

University of Florida
Department of Applied Physiology and Kinesiology
APK 3113 Principles of Strength and Conditioning
Spring 2019

Section 10785 Lecture: MWF 8:30 – 9:20, FLG 220

Section 10786 Lecture MWF 9:35-10:25, FLG 230

Instructor: Dr. Blain Harrison

Office: FLG 190F

Phone: (352) 294-1704

Email: blainharrison@ufl.edu (preferred)

Office hours: MWF 12:00 – 2:00PM or by appointment

Course Syllabus

Course Description

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.

This course addresses the selection and implementation of strength, power, speed, agility, endurance, and hypertrophy training methods, focusing primarily on periodization programs. Components include discussions of physiological principles and strength assessment as they relate to resistance training.

Course 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 resistance training performance
- Analyze a sport with regards to the primary energy system involved in its execution, primary movement patterns, and common injuries.
- 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, core function, and flexibility
- Create a periodized annual strength and conditioning program incorporating all of the variables described above.
- Manipulate a strength and conditioning program to meet the needs of a rehabilitating athlete.
- Sit for the NSCA CSCS exam in your senior year, or upon graduation, if desired.

Required Textbook

Harrison, B. Strength and Conditioning. TopHat Monocle

Recommended Textbooks

Haff, G. and T. Triplett. Essentials of Strength Training and Conditioning – 4th Edition. Human Kinetics, 2016.

Grading

Assessment	Points	Weight
Exam 1	20 points	10%
Exam 2	20 points	10%
Exam 3	20 points	10%
Exam 4	20 points	10%
Module Quizzes	160 points	10%
Program Design Project	150 points	25%
Weekly Participation Assignments/TopHat		15%
Lab Practical Exam	20 points	10%

93.0% - 100% = A

90.0% - 92.99% = A-

87.0% - 89.99% = B+

80.0% - 86.99% = B

77.0% - 79.99% = C+

70.0% - 76.99% = C

67.0% - 69.99% = D+

60.0% - 66.99% = D

<60 = E

Information on current UF grading policies for assigning grade points:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Exams

There are four semester exams. The semester exams will be not be comprehensive, Lecture Exams will be administered through Canvas. All exams will be taken online outside of class and will be open book. Exams will consist of essay questions. Students may NOT work together on exams. Exams will be available for 24 hours but must be completed in one sitting and will be time limited to **60min**. Students with accommodation letters from the DRC will be given additional time per their letter. All exams will be taken on **Canvas ONLY**. It is the student's responsibility to ensure that their computers will connect successfully to wifi prior to all exams. **HARD COPIES OF QUIZZES AND EXAMS WILL NOT BE AVAILABLE.**

Please see your instructor at least 72 hours prior to your exam if circumstances arise that will prevent you from taking the exam. If you have a schedule conflict for an exam you must take the exam early and not after the scheduled exam. Missed Exams will be scored a zero with no make-up exams permitted.

Module Quizzes

Weekly module quizzes will be administered via Canvas. These quizzes will consist of objective questions (i.e. multiple choice, matching, ordering, etc.). Weekly module quizzes will be available for 24 hours Friday of the week the module is covered in class. Students will complete the quizzes outside of class. The LockDown Browser is required for taking each quiz and there will be a **15min** time limit for each quiz. Students with accommodation letters from the DRC will be given additional time per their letter.

Weekly Assignments

Each week a unique collection of daily assignments will be made available on Canvas or TopHat. Students should expect to answer TopHat questions in class during every class session. These in class TopHat questions will be added to the TopHat chapter reading questions that are due by 8:30AM each Monday. Additional participation assignments may include quizlet assignments, lab questions, and program design questions. **Please note that there is an assignment due every weekday throughout the semester.** A particular day's assignment will be available for 24 hours so that students spend approximately 20 minutes each weekday engaged with the course material. Similar assignments will be due on the same day each week according to the following outline:

Monday – TopHat Chapter Module Questions – Due by 8:30AM each Monday (Participation Assignment)

Tuesday – Quizlet Activity – Due by 11:59PM each Tuesday (Participation Assignment)

Wednesday – Weekly Lab Questions – Due by 11:59PM each Wednesday (Participation Assignment)

Thursday – Weekly Program Design Project Submission – Due by 11:59PM each Thursday (Participation Assignment)

Friday – Weekly Module Quiz – Due by 11:59PM each Friday (Graded Assignment)

Mon/Wed/Fri – In-class TopHat questions (Participation Assignment)

Fri – Peer Review of Weekly Program Design Project Submission (Participation Assignment)

Applied Program Design Project

Throughout the semester, students will be asked to create a periodized strength and conditioning program for a hypothetical athlete with parameters provided by the instructor. An individual component of the final project will be assigned each week of the semester. The individual components will be due by Sunday at 11:59PM of the week they are assigned. The individual components will initially be graded as “complete/incomplete” for inclusion in the participation portion of the course. Students will be assigned a Peer Review in order to provide feedback to one of their classmates regarding the quality of the submission. A “complete” grade will not be given until the student has submitted their assignment and completed the Peer Review for their classmate. Detailed Rubrics will be available to aid in the Peer Review. By the end of the semester, each student will have a project consisting of 15 components for which they have received peer feedback. Edits to individual components of the project may be made throughout the semester. Final submission of the project is Sunday, April 28th by 11:59PM. The final project is worth 150 total points and a grade will be assigned to the final submission based on accrued points out of the 150 available points.

