

# **COURSE OUTLINE**

## **EXSC-209**

### **Sport and Exercise Nutrition**

**3 Semester Hours**

## **HOWARD COMMUNITY COLLEGE**

### **Description**

This course will apply the basic nutritional theories, principles, and concepts to participation in fitness and sports activities. The requirements necessary for participation and performance enhancement for all levels of athletic and exercise performance will be examined. Students will learn to apply the various sports nutrition concepts for recreational to elite level athletes. Course content includes energy systems, hydration, pre-and post-event nutrition, weight management and body composition issues of athletes, ergogenic aids.

### **Overall Course Objectives**

Upon completion of this course the student will be able to:

1. Describe human energy metabolism and fuel utilization at rest and during exercise.
2. Identify the role of macro and micronutrients in exercise performance.
3. Evaluate energy expenditure and energy intake in relation to physical performance..
4. Identify guidelines for maintaining optimal hydration for sport and exercise
5. Explain the appropriate use of sports drinks pre-exercise, during exercise and in recovery following exercise.
6. Suggest eating strategies for pre-exercise and recovery nutrition, eating while traveling and eating on competition days.
7. Explain the special nutritional needs of physically active children, adolescents and vegetarians.
8. Evaluate various sources of nutritional information for validity and reliability.
9. Compare and contrast effective, ineffective, and dangerous nutritional supplements and ergogenic aids.
10. Compare and contrast the nutritional needs of athletes involved in various sports.

### **Major Topics**

- I. Macro And Micronutrients In Human Nutrition.
- II. Energy Metabolism and Fuel Use during Exercise
- III. The Training Diet
- IV. Nutritional Needs of Endurance and Power Athletes
- V. Hydration Requirements
- VI. Nutrition for Competition
- VII. Body Composition, Gaining and Losing Weight
- VIII. Body Image Disorders
- IX. Nutritional Supplements/Ergogenic Aids
- X. Special Nutritional Needs (Children, Vegetarians, Pregnancy, the Older Athlete)

### **Course Requirements** (List only objectives that will be included in all sections of course)

Grading/Exams: Grading procedures will be determined by the individual faculty member to include, but not limited to attendance, mid-term, final exam and writing project.

Writing: Specific writing assignments will be determined by the individual faculty member to include, but not limited to, a choice of research paper, book report, community service project, or assigned health topic.

### **Other Course Information**