College of San Mateo Official Course Outline

1. COURSE ID: FITN 226 TITLE: Plyometric Conditioning

Units: 0.5 or 1.0 units Hours/Semester: 24.0-54.0 Lab hours; 24.0-54.0 Total Student Learning hours Method of Grading: Grade Option (Letter Grade or Pass/No Pass) Prerequisite: Completion of or concurrent enrollment in a varsity course.

2. COURSE DESIGNATION:

Degree Credit Transfer credit: CSU; UC AA/AS Degree Requirements: CSM - GENERAL EDUCATION REQUIREMENTS: E4: Physical Education CSU GE: CSU GE Area E: LIFELONG LEARNING AND SELF-DEVELOPMENT: E2

3. COURSE DESCRIPTIONS:

Catalog Description:

Course designed to promote physiological development of strength, speed and power through a series of leaping, bounding and hopping exercises to effectively improve coordination and agility, and fast-twitch muscle fiber conditioning. May be taken four times for a maximum of 4 units.

4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

- 1. Explain the differences between plyometric training, aerobic training and anaerobic training.
- 2. Improve one or more: body composition, range of motion, overall body weight, resting heart rate, strength and endurance, and aerobic capacity.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

Upon successful completion of this course, a student will be able to:

- 1. Engage in a safe, effective plyometric program.
- 2. Explain the differences between plyometric training, aerobic training and anaerobic training.
- 3. Improve/maintain overall fitness level.

6. COURSE CONTENT:

Lab Content:

- 1. Understanding safety protocol
- 2. Engaging in flexibility exercises, warm-up
- 3. Flexibility: lower limbs, core, upper limbs
- 4. Warm-up: moderate aerobic activities
- 5. Fast twitch core training (response time)
- 6. Emphasis on core development
 - i. Gastrocnemius, hamstrings, quadriceps, gluteus maximus
- ii. Latissimus dorsi, trapezius
- iii. Abdominals
- 7. Eccentric drop and hold jumps
- 8. Eccentric to concentric phase (muscular response)
- 9. Pre-season/early conditioning phase (low range)
- 10. Split squats
- 11. Jump squats
- 12. Straight leg jumps
- 13. Main power conditioning phase (medium range)
- 14. Single leg variants
- 15. Development of optimum force return
- 16. Pre-competition phase (high range)
- 17. Quality, high intensity activity
- 18. Sport specific activities
- 19. Competition phase (maintenance)
 - A. High quality drills, low in number

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Activity
- D. Critique
- E. Directed Study
- F. Discussion
- G. Individualized Instruction
- H. Observation and Demonstration

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

1. Article and presentation on the widespread use of plyometric training in professional and collegiate sports

Reading Assignments:

1. Written report on the difference between plyometric training and resistance training.

2. Written assignment on the contraindications of plyometric training and strategies to avoid them.

3. Journal: Students will maintain a weekly journal detailing the physiological benefits gained through plyometric training.

Other Outside Assignments:

- a. Week 1: Baseline measures
 - i. Core strength Abdominal crunches measured per minute (timed test)
 - ii. Vertical leap Using Vertec jump measurement device
 - iii. 5 dot drill Measuring footspeed
 - iv. Side-side ankle hops Measuring agility/footspeed
 - v. Standing long jump Measuring explosiveness in quadriceps
- b. Week 2-7: Prescription provided, detailed and documented in journal
- c. Week 8: Mid-term
- d. Week 9: Re-establish prescription based on mid-term results
- e. Week 10-16: Continuation of journal entry
- f. Week 17: Final measurements taken

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Performance
- C. Class Work
- D. Exams/Tests
- E. Final Class Performance
- F. Lab Activities
- G. Portfolios
- H. Quizzes
- I. Written examination
- J. Progressive skill development Assessment of pre and post physiological adaptations Written exam on principles of exercise with emphasis on plyometric activity Evaluation of journal

10. REPRESENTATIVE TEXT(S):

Other:

- A. Instructor generated
- handouts
- B. YouTube or related video content

Origination Date: August 2023 Curriculum Committee Approval Date: September 2023 Effective Term: Fall 2024