A. COURSE DESCRIPTION

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

  Theory and practice of strength and speed training with emphasis on technique analysis and instructional
  methods for strength training. Includes facility design and equipment purchasing and maintenance.
  Prepares students for National Strength and Conditioning Association Certified Strength and Conditioning
  Specialist (CSCS). Prerequisite: PHED 3300 or consent of instructor.

B. COURSE EFFECTIVE DATES: 08/03/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

  1. Adaptations to Aerobic Endurance Training Programs
  2. Adaptations to Anaerobic training programs
  3. Administration, Scoring and Interpretation of Selected Tests
  4. Age- and Sex-Related Differences
  5. Bioenergetic of Exercise and Training
  6. Biomechanics of Resistance Exercise
  7. Nutritional Factors in Health and Performance
  8. Periodization
  9. Plyometric Training
  10. Resistance Training
  11. Speed and agility
  12. Structure and Function of body systems

D. LEARNING OUTCOMES (General)

  1. demonstrate a basic knowledge of exercise physiology, including training adaptations, and
     overtraining
  2. demonstrate knowledge of commonly abused substances and the detrimental effects of the substances
     on the body
  3. demonstrate skills needed for physiological testing, specifically the student will be able to select,
     organize, administer and evaluate tests of strength and physical performance
  4. demonstrate the ability to instruct and lead exercises in strength conditioning/training and joint
     flexibility including spotting, flexibility, plyometric and other conditioning exercises
  5. demonstrate the ability to prescribe individual exercise programs that are safe and effective
     a. that maximize physical performance using various training methods and modes
     b. that appropriately apply exercise order, load, volume, rests, training frequencies, and muscle
        balance
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted