GROSSMONT COLLEGE

COURSE OUTLINE OF RECORD

Curriculum Committee Approval: 03/22/2022

GCCCD Governing Board Approval: 04/19/2022

NUTRITION 158 – NUTRITION FOR FITNESS AND SPORTS

1. Course Number Course Title Semester Units

NUTR 158 Nutrition for Fitness and Sports 3

Semester Hours: 3 hours lecture: 48-54 hours 96-108 outside-of-class hours 144-162 total hours

2. Prerequisites

None

Corequisite

None

Recommended Preparation

None

3. Catalog Description

Students will investigate the effects of nutrition and various dietary regimens on athletic performance, physical fitness, and general health. Students will compare the physiological effects of optimal nutrition vs. inadequate nutrition for the general population as well as athletes. Cultural, sociological, and psychological influences on diet, nutrition and athletic performance will be examined thoroughly. Current “fad” and supposed performance-enhancing diets and supplements will be discussed.

4. Course Objectives

The student will:

a. List the six essential nutrients, their food sources, their functions in the human body and their effects on physical fitness and athletic performance.

b. Analyze energy and caloric needs the general population, active individuals, and those participating in various types of competitive sports.

c. Develop a personal dietary strategy (including fluid intake and pre-exercise meals) based on size, age, gender, and energy expenditure.

d. Discuss the importance of body composition (fat vs. lean body mass) to athletic performance while contrasting body composition of athletes vs. the general population.

e. Examine and discuss cultural differences relative to nutrition and body image.

f. Critically analyze societal influences on dietary choices, and conversely, the impact of nutritional practices on our society.

g. Develop strategies to successfully scrutinize marketing “hype” from evidence-based practice relative to food and dietary supplements, .

h. Examine the importance of monitoring fluid and electrolyte balance during exercise, training and competition.

i. List possible heat disorders and measures for preventing them.

j. Discuss the impact of psychological factors to performance, body image and nutritional choices.

k. Evaluate current nutritional practices such as “carbohydrate loading” for safety and effectiveness.

l. Investigate authoritative, evidence-based sources for nutritional information relating to athletic performance.

m. Analyze the effects of supplements, steroids, mood modifiers, and other chemicals on health and athletic performance.

5. Instructional Facilities

Standard classroom

6. Special Materials Required of Student

a. Electronic storage media.

b. Calculator.

7. Course Content

a. Impact of nutrition on general health.

b. Society’s impact on nutritional practices for the general populations as well as active/athletic people, including hype vs. truth, promotion of “supplements” to gain the physical edge, how the media promotes a certain “body image”, and how the “fast food” craze has become an integral part of our society.

c. Examination of how nutritional behaviors affect society in terms of general health of the population, economics, food-related illnesses, and chronic disease.

d. Essential nutrients (protein, carbohydrate, fats, vitamins, minerals, and water) and their importance in a nutritious diet and their effects on physical fitness and athletic performance.

e. Individual dietary analysis to examine energy needs, fluid needs, body composition, fitness-related needs, and nutritional adequacy, with modifications as appropriate to meet the specific metabolic needs of athletes

f. Cultural influences on body image, performance, exercise, and dietary choices. Incorporation of culturally specific foods into a balanced diet.

g Contemporary and controversial diets, supplements and other performance enhancing factors used by athletes.

h. Consumer literacy in evaluating nutrition-related claims made by the fitness and dietary supplement industry using evidence-based resources

i. Positive or negative impact that nutrition, body image, exercise, weight control and dietary supplementation can have on a person’s psychological state relative to athletic performance as well as general health.

8. Method of Instruction

a. Lecture.

b. Class discussions.

c. Multimedia presentations

**d.** Group projects

9. Methods of Evaluating Student Performance

a. Written examinations, including final exam.

b. Analysis of personal and case-study diets with emphasis on impact of diet on fitness and athletic performance.

c. Homework assigned to investigate nutritional information and practices related to fitness and athletic performance.

d. Individual or collaborative presentations

10. Outside Class Assignments

a. Final diet analysis project where students compare their nutrient intake to what would be required for an elite athlete and determine what changes would need to be made to meet the needs of an elite athlete

b. Group work to prepare class presentation on an assigned topic.

c. Dietary supplementary project (for example, students are assigned a dietary supplement marketed for athletic performance enhancement and use evidence-based resources to evaluate potential risks and benefits to athletes.

11. Representative Texts

1. Representative Texts
2. Rawson, E., Branch, D., and Stephenson, T. *Nutrition for Health, Fitness and Sport*, 12th edition. New York: McGraw Hill, 2019.
3. American College of Sports Medicine position papers on nutritional issues as published. (Provided by instructor)

b. Supplementary texts and workbooks:

None

Addendum: Student Learning Outcomes

Upon completion of this course, our students will be able to do the following:

* 1. Identify the six classes of nutrients by name, function, caloric energy in a gram, food source, range of caloric amount in total diet.
  2. Identify the unique nutritional needs of active individuals and athletes.
  3. Understand appropriate timing of nutrient intake before and after exercise to maximize performance and recovery.