

Department of Applied Physiology and Kinesiology

UNIVERSITY of FLORIDA

# **PRINCIPLES OF STRENGTH AND CONDITIONING**

APK3113C ~ 3 ~ FALL 2021

INSTRUCTOR:	Ben Gordon, Ph.D, CEP, CSCS Office: FLG106I Office Phone: 352-294-1755 Email: bgordon1@ufl.edu Preferred Method of Contact: email
OFFICE HOURS:	Periods 3 and 4 on Tuesday and Thursday (Or by appointment)
MEETING TIME/LOCATION:	FLG 220, MWF Period 2 8:30A-9:20A FLG 280, MWF Period 8 3:00P-3:50P

**COURSE DESCRIPTION:** This course is designed to develop the knowledge and practical skills necessary to design and implement strength and conditioning programs. For individuals who are interested in becoming certified personal trainers (NSCA-PT) or certified strength and conditioning specialists (CSCS) through the National Strength and Conditioning Association.

**PREREQUISITE KNOWLEDGE AND SKILLS:** APK 2100C and APK 2105C with minimum grades of C. While these are the only courses that are prerequisites for the course, the course will cover material from APK 3110 and APK 4125. Students who haven't had these course will need to dedicate more time to certain material.

**REQUIRED AND RECOMMENDED MATERIALS:** All required course materials will be provided on the APK3113 Canvas page and through PowerPoint. While there is no required text, the overwhelming majority of the course content comes from the following book:

Haff, G. Gregory, and N. Travis Triplett, eds. Essentials of strength training and conditioning 4th edition. Human kinetics, 2015.

#### **COURSE FORMAT:**

Students will have a different topic of Strength and Conditioning to focus on each week of the semester. All lectures of that week will be dedicated to that topic. At the end of the week there will be a quiz dedicated to that same topic.

#### COURSE LEARNING OBJECTIVES:

At the conclusion of the course students will be able to:

- Describe the basic physiology of the skeletal, neuromuscular, and cardiovascular systems as they pertain to an athlete engaged in a strength and conditioning program
- Identify the biomechanical factors that influence strength, power, and speed performance
- Analyze a sport with regards to the primary energy system, motor skills, joint movements, and skeletal muscles involved in its execution
- Compare the expected physiological adaptations of anaerobic and aerobic training programs.
- Recommend appropriate assessments of athletic performance and interpret test results.
- Prescribe exercise training sessions with the intention of improving athletic performance in the areas of strength, power, speed, agility, aerobic capacity, anaerobic capacity, hypertrophy, and flexibility
- Create a periodized annual strength and conditioning program incorporating all of the variables described above.
- Utilize recommendations regarding the health and safety of athletes completing strength and conditioning sessions in a hot and humid environment
- Summarize the available evidence related to the effectiveness of various recovery modalities.
- Sit for the NSCA CSCS exam in your senior year, or upon graduation, if desired.

## COURSE AND 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.

**PERSONAL CONDUCT POLICY:** 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 (<u>http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/</u>) 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. If you have any questions or concerns, please consult the instructor or TA in this class.

**EXAM MAKE-UP POLICY:** Students who will be unavailable on the day of an exam may provide the instructor with evidence of their excuse and may be permitted the opportunity to complete the exam early or later at the discretion of the instructor.

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 are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <u>https://evaluations.ufl.edu</u> or directly in CANVAS. 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.

(NOTE: Besides the evaluations if you have a concern about the class, or you don't understand something, or you don't like something. TELL ME. I don't judge students for speaking their mind. If you tell me at the end of the semester that you need help, or you don't like the way something was taught or graded I can't do anything about it.)

# 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: <a href="https://counseling.ufl.edu/">https://counseling.ufl.edu/</a>, 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) <u>http://www.police.ufl.edu/</u>

Academic Resources

- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. <u>https://lss.at.ufl.edu/help.shtml</u>
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. <u>https://career.ufl.edu/</u>
- Library Support, <u>http://cms.uflib.ufl.edu/ask</u>. 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. <u>http://teachingcenter.ufl.edu/</u>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <u>http://writing.ufl.edu/writing-studio/</u>
- Student Complaints On-Campus: <u>https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</u> On-Line Students Complaints: <u>http://distance.ufl.edu/student-complaint-process/</u>

### 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
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

## GRADING:

Evaluation Components (number of each)	Weighted % of Total Grade	
Lecture Exams	30%	
Module Quizzes	30%	
Comprehensive Final	15%	
Oral Exam (Program Design)	20%	
Your Story Assignment	5%	

*Lecture Exams* – Each exam will consist of multiple-choice, true-false and short answer questions. Students will complete the exam in class on the day designated on the course schedule.

