

ATH-918: Advanced Nutrition for Sports

Independent Study Online Course Syllabus

Instructor: Andy Herrick, PhD

Phone: (602) 751-2528

Email: andrew.herrick@fresno.edu

Website: FPUCourses.com

Number of Graduate Semester Units: 3

Target Audience: 7th - 14th grade teachers

Course Access: <https://connect.fresno.edu>

Course Description

The best conditioning regimens and technical instruction are beneficial only if the body's engine is properly fueled and ready to operate at peak efficiency. This course provides the best results-based information and advice that coaches and athletes need to gain a nutritional edge. Far beyond the typical food pyramid formula, this course presents cutting edge nutritional concepts tailored for application by advanced athletes in any sport. Concepts covered in this course include: a) Timing of meals, fluid, and training to maintain ideal energy balance throughout each day, b) Digesting optimal ratios and quantities of energy nutrients, vitamins, and minerals for any sport, c) Consuming the right amount of fluid and electrolytes to avoid dehydration and hyperhydration, d) Identifying and maintaining a body composition capable of maximal power output with minimal excess weight for specific sports, and e) Understanding the effects of travel, high altitude, and age on nutritional needs and Performance.

Course assignments encourage participants to integrate specific national standards for physical education. Objectives for each lesson are modeled around standards-based learning as identified by the SHAPE America. Evidence of learning is tied directly to stated objectives and is assessed via analysis and application papers, nutrition programs, reflective evaluations and peer learning. The course is designed for teachers and coaches of 7th through 14th grade students.

Note: Required book must be acquired separately.

Required Texts and Course Materials

Book: Benardot, D. (2021). Advanced Sports Nutrition (3rd ed.). Human Kinetics ISBN: 978-1-4925-9309-6. <https://www.amazon.com/Advanced-Sports-Nutrition-Dan-Benardot/dp/1492593095>

Note: Students are responsible for purchasing their own textbook, analyzing the content, and applying what they learned to the course assignments. You are welcome to purchase used, e-book, or new versions to save money. You can order the book directly from the publisher or from one of several discount aggregators (for example): <https://amazon.com>

Online Resources: Relevant online resources that support the course content and encourage further investigation will be available throughout the course assignments. Active hyperlinks are utilized throughout the course and will link to the appropriate information when clicked. These include videos, podcasts, worksheets, online activities, journal articles and other resources.

Canvas: This course will be delivered totally online. Canvas is a web-based learning management system (LMS) that provides students access to online resources, documents, videos, assignments, quizzes, forums, etc. Canvas is easy to learn and has a user-friendly interface.

Course Dates

Self-paced; students may enroll at any time and take up to one year, from the date of registration, to complete assignments. Students may complete assignments in no less than three weeks for a 3-unit course (one week per unit).

National Standards Addressed in This Course

National Board for Professional Teaching Standards (NBPTS)

(<http://www.nbpts.org/standards-five-core-propositions/>)

First published in 1989 and updated in 2016, [What Teachers Should Know and Be Able to Do](#) articulates the National Board's Five Core Propositions for teaching. The Five Core Propositions - comparable to medicine's Hippocratic Oath — set forth the profession's vision for accomplished teaching. Together, the propositions form the basis of all National Board Standards and the foundation for National Board Certification. Course assignments have been designed so students can demonstrate excellence against these professional teaching standards whenever possible.

- Proposition 1: Teachers are committed to students and their learning
- Proposition 2: Teachers know the subject they teach and how to teach those subjects to students
- Proposition 3: Teachers are responsible for managing and monitoring student learning
- Proposition 4: Teachers think systematically about their practice and learn from experience
- Proposition 5: Teachers are members of learning communities

National Physical Education Standards by SHAPE America

(<https://www.shapeamerica.org/MemberPortal/standards/pe/new-pe-standards.aspx>)

The following content standards defined by SHAPE America specify what students should know and be able to do as result of a quality physical education program. States and local school districts across the country use the National Standards to develop or revise existing standards, frameworks and curricula. Participants are asked to apply these standards in their teaching practices and demonstrate them within their coursework.

- SHAPE 1 - Develops a variety of motor skills.
- SHAPE 2 - Applies knowledge related to movement and fitness concepts.
- SHAPE 3 - Develops social skills through movement.
- SHAPE 4 - Develops personal skills, identifies personal benefits of movement, and chooses to engage in physical activity.

Common Core State Standards (CCSS) (www.corestandards.org)

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our

young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

Continuing Education Student Learning Outcomes (CE-SLO)

CE-SLO 1	Demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to inform and persuade others, and present information applicable to targeted use.
CE-SLO 2	Demonstrate comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
CE-SLO 3	Reflect on their personal and professional growth and provide evidence of how such reflection is utilized to manage personal and professional improvement.
CE-SLO 4	Apply critical thinking competencies by generating probing questions, recognizing underlying assumptions, interpreting and evaluating relevant information, and applying their understandings to the professional setting.
CE-SLO 5	Reflect on values that inspire high standards of professional and ethical behavior as they pursue excellence in applying new learning to their chosen field.
CE-SLO 6	Identify information needed in order to fully understand a topic or task, organize that information, identify the best sources of information for a given enquiry, locate and critically evaluate sources, and accurately and effectively share that information.

Course Student Learning Outcomes (C-SLO)

Student Learning Outcomes for This Course By the end of this course student will be able to:		National Standards Addressed*	CE-SLO Addressed**
C-SLO 1	Identify and integrate professional coaching and teaching standards into their teaching and coaching as demonstrated through their coursework	2, 3, 4	1, 2, 3, 4, 5
C-SLO 2	Describe their role in shaping their student athletes to become “physically educated students”.	1, 2, 3, 4, 5	1, 2, 5
C-SLO 3	Understand how to time meals, snacks, fluids, training, and performances to maintain ideal energy balance throughout each day	2, 3, 5	2, 3, 5, 6
C-SLO 4	Develop a strategy that includes the optimal amount of fluid and electrolytes to avoid dehydration and hyperhydration.	1, 2, 3	2, 4, 6
C-SLO 5	Explain how the proper ratio and quantity of energy nutrients, vitamins, and minerals influences athletic performance.	2, 3, 5	2, 3, 5, 6

C-SLO 6	Develop a nutritional strategy that balances body composition with maximal power output	2, 3, 4, 5	2, 3, 5, 6
C-SLO 7	Explain the effects of travel, high altitude, and age on their student athlete's nutritional needs and athletic performance.	2, 3, 5	2, 3, 5, 6
C-SLO 8	Appreciate the human body and its ability to perform physical activity.	1, 2, 3, 4, 5	2, 3, 4, 5

* Please refer to the section on **National Standards Addressed in This Course**

** Please refer to the section on **Continuing Education Program Student Learning Outcomes**

Topics, Assignments, and Activities

Module Title	Module Assignments and Activities	Assignment Credit
Welcome Module	- Welcome Video - Course Syllabus - Introduce Yourself Forum	
Module 1 – Analysis and Application Papers	- The “Analysis and Application” papers address the various chapters and issues covered in your Advanced Sports Nutrition textbook. Each paper will be 3 to 4 pages and include two sections: Analysis (discussing the major points presented in the chapter) and Application. - Reflective Forum (post, read, respond)	A mark of “Complete” is required for each Assignment
Module 2 – Nutritional Strategy and Plan	- Create a Nutritional Strategy and Plan for a student athlete based on the specific energy system used within their sport and the information in the Advanced Sports Nutrition textbook and the course packet. - Reflective Forum (post, read, respond)	A mark of “Complete” is required for each Assignment
Module 3 – Nutritional Strategy and Plan Reflection	- Implement the Nutritional Strategy and Plan for 1 week, and write a brief reflection on the positive and negative aspects of the Plan. - Reflective Forum (post, read, respond)	A mark of “Complete” is required for each Assignment
Module 4 – Advanced Sports Nutrition Lesson Plan	- Create a classroom lesson plan or a workshop outline/script on Advanced Sports Nutrition using the textbook and the references provided within the course packet. This assignment will be appropriate for the coach or teacher interested in presenting general nutrition and/or sports nutrition information as part of a unit on nutrition or to his/her colleagues during an in-service opportunity. - Reflective Forum (post, read, respond)	A mark of “Complete” is required for each Assignment

Module 5 – Coach’s Interview	Interview an athletic coach about his/her recommended nutritional advice/recommendations for athletes which a specific sport and ways he/she could enhance it with the advanced nutrition strategies described in this course.	A mark of “Complete” is required for each Assignment
Course Wrap-up – Grading and Evaluation	- Final Reflection Forum - Course Evaluation - Course Completion Checklist - Grade Request / Transcript Request	

Grading Policies, Rubrics, and Requirements for Assignments

Grading Policies

- Assignments will be graded per criteria presented in the course rubrics.
- A = 90-100% and B = 80-89%, (anything below 80% will not receive credit.)
- The discernment between an A or a B letter grade is at the discretion of the instructor based on the quality of work submitted (see course rubrics).
- Coursework falling below a B grade will be returned with further instructions.
- All assignments must be completed to receive a grade and are expected to reflect the quality that teacher-training institutions require of professional educators. If completed assignments do not meet this standard, students will be notified with further instructions from the instructor.

Grading Rubrics

Grade	Percent	Description	Rubric
A	90-100%	Excellent	Meets all course / assignment requirements with significant evidence of subject mastery and demonstration of excellent graduate level professional development scholarship.
B	80-89%	Very Good	Adequately meets criteria for all course/assignment requirements - demonstrates subject competency with very good graduate level professional development scholarship.
NC	Below 80%	Unacceptable	Does not meet the minimum criteria for all course/assignment requirements and demonstrated little, if any, evidence of acceptable graduate level professional development scholarship.

Writing Requirements

- Superior:** Writing is clear, succinct, and reflects graduate level expectations. Clearly addresses all parts of the writing task. Maintains a consistent point of view and organizational structure. Includes relevant facts, details, and explanations.
- Standard:** Writing is acceptable with very few mistakes in grammar and spelling. Addresses most parts of the writing task. Maintains a mostly consistent point of view and organizational structure. Includes mostly relevant facts, details, and explanations.
- Sub-standard:** Writing contains noticeable mistakes in grammar and spelling. Does not address all parts of the writing task. Lacks a consistent point of view and organizational structure. May include marginally relevant facts, details, and explanations.

Lesson Plan Requirements

- **Superior:** Instructional goals and objectives clearly stated. Instructional strategies appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is clearly delineated and authentic. All materials necessary for student and teacher to complete lesson clearly listed.
- **Standard:** Instructional goals and objectives are stated but are not easy to understand. Some instructional strategies are appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is present. Most materials necessary for student and teacher to complete lesson are listed.
- **Sub-standard:** Instructional goals and objectives are not stated. Learners cannot tell what is expected of them. Instructional strategies are missing or strategies used are inappropriate. Method for assessing student learning and evaluating instruction is missing. Materials necessary for student and teacher to complete lesson are missing.

Instructor/Student Contact Information

Throughout the course participants will be communicating with the instructor and their classmates on a regular basis using asynchronous discussion forums. Students are provided with instructor contact information in the event they want to make email or phone contact. In addition, students are encouraged to email or phone the instructor at any time. Students will also receive feedback on the required assignments as they are submitted.

Forums

Participation is an important expectation of this course and all online courses. Online discussions promote reflection and analysis while allowing students to appreciate and evaluate positions that others express. While students may not be engaging with the same students throughout this course, they will be expected to offer comments, questions, and replies to the discussion question whenever possible. The faculty role in the discussion forum is that of an observer and facilitator.

Coursework Hours

Based on the Carnegie Unit standard, a unit of graduate credit measures academic credit based on the number of hours the student is engaged in learning. This includes all time spent on the course: reading the textbook, watching videos, listening to audio lessons, researching topics, writing papers, creating projects, developing lesson plans, posting to discussion boards, etc. Coursework offered for FPU Continuing Education graduate credit adheres to 45 hours per semester unit for the 900-level courses. Therefore, a student will spend approximately 135 hours on a typical 3-unit course.

