Alexandria Technical and Community College

EXSC 1690: Exercise Principles and Methodology

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 2
OJT Hours/Week: *
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course provides students with technical preparation for entry into a health/fitness related profession. Students are introduced to basic principles of exercise theory and methodology. Content reflects emphasis on understanding the body’s response to exercise, and principles that govern exercise-based programs. Instruction and performance of free weight and other strength training exercises will be a primary focus. Participants analyze exercise from an anatomical perspective developing a methodology for prescription. Specialized training modes will be presented and basic assessment procedures and physical testing modalities studied.

B. COURSE EFFECTIVE DATES: 04/27/2023 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Understand the essential principles of exercise-based physical training
2. Explain the anatomical and physiological process of adapting to resistance training
3. Explore, perform, and observe a minimum of 25 basic resistance exercises
4. Analyze common and essential resistance exercises from an anatomical and coaching standpoint
5. Define and learn key terms and concepts used to explain and describe resistance exercise
6. Understand the value of resistance training to improve health and movement
7. Demonstrate sufficient knowledge of resistance exercise to effectively instruct and use appropriate cueing strategy
8. Become familiar with established weight room protocol and training equipment commonly found in resistance training venues
9. Learn to use variables in effectively prescribing exercises and creating fitness programs

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate skills and knowledge in the area of physiological adaptation to resistance, cardiorespiratory, and flexibility/mobility exercise and primary modalities of exercise in each area.
2. The learner will acquire sufficient knowledge and understanding of physical movement and exercise to analyze performance of resistance exercise and recommend alterations/improvements in performance.
3. The learner will gain skills and knowledge essential to effectively prescribe and instruct resistance exercise.
4. The learner will create a personal resource for resistance terminology, exercise concepts, and coaching of resistance exercises.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted