COMMON COURSE OUTLINE: Course discipline/number/title: PHED 2241: Essentials of Personal Training

A. CATALOG DESCRIPTION
   1. Credits: 3
   2. Hours/Week: 4, 2 hours lecture, and 2 hours lab
   3. Prerequisites (Course discipline/number): None
   4. Co-requisites (Course discipline/number): None
   5. MnTC Goals (if any): NA

   This course explores the foundations of exercise science, safe and effective exercise techniques, program design and safety and legal issues of providing personal training instruction to clients. This course takes an in-depth look into anatomy and physiology and who it relates to the body's adaptation to both anaerobic and aerobic training regimes. Evaluating individuals utilizing physical testing protocols and assessments and developing exercise prescriptions for clients based on their present levels of fitness and their goals is the primary focus, while understanding the intricate interrelationships of the body systems to achieve optimal results. RECOMMENDED ENTRY SKILLS/KNOWLEDGE: College Level Reading, PHED 1105, PHED 1122, PHED 1132, PHED 1133.

B. DATE LAST REVISED (Month, year): February, 2010

C. OUTLINE OF MAJOR CONTENT AREAS:
   1. Structure and function of muscular, nervous and skeletal systems
   2. Structure and function of cardiovascular and respiratory systems
   3. Understanding bioenergetics and metabolism
   4. Understanding the psychology of the benefits of exercise
   5. Understanding motivation for clients.
   6. Fitness and health appraisal screening.
   7. Exercise technique, safety guidelines and program development implementing flexibility, resistance training and cardiovascular training.
   8. Develop fitness or training programs for individuals with any specific goals, requirements, restrictions or guidelines.
   9. Legal obligations to clients and areas of certification.

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Describe the functions, structures and roles of skeletal muscles.
   2. Describe the function of the motor unit.
   3. Describe the function of the skeletal system.
   4. Discuss the composition of connective tissue and its interrelation of function with muscles and bones.
   5. Describe the anatomical and physiological characteristics of the cardiovascular and respiratory system, the electrical systems of the heart and explain gas exchange.
   6. Discuss bioenergetics of muscle fibers, and ATP energy systems and develop training programs to best utilize energy systems.
   7. Identify physiological factors that relate to over or detraining.
   8. Apply appropriate motivations to clients to assure optimal effects.
   9. Conduct initial client interviews to assess fitness levels and develop safe goals for clients.
   10. Apply safe exercise techniques while developing general fitness programs for clients.
   11. Design specific individual fitness programs for clients to enhance aerobic capacity, speed, power, agility, strength.
   12. Design specific individual fitness programs for clients with special needs. Eg clients who are; youth, elders, pregnant, have nutritional concerns, possess cardiovascular or respiratory conditions, injury rehabilitation, developmental disabilities or athletes.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   1. Daily assignments
   2. Quizzes
   3. Program development for specific populations
   4. Practical assessment of techniques.
   5. Exams
G. SPECIAL INFORMATION (if any): None