

Common Course Outline
AEXS 240
Principles of Muscular Conditioning and Flexibility
3 Semester Hours

Community College of Baltimore County

Description

Principles of Muscular Conditioning and Flexibility

Investigates the theories and applied principles of physical training and conditioning as they relate to flexibility improvement and muscular strength, endurance and power development; examines the principles and training variables of weight training, a detailed comparison of various weight training programs, and the development of power through plyometrics.

Prerequisite: ACLT 052

Overall Course Objectives

Upon successfully completing this course students will be able to:

1. Develop and implement an individually designed exercise program to improve flexibility.
2. Identify and demonstrate the various tests to assess flexibility.
3. Explain and demonstrate the proper technique for stretches.
4. Identify the various contraindicated exercises for the general population.
5. Identify and demonstrate the basic procedures of posture evaluation.
6. Identify and remedy postural problems.
7. Analyze the anatomy and physiology of the musculo-skeletal system.
8. Demonstrate the proper procedures in the assessment of muscular strength and endurance.
9. Compare and contrast the various methods of strength development.
10. Demonstrate the special developmental exercises for various parts of the body.
11. Identify and explain the basic principles in an exercise program to improve muscular strength
12. and endurance.
13. Identify the factors in designing a strength training program.
14. 13 Identify and explain the advanced weight training programs.
15. Identify the Olympic lifts and explain their unique training programs.
16. Demonstrate the techniques of free weight training.
17. Demonstrate the techniques of weight training with various machines.
18. Identify the weight training safety guidelines.
19. Identify the power lifts and explain their unique training programs.
20. Demonstrate the procedures to evaluate power.
21. Demonstrate power training through plyometrics.

Major Topics

I. Flexibility

- a. Evaluation
- b. Program Design
- c. Contraindications
- d. Postural Screening

II. Musculo-Skeletal System

- a. Anatomy and Physiology
- b. Factors that Affect Strength Performance.
- c. Evaluation of Muscular Strength and Muscular Endurance

III. Training for Muscular Conditioning

- a. Isometrics
- b. Isotonics
- c. Isokinetics
- d. Principles of Weight Training
- e. Training Variables
- f. Advanced Weight Training Programs

IV. Training for Muscular Power

- a. Assessment of Power
- b. Sport Specific Weight Training
- c. Plyometrics

Course Requirements

Grading: Grading procedure will be determined by the individual faculty member but will include:

1. Attendance and Participation
2. Two Examinations (both include written and practical applications sections)
3. Multiple Term Projects
4. Oral Presentations
5. Teaching Practical

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.