

Strength and Conditioning for Beginning Practitioners

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APK5177 | 3 Credits | Spring 2024

Course Info

INSTRUCTOR

Christopher Brown, PhD, LAT, ATC, CSCS, TSAC-F, PES, OPE-C
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Clinical Education Coordinator, Doctor of Athletic Training Program
Office Location: 124FLG
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OFFICE HOURS

Will be posted in CANVAS during the semester
If you would like an appointment, please click [HERE](#)

MEETING TIME/LOCATION

Access course through Canvas on UF e-Learning
(<https://elearning.ufl.edu/>) & the Canvas mobile app by Instructure

COURSE DESCRIPTION

This course addresses the principles of designing training programs of varying duration aimed at improving muscular strength, power, speed, agility, endurance, balance, stability, and hypertrophy. Emphasis will be placed on creating and administering evidence-based periodized training programs and ensuring safe and productive technique of fundamental exercises in each modality.

PREREQUISITE KNOWLEDGE AND SKILLS

There are no prerequisites to the course.

REQUIRED AND RECOMMENDED MATERIALS

Textbook	ISBN	
Essentials of Strength and Conditioning Author: National Strength and Conditioning Association Publisher: Human Kinetics Year: 2015 Edition: 4th	9781492501626	Required
Exercise Technique Manual for Resistance Training Author: National Strength and Conditioning Association Publisher: Human Kinetics Year: 2016 Edition: 3 rd	9781492506928	Recommended
All other reading materials will be available on the class web page (E- Learning)		
Please view course fees (if applicable) at https://one.ufl.edu/soc/		

COURSE FORMAT

This course will utilize a lecture and assignment approach. You will be able to watch lectures on CANVAS and participate in discussions/assignments within the CANVAS shell. I will provide PowerPoint slides for you to access for information about specific points. You will need to review this information as well as the information in the textbook and from alternative readings for this course. You will be expected to be active learners outside of the classroom.

COURSE LEARNING OBJECTIVES:

- Identify the biomechanical factors that influence resistance training performance
- Describe the basic physiology of the skeletal, neuromuscular, and cardiovascular systems as they pertain to an athlete engaged in a strength and conditioning program
- Predict the expected physiological adaptations of anaerobic and aerobic training programs.
- Conduct a needs analysis of a sport and an athlete within the sport
- Create a periodized annual strength and conditioning program integrating training modalities relevant to a chosen sport
- Administer 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
- Adjust exercise prescriptions to meet the unique needs of youth and masters athletes
- Recommend evidence-based post-training recovery strategies to athletes.
- Identify facility administration safety considerations to limit liability risk
- Sit for the NSCA CSCS exam if desired.

Course & University Policies

PERSONAL CONDUCT POLICY

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." Students will exhibit behavior consistent with this commitment to the UF academic community. Academic misconduct appears in a variety of forms (including plagiarism) and may be punishable in a variety of ways, from failing the assignment and/or the entire course to academic probation, suspension or expulsion. On all work submitted for credit by students at the university, the following pledge is either required or implied: "**On my honor, I have neither given nor received unauthorized aid in doing this assignment.**" Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Faculty will not tolerate violations of the Honor Code at the University of Florida and will report incidents to the Dean of Students Office for consideration of disciplinary action. The Honor Code (<https://sccr.dso.ufl.edu/students/student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have questions about what constitutes academic misconduct before handing in an assignment, see your instructor.

EXAM MAKE-UP POLICY

There will be NO make-up examinations unless exceptional conditions occur (as defined in the University of Florida Undergraduate Catalog). Please see this link for more information.

<http://www.registrar.ufl.edu/catalog/policies/regulationattendance.html> Prior permission from the professor is required. There will be a time limit for each examination. Examinations will evaluate the understanding of material from lecture, text, and other supplemental material provided.

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.

