

## **PELF 133**

### **Speed, Agility, and Plyometric Training for Competitive Sports**

2 Credits

## Community College of Baltimore County

### Common Course Outline

#### Description

**PELF 133 – Speed, Agility, and Plyometric Training for Competitive Sports:** is an intensive advanced training program that incorporates and applies knowledge of sport specific movement as it relates to athletes. Students will be assessed across various physical skills and will learn how to develop safe and effective sports-specific training programs associated with speed, agility, and plyometrics training. Various training modalities will be used in this course to ensure a comprehensive experience. The priority within this course is to enhance the development of fast-twitch muscle groups, agility, power, and co-ordination. The use of anaerobic training principles will be used to meet this priority.

#### Overall Course Objectives

Upon completion of this course, students will be able to:

1. create a comprehensive fitness routine using sound training principles and programming;
2. apply principles and procedures related to anaerobic training, agility, power, and co-ordination;
3. recognize the importance of maintaining specific level of fitness for competitive sports;
4. explain the physiology of the cardiovascular and muscular systems pertaining to plyometrics, power, and speed training;
5. apply the terminology used in strength and conditioning programming;
6. assess improvements in speed and agility;
7. identify the anatomical, physiological, and psychological benefits of physical training;
8. describe personal risk factors associated with hypokinetic diseases and cardiovascular diseases;
9. demonstrate critical thinking and decision making that allows for effective implementation of fitness programs;
10. discuss the relationship of other health factors, such as, diet, nutrition, hydration, and stress to fitness and health; and
11. discuss training techniques to minimize the likelihood of injuries.

#### Major Topics

- I. Muscular anatomy and physiology of fast-twitch and slow-twitch muscle groups
- II. Proper training techniques
- III. Agility and reaction time training
- IV. Power training techniques

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

- V. Plyometric training techniques
- VI. Co-ordination training techniques and principles
- VII. Recovery techniques and flexibility
- VIII. Periodization programming
- IX. Types of training principles
- X. Adverse effects of overtraining
  - a. Musculoskeletal injuries
  - b. Overtraining
- XI. Program design
  - a. Exercise selection
  - b. Exercise sequence
  - c. Progressive overload
- XII. Health factors
  - a. Diet
  - b. Nutrition
  - c. Stress

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- One written assignment
- Two exams
- Active participation
- One capstone assignment

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

### **Other Course Information**

This course requires strenuous physical activity. This course may require you to obtain physician permission pending the health history questionnaire.

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