

# Principles of Strength & Conditioning

APK3113C | Class #7262(21105) | 3 Credits | Fall 2022

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## Course Info

### INSTRUCTOR

**Tracy Zimmer, MS, RSCC\*D, SCCC, USAW, CES, USATF, FMS, HKC**  
Office: South End Zone (SEZ)  
Office Phone: 352-375-6492  
Email: [tracyz@gators.ufl.edu](mailto:tracyz@gators.ufl.edu)  
Preferred Method of Contact: email

### OFFICE HOURS

Wednesday: Period 5-6 (11:45am-1:40pm) or by appointment.

### MEETING TIME/LOCATION

T Period 10 (5:10-6pm), R Periods 10-11 (5:10-7:05pm)  
FLG 0220

## 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 courses 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 lectures. 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. ISBN: 9781492501626

## COURSE FORMAT

Students will have a different topic of Strength and Conditioning to focus on each week of the semester. All lectures/labs of that week will be dedicated to that topic. Live lectures will be available via zoom, with zoom recordings saved to Canvas. At the end of the week there will be a quiz dedicated to that same topic.

## **COURSE LEARNING OBJECTIVES:**

By the end of this course, students should 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
- Differentiate between terms relevant to psychological areas of concern: anxiety, attention, the ideal performance state, self-efficacy, imagery, and goal setting
- Know the basics of sports nutrition and understand the scope of practice as a strength and conditioning professional
- Sit for the NSCA CSCS exam in your senior year, or upon graduation, if desired

## **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.

### **PERSONAL CONDUCT POLICY**

Students are expected to exhibit behaviors that reflect highly upon themselves and our University. 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 (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) 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**

A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an illness, family emergency or death, please contact the Dean of Students Office ([www.dso.ufl.edu](http://www.dso.ufl.edu)) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment (<https://care.dso.ufl.edu/instructor-notifications/>). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO.

“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>.

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 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

### 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. Ashley Smuder, HHP IDEA Liaison, [asmuder@ufl.edu](mailto:asmuder@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

Evaluation Components (number of each)	% of Total Grade
Lecture Exams (3)	30%
CANVAS Quizzes (10)	20%
Oral Exam (Program Design)	20%
Your Story Assignment	5%
Professional Interview	5%
Lab Participation – Attendance (10)	20%
Extra Credit: IRON Gators	Up to 1%

**Lecture Exams** – Questions will be multiple choice, true/false, and fill in the blank. Students are not permitted access to any kind of materials or notes during these exams. Exam questions are generated by the course instructor and the majority of focus should be given to the lecture notes/lab instruction when studying. Students will take exams in the same room where weekly meetings are held and will be allowed 50 minutes to complete the exam.

**CANVAS Quizzes** – A quiz pertaining to each week’s module will be assigned Friday throughout the semester (see Weekly Schedule for specific quiz weeks). The 10-question quiz will be available for 18 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.

**Oral Exam (Program Design)** – Students will sign up for an oral exam in the last two weeks of the semester. All programs must be submitted prior to Exam 3 (12/6) via email or in class using a template that will be provided on CANVAS. When arriving at the oral exam, the student will be given 15 minutes to explain their program design and asked a series of questions addressing all performance related variables during a specific time in the periodization of the athlete. A detailed rubric will be posted in canvas.

**Your Story Assignment** – This is a short assignment at the start of the semester to help Professor Zimmer 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 Professor Zimmer, so you can get to know each other. Questions due by Friday 9/2 via email or in class. Available to meet Friday 8/26-Friday 9/9.

**Professional Interview** – Connect with a professional in Strength and Conditioning or health profession of your choosing. This is an opportunity to learn how someone ended up in their current role, understand their experiences, and establish a relationship with someone who may be a helpful resource as you look to build a career. Keep an open mind and you’re likely to learn a lot. A detailed rubric will be posted in canvas. Due prior to Exam 2 (12/6) via email or in class.

**Lab Participation (Attendance)** – All labs will be held during class time. Please refer to the weekly schedule. Any dates/locations not specified will be shared as an announcement on CANVAS. In order to better understand

how to apply the principles of strength and conditioning, you will be asked to teach/demonstrate exercises, work in groups, and engage in meaningful ways that will set you up for success in a coaching environment. There are 10 Labs (\*). NO make-up labs.

**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 program design. More detailed information regarding current UF grading policies can be found here: <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	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	93-100%	4.0
A-	90-92.99%	3.7
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
E	0-59.99%	0

## Weekly Course Schedule

The instructor reserves the right to alter the syllabus or schedule if it is determined that such a change will benefit the course and students. Any changes of this nature will be posted as an announcement in CANVAS.

Week	Dates	Topic	Module
1	(8/25)	Introduction, Review of Syllabus	Intro
2	(8/30 & 9/1)	Facility Considerations Structure and Function of Body Systems/Biomechanics Quiz 1	1.1, 1.2
3	(9/6 & 9/8)	Warm-up and Flexibility Training <i>Movement Prep/Flexibility LAB*</i> Quiz 2	1.3
4	(9/13 & 9/15)	Needs Analysis and FMS <i>FMS LAB*</i> Quiz 3	1.4
5	(9/20 & 9/22)	Principles of Test Selection and Administration <i>Assessments LAB*</i> Quiz 4	1.5

6	(9/27 & 9/29)	Anaerobic and Aerobic Training Adaptations <b>EXAM 1 - Thursday 9/29</b>	2.1, 2.2
7	(10/4 & 10/6)	Periodization <i>Fundamental Lifts LAB*</i> Quiz 5	2.3
8	(10/11 & 10/13)	Program Design for Resistance Training <i>Fundamental Lifts LAB*</i> Quiz 6	2.4
9	(10/18 & 10/20)	Program Design for Resistance Training <i>Fundamental Lifts LAB*</i> Quiz 7	2.4
10	(10/25 & 10/27)	Program Design for Power Training <i>Plyometric Technique LAB*</i>	2.5
11	(11/1 & 11/3)	Program Design for Core Training <b>EXAM 2 - Thursday 11/3</b>	3.1
12	(11/8 & 11/10)	Program Design for SAQ Program Design for Linear Speed* Quiz 8	3.2, 3.3
13	(11/15 & 11/17)	<i>Core Stability Drills and SAQ LAB*</i> Thursday - Zoom Lecture (NO CLASS) Sport Psychology Quiz 9	3.4
14	(11/22)	Nutrition for Health/Performance <b>NO CLASS THURSDAY (THANKSGIVING)</b>	3.5
15	(11/29 & 12/1)	<i>Guest Speaker/Panel Discussion*</i> Review/Open Gym (SEZ) Quiz 10	
16	(12/6)	<b>Exam 3 - Tuesday 12/6</b> <i>12/8 - 12/9 Reading Days</i>	
17	Finals	<b>Oral Exam (Program Design) 12/5-7, 12/12-16</b>	

\*Lab participation counted for attendance.

## SUCCESS AND STUDY TIPS

- 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 then ask Professor Zimmer.
- 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?
- Comprehend the material and your grade will take care of itself.