APPLIED CONCEPTS IN FITNESS FOR FORENSICS & SECURITY
Course Syllabus

Course Number: LAW-1662          OHLAP Credit: No
OCAS Code: None
Course Length: 40 Hours
Career Cluster: Law, Public Safety, Corrections & Security
Career Pathway: Law Enforcement Services
Career Major(s): Criminal Justice Forensics and Security

Pre-requisite(s): None

Course Description: This course provides an in-depth look at procedures of strength training, flexibility, cardiovascular conditioning, and how to set up individualized programs for injury prevention and general fitness enhancement. Students learn exercise techniques, teaching approaches using different types of weights, and techniques that improve cardiovascular health, strength, and flexibility for forensics and security officer training.

Textbooks: N/A

Course Objectives: A. Upon completion of this course, Students will learn the following objectives pertaining to forensics and security:
- Benefits of cardiorespiratory function
- Components of an aerobic exercise program
- Different training methods
- Guidelines for cardiorespiratory activity
- Steps in monitoring cardiorespiratory exercise
- Special considerations and proper safety practices
- Strength benefits and strength training guidelines
- Strength production, factors, and the relationship between strength and endurance
- Strength program considerations
- Ergogenic aids and supplements
- Strength plateaus
- Motivation techniques
- Flexibility
- Factors that affect flexibility
- Principles of stretching

B. Students will demonstrate the following:
- Utilization of strength-training equipment
- Design and application of resistance-training programs
- Five program design scenarios
- Gauge of proper intensity for training programs
-Appropriate times to change a strength program
-Practical application through case studies
-Periodization, tracking gains, and directing results
-Proper techniques of strength training for the upper and lower body
-Mechanics of stretching
-Performance of different types of stretching
-Difference between exercise programs designed to develop physical fitness and those focused on health and prevention of disease
-Four steps in establishing an exercise program for a client:
  a) Medical health screening
  b) Physical fitness testing
  c) Selection of the aerobic exercise mode
  d) Designing an exercise program for total fitness
-Rates of progression, based on case studies

C. Students will describe how exercise affects the following diseases:
-cardiovascular issues
-hypertension
-stroke
-peripheral vascular disease
-diabetes
-asthma
-bronchitis and emphysema
-cancer
-osteoporosis
-low-back pain
-arthritis

D. Students will learn special considerations for older adults, children, and pregnant women
E. Students will create exercise recommendations for weight management

1 ODCTE Objective

1Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures:
1. Students are graded on theory and lab practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.
4. Career Major grades established during coursework are a major criteria in successfully obtaining certification.
**Description of Classroom, Laboratories, and Equipment:**

Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

**Available Certifications/College Credit:**

The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

**College Credit Eligibility:**

The student must maintain a grade point average of 2.0 or better.