UF Department of Applied Physiology and Kinesiology
College of Health and Human Performance
UNIVERSITY of FLORIDA

Tactical Strength & Conditioning

APK6611 | 3 Credits | Fall 2025

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Course Info

INSTRUCTOR

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Preferred Method of Contact: **email**

OFFICE HOURS

Office Hours are Mondays and Wednesdays from 11AM - 1PM Eastern Standard time (EST) on zoom. If this time does not fit your schedule, you can schedule an appointment with me here.

MEETING TIME/LOCATION

Access course through Canvas on **UF e-Learning** & the ***Canvas*** mobile app by ***Instructure.*** This is a fully online course, so there are no in-person meetings. Lectures are pre-recorded so that you may watch them on-demand; please refer to the "Course Schedule" below for the suggested timeline to follow.

COURSE DESCRIPTION

Examines fundamental concepts in bioenergetics, biomechanics, cardiopulmonary responses, and skeletal muscle function & adaptation. Includes evidence-based strength and conditioning program design and practical skills necessary for success when working with fire and rescue, law enforcement, and military professionals on improving their physical performance. Content will prepare students to successfully complete the NSCA Tactical Strength and Conditioning Facilitator certification exam and the NASM Performance Enhancement Specialist certification exam.

PREREQUISITE KNOWLEDGE AND SKILLS

None

RECOMMENDED MATERIALS

NSCA's Essentials of Tactical Strength and Conditioning. Alavar, B.A., K. Sell, P.A. Deuster, Eds. Human Kinetics, 2017. ISBN: 978-1-4504-5730-9 (UF All Access e-book version also available)

NASM Essentials of Sports Performance Training. McGill, E.A. and I. Montel, Eds. Jones & Bartlett Learning, 2018. ISBN: 978-1-2841-4798-8.

Additional learning materials provided by the instructor within the Canvas course shell.

COURSE FORMAT

Students access and complete course assignments through the APK6611 Canvas page. Course topics are organized into 12 learning modules. Each module includes 2 practice activities corresponding with the module's learning materials (i.e., textbook reading and associated lecture videos) as well as 3 graded assignments including a discussion board, applied assignment, and a graded module quiz. A midterm exam and final exam are included in addition to the module assignments. Students will have access to all learning modules and assignments from the first day of the course. Students may work at their own pace but must progress according to the course schedule of topics and abide by graded assignment due dates provided on the eLearning course page.

COURSE LEARNING OBJECTIVES:

By the end of this course students will be able to:

1. Summarize and explain general concepts related to tactical strength and conditioning.
2. Apply kinesiological and biomechanical principles to exercise selection and tactical job performance.
3. Analyze the training variables that can affect performance outcomes as they relate to physiological adaptations from aerobic and anaerobic training.
4. Evaluate results of properly administered performance tests in tactical athletes.
5. Design exercise programs including modalities such as strength, power, speed, agility, balance core training, anaerobic and aerobic endurance, and mobility.
6. Calculate internal and external loads induced by the various modalities of training.
7. Select appropriate instruments for calculating internal and external loads.
8. Plan systematic progressions of training programs utilizing concepts of periodization.
9. Identify common acute and chronic injuries and risk factors for injury in different tactical populations.
10. Differentiate the unique physiological and biomechanical occupational demands of law enforcement, fire/rescue, and military professionals.
11. Identify wellness strategies and interventions to decrease the risk and consequences of illness and disease in tactical populations.
12. Give examples of strategies to create a safe training environment and reduce the risk of litigation.

Course & University Policies

UF STUDENT COMPUTING REQUIREMENTS:

As a 100% online course and as 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. Access to fast, secure Wi-Fi will be necessary for this course. If a student is 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.
3. 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.

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 here.

ATTENDANCE

Because this is an entirely online course, you are not expected to physically be on UF's campus at any time. However, you most certainly ARE expected to participate in discussion posts, assignments, engagement activities, and exams.

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

University of Florida students are bound by the Honor Pledge. On all work submitted for credit by a student, the following pledge is required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Student Honor Code and Conduct Code (Regulation 4.040) specifies a number of behaviors that are in violation of this code, as well as the process for reported allegations and sanctions that may be implemented. All potential violations of the code will be reported to Student Conduct and Conflict Resolution. If a student is found responsible for an Honor Code violation in this course, the instructor will enter a Grade Adjustment sanction which may be up to or including failure of the course.

