomes (SLOs) and the specific learning objectives for APK 2105c. By the end of this course, students should be able to:

Gen Ed SLOs	APK 2105c Course Goals	Assessment Method
<b>Content:</b> Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.	<ul style="list-style-type: none"><li>• Integrate and apply principles and methods of math, social sciences, and arts and humanities to applied physiology and kinesiology, wellness, and/or fitness environments.</li><li>• Identify and relate the nomenclature, structures, and locations of components of human anatomy to health, disease, and physical activity.</li><li>• Identify, examine, and explain physiological mechanisms of homeostasis at various levels of an organism (i.e., cells, tissues, organs, systems).</li><li>• Investigate and explain the effects of physical activity on psychological health as well as the perspectives used to enhance adherence to healthier lifestyles.</li></ul>	<ul style="list-style-type: none"><li>• Quizzes</li><li>• Individual Exams</li><li>• Lab Reports</li><li>• Final Practical Exam</li></ul>

	<ul style="list-style-type: none"> <li>• Identify and explain the acute and chronic anatomical and physiological adaptations to exercise, training, and physical activity.</li> </ul>	
<p><b>Communication:</b> Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.</p>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Final Practical Exam</li> </ul>
<p><b>Critical Thinking:</b> Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.</p>	<ul style="list-style-type: none"> <li>• Select and apply the appropriate scientific principles when assessing the health and fitness of an individual and prescribing physical activity based on those assessments.</li> <li>• 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.</li> <li>• Collect, analyze, and interpret qualitative or quantitative data in an applied physiology and kinesiology context.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual exams</li> <li>• Final Practical exam</li> <li>• Lab Reports</li> </ul>

## Course & University Policies

### ATTENDANCE POLICY

Students are expected to make every effort to attend all lectures and labs. If students cannot make it to the live lecture than they should watch the recorded version of the zoom lecture. Attendance for lab is mandatory and is a part of the laboratory grade for this course. Students must attend only the lab section for which they are enrolled, not the one most convenient for them on any particular day/week. If a student must miss their lab for a valid reason (e.g., personal illness, family emergency), they should make arrangements with their Lab TA, Lab Coordinator and Instructor to attend another section for that week only. Documentation of your reason for missing lab may be required. **Unexcused absences for lab 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 missing lab, you will receive a B. More specifics on lab grades can be found in the grading section of this syllabus

## PERSONAL CONDUCT POLICY

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

- Read and refer to the syllabus
- Watch/Attend all Lectures
- Show respect for the authority of the graduate and undergraduate TAs through politeness and use of proper titles. In addition, understand that TAs are the authority on lab grades, Dr. Gordon will defer to their decision on lab grades. If you have questions regarding your lab grade, discuss it with your TA FIRST.
- Use of professional, courteous standards for all emails and discussions:
  - Descriptive subject line
  - Body of the email should be concise but have sufficient detail
- Adherence to the UF Student Honor Code: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
  - Honor code violations of any kind will not be tolerated and sanctions will be determined by the course instructor for first-time violators
  - Any use, access, or handling of technology during assessments will result in zero points for that assessment **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. This includes looking at your neighbor's test form during an assessment or plagiarizing part or all of another student's lab report.

## EXAM MAKE-UP POLICY

Make-up exams will be given at the discretion of the instructor. 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 have a serious emergency or life event, please contact the Dean of Students Office ([www.dso.ufl.edu](http://www.dso.ufl.edu)) and they will contact your instructors so that you do not have to provide documentation of the emergency/death in order to get a make-up exam. 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>.

## ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their Get Started page at <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. **Any variation of this statement is acceptable. More details are always helpful to DRC-registered students.**

## COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a

professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## Getting Help

Please feel free to list as many or as few resources here as you would like. However, the **counseling and wellness center** and the **UFPD** contacts are required.

### HEALTH & WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact [umatter@ufl.edu](mailto: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 option 2) or e-mail to [Learning-support@ufl.edu](mailto: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/>

### INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Linda Nguyen, APK IDEA Liaison, [linda.nguyen@hhp.ufl.edu](mailto:linda.nguyen@hhp.ufl.edu)
- Dr. Rachael Seidler, APK Graduate Coordinator, [rachaelseidler@ufl.edu](mailto:rachaelseidler@ufl.edu)
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, [jahlgren@ufl.edu](mailto:jahlgren@ufl.edu)

## Grading

The following table outlines the percentage-accruing components of the course.

