

Sports Nutrition

APK3163 | Class # 10566 | 3 Credits | Fall 2023

Connect with HHP



Course Info

INSTRUCTOR

Blain Harrison, Ph.D, CSCS*D
Office: 106B FLG
Office Phone: 352-294-1704
Email: blainharrison@ufl.edu
Preferred Method of Contact: **email**

OFFICE HOURS

Office Hours are Wednesday and Sunday from 8-9pm Eastern Standard time (EST) on [zoom](#). If these times do 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

This course addresses the aspects of nutrition that are related to exercise performance. Emphasis will be placed on the bioenergetics systems, the components of nutrition, nutritional and body composition assessments, ergogenic aids and diet modifications for physically active individuals and athletes.

PREREQUISITE KNOWLEDGE AND SKILLS

HUN2201 and (APK2105C or BSCX094+L or BSCX086+L or PETX322+L or PCB3703C)

REQUIRED AND RECOMMENDED MATERIALS

Required: Fink, H.H. and A.E. Mikesky. **Practical Applications in Sports Nutrition 6th Edition**. Jones& Bartlett Learning. 2020.

Required: PDF copies of Position Stands published by the International Society of Sports Nutrition are provided throughout the course and are required reading

COURSE FORMAT

Students access and complete course assignments through the APK3163 Canvas page. Course topics are organized into weekly learning modules. Each module includes ~3 practice activities corresponding with the module's learning materials (i.e. textbook reading, research articles, and associated lecture videos). In addition, each module contains the following graded assignments: an applied assignment, a discussion board, and a 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. Describe the digestion and absorption of macronutrients and micronutrients
2. Clarify effects of high and low carbohydrate diets on exercise performance
3. List the potential athletic benefits of manipulating fat content in our diet
4. Reflect on increasing protein intake to promote exercise adaptations
5. Summarize specific physiologic functions of micronutrients
6. Specify fluid intake recommendations before, during, and after exercise
7. Calculate macronutrient recommendations for endurance athletes, strength/power athletes, and team sport athletes
8. Provide sports nutrition recommendations for special populations of athletes
9. Recommend nutrition strategies related to weight management goals
10. Contrast the benefits and challenges of unique body composition assessments
11. List the ergogenic benefits of popular dietary supplements.
12. Complete sports nutrition certification exams from a variety of organizations

Course & University Policies

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

Students are expected to review and adhere to the [UF Netiquette](#) guide for online courses. 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](#) 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 in this class. According to [UF Policy](#), a student shall not represent as the student's own work all or any portion of the work of another.

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. 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, 352-392-1601. 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

The instructor strives to create an accessible and inclusive environment that is equal for all students regardless of race, gender, ethnicity, or ability. Derogatory, rude, or hurtful interactions with classmates or the instructor are not tolerated. Questions or concerns related to this statement are welcomed by the instructor or may be addressed to members of the APK IDEA Committee:

- Dr. Linda Nguyen, APK IDEA Liaison, linda.nguyen@hhp.ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Grading

Evaluation Components	Course Objectives Met	Points Per Component	Weighted % of Total Grade
Module Quizzes	1-11	186 points	15%
Discussion Boards	1-11	65 points	10%
Applied Assignments	1-11	100 points	10%
Supplement Presentation	11	50 points	10%
Summary Flyer	1-11	50 points	10%
Midterm Exam	1-11	100 points	20%
Cumulative Final Exam	1-11	100 points	25%
Extra-credit Bonus points earned from writing module practice questions	1-11	12 total bonus points possible to be added to low quiz scores	Final grade % improvement cannot exceed 2% from all extra-credit opportunities
Final exam score replacing midterm exam score	1-11	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 one objective question from each previous learning module. This means that the first quiz will be worth 10 total points, followed by 11 total points for the second, and so on until the final quiz is worth 21 total points. The overall total amount of points earned via module quizzes is 186. Quiz questions will be randomly selected from a 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 Sunday at 11:59pm 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 5 points. A rubric is used to grade responses to ensure students provide thoughtful reflections and meaningful interactions with their classmates. The rubric used is provided below:

Length of Post: Discussion thread posts should be 25 words or more in length.	1 pts Full Marks Post is 25 or more words in length.	0 pts No Marks Post is less than 25 words in length.
Depth of post: The post demonstrates a thoughtful response to the discussion question.	1 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.	1 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.	1 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 by the due date of the discussion.	1 pts Full Marks Student replied to at least one of their classmate's posts by the due date.	0 pts No Marks Student did not reply to one of their classmate's posts by the due date.

Applied Assignments – Learning modules 2 – 11 include assignments designed to provide hypothetical food intake and nutrient analysis information in a case study format whereby students answer objective (multiple-choice) questions whose answers can be gleaned from a review of the provided case. Applied Assignments provide students an opportunity to practice case study-based questions similar to what they may see on the midterm or final exam, specifically questions that require application of macronutrient and micronutrient recommendations discussed throughout the course. Each applied assignment is worth 10 points and students may complete the assignments as many times as they like. The highest score earned on any attempt will be used in the calculation of the final grade.