Communication and Questions:

Students are responsible for getting a University of Florida email account (e.g., john.doe@ufl.edu) and should use this email for all university related correspondence – The instructor may not read emails from or send emails to any non-UF email addresses (e.g., john.doe@hotmail.com). Email subject should start with "SPM 4723 – First name, Last name - …" Email use does not relieve students from the responsibility of confirming the communication with the instructor. Always sign your email – don't make the instructor guess from whom the email was sent. The instructor will answer your email within the day, when possible

You may email me through the course site with any questions or concerns you have, and I will attempt to respond to your emails within 24 hours (typically sooner). If you have an urgent issue, please call my office and/or email my UF email, blaincharrison@ufl.edu.

For general course questions, I encourage you to check the **Course Questions Discussion Board** since other students may have the same question. If you do not find an answer, post your question using a descriptive subject line. All students are expected to follow rules of common courtesy in email messages, discussions, chats, etc. Please review the Netiquette Guide (also on course website) for further important information.

Honor Code Policy

All students must adhere to university regulations regarding academic integrity. Any form of academic dishonesty (including but not limited to any form of cheating, plagiarism, misrepresentation, etc.) will not be tolerated. Any student guilty of academic dishonesty will receive a failing grade (E) for the course, and the matter will be forwarded to the UF Office Student Affairs and the Dean of Students.

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

The following pledge will be either required or implied on all work:
"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is the duty of the student to abide by all rules set forth in the UF Undergraduate Catalog. Students are responsible for reporting any circumstances which may facilitate academic dishonesty. University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code here.

Copyright Statement:
The materials used in this course are copyrighted. The content presented is the property of UF and may not be duplicated in any format without permission from the College of Health and Human Performance and UF, and may not be used for any commercial purposes.

Content includes but is not limited to syllabi, videos, slides, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy or distribute the course materials, unless permission is expressly granted. Students violating this policy may be subject to disciplinary action under the UF Conduct Code.

APPROPRIATE USE OF AI TECHNOLOGY

The UF Honor Code strictly prohibits *cheating*. The use of any materials or resources prepared by another person or Entity (inclusive of generative AI tools) without the other person or Entity's express consent or without proper attribution to the other person or Entity is considered *cheating*. Additionally, the use of any materials or resources, through any medium, which the Faculty / Instructor has not given express permission to use and that may confer an academic benefit to a student, constitutes *cheating*.

LATE WORK POLICY

Students should submit all assignments by their due date indicated in Canvas. If an assignment is submitted after the due date, the instructor will deduct 0.5 points per day it is late from the maximum number of points provided on the assignment. For example, if the assignment is worth 10 points total and a student submits the assignment 4 days after its due date, the highest score the student can earn on that assignment is 8 points.

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. 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 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 here. 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. 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. Students can complete evaluations in three ways:

1. The email they receive from GatorEvals,
2. Their Canvas course menu under GatorEvals, or
3. The central portal

Guidance on how to provide constructive feedback is available here. Students will be notified when the evaluation period opens. Summaries of course evaluation results are available to students here.

Getting Help

HEALTH & WELLNESS

- ***U Matter, We Care**:* If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- ***Counseling and Wellness Center**:* Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- ***Student Health Care Center**:* Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- ***University Police Department**:* Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- ***UF Health Shands Emergency Room / Trauma Center**:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; or visit the UF Health Emergency Room and Trauma Center website.
- ***GatorWell Health Promotion Services**:* For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

ACADEMIC RESOURCES

- ***E-learning technical support***: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- ***Career Connections Center***: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- ***Library Support***: Various ways to receive assistance with respect to using the libraries or finding resources.
- ***Teaching Center***: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- ***Writing Studio***: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- ***Student Complaints & Grievances***: Students are encouraged to communicate first with the involved person(s), but here is more information on the appropriate reporting process.
- ***Academic Policies and Campus Resources***