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.ua.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/>. Thank you for serving as a partner in this important effort. Students should provide feedback on the quality of instruction in this course by completing online evaluations. 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. Summary results of these assessments are available to students at <https://gatorevals.ua.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/>

CIVILITY ACCESSABILITY AND COMMUNITY RESOURCES

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

- Dr. Ashley Smuder, APK Culture and Engagement Committee Chair, asmuder@ufl.edu
- Dr. Stephen Coombes, APK Graduate Coordinator, scoombes@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Grading

Students will earn their course grade based on completion of coursework as outlined in the Grading Criteria listed below. Percentage calculations are rounded up at “.6 or above” and rounded down at “.5 or below”. For more information regarding Grade Point Averages, Grade Values, etc. please visit the University registrar website <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

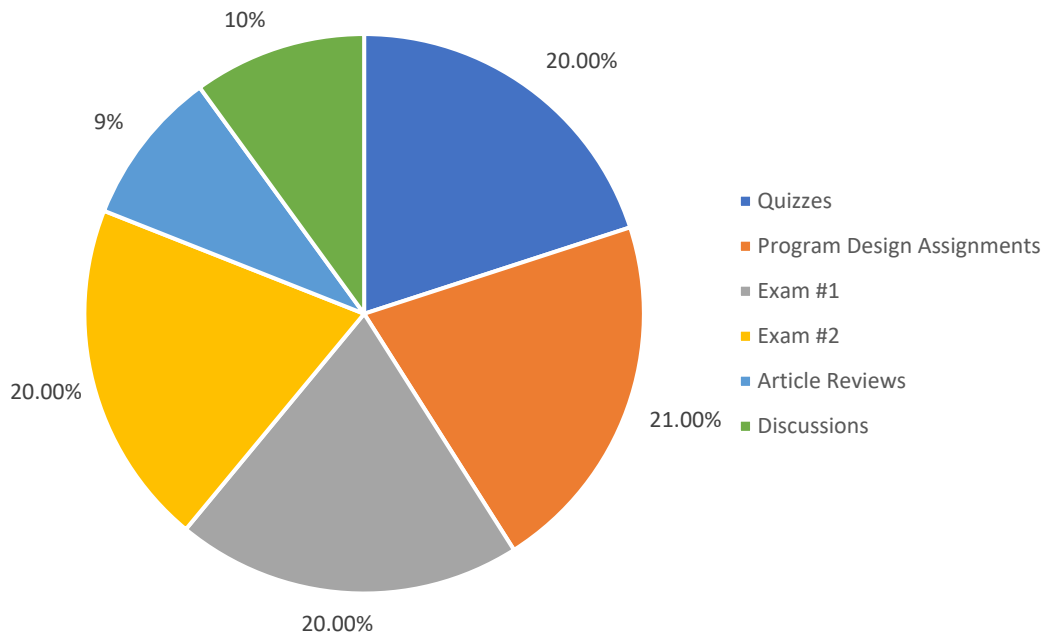
GRADING CRITERIA

Letter Grade	Grade Points	Percentage
A	4.00	100-91.5
A-	3.67	91.4-88.5
B+	3.33	88.4-86.5
B	3.00	86.4-79.5
C+	2.33	79.4-76.5
C	2.00	76.4-71.5
D+	1.33	71.4-69.5
D	1.00	69.4-59.5
E	0.00	Below 59.5

ASSIGNMENTS

- Quizzes (12) 20%
- Program Design Assignments (7) 21%
- Exam #1 20%
- Exam #2 20%
- Discussions 10%
- Article Reviews (3) 9%

Grade Breakdown



Quizzes:

- You have up to 3 attempts to answer all questions correctly
- You will be unable to see your responses or the correct answers between attempts.
- The highest score will be kept as your score.
- The quiz is untimed so please take all the time you need on each attempt.
- The quiz is open book and open note.
- Answers will display for 24 hours once the quiz has closed.

