

Principles of Strength & Conditioning

APK3113C | Class #7262(21105) | 3 Credits | Fall 2023

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Course Info

INSTRUCTOR

Tracy Zimmer, MS, RSCC*D, SCCC, USAW, CES, USATF, FMS, HKC
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Email: tracyz@gators.ufl.edu
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 0285

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/weight room time for that week will be dedicated to that topic. Live lectures indicated with an asterisk will also be available via zoom, with zoom recordings saved to Canvas. There will be biweekly Canvas quizzes dedicated to the topic(s) from the week prior, available Monday-Thursday.

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. If students cannot make it to the live lecture then they should watch the recorded version of the zoom lecture if provided.

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

Grading

Evaluation Components (number of each)	% of Total Grade
Your Story Assignment	5%
CANVAS Quizzes (5)	15%
Lecture Exams (3)	30%
Professional Interview	5%
Group Project	10%
Guest Speaker Reflection	5%
Weight Room Participation-Attendance (5)	10%
Oral Exam (Program Design)	20%
Extra Credit: IRON Gators	Up to 1%

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 and submit in CANVAS. Once you turn in the assignment, please sign up for a 10-minute time slot using the CANVAS Calendar to meet with Professor Zimmer via zoom so you can get to know each other. Questions due by Thursday 8/31. Available to meet:

- Monday 8/28 – Thursday 8/31
- Monday 9/4 – Thursday 9/7

CANVAS Quizzes – A quiz pertaining to one or more modules will be available Monday-Wednesday as noted on the weekly course schedule. Students will have 25-minutes to complete the 10-question quiz once they open the quiz. Module quizzes are open-book and open-note with questions focusing on the practical application of course material. There are no make up quizzes.

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/weight room 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.

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 (Thursday 11/3).

Group Project – Students will deepen their understanding of exercise technique by creating a video tutorial of an assigned resistance training exercise. Students will work with a partner or group of 3 to create a video with: proper exercise demonstration, correct exercise instructions, coaching cues, and common faults. A rubric will be provided on CANVAS. Due Friday 11/17.

Guest Speaker Reflection – At the conclusion of our Guest Speaker Series (11/21), please take time to consider what you learned. Submit a 1 to 2-page reflection on your interpretation of the conversations: What resonated with you? How you can apply the information going forward? Did you follow up with any of the speakers? What was most (or least) valuable? Etc. A rubric will be provided on CANVAS. Due Tuesday 12/5 prior to Exam 3.

Weight Room Participation – Please refer to the weekly schedule to know when we will meet in the South End Zone (SEZ). 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.

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). 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 template will be provided and detailed rubric will be posted in CANVAS.

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 85th 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	(8/24)	Introduction, Review of Syllabus	Intro
2	(8/29 & 8/31)	Facility Considerations Needs Analysis and FMS	1.1 1.2
3	(9/5 & 9/7)	Warm-up and Flexibility Training Movement Prep/Flexibility (SEZ) <i>CANVAS Quiz #1</i>	1.3
4	(9/12 & 9/14)	Guest Speaker #1 – ATCs Principles of Test Selection and Administration	1.4
5	(9/19 & 9/21)	Assessments (SEZ) + Exam 1 Review Exam 1 – Thursday 9/21	1.5
6	(9/26 & 9/28)	Anaerobic and Aerobic Training Adaptations	2.1, 2.2
7	(10/3 & 10/5)	Periodization Fundamental Lifts 1 (SEZ) <i>CANVAS Quiz #2</i>	2.3
8	(10/10 & 10/12)	Program Design for Resistance Training Fundamental Lifts 2 (SEZ)	2.4
9	(10/17 & 10/19)	Program Design for Resistance Training Fundamental Lifts 3 (SEZ)	2.4
10	(10/24 & 10/26)	Guest Speaker #2 – S&C Coaches Program Design for Power Training <i>CANVAS Quiz #3</i>	2.5
11	(10/31 & 11/2)	Program Design for Core Training EXAM 2 – Thursday 11/3	3.1
12	(11/7 & 11/9)	Program Design for SAQ Program Design for Linear Speed <i>CANVAS Quiz #4</i>	3.2, 3.3
13	(11/14 & 11/16)	Core Stability Drills and SAQ Thursday 11/16 – NO CLASS (Group assignment due 11/17)	3.4
14	(11/21)	Guest Speaker #3 – DPT NO CLASS THURSDAY (THANKSGIVING)	
15	(11/28 & 11/30)	Sport Psychology & Training Scenarios <i>CANVAS Quiz #5</i>	3.5
16	(12/5)	Exam 3 – Tuesday 12/5 <i>12/7 – 12/8 Reading Days</i>	
17	Finals	Oral Exam (Program Design)	

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.