Grading

Evaluation Components	Course Objectives Met	Points Per Component	Weighted % of Total Grade
Module Quizzes	1-10	250 points	25%
Discussion Boards	1-10	125 points	12.5%
Applied Assignments	1-10	100 points	10%
Article Synopses (x4)	1-10	50 points	5%
Training Modality Presentation	6	50 points	5%
Program Design Summary Flyer	6	25 points	2.5%
Midterm Exam	1-6	100 points	20%
Cumulative Final Exam	1-10	100 points	20%
Final exam score replacing midterm exam score	1-10	If the final exam score is higher than the midterm exam score, the final exam score will replace the midterm exam score	Final grade % improvement cannot exceed 2% from all extra-credit opportunities

Module Quizzes - Each learning module contains a graded quiz consisting of 10 objective questions related to all components of the module plus two objective questions from each previous learning module. This means that the first quiz will be worth 10 total points, followed by 12 total points for the second, and so on until the final quiz is worth 30 total points. The overall total amount of points earned via module quizzes is 250. Quiz questions will be randomly selected from a quiz question bank specific to each module. Each module quiz question bank contains multiple questions aligning with each individual module objective provided at the top of each learning module page in e-Learning. All quizzes are available from the first day of classes, but each module has a due date corresponding to the end of the week of the module according to the course schedule. Specifically, quizzes are due by Monday at 2:59am EST (Sunday at 11:59pm PST) each week**.** Students are permitted **ONE** attempt on each module quiz. Students are permitted to utilize their textbooks, lecture notes, or lecture videos while completing the quizzes. Explanations are provided for every question within the quiz question banks and students will be able to see the correct answer along with the corresponding explanation upon submitting the quiz. Honorlock is NOT needed for Module Quizzes.

Discussion Boards – Each of the 12 learning modules contains a graded Discussion Board assignment. These assignments offer students an opportunity to reflect on the application of the course material and how it may impact their personal life and career. Each Discussion Board assignment is worth 10 points. A rubric is used to grade responses to ensure students provide thoughtful reflections and meaningful interactions with their classmates. An additional discussion board is assigned in Module 1 for students to introduce themselves to the rest of the class. This introduction discussion board is worth 5 points. In total, the discussion board assignments equate to 125 points. The rubric used is provided below:

Length of Post: Discussion thread posts should be 200 words or more in length.	**2 pts** **Full Marks** Post is 200 or more words in length.	**0 pts** **No Marks** Post is less than 200 words in length.
Depth of post: The post demonstrates a thoughtful response to the discussion question.	**2 pts** **Full Marks** A thoughtful response to the discussion question is evident in the post.	**0 pts** **No Marks** A thoughtful response to the discussion question is not evident in the post.
Accuracy of Post: The post contains information that is supported by the class learning materials.	**2 pts** **Full Marks** The post contains information that is supported by the class learning materials.	**0 pts** **No Marks** The post contains information that is not supported by the class learning materials.
Writing skill of post: The post should contain proper grammar and spelling.	**2 pts** **Full Marks** The post is written with proper grammar and spelling.	**0 pts** **No Marks** The post contains one or more grammar or spelling errors.
Collegiality: Each student should reply to at least one of their classmate's posts with a minimum of 50 words by the due date of the discussion.	**2 pts** **Full Marks** Student replied to at least one of their classmate's posts with a minimum of 50 words by the due date.	**0 pts** **No Marks** Student did not reply to one of their classmate's posts and/or did not use a minimum of 50 words by the due date.

Applied Assignments – Students will complete weekly assignments involving the application of corrective exercise principles using that week's topic. Instructions for completing each week's assignment are provided on Canvas. Each assignment is worth 10 points. Students are permitted to re-submit the assignments following initial feedback from the instructor to ultimately earn all 10 points for each assignment.