Evaluation Components (n)	% of Total Grade
Midterm Lecture Exam	35%
Comprehensive Lecture Final	20%
Lab and Practice Practicals	20%
Your Story Assignment	2.5%
Comprehensive Lab Practical	12.5%
Quizzes & Practice Prescriptions	10%
Iron Gator Assessments	Extra Credit

**Midterms And Final Exam** - The midterm lecture exams will (generally) consist of roughly 40 fill-in the blank, multiple choice and true/false questions and 2 free-response questions. The comprehensive lecture final will consist of 40 multiple choice questions and 2 short answer questions.

**Lab** – For each lab students will receive 2 points through properly participating in their group’s completion of each lab report. The percentage of the 2 points that each student receives will be based on the effort reports submitted by each group (each student in every group will submit an effort report on all of their group-members). The effort report will be a simple estimate of how much effort that student gave while creating the group lab report. The questions listed on the data sheet of each lab will make up the lab report and be the remaining 8 points of the lab grade. Lab reports will be completed in groups and should be submitted directly on canvas. Turnitin will be used to ensure students are submitting original work. Lab reports are due at the start time of the following lab (1 week). Your TA will check the submission time in the gradebook to verify timely submission. Late submissions will result in a 1 point penalty. Lab reports should be typed and neatly/clearly labeled/organized. All group members’ names must be present on the first page of the lab report. Not following the prescribed lab report template/rubric will result in a 1-2-pt deduction, depending on severity.

**Comprehensive Lab Practical** - 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 practical exam time on canvas calendar. The exams times will be throughout the last week and a half of the semester. **Students must earn a 3 out of 5 on each of the student learning objectives assessed by this exam in order to register for an APK Internship and to PASS THE PROGRAM.** If you fail to meet this standard, you will be asked to remediate the exam with a new administrator, 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. Remember that this course assesses student on SLO’s of the entire program, and may require the student to recall information from previous APK classes such as APK 2100, APK 2105, APK 3110.

**Quizzes** – Quizzes will be given throughout the semester. These quizzes will be administered on canvas and they will be open for 12 hours on Monday or Wednesday. These quizzes are short and to the point. Each quiz could contain fill-in-the-blank, multiple choice, short answer, and true or false questions. Each quiz will range between 5 and 10 questions. In addition to the quizzes, students will be given a

prescription assignment near the end of the semester to critically think about a specific assessment or prescription application. The main objective of these assignments is to practice prescription creation.

**Practice Practicals (Exercise Assessments)** – Each student will be expected to practice 2 of the following assessments (YMCA cycle ergometer test, Bruce Protocol Test, Heart Rate and Blood Pressure, Skinfold Assessments, YMCA bench press test, 1-RM test). The 2 assessments must be practiced in a 1-on-1 session with one of the undergraduate teaching assistants. Students can schedule the assessments by contacting the undergraduate TA’s and scheduling a time.

**Your Story Assignment** - This is a short assignment at the start of the semester to help Dr. Gordon get to know you. There are 10 simple questions to answer about yourself that you’ll turn in. Once you turn in the document, you’ll sign up for a 10 minute time slot to meet with Dr. Gordon, so you can get to know each other.

**APK IRON GATORS** – This is a extra-credit project to get APK students more involved in fitness testing and physical activity. APK IRON GATORS will post record assessment scores for every component of fitness (skill and health related) for anyone in APK. Within IRON GATORS there is a specific challenge known as the IRON GATOR challenge. The challenge requires a student to score in the 85<sup>th</sup> percentile in 10 different assessments of fitness. Every assessment a student attempts is worth .02% on a student’s final grade, and an attempt of 10 assessments for the IRON GATOR challenge is worth 1% on a student’s final grade.