Top Hat

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. Questions administered in class and within the TopHat textbook modules count towards your final grade. Each lecture will include approximately 5 questions worth 1 point each (as participation points). In-class and textbook TopHat questions will contribute to the participation component of the course that constitutes 15% of the final grade.

You can visit the Top Hat Overview (<https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide>) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website:

<https://app.tophat.com/e/910442>

Note: Course Join Code is 910442

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

Lab Practical Exam

Students will be assessed on their ability to safely lead another individual through exercises representative of a strength and conditioning program. Proper technique and coaching recommendations will be provided in weekly laboratory experiences. The practical exam will consist of objective questions involving viewing videos of exercise demonstrations and answering questions regarding technique and coaching recommendations.

Grading

Notification of final grades will be made by the Registrar or you may check your grade by using ISIS. Final grades will not be posted.

Class Attendance Policy

Students are expected to attend all classes and to have completed assigned reading prior to class as scheduled by the instructor. Questions related to assigned readings will be available on Canvas. The following link outlines the UF Attendance Policy found in the Graduate Catalog

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Cell Phone Policy

Students in this course are expected to behave professionally, politely, and considerately. Cell phone use with regard to phone conversations, text messaging, and social media use during lectures, labs, and exams is banned in this class. Smartphone or tablet devices may be used to participate in discussions and answer questions administered through TopHat.

Academic Honesty

Cheating will not be tolerated in this course. All students are required to abide by the Academic Honesty Guidelines and Honor Code, which have been accepted by the University. Cheating is defined as the improper taking or tendering of any information or material, which shall be used to determine academic credit. Violations of the Honor Code will be handled according to the guidelines set by Student Judicial Affairs. 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 obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with me.

Accommodations for students with disabilities

Students with disabilities requesting accommodations should first register with the DisabilityResource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester

Online course evaluation process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. 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://evaluations.ufl.edu/results/>.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies

The University of Florida has enacted a policy of allowing NO food or drink of any kind in any campus classroom. This policy will be enforced during the meeting times of this course.

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

APK3113 - Class Schedule

***Indicates a homework assignment is due at the end of the week. Consult Canvas for details**

Week	Dates	Topic	Module
1	(1/7 – 1/11)	<i>Designing a Needs Analysis</i> Introduction, Review of Syllabus Wed – Assessment Lab 1	1.1
2	(1/14-1/18)*	<i>Designing an Annual Training Plan</i> Wed – Assessment Lab 2	1.2
3	(1/21-1/25)*	<i>Designing an Integrated Training Plan</i> Wed – Assessment Lab 3 NO CLASS MONDAY – MLK DAY	1.3
4	(1/28-2/1)	<i>Designing a Corrective Exercise Program Design</i> Wed – Corrective Exercise Techniques Lab	1.4
5	(2/4-2/8)*	<i>Designing a Movement Preparation/Warm Up</i> Wed – Dynamic Warm Up Lab Exam 1 – Thursday 2/7 (Module 1)	2.1
6	(2/11-2/15)*	<i>Designing a Flexibility Program</i> Wed – PNF Stretching Lab	2.2
7	(2/18-2/22)*	<i>Designing a Core Training Program</i> Wed – Core Stability, Strength, Power Lab (online)	2.3
8	(2/25-3/1)	<i>Designing a Muscular Hypertrophy Program</i> Wed – Fundamental Resistance Exercise Lab	2.4
9	(3/4-3/8)	SPRING BREAK	
10	(3/11-3/15)*	<i>Designing a Maximal Strength Program</i> Wed – Olympic Weightlifting Lab Exam 2 – Thursday 3/14 (Module 2)	3.1
11	(3/18-3/22)*	<i>Designing a Power Training Program</i> Wed – Plyometric Drills Lab	3.2
12	(3/25-3/29)	<i>Designing a Maximal Linear Speed Program</i> Wed – Speed Drills Lab	3.3
13	(4/1-4/5)*	<i>Designing a SAQ Program</i> Wed – SAQ Drills Lab	3.4
14	(4/8-4/12)	<i>Designing a Conditioning Program</i> Wed – Conditioning Lab (online) Exam 3 – Thursday 4/11 (Module 3)	4.1
15	(4/15-4/19)*	<i>Designing Sports Nutrition Recommendations</i> Lab Practical Exam (4/19)	4.2, 4.3

16 (4/22-4/24) *Designing a Periodized Nutrition Program*
Exam 4 - Wednesday 4/24 (Module 4)

4.4

Final Project Due
Sunday April 28th by 11:59PM