Article Synopses - Students will search the available corrective exercise literature using a relevant database of research journals (i.e., Google Scholar, SportDiscus, PubMed) to find 4 peer-reviewed research articles related to one of the course topics for deeper reflection. Article synopses are due at the end of modules 3, 6, 9, and 12, respectively. After reading the article, the student will write a synopsis of it to include the following 9 topic headers: 1. Reason for Selection 2. Background, 3. Purpose of Study, 4. Methods, 5. Results and Conclusions, 6. Transferability, 7. Takeaways, 8. Follow Up Study, 9. Limitations. Each article synopsis assignment is worth 10 points and a rubric is used for grading. After submitting all four article synopses, students will produce a 90-sec video within Canvas to summarize and reflect on what they learned by reviewing the articles throughout the semester. In total, the five assignments within the "Article Synopses" header are worth 50 points. The rubric is provided below:

Reason for Selection	**1 pt** **Full Marks** A description of why the student selected the article is provided.	**0 pts** **No Marks** A description of why the student selected the article

		is not provided.
Background	**1 pt** **Full Marks** Background information on the article topic is provided	**0 pts** **No Marks** Background information on the article topic is not provided
Purpose of the Study	**1 pt** **Full Marks** Purpose of the study is provided in student's own words.	**0 pts** **No Marks** Purpose of the study is not provided or is pasted directly from the article.
Methods	**1 pt** **Full Marks** Description of how the study was conducted is provided in student's own words.	**0 pts** **No Marks** Description of how the study was conducted is not provided or is pasted directly from the article.
Results and Conclusions	**1 pt** **Full Marks** Explanation of data reported and relevant conclusions are provided.	**0 pts** **No Marks** Explanation of data reported and relevant conclusions are not provided.
Transferability	**1 pt** **Full Marks** The post demonstrates a thoughtful response to the reflection of how the results may impact different populations from those in the study.	**0 pts** **No Marks** The post does not demonstrate a thoughtful response to the reflection of how the results may impact different populations from those in the study.
Takeaways	**1 pt** **Full Marks** The student describes what aspects of the article they will use in their own practice.	**0 pts** **No Marks** The student does not describe what aspects of the article they will use in their own practice.
Follow Up Study	**1 pt** **Full Marks** The student proposes a design for a follow up study.	**0 pts** **No Marks** The student does not propose a design for a follow up study
Limitations	**1 pt** **Full Marks** The student describes what they would have done differently had they designed the study themselves.	**0 pts** **No Marks** The student does not describe what they would have done differently had they designed the study themselves.
Article Upload	**1 pt**	**0 pts**

	Full Marks A pdf copy of the article is uploaded with the synopsis.	**No Marks** A pdf copy of the article is not uploaded with the synopsis.

Strength and Conditioning Training Modality Presentation - Students will record a 10-minute presentation regarding a strength and conditioning training modality (i.e. equipment) by selecting one from a list of equipment provided by the instructor. The presentation is recorded using Microsoft Powerpoint and includes a description of the modality, common techniques and errors when using the modality, common exercise prescription characteristics when using the modality, evidence supporting effectiveness of the modality, and resources related to available certifications involving the modality. Detailed instructions for creating the presentation are provided in Canvas. The Strength and Conditioning Training Modality Presentation assignment is worth 50 points. A rubric is used for grading and is provided below:

Modality Description and Development	**10 pts** **6-10points** Thorough and Complete description of the modality and its use in strength and conditioning.	**5 pts** **1-5 points** Partial Description of the Modality and/or its development.	**0 pts** **0 points** No descriptor of modality nor discussion of its development.
Common Techniques and Errors	**10 pts** **Full Marks** Details on 3 or more common exercises utilizing the modality.	**5 pts** **1-5 points** Details on 1-2 common exercises utilizing the modality.	**0 pts** **No Marks** No details of any exercises using the modality.
Common Prescription Characteristics	**10 pts** **6-10 points** Thorough and complete description of how intensity, volume, and frequency are commonly prescribed.	**5 pts** **1-5 points** Partial description of how intensity, volume, and frequency are commonly prescribed.	**0 pts** **0 points** No description of how intensity, volume, nor frequency are commonly prescribed.
Evidence Supporting Use	**10 pts** **6-10 points** Description of 2 or more original research articles involving use of the modality in an athletic population.	**5 pts** **1-5 points** Description of 1 research article involving the use of the modality in an athletic population.	**0 pts** **0 points** No description of any research articles involving the use of the modality in an athletic population.
Certification Resources	**10 pts** **Full Marks** Complete listing of organizations offering certifications with modality.	**5 pts** **1-5 points** Partial listing of organizations offering certifications with modality.	**0 pts** **No Marks** No organizations offering certifications in the modality provided.