**Availability for Practice Practicals and Iron Gator Assessments**

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7:30a							
8:00a							
8:30a	10565	Francisco	18810				
9:00a		Francisco					
9:30a	8:30-10:25a	10579	8:30-10:25a	10567			
10:00a							
10:30a	10566	9:35-11:30a		9:35-11:30a			
11:00a							
11:30a	10:40-12:35a						Francisco
12:00p		10580					Francisco
12:30p							Francisco
1:00p		11:45-1:40p			Francisco		Francisco
1:30p					Francisco		Francisco
2:00p	Jade				Francisco		Francisco
2:30p	Jade	Jade			Francisco		
3:00p	Jade	Jade		22158			
3:30p	Wasanti	Jade	Wasanti				
4:00p	Wasanti	Jade	Wasanti	3:00-4:55p			
4:30p	Wasanti	Jade	Wasanti				
5:00p	Wasanti		Wasanti	Jade			
5:30p	Wasanti		Wasanti	Jade			
6:00p	Wasanti		Wasanti	Jade			
6:30p				Jade			
7:00p							

Letter Grade	Percent Associated with Grade	GPA Impact
A	90.00-100%	4.0
B+	87.00-89.99%	3.33
B	80.00-86.99%	3.0
C+	77.00-79.99%	2.33
C	70.00-76.99%	2.0
D+	67.00-69.99%	1.33
D	60.00-66.99%	1.0
F	0-59.99%	0

## Weekly Course Schedule

### CRITICAL DATES & UF OBSERVED HOLIDAYS

- No Class: Labor Day, September 5<sup>th</sup>
- No Class: Thanksgiving Break, November 23<sup>rd</sup>

### WEEKLY SCHEDULE

Week	Dates	Assigned Module & Schedule Notes	Lab Topics
1	Aug 24	Syllabus and Introduction to Exercise Prescription	No Labs
2	August 29 & 31	8/29 - Introduction to Exercise Prescription and Assessment 8/31 - Pre-participation Screening and Resting Measurements	Introduction to Labs
3	Sept 5 & 7	9/5 – <b>NO CLASS</b> 9/7 - Pre-participation Screening and Resting Measurements	No Labs
4	Sept 12 & 14	9/12 - Cardiorespiratory Fitness Assessment 9/14 - Cardiorespiratory Fitness Assessment	Lab 1 - HR, BP, ECG
5	Sept 19 & 21	9/19 - Cardiorespiratory Fitness Assessment 9/21 - Muscle Fitness Assessment	Lab 2 - VO2 Max
6	Sept 26 & 28	9/26 - Muscle Fitness Assessment 9/28 - Muscle Fitness Assessment	Lab 3 - VO2 Submax
7	Oct 3 & 5	10/3 - Body Composition Assessment 10/5 - Body Composition Assessment	Lab 4 - RMR and ACSM Metabolic Equations
8	Oct	10/10 - Flexibility/Functional Mvmt Assess	Lab 5 - Skinfolds, WHR, BMI, BIA



	10 & 12	10/12 - Flexibility/Functional Mvmt Assess	
9	Oct 17 & 19	10/17 – Exam 1 10/19 - Cardiorespiratory Exercise Programming	Lab 6 – The Bod Pod
10	Oct 24 & 26	10/24 - Cardiorespiratory Exercise Programming 10/26 - Cardiorespiratory Exercise Programming	Lab 7 - Muscular Strength/Endurance
11	Oct & Nov 31 & 2	10/31 - Cardiorespiratory Exercise Programming 11/2 - Resistance Exercise Programming	Lab 8 - Flexibility and Balance
12	Nov 7 & 9	11/7 - Resistance Exercise Programming 11/9 - Resistance Exercise Programming	Practice Practicals
13	Nov 14 & 16	11/14 - Resistance Exercise Programming 11/16 - Resistance Exercise Programming	Practice Practicals
14	Nov 21 & 23	11/21 – Exam 2 11/23 – <b>NO CLASS</b>	No Labs
15	Nov 28 & 30	11/28 – Corrective Exercise Programming 11/30 - Corrective Exercise Programming	Final Practicals
16	Dec 5 & 7	12/28 - Corrective Exercise Programming 12/7 - Corrective Exercise Programming	Final Practicals

## SUCCESS AND STUDY TIPS

- Read the text. Use the ACSM guidelines to your advantage.
- 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.
- If you get lost or don't understand the material or an assignment, ask the instructor. If it's a question regarding lecture than ask Dr. Gordon. If it's a question regarding lab ask your TA. That's what we're here for, to facilitate learning.
- While you're studying try and engage your classmates. This material is meant to be discussed and used.
- 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?
- Lastly, don't get overwhelmed by the material for these classes, just and have fun. ☺