

NUTF 0014 - SPORTS NUTRITION

Catalog Description

Advisory: Completion of NUTF 10 with grade of "C" or better
Hours: 54 lecture

Description: Presents fundamental nutrition concepts and applies them to individuals interested in physical activity, exercise, and sport. Nutrition topics include short-term and long-term nutrient intake, hydration status, supplement use, and body composition as they relate to physical performance. Basic fitness information regarding the key components of fitness, energy systems, and energy balance will also be explored. (CSU)

Course Student Learning Outcomes

- CSLO #1: Identify dietary changes which influence health, energy metabolism and physical performance.
- CSLO #2: Determine nutrient requirements and energy needs based on body weight, body composition and physical activity.
- CSLO #3: Evaluate how food and dietary supplements impact body weight, body composition and physical performance.
- CSLO #4: Critique individual nutrient intake and energy balance using current dietary assessment tools.

Effective Term

Fall 2020

Course Type

Credit - Degree-applicable

Contact Hours

54

Outside of Class Hours

108

Total Student Learning Hours

162

Course Objectives

1. Explain basic nutrition principles and how they may be modified to meet the needs of athletes.
2. Evaluate the accuracy and validity of sports nutrition information.
3. Define energy and the energy systems utilized during physical activities varying in intensity and duration.
4. Explain the various roles and utilization of macro- and micronutrients in energy production
5. Describe the importance of fluid and electrolyte balance on physical activity, exercise, and sport
6. Explain the effectiveness, safety, and legality of dietary supplements and ergogenic aids.
7. Analyze personal diet information regarding the need for adequate energy and nutrient intakes to support optimum physical performance.
8. Identify the strengths and limitations of various body composition assessment methods.

9. Describe the incidence and effects of disordered eating among athletes

General Education Information

- Approved College Associate Degree GE Applicability
 - AA/AS - Behavioral Sciences
 - AA/AS - Health Ed/Physical Ed
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Objective Examinations
 - Example: Students will take a multiple choice examination on carbohydrates, lipids, and protein. Standard grading. Sample question: Which is the primary fuel during low-intensity, long-duration exercise? A. Carbohydrate B. Protein C. Lipid D. All are used equally
- Projects
 - Example: Students will describe the effectiveness and safety concerns of nutritional supplements/ergogenic aids through a class presentation. Presentations will be evaluated using an instructor created rubric.
- Reports
 - Example: Students will analyze and critique individual dietary intake for optimization of physical performance. Reports will be evaluated using an instructor created rubric.

Repeatable

No

Methods of Instruction

- Laboratory
- Lecture/Discussion
- Distance Learning

Lab:

1. Instructor will demonstrate the various measurement techniques for body composition upon each other. Students will then participate in a class discussion to compare and contrast these methods and their accuracy.

Lecture:

1. Following an instructor lecture on ergogenic aids, students will work together in small groups and summarize the effectiveness, safety and legality of various ergogenic aids. Students will present this information to the rest of the class.

Distance Learning

1. Instructor will present lecture materials regarding the definition of energy and the energy systems used during physical activity varying in intensity and duration. Students will respond to a corresponding discussion prompt and reply to at least 2 other student posts

Typical Out of Class Assignments

Reading Assignments

1. Read chapter on "Optimizing Health and Wellness Throughout the Lifespan" and answer the Review Questions. 2. Read and evaluate validity of Sports Nutrition websites by using the method described in the textbook.

Writing, Problem Solving or Performance

1. Analyze your own diet and activity using an online nutrient assessment program to determine whether nutrient intake is sufficient to support physical activity. 2. Calculate and compare resting metabolic rate using the Harris-Benedict, Mifflin-St. Jeore, and the simplified methods.

Other (Term projects, research papers, portfolios, etc.)

1. Prepare to present information regarding a single sport examining the training, rules, equipment, and nutrition plan required for success. 2. Research one ergogenic aid and write a research report emphasizing current research, safety, and ethical concerns.

Required Materials

- Nutrition for Sport, Exercise, and Health
 - Author: Spano, Kruskall, and Thomas
 - Publisher: Human Kinetics
 - Publication Date: 2018
 - Text Edition: 1st
 - Classic Textbook?:
 - OER Link:
 - OER:
- Practical Applications in Sports Nutrition
 - Author: Fink and Mikeskey
 - Publisher: Jones and Barlett
 - Publication Date: 2018
 - Text Edition: 5th
 - Classic Textbook?:
 - OER Link:
 - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.

Diet analysis software program.