Nutrition Supplement Presentation - Students will record a 10-minute presentation describing the chemistry, metabolism, cost, potential ergogenic benefit, and evidence-based recommendations for use of a nutritional supplement of their choice using Voicethread. Detailed instructions for creating the presentation are provided in Canvas. The Nutrition Supplement Presentation assignment is worth 50 points. A rubric is used for grading and is provided below:

<p>Advertisement and Price per serving:</p> <p>A screenshot of an advertisement for the supplement and a description of the price per serving is included.</p>	<p>10 pts Full Marks Both the advertisement and price per serving are provided</p>	<p>5 pts Half Marks Either an advertisement or the price per serving is missing.</p>	<p>0 pts No Marks Both the advertisement and the price per serving are missing</p>
<p>Claimed action:</p> <p>The claimed actions influencing athletic performance are provided.</p>	<p>10 pts Full Marks Thorough and complete description of the claimed actions of the supplement as they pertain to athletic performance.</p>	<p>5 pts Half Marks Incomplete description of the claimed actions of the supplement as they pertain to athletic performance.</p>	<p>0 pts No Marks Claimed action of supplement as it pertains to athletic performance is not in the presentation.</p>
<p>Interpretation of Claims:</p> <p>Your interpretation of the claimed actions based on your understanding of physiology and biochemistry (in other words - based on what you know of physiology and biochemistry, do the claimed actions make sense? Why?)</p>	<p>10 pts Full Marks Thorough and complete interpretation of the claims of the supplement based on principles of physiology and biochemistry.</p>	<p>5 pts Half Marks Incomplete description of the supplement claims based on principles of biochemistry and physiology.</p>	<p>0 pts No Marks Description of supplement claims based on principles of biochemistry and physiology is missing from presentation.</p>
<p>Supporting Evidence:</p> <p>Describe the quality of the research on the supplement. Provide specific evidence from peer reviewed studies (in other words - show data that demonstrates that the supplement does or does not influence athletic performance)</p>	<p>10 pts Full Marks Thorough and complete description of the best available evidence describing the efficacy of the supplement as it pertains to athletic performance including appropriate citation and bibliography slide.</p>	<p>5 pts Half Marks Incomplete description of the quality of available evidence, inappropriate or missing citations, or missing bibliography slide.</p>	<p>0 pts No Marks Description of available evidence, citations, and bibliography slide are missing.</p>

<p>Recommendation:</p> <p>Determine if you would recommend this supplement to an athlete. Why or why not?</p>	<p>10 pts Full Marks Recommendation and rationale are provided in presentation.</p>	<p>5 pts Half Marks Either the recommendation or rationale for the recommendation are missing from the presentation.</p>	<p>0 pts No Marks Recommendation and/or rationale are not provided in the presentation.</p>
---	--	---	--

Sports Nutrition 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 energy, macronutrient, micronutrient, fluid, timing, and supplement recommendations learned throughout the course. Detailed instructions for creating the flyer are provided in Canvas. The Sports Nutrition Summary Flyer assignment is worth 50 points. A rubric is used for grading and is provided below:

<p>Energy</p>	<p>10 pts Full Marks Description of how to calculate daily energy intake, daily total energy expenditure, and energy balance are provided as are the components of total energy expenditure and the possible energy balance outcomes.</p>	<p>5 pts Half Marks One to three of the following components are missing or improperly described based on information provided in the course content: Description of how to calculate daily energy intake, daily total energy expenditure, and energy balance; the components of total energy expenditure and the possible energy balance outcomes.</p>	<p>0 pts No Marks Four or more of the following components are missing or improperly described based on information provided in the course content: Description of how to calculate daily energy intake, daily total energy expenditure, and energy balance; the components of total energy expenditure and the possible energy balance outcomes.</p>
<p>Macronutrient Recommendations</p>	<p>10 pts Full Marks Descriptions of the role of each macronutrient and the recommended intakes of each are provided including both relative intake and AMDR recommendations and examples of how to calculate each.</p>	<p>5 pts Half marks One to three of the following components are missing or improperly described based on information provided in the course content: Descriptions of the role of each macronutrient and the recommended intakes of each are provided including both relative intake and AMDR recommendations and</p>	<p>0 pts No Marks Four or more of the following components are missing or improperly described based on information provided in the course content: Descriptions of the role of each macronutrient and the recommended intakes of each are provided including both relative intake and AMDR recommendations and</p>

