

Strength and Conditioning for Beginning Practitioners

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APK5177 | 3 Credits | Spring 2025

Course Info

INSTRUCTOR

Blain Harrison, Ph.D, CSCS*D, TSAC-F, PES
Instructional Associate Professor
Office Location: FLG106J
Email: blainharrison@ufl.edu

OFFICE HOURS

Mondays 12 – 2PM
If you would like an appointment, please click [HERE](#)

MEETING TIME/LOCATION

Tuesdays 8:30 – 11:30am FLG235
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

UF STUDENT COMPUTING REQUIREMENTS:

Per the UF student computing requirements, “access to and on-going use of a computer is required for all students.” UF does not recommend students relying on/regularly using tablet devices, mobile phones or Chromebook devices as their primary computer as it may not be compatible with specific platforms used in this course or UF (<https://it.ufl.edu/policies/student-computing-requirements/>). Access to fast, secure Wi-Fi will be necessary for this course. If a student is in an area with limited wi-fi access, UF students can access **eduroam** for free with their GatorLink log-in credentials.

How to connect to eduroam:

1. If you can get a Wi-Fi signal at any of the eduroam locations (see below) and your mobile device (laptop, smartphone, or tablet) has already been configured for eduroam, then you will automatically connect.
2. Otherwise, follow the instructions for connecting here: <https://helpdesk.ufl.edu/connecting-to-eduroam-off-campus/>.

There are more than 100 Wi-Fi hotspots in Florida, including several state university campuses and community colleges. You don't have to sit in a car--many locations have open spaces and communal rooms available so you can get online while socially distancing and following CDC guidelines in an air-conditioned space. Also, in Florida all of the UF/IFAS Research and Education Centers (REC) are equipped with eduroam, so if you live in a rural area of your county you can visit an REC to securely watch course videos and take care of your academic needs. Here's a link to all the eduroam sites in the U.S.: <https://incommon.org/eduroam/eduroam-u-s-locator-map/>.

If you have any problems connecting to eduroam you can call (352-392-HELP/4357) or [email](#) the UF Computing Help Desk.

The UF Computing Help Desk is available to assist students with technical issues. If you have any issues accessing the

online course material, you must contact the UF Computing Help Desk immediately for assistance and obtain a case number. **I will not accept late assignments, or change any course dates, due to technology difficulties if you do not have a case number prior to the due date for the assignment.**

Other resources are available at: <https://distance.ufl.edu/getting-help/>

ATTENDANCE

While an attendance grade is not used to calculate your final grade in this course, students are expected to attend all weekly class meetings. The midterm and final exam will be administered in class only.

PARTICIPATION POLICY

Active participation in the course is mandatory. Interaction with the course through graded Discussion boards in each module makes up the participation grade and is part of the final grade in the course.

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

Unless excused based on [University policies](#) missed examinations and non-submitted or late assignments will be not be evaluated and will be assigned a grade of 0. Obtaining approval for make-up exams or make-up assignments is the responsibility of the student. Students with medically or emergency related circumstances should utilize the UF Care Team's [Contact My Instructor](#) service provided by the UF Dean of Students Office.

Any non-medical or emergency related circumstances require students to submit a written request explaining why an exception is being requested. The written request must include official documentation that provides proof that the missed coursework was due to acceptable reasons outlined by University policy.

ACCOMMODATING STUDENTS WITH DISABILITIES

Students requesting accommodation for disabilities must first register with the [Dean of Students Office](#). 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. Accommodation is 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 [here](#). 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 [here](#). 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 [here](#).