Program Design Assignments:

- These assignments give a chance to showcase the practical skills learned in select modules by designing a program for a select client or group of athletes
- Each program will be evaluated by a random peer in the course. The Peer evaluator will be randomly assigned by CANVAS.
- These assignments are graded as Complete/Incomplete

Exam #1:

- The exam is 50 questions, all multiple choice.
- Each question only has three answer choices.
- I won't know what questions you'll get until after you take the exam.
- 50 Questions will be randomly pulled from the exam banks.
 - 45 from the general bank
 - 5 from the research articles bank
- You are allowed 2 attempts on the exam. You will be not able to view the questions and your answers between attempts. The highest score from the 2 attempts is used in calculating your final grade.
- You will not be able to see correct answers until after the exam window has passed.
 - Exam questions and correct answers will be posted the day after the Exam for 24 hours.
- The exam is not timed, but you can't work on it past the Due Date/Time. Be finished before then.
 - Keep in mind the exam is on Eastern Standard Time for those in different time zones.

- Honorlock will be on during the exam. There is a basic calculator. Notes, scratch paper, and textbook are **NOT** permitted (different than quizzes).

Exam #2:

- The exam is 65 questions, all multiple choice.
 - 14 questions will be pulled from the Exam #1 question bank
 - 51 questions will be from the Exam #2 question bank
- Each question only has three answer choices.
- You are allowed 2 attempts on the exam. You will be not able to view the questions and your answers between attempts. The highest score from the 2 attempts is used in calculating your final grade.
- These questions may involve the assigned chapter(s) in the modules, the assigned research article(s) in the modules. While some questions may overlap the 2 attempts, you should not expect the second attempt to be identical to the first.
- You will not be able to see correct answers until after the exam window has passed.
- Exam questions and correct answers will be posted the day after the Exam for 24 hours The exam is not timed, but you can't work on it past the Due Date/Time. Be finished before then.
 - Keep in mind the exam is on Eastern Standard Time for those in different time zones.
- Honorlock will be on during the exam. There is a basic calculator. Notes, scratch paper, and textbook are **NOT** permitted (different than quizzes).

Discussions:

- This is the online discussion posting board for the course.
- Content will be based on course materials

Article Reviews:

- Students are expected to post 3 research article synopses to CANVAS by the Due Date. Each article synopsis requires students to search a relevant database of research journals (i.e. Google Scholar, SportDiscus, PubMed) to find a peer-reviewed research article related to one of the course topics. Students should read the selected articles in their entirety.
- The synopsis should be written and should include the following headers:
 - Reason for Selection
 - Research Problem
 - Methods
 - Results/Conclusions
 - Takeaways.
- Students should briefly summarize why they selected the article, what research problem was addressed in the article, how the experiment was conducted, the most important results and explanations for the results provided by the authors of the study, and what information from the article can be used by classmates in their strength and conditioning decision making processes.
- Each Synopsis is graded Complete/Incomplete.

Weekly Course Schedule

Module Start	Topics	Assignments	Assignment Due Date
Jan 8 th	Syllabus/Introduction	S&C History: Quiz Discussions Due Throughout Semester	Jan 28 th
Jan 8 th	Body Systems and Bioenergetics	Chapter 1&3: Quiz Program Design: Bioenergetics	Jan 28 th
	Age and Sex	Chapter 7 Quiz	
Jan 29 th	Testing	Chapter 12-13: Quiz Program Design: Testing	Feb 11 th
	Warm-up/Flexibility	Chapter 14: Quiz Program Design: Warm-up/Flexibility	
Feb 12 th	Exercise Technique	Chapter 15-16: Quiz Article Review #1	Feb 25 th
	Program Design	Chapter 17: Quiz Program Design: Resistance Training	
Feb 26 th	Exam #1		Mar 3 rd
Mar 4 th	Plyometrics	Chapter 18: Quiz Program Design: Plyometrics	Mar 24 th
	Speed and Agility/Aerobic	Chapter 19-20: Quiz Article Review #2	
Mar 25 th	Periodization	Chapter 21: Quiz Program Design: Periodization	Apr 7 th
	Recovery	Program Design: Recovery	
Apr 8 th	Biomechanics	Chapter 2: Quiz	Apr 21 st
	Facility Design/Legal	Chapter 23-24: Quiz Article Review #3 Discussions Due Throughout Semester	
Apr 22 nd	Exam #2		Apr 28 th

***All Assignments are due by 11:59pm EST of the date listed.**