Program Design Summary Flyer **-** Students will create an educational flyer that could be provided to patients, clients, or athletes throughout their career and that contains a summary of the program design recommendations for resistance training, conditioning training, load carriage training, flexibility training, and SAQ training. Detailed instructions for creating the flyer are provided on Canvas. The Program Design Summary Flyer assignment is worth 25 points. A rubric is used for grading and

is provided below:

Resistance Training Program Design	**10 pts** **Full Marks** Description of how to effectively prescribe frequency, intensity, volume, rest interval, and tempo for resistance exercise according to evidence-based recommendations are provided.	**5 pts** **Half Marks** One to three of the following components are missing or improperly described based on information provided in the course content: Frequenc y, Intensity, Volume, Rest Interval, Tempo	**0 pts** **No Marks** Four or more of the following components are missing or improperly described based on information provided in the course content: Frequenc y, Intensity, Volume, Rest Interval, Tempo
Conditioning Training Program Design	**10 pts** **Full Marks** Description of how to effectively prescribe type, frequency, intensity, volume, and rest interval for cardiovascular exercise according to evidence-based recommendations are provided.	**5 pts** **Half marks** One to three of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.	**0 pts** **No Marks** Four or more of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.
Load Carriage Program Design	**10 pts** **Full Marks** Description of how to effectively prescribe type, frequency, intensity, volume, and rest interval for Load Carriage exercise according to evidence-based recommendations are provided.	**5 pts** **Half marks** One to three of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of	**0 pts** **No Marks** Four or more of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of

		how to calculate each.	how to calculate each.
Flexibility/Mobility Program Design	**10 pts** **Full Marks** Description of how to effectively prescribe type, frequency, intensity, volume, and rest interval for Flexibility/Mobility exercise according to evidence-based recommendations are provided.	**5 pts** **Half marks** One to three of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.	**0 pts** **No Marks** Four or more of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.
Speed/Agility/Quickness Program Design	**10 pts** **Full Marks** Description of how to effectively prescribe type, frequency, intensity, volume, and rest interval for SAQ exercise according to evidence-based recommendations are provided.	**5 pts** **Half marks** One to three of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.	**0 pts** **No Marks** Four or more of the following components are missing or improperly described based on information provided in the course content: Type, Frequency, Intensity, Volume, Rest Interval, Tempo recommendations and examples of how to calculate each.

Midterm Exam – The midterm exam consists of 50 objective questions (multiple choice, matching, true/false) worth **2 points** each. Questions will require the application of course material or knowledge of basic scientific principles covered within each of the first 6 learning modules. Exam questions are generated by the course instructor and are randomly selected from the first 6 module midterm exam question banks. Students should prepare for the exam by completing all weekly course readings, practice activities, and module quizzes prior to the exam. The exam is not timed; however, the **Honorlock proctoring service is required to complete it**. Honorlock is included on the e-Learning platform and no additional downloads are required. **ONE** attempt is allowed on the midterm exam. Explanations are provided for

every question within the quiz question banks and students will be able to see the correct answer along with the corresponding explanation upon submitting the exam The exam will be available for one week following Module 6 in the course schedule and is due according to the course schedule provided at the end of the syllabus.

Cumulative Final Exam - The cumulative final exam will consist of 100 objective questions (multiple choice, matching, true/false) worth **1 point** each. Questions will require the application of course material or knowledge of basic scientific principles covered within each of the 12 learning modules. Exam questions are generated by the course instructor and are randomly selected from all 12 module final exam question banks. Students should prepare for the exam by completing all weekly course readings, practice activities, and module quizzes prior to the exam. The exam is not timed; however, the Honorlock proctoring service is required to complete it. Honorlock is included on the e-Learning platform and no additional downloads are required. **ONE attempt** is allowed on the final exam. In the event that the final exam score is higher than the midterm exam scores the final exam score will replace the midterm score when calculating the final grade in the course. Explanations are provided for every question within the quiz question banks and students will be able to see the correct answer along with the corresponding explanation upon submitting the exam. The exam will be available for one week following Module 12 in the course schedule and is due according to the course schedule provided at the end of the syllabus.

