KFIT 16.1 Course Outline as of Fall 2021

CATALOG INFORMATION

Dept and Nbr: KFIT 16.1 Title: PLYOS, SPEED AND AGILITY

Full Title: Plyometrics, Speed and Agility

Last Reviewed: 3/9/2020

Units		Course Hours per Week	k N	Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	1.50	Lab Scheduled	3.00	6	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 26.25 Total Student Learning Hours: 78.75

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

This course will introduce students to equipment and drills used to improve strength, power, speed, agility, and jumping ability while developing coordination and balance.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: This course will introduce students to equipment and drills used to improve strength, power, speed, agility, and jumping ability while developing coordination and balance.

(Grade or P/NP)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Transfer Credit: CSU;UC. Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

IGETC: Transfer Area Effective: Inactive:

CSU Transfer: Transferable Effective: Fall 2013 Inactive:

UC Transfer: Transferable Effective: Fall 2013 Inactive:

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

- 1. Describe the basic physiology of muscular function as it applies to plyometrics, speed, and agility training.
- 2. Generate and apply exercises for plyometrics, speed and agility with proper form and technique.
- 3. Design a training protocol based on assessment results of fitness level and athletic goals.

Objectives:

At the conclusion of this course, the student should be able to:

- 1. Identify basic muscle anatomy, physiology and function.
- 2. Identify and perform exercises to increase speed, agility and speed endurance.
- 3. Explain the importance of periodization in a strength and conditioning program.
- 4. Describe proper technique, injury prevention, and safety concerns for plyometrics, speed, and agility training.
- 5. Design a sport-specific strength and conditioning program.
- 6. Assess current fitness level and establish athletic goals.
- 7. Describe effect of strength, agility, balance, coordination, speed, power and flexibility training on sport performance.

Topics and Scope:

- I. Muscle Anatomy, Physiology and Function
 - A. Muscle tissue, bones, tendons and ligaments
 - B. Muscle fiber types
 - C. Eccentric, concentric, and isometric muscle action
 - D. Structure of muscle cell
 - E. Muscle elasticity and the stretch-shortening cycle
- II. Types of Training
 - A. Power training
 - B. Flexibility

- C. Aerobic and anaerobic training
- D. Muscular endurance and strength

III. Exercises and Drills

- A. Proper warm-up
- B. Assisted and resisted acceleration
- C. Assisted and resisted speed
- D. Agility ladders
- E. Basic and supplemental speed technique
- F. Basic and supplemental acceleration
- G. Plyometrics jumps
- H. Sprints
- I. Cone drills
- J. Medicine ball
- K. Reaction and directional change
- L. Quick feet
- M. Bleachers and bench stepping
- N. Jump rope
- O. Hurdles
- IV. Periodization and Program Design
 - A. Fitness testing and assessment
 - B. Athletic goals
 - C. Sport specific programming
 - D. Frequency, intensity, and volume of training
 - E. Proper preparation and progression
 - F. Injury prevention and safety concerns
 - G. Program design

Assignment:

Students are expected to spend an additional one and one-half hours per week outside of class completing one or more of the following assignments:

- 1. Fitness testing and assessment (1-2 per semester)
- 2. Short term and long term goal setting (2 4 per semester, 1 2 pages each)
- 3. Performance exam(s) (1-3 per semester)
- 4. Developing a sport-specific program
- 5. Written reports or journals (1 per week)
- 6. Exam(s)/quiz(zes)(1-3)
- 7. Performing exercises 1 to 2 hours per week in addition to regularly scheduled class meetings

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written reports and journals, program design

Writing 10 - 30%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Problem solving Fitness testing and assessment 5 - 10% **Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams. Skill Demonstrations Performance exam(s) 10 - 30% **Exams:** All forms of formal testing, other than skill performance exams. Exams Quiz(zes)/Exam(s) 20 - 40% **Other:** Includes any assessment tools that do not logically fit into the above categories. Other Category

Representative Textbooks and Materials:

Participation and attendance

Training for Speed, Agility, and Quickness. 2nd ed. Brown, Lee and Ferrigno, Vance. Human Kinetics. 2015 (classic)

30 - 50%

Jumping Into Plyometrics. 2nd ed. Chu, Donald. Human Kinetics. 1998 (classic) Advanced Power Training, Version 1.1. Maliszewski, Anne. Human Kinetics. 2006 (classic) Instructor prepared materials