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/>

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/>

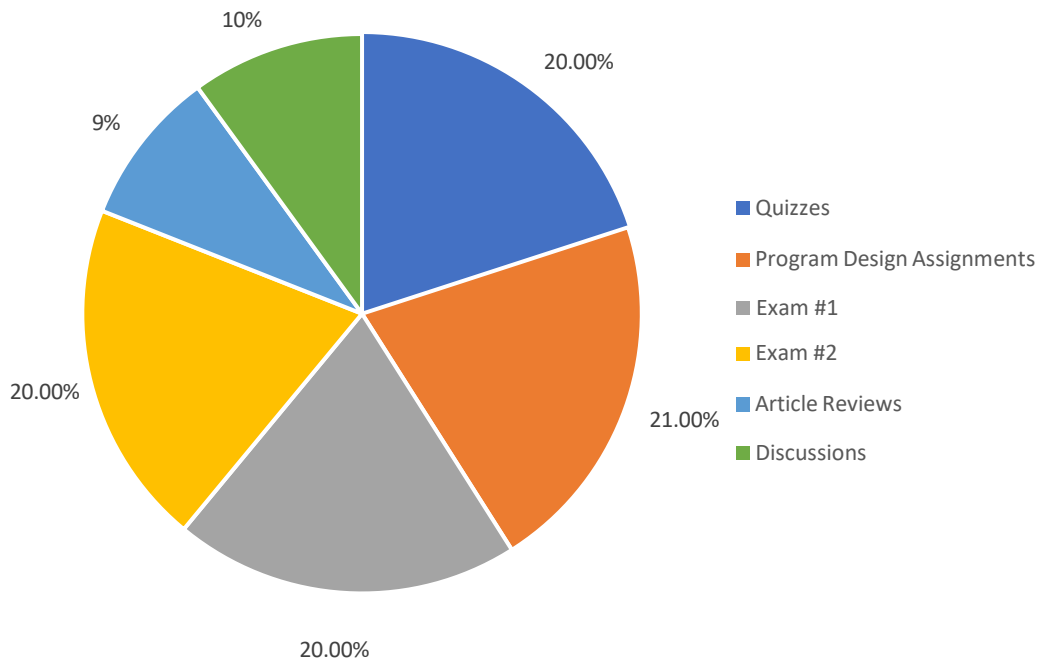
GRADING CRITERIA

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 1 attempt for each quiz
- Quizzes are untimed so please take all the time you need on each attempt.
- Quizzes are 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 1 attempt on the exam.
- You will be able to see correct answers upon submitting the exam.

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 1 attempt on the exam.
- These questions may involve the assigned chapter(s) in the modules, the assigned research article(s) in the modules.
- You will be able to see correct answers upon submitting the exam.

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 13 th	Syllabus/Introduction	S&C History: Quiz Discussions Due Throughout Semester	Jan 26 th
Jan 13 th	Body Systems and Bioenergetics	Chapter 1&3: Quiz Program Design: Bioenergetics	Jan 26 th
	Age and Sex	Chapter 7 Quiz	
Jan 27 th	Testing	Chapter 12-13: Quiz Program Design: Testing	Feb 9 th
	Warm-up/Flexibility	Chapter 14: Quiz Program Design: Warm-up/Flexibility	
Feb 10 th	Exercise Technique	Chapter 15-16: Quiz Article Review #1	Feb 23 rd
	Program Design	Chapter 17: Quiz Program Design: Resistance Training	
Feb 24 th	Midterm Exam		Mar 2 nd
Mar 3 rd	Plyometrics	Chapter 18: Quiz Program Design: Plyometrics	Mar 23 rd
	Speed and Agility/Aerobic	Chapter 19-20: Quiz Article Review #2	
Mar 24 th	Periodization	Chapter 21: Quiz Program Design: Periodization	Apr 6 th
	Recovery	Program Design: Recovery	
Apr 7 th	Biomechanics	Chapter 2: Quiz	Apr 20 th
	Facility Design/Legal	Chapter 23-24: Quiz Article Review #3 Discussions Due Throughout Semester	
Apr 22 nd	Final Exam Review		Apr 28 th

***All Assignments are due by 11:59pm EST of the date listed.
Final Exam is Friday, May 2nd from 12:30 – 2:30pm EST in FLG235**