Final Exam Substitute Option – Students have the option to complete either the TSAC-F certification exam offered by the National Strength and Conditioning Association or the Performance Enhancement Specialist certification exam offered by the National Academy of Sports Medicine as a substitute for the course final exam. Students who select this option are required to pay for the exams out of pocket. The instructor will provide instructions for registering for the exams early in the course. Students who complete an exam must submit their score report to the instructor and their score will be substituted for their final exam grade only if the certification exam score is higher than the course final exam score. **All students must complete the APK6611 course final exam regardless of whether they choose to complete the TSAC-F or PES exams**. The substitution option described here only applies if a student receives a higher percentile score on the TSAC-F exam (averaged between the two sections of the TSAC-F exam) or PES exam than the APK6611 course final exam and wishes to use it as a substitute. This option is considered a form of extra credit. All extra credit earned throughout the course collectively can only increase a student's final grade by 2%.

Module Activities - Two ungraded practice assignments are available in each of the 12 learning modules. Links to the practice assignments are under the "Practice" header on the module learning pages. The practice assignments correspond to the learning material in the module. They may be completed an unlimited number of times, Honorlock is not required, and questions and answers are viewable between attempts. All practice assignments are available from the first day of the course and there are no due dates. These are optional assignments designed to help students gauge their comprehension and application of course learning material as it pertains to stated course objectives. Scores earned from any practice assignment **DO NOT** affect a student's final grade in any way.

Extra Credit – This course includes 1 extra credit opportunity:

1. If the grade on the final exam is better than the grade on the midterm exam, the final exam grade will replace a midterm exam grade. If a student chooses to

substitute their TSAC-F or PES exam score for their final exam score, and that score is higher than the midterm exam score, then it will also replace the midterm exam score.

NOTE: UF policy limits the ability of extra credit assignments to improve a student's final grade more than 2%. **Therefore, any extra credit listed above will be limited to increasing the student's final grade no more than 2 percentage points. Extra credit is added AFTER all course assignments are complete.** For example, if a student's final grade is calculated at 89% (B+) after all required graded assignments, quizzes, and exams have been completed, but the student has earned extra credit via the opportunities listed above, the highest grade they are eligible to earn via the extra credit is a 91% (A-)

Module Completion Recommendations

The instructor recommends completing each component of a learning module in the following order:

1. Read each assigned chapter from the textbook.
2. Watch the lecture videos located in the module page.
3. Complete the practice quizlet assignment (ungraded assignment).
4. Complete the practice quiz assignment (ungraded assignment).
5. Complete the discussion assignment (graded assignment).
6. Complete the current module's applied assignment.
7. Complete the module quiz.
8. Review your results from the module quiz and attend a virtual office hour if clarification is needed.

GRADING SCALE

All course assignments are administered and graded within the APK6611 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. Final Grades will be rounded up at .5 and above. The table below provides a reference. 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	92.5-100%	4.0
A-	89.5 – 92.49%	3.7
B+	86.5-89.49%	3.33
B	82.5-86.49%	3.0
C+	76.5-79.49%	2.33
C	72.5-76.49%	2.0
D+	66.5-69.49%	1.33
D	62.5-66.49%	1.0
E	0-59.49%	0

Weekly Course Schedule

CRITICAL DATES & UF OBSERVED HOLIDAYS

- Complete list available here

WEEKLY SCHEDULE

Week	Dates	Assigned Module & Schedule Notes	Assessments Due
1-2	8/21 – 8/31	Module 1 Integrated Training Essentials Chapter 1 NSCA Text Chapter 1 NASM Text	Module 1 Quiz Module 1 Discussion
3	9/1 – 9/7	Module 2 Science of Human Movement Load Management Chapter 3 NSCA Text Chapter 2 NASM Text	Module 2 Quiz Module 2 Discussion Applied Assignment 1
4	9/8 – 9/14	Module 3 Evaluation of Tactical Populations Chapter 8 NSCA Text Chapter 3 NASM Text	Module 3 Quiz Module 3 Discussion Applied Assignment 2 Article Synopsis 1
5	9/15 – 9/21	Module 4 Flexibility Training Concepts Chapter 12 NSCA Text Chapter 4 NASM Text	Module 4 Quiz Applied Assignment 3 Module 4 Discussion
6	9/22 – 9/28	Module 5 Resistance Training Concepts Chapters 9, 11 NSCA Text Chapter 10 NASM Text	Module 5 Quiz Applied Assignment 4 Module 5 Discussion
7	9/29 – 10/5	Module 6 Plyometric Training Concepts Chapter 13, 15 NSCA Text Chapter 8 NASM Text	Module 6 Quiz Applied Assignment 5 Module 6 Discussion Article Synopsis 2
8	10/6 – 10/12	Midterm Exam	**Midterm Exam 10/13**
9	10/13 – 10/19	Module 7 Speed, Agility, and Quickness Training Chapter 13, 19 NSCA Text Chapter 9 NASM Text	Module 7 Quiz Applied Assignment 6 Module 7 Discussion
10	10/20 – 10/26	Module 8 Conditioning Training Concepts Chapters 14, 20 NSCA Text Chapter 5 NASM Text	Module 8 Quiz Applied Assignment 7 Module 8 Discussion