		examples of how to calculate each.	examples of how to calculate each.
Micronutrient Recommendations	<p>10 pts Full Marks Descriptions of the role of 5 vitamins and 5 minerals and the recommended intakes of each are provided.</p>	<p>5 pts Half marks One to three of the following components are missing or improperly described based on information provided in the course content: Descriptions of the role of 5 vitamins and 5 minerals and the recommended intakes of each are provided.</p>	<p>0 pts No Marks Four or more of the following components are missing or improperly described based on information provided in the course content: One to three of the following components are missing or improperly described based on information provided in the course content:</p>
Fluid Recommendations	<p>10 pts Full Marks Fluid recommendations for an entire day, 2-4 hours prior to exercise, 10-20min prior to exercise, during exercise, and immediately following exercise are provided along with recommendations on the type of beverage to consume at each time frame.</p>	<p>5 pts Half marks One to three of the following components are missing or improperly described based on information provided in the course content: Fluid recommendations for an entire day, 2-4 hours prior to exercise, 10-20min prior to exercise, during exercise, and immediately following exercise are provided along with recommendations on the type of beverage to consume at each time frame.</p>	<p>0 pts No Marks Four or more of the following components are missing or improperly described based on information provided in the course content: Fluid recommendations for an entire day, 2-4 hours prior to exercise, 10-20min prior to exercise, during exercise, and immediately following exercise are provided along with recommendations on the type of beverage to consume at each time frame.</p>
Nutrition Supplements	<p>10 pts Full Marks All of the following are included and align with information provided in course content - General guidelines for incorporating supplements - Description of 5 most pertinent</p>	<p>5 pts Half marks One to three of the following components are missing or improperly described based on information provided in the course content: - General guidelines for incorporating supplements -</p>	<p>0 pts No Marks Four or more of the following components are missing or improperly described based on information provided in the course content: - General guidelines for incorporating supplements -</p>

	recommended supplements for selected population - Recommended dose of each supplement - Description of how to select safe products.	Description of 5 most pertinent recommended supplements for selected population - Recommended dose of each supplement - Description of how to select safe products.	Description of 5 most pertinent recommended supplements for selected population - Recommended dose of each supplement - Description of how to select safe products.
--	---	---	---

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 quiz 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 Sunday, October 15 at 11:59pm.

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 quiz 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 Friday, **December 15th at 11:59PM**.

Module Activities - Approximately three 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. Aligns with course objectives 1-12.

Extra Credit – This course includes 2 extra credit opportunities:

1. Each learning module contains an extra credit practice-questions assignment. The assignment involves students creating up to 2 practice questions from the module's learning material for inclusion within the practice question banks in the course. Each new question created is worth 0.5 bonus points to be added to the lowest quiz scores following the completion of all 12 module quizzes. This means that a maximum of 12 bonus points could be added to quiz scores. Extra credit assignments are due at 11:59pm on Sundays at the end of the week the module is assigned in the course schedule.
2. If the grade on the final exam is better than the grade on the midterm exam, the final exam grade will replace the midterm exam grade.

NOTE: UF policy limits the ability of extra credit assignments to improve a student's final grade more than 2%. Therefore, any combination of the extra credit assignments listed above will be limited to increasing the student's final grade no more than 2 percentage points. 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-)

GRADING SCALE

All course assignments are administered and graded within the APK3163 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

Addressing Student Concerns

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

- Clarification on quiz or exam questions
- Clarification on instructions for 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 email questions or concerns within 24 hours on weekdays and 48 hours on weekends and will recommend a zoom appointment if needed.

Weekly Course Schedule

CRITICAL DATES & UF OBSERVED HOLIDAYS

- Complete list available [here](#).

WEEKLY SCHEDULE

Week	Dates	Assigned Module & Schedule Notes	Assessments Due
1	August/Sep 23 - 1	Module 1	Module 1 Quiz (Due Sunday Sep 3 at 11:59pm EST) Module 1 Discussion
2	September 4 - 8	<i>Monday is a holiday</i> Module 2	Module 2 Quiz Module 2 Discussion Applied Assignment 1
3	September 11 - 15	Module 3	Module 3 Quiz Module 3 Discussion Applied Assignment 2
4	September 18 - 22	Module 4	Module 4 Quiz Applied Assignment 4 Module 4 Discussion
5	September 25 - 29	Module 5	Module 5 Quiz Applied Assignment 5 Module 5 Discussion
6	October 2 - 6	Module 6	Module 6 Quiz Applied Assignment 6 Module 6 Discussion
7	October 9 - 13	Midterm Exam	Midterm Exam Due Sunday 10/15 by 11:59pm EST
8	October 16 - 20	Module 7	Module 7 Quiz Applied Assignment 7 Module 7 Discussion
9	October 23 - 27	Module 8	Module 8 Quiz Applied Assignment 8 Module 8 Discussion
10	Oct/Nov 30 - 3	Module 9	Module 9 Quiz Applied Assignment 9 Module 9 Discussion
11	November 6 - 10	Module 10	Module 10 Quiz Applied Assignment 10 Module 10 Discussion

			Nutrition Supplement Presentation
12	November 13 - 17	Module 11	Module 11 Quiz Module 11 Discussion
13	Nov/Dec 27 - 1	Module 12	Module 12 Quiz Module 4 Discussion Sports Nutrition Summary Flyer

Comprehensive Final Exam – Due Friday, Dec 15th at 11:59pm EST

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
- Complete the extra credit opportunities.
- More than half 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.