**Module Quizzes** – A quiz pertaining to each week's module will be assigned each Friday throughout the semester. The 10 to 15 question quiz will be available for 12 hours and students will have 25 min to complete it, once they open the quiz. Module quizzes are open-book and open-note with questions focusing on the practical application of course material.

**Comprehensive Final** – The final exam will consist of multiple-choice, true-false, and short answer questions each worth 1 point and 4 short-answer question each worth 10 points. The exam will be completed through the APK3113 Canvas page and will have a 2-hour time limit. The exam will be administered on the assigned exam day. Students are NOT permitted to use course materials on the exam.

**Oral Exam Program Design** – Students will sign up for an oral exam in the last two weeks of the semester. When arriving at the oral exam, the student will be given an athlete with a specific health history, specific performance goals, and lastly a specific time in the periodization of the athlete. The student will then be given 15 minutes to write out a session of training for this athlete in the specified time of their training. A rubric will be provided on Canvas.

**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 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. In addition, there is the IRON GATOR challenge which consists of scoring in the 85<sup>th</sup> percentile in 10 different assessments of fitness. Each attempt of a record is worth .02% on a student's final grade, and an attempt of all 10 assessments for the IRON GATOR challenge is worth 1% on a student's final grade.

**GRADING SCALE:** All course assignments are administered and graded within the canvas course page, so students will have access to all grades as they submit assignments. Any assignment that requires the instructor to manually grade some aspect of it will be graded within one week of its due date, including the semester exams and final project. More detailed information regarding current UF grading policies can be found here: <u>https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</u>. 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	Percent of Total Points Associated	GPA Impact of Each
Grade	with Each Letter Grade	Letter Grade
A	93-100%	4.0
A-	90 – 92.99%	3.7
B+	87.00-89.99%	3.33
В	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
E	0-59.99%	0

# WEEKLY COURSE SCHEDULE:

Week	Dates	Торіс	Module
1	(8/23 – 8/27)	Introduction Review of Syllabus Start Needs Analysis with FMS	1.1
2	(8/30 - 9/3)	<i>Needs Analysis and FMS</i> Quiz 1	1.2
3	(9/6–9/10)	<b>NO CLASS MONDAY LABOR DAY</b> Periodization – Annual Plan Quiz 2	1.3
4	(9/13 – 9/17)	Periodization – Modality Integration Quiz 3	1.4
5	(9/20 – 9/24)	Corrective Exercise Program Design Quiz 4	2.1
6	(9/27 – 10/1)	<i>Corrective Exercise Program Design</i> Quiz 5	2.2
7	(10/4-10/8)	Flexibility Program Design Quiz 6	2.3
8	(10/11 – 10/15)	Core Training Program Design <b>Exam 1 – Friday 10/15</b>	2.4

9	(10/18 – 10/22)	<i>Resistance Training</i> Quiz 7	3.1
10	(10/25 – 10/29)	<i>Resistance Training 1</i> Quiz 8	3.2
11	(11/1-11/5)	Power Training Program Design Quiz 9	3.3
12	(11/8 – 11/12)	Power Training Program Design <b>Exam 2 - Friday 11/12</b>	3.4
13	(11/15–11/19)	Linear Speed Program Design Quiz 10	4.1
14	(11/22 – 11/26)	SAQ Program Design NO CLASS WEDNESDAY OR FRIDAY	4.2
15	(11/29 – 12/3)	<i>SAQ Program Design</i> Quiz 11	4.3
16	(12/6 – 12/8)	Conditioning Program Design	
	Finals	Final Exams 12/17 at 10:00a Or 12/14 at 12:30p <b>Oral Exam (Design Project) 11/29 - 12/17</b>	

## SUCCESS AND STUDY TIPS:

- 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. That's what instructors are here for; to help you learn.
- While you're studying and trying to fully understand the material, engage your classmates. This material is meant to be discussed and used...
- Everything that we cover in lecture could be used for an exam.
- 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 this class, and just have fun. 😊