11	10/27 – 11/2	Module 9 Balance and Core Training Concepts Chapter 19 NSCA Text Chapters 6, 7 NASM Text	Module 9 Quiz Applied Assignment 8 Module 9 Discussion Article Synopsis 3
12	11/3 – 11/9	Module 10 Periodization for Tactical Populations Chapters 10, 17 NSCA Text Chapter 12 NASM Text	Module 10 Quiz Applied Assignment 9 Module 10 Discussion
13	11/10 – 11/16	Module 11 Injury Prevention and Wellness Chapters 16, 21 NSCA Text Chapter 13 NASM Text	Module 11 Quiz Applied Assignment 10 Module 11 Discussion Training Modality Presentation
14	11/17 – 11/23	Module 12 Organization and Management Sport Psychology Chapter 22 NSCA Text Chapters 11, 16 NASM Text	Module 12 Quiz Module 12 Discussion Article Synopsis 4 Strength and Conditioning Summary Flyer
15	11/24 – 11/30	Thanksgiving Break	No Assignments Due
16	12/1 – 12/7	No Module Assigned	Article Synopsis Summary
Comprehensive Final Exam – Due Monday, December 8 at 2:59am EST			

Addressing Student Concerns

Students should bring any questions or concerns related to the course to the attention of the instructor via email through Canvas or directly at blaincharrison@ufl.edu. Examples of concerns include, but are not limited to:

- Clarification on quiz or exam questions
- Clarification on instructions for article synopsis, discussion board, nutrition supplement, or sports Nutrition flyer assignments
- Difficulty accessing course materials.
- Clarification on the suitability of a research article to review for the article synopses assignments.

The instructor will respond to all questions or concerns within 24 hours on weekdays and 48 hours on weekends and will recommend a zoom appointment if needed.

SUCCESS AND STUDY TIPS

- Utilize the module practice assignments as study tools. You may complete them as many times as you like. Complete the assignments while you are working through the module and then again when you are reviewing for the exams
- Sixty percent of the final grade comes from graded assignments that allow

you to use any learning material to complete them. Take advantage of these assignments to bring up any quiz or exam grades in which you are disappointed.

- Perform well on the final exam.
- Consider completing the NSCA TSAC-F and NASM PES certification exams

*Note Regarding Program Comprehensive Exam - If you choose APK6611 as one of the courses to include within your comprehensive exam, know that the exam will contain 60 objective questions (multiple choice, true/false, matching) that are pulled at random from a question bank like the quizzes and exams in this course. If you complete the exam in a future semester, you will be able to access this APK6611 Canvas course and review lecture videos and exam questions and answers. If you complete the exam during this semester, you will need to work ahead in the course to ensure you have been introduced to all the topics that are found on it. All modules and assignments are available from the first week of the course. I recommend completing the practice quizzes in each module as many times as needed to gain practice with course content not yet covered by the time you take the exam.