Services for Students with Disabilities

Students with disabilities are eligible for reasonable accommodations in their academic work in all classes. In order to receive assistance, the student with a disability must provide the Academic Support Center with documentation, which describes the specific disability. The documentation must be from a qualified professional in the area of the disability (i.e. psychologist, physician or educational diagnostician). Once documentation is on file, arrangements for reasonable accommodations can be made. For more information and for downloadable forms, please go to <https://www.fresno.edu/departments/disability-access-education>.

Plagiarism and Academic Honesty

All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled per the procedures set forth in the Fresno Pacific University Catalogue and Handbook - <https://handbook.fresno.edu/graduate/academic-policies>

Technology Requirements

To successfully complete the course requirements, course participants will need Internet access, can send and receive email, know how to manage simple files in a word processing program, and have a basic understanding of the Internet. Please remember that the instructor is not able to offer technical support. If you need technical support, please contact your Internet Service Provider.

Getting Help with Canvas: If you need help with Canvas, please contact the FPU Help Desk by phone: (559) 453-3410 or email: helpdesk@fresno.edu. Help is available Mon-Fri 8:00 am to 7:00 pm.

Final Course Grade and Transcripts

When all work for the course has been completed, students will need to logon to the Continuing Education website (<https://ce.fresno.edu/my-account>) and “Request Final Grade”. Once the instructor receives the requests and submits the grade online, students may log back in to view their Final Grade Report or order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information, see the Continuing Education Policies and Procedures at <https://ce.fresno.edu/ce-policies-and-procedures>.

University Policies and Procedures

Students are responsible for becoming familiar with the information presented in the Academic Catalog and for knowing and observing all policies and procedures related to their participation in the university community. A summary of university policies may be found on the university website at <https://www.fresno.edu/departments/registrars-office/academic-catalogs>.

Fresno Pacific University Student Learning Outcomes (FPU-SLO)

FPU-SLO 1	Oral Communication: Students will <i>exhibit</i> clear, engaging, and confident oral communication – in both individual and group settings – and will critically <i>evaluate</i> content and delivery components.
FPU-SLO 2	Written Communication: Students will <i>demonstrate</i> proficient written communication by <i>articulating</i> a clear focus, <i>synthesizing</i> arguments, and utilizing standard formats in order to <i>inform</i> and <i>persuade</i> others.
FPU-SLO 3	Content Knowledge: Students will <i>demonstrate</i> comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
FPU-SLO 4	Reflection: Students will <i>reflect</i> on their personal and professional growth and <i>provide evidence</i> of how such reflection is utilized to manage personal and vocational improvement.

FPU-SLO 5	Critical Thinking: Students will <i>apply</i> critical thinking competencies by <i>generating</i> probing questions, <i>recognizing</i> underlying assumptions, <i>interpreting</i> and <i>evaluating</i> relevant information, and <i>applying</i> their understandings to new situations.
FPU-SLO 6	Moral Reasoning: Students will <i>identify</i> and <i>apply</i> moral reasoning and ethical decision-making skills, and <i>articulate</i> the norms and principles underlying a Christian worldview.
FPU-SLO 7	Service: Students will <i>demonstrate</i> service and reconciliation as a way of leadership.
FPU-SLO 8	Cultural and Global Perspective: Students will <i>identify</i> personal, cultural, and global perspectives and will employ these perspectives to <i>evaluate</i> complex systems.
FPU-SLO 9	Quantitative Reasoning: Students will accurately <i>compute</i> calculations and symbolic operations and <i>explain</i> their use in a field of study.
FPU-SLO 10	Information Literacy: Students will <i>identify</i> information needed in order to fully understand a topic or task, <i>explain</i> how that information is organized, <i>identify</i> the best sources of information for a given enquiry, <i>locate</i> and critically <i>evaluate</i> sources, and accurately and effectively <i>share</i> that information.