Syllabus

SPECIALIST IN SPORTS NUTRITION

COURSE LENGTH
6 months

PREREQUISITES
Certified Fitness Trainer

CO-PREREQUISITE
Basic Adult CPR/AED/First Aid

TEXTBOOKS AND MATERIALS
Gastelu, Dan and Fred Hatfield. *Sports Nutrition, Fourth Edition*. Int'l Sports Sciences Association.

COURSE DESCRIPTION
This course covers dietary and supplement strategies to enhance athletic performance. Students learn to identify the dietary needs of both athletic and general populations based on age, size, activity level, and goal. Topics covered include the structure and function of macronutrients and micronutrients, how anatomy and metabolism determine nutrient needs, and various approaches to fine tuning performance through manipulating nutrient intake.

COURSE OBJECTIVES
After completing this course, students will be able to:

- Explain how proper nutrition improves both physical and mental performance.
- Describe the structure, metabolism, and dietary sources of carbohydrates, fats, and proteins.
- Identify dietary sources, functions, the effects of deficiency, and the effects of surplus for various micronutrients.
- Recognize the different type of nutrient sources available to the athlete and the variables that determine if the nutrient source is beneficial for the athlete.
- Explain the components of cell structure, energy transfer, anatomy and physiology of digestion, and metabolism.
- Conduct body composition assessments and calculate energy requirements.
- Analyze dietary strategies for fat loss and muscle gain.
- Construct custom nutrition plans for clients based on his or her sport, age, size, and performance objective.

COURSE OUTCOMES
After completing this course, students will:

- Identify the three E's of nutrition.
- Describe the role of each macronutrient and micronutrient in relation to health and human performance.
- Utilize skinfold, girth, height, and weight measurements to identify a client's baseline body composition.
- Explain how to manipulative energy balance to elicit a desired body composition change.
- Analyze collected dietary, health, and physical activity history information to determine a client's nutrient needs.
- Determine in which situations a special dietary strategy is appropriate to incorporate.
- Design a nutritional and supplementation strategy to optimize a client's physical and mental performance based on age, size, activity level, and goal.

COURSE OUTLINE

You have have until the course end date to finish all required submissions. A suggested guided study for you to complete the course is set up as follows:

Module 1: The role of sports nutrition; Overview of nutrients
Module 2: Macronutrients
Module 3: Water Micronutrients
Module 4: Supplements and Food Labeling
Module 5: Cell structure and function; Digestion and absorption
Module 6: Body Composition; Energy needs and metabolism
Module 7: Overview of Dietary Guidelines 2015-2020; Performance Nutrition Strategies
Module 8: Special dietary strategies
Module 9: Female Athlete Triad; Athletic Performance Improvement Approach
Module 10: Final Examination

INSTRUCTIONAL METHODS

This course will include online lectures, reading assignments, written assignments, discussions, and quizzes.

GRADING

Review "How to Score Well" under "Course Home" for general guidance on how your written submissions are evaluated.

EARNING YOUR CERTIFICATE - MINIMUM REQUIREMENTS

To earn your certificate, you must:

- **Submit all course components.**
- **Earn a course score of 75% or better in the course.**
- **Submit current Adult CPR/AED**
- **Any fees must be paid in full.**