CASCE Standards Included in this Course

Human Anatomy and Physiology
a. Structure and function of body systems
b. Musculoskeletal system
c. Neuromuscular system
d. Cardiovascular system
e. Respiratory system
Exercise Physiology
a. Bioenergetics of exercise and training
b. bioenergetic limiting factors in exercise performance
c. Substrate depletion and repletion
d. Bioenergetic limiting factors in exercise performance
e. Oxygen uptake and the aerobic and anaerobic contributions to exercise
f. Metabolic specificity of training
g. Endocrine responses to resistance exercise
h. Synthesis, storage, and secretion of hormones
i. Muscle as the target for hormone interactions
j. Role of receptors in mediating hormonal changes
k. Categories of hormones
l. Heavy resistance exercise and hormonal increases
m. Mechanisms of hormonal interactions
n. Hormonal changes in peripheral blood
o. Adaptations in the endocrine system
p. Primary anabolic hormones
q. Adrenal hormones
r. Other hormonal considerations
Psychology of Sport and Exercise
e. Influence of arousal and anxiety on performance
f. Motivation
g. Attention and focus
h. Psychological techniques for improved performance
i. Enhancing motor skill acquisition and learning
Scientific Principles of Strength and Conditioning
a. Adaptations to anaerobic training programs
b. Neural adaptations
c. Muscular adaptations
d. Connective tissue adaptations
e. Endocrine responses and adaptations to anaerobic training
f. Cardiovascular and respiratory responses to anaerobic exercise

g. Compatibility of aerobic and anaerobic modes of training
h. Overtraining: definition, prevalence, diagnosis, and potential markers
i. Detraining
r. Rehabilitation and reconditioning
s. Types of injury
t. Tissue healing
u. Rehabilitation and reconditioning strategies
v. Program design
w. Reducing risk of injury and reinjury
Resistance Training and Conditioning (Practical/Laboratory)
a. Warm-up and flexibility training
b. Types of stretching
c. Static stretching techniques
d. Dynamic stretching techniques
e. Exercise technique for free-weight and machine training
f. Fundamentals of exercise technique
g. Spotting free-weight exercises
h. Resistance training exercises
i. Olympic-style lifting techniques: progressions and regressions
k. Bodyweight training methods
l. Core stability and balance training methods
Exercise Testing/Exercise Prescription with Emphasis in Anaerobic Exercise
a. Principles of test selection and administration
b. Reasons for testing
c. Testing terminology
d. Evaluation of test quality
e. Test selection
f. Test administration
g. Administration, scoring, and interpretation of selected tests
h. Measuring parameters of athletic performance
i. Selected test protocols and scoring data
j. Statistical evaluation of test data
Program Design as Related to Strength and Conditioning
a. Program design for resistance training
b. Principles of anaerobic exercise prescription
(1) Step 1: Needs analysis
(2) Step 2: Exercise selection
(3) Step 3: Training frequency
(4) Step 4: Exercise order

(5) Step 5: Training load and repetitions
(6) Step 6: Volume
(7) Step 7: Rest periods
Program design and technique for plyometric training
(1) Plyometric mechanics and physiology
(2) Design of plyometric training programs
(3) Age considerations
(4) Plyometrics and other forms of exercise
(5) Safety considerations
(6) Plyometric drills
Program design and technique for speed and agility training
(1) Speed and agility mechanics
(2) Neurophysiological basis for speed
(3) Running speed
(4) Agility performance and change-of-direction ability
(5) Methods of developing speed
(6) Methods of developing agility
(7) Program design
(8) Speed development strategies
(9) Agility development strategies
(10) Speed and agility drills
Program design and technique for aerobic endurance training
(1) Factors related to aerobic endurance performance
(2) Designing an aerobic endurance program
(3) Types of aerobic endurance training programs
(4) Application of program design to training seasons
(5) Special issues related to aerobic endurance training
(6) Aerobic endurance training exercises
(7) Periodization
(8) Central concepts related to periodization
(9) Periodization hierarchy
(10) Periodization periods
(11) Applying sport seasons to the periodization periods
(12) Undulating versus linear periodization models
(13) Example of an annual training plan
Program organization, administration, and oversight
a. Facility design, layout, and organization
b. General aspects of new facility design

c. Existing strength and conditioning facilities
d. Assessing athletic program needs
e. Designing the strength and conditioning facility
f. Arranging equipment in the strength and conditioning facility
g. Maintaining and cleaning surfaces and equipment
h. Facility policies, procedures, and legal issues
i. Mission statement and program goals
j. Legal and ethical issues
k. Staff policies and activities
l. Facility administration
m. Emergency planning and response