Rehabilitation Techniques in Athletic Training
Course Objectives:

A. To be able to describe the body's anatomical and physiological and psychological adaptation to cardiovascular and muscular conditioning programs. Describes and predicts the integration and coordination of cell function in response to injury and its implications on the development and progression of a rehabilitation program. Describes, defines and appreciates the healing process of bone and the inflammatory response to acute and chronic injury and illness and defines tissue lesions by body system in terms of etiology pathogenesis, pathomechanics, treatment options, and expected outcomes. Identifies the implications of underlying pathologies and uses this knowledge to select the appropriate therapeutic modality and exercise protocols.

B. Define, describe and interpret the use of standard tests, test equipment, functional testing procedures, and testing protocols for the measurement of cardiovascular respiratory fitness, body composition, posture, flexibility, muscle strength, power and endurance as they relate to therapeutic exercise. Use the objective measures to develop individual rehabilitation and reconditioning programs. Compares and contrasts various types of flexibility, strength training and cardiovascular conditioning programs considering the effects the athletes would expect if followed. Lists the safety precautions for these programs.

C. Implements, administers, recommends, describes and provides supervision and instruction on development of fitness programs, the use of commercial weight training equipment. The student will be able to correct or modify of inappropriate unsafe or dangerous fitness routines. Will describe common surgical techniques, pathology and anatomical alterations that may effect implementation of rehabilitation and reconditioning programs. Understands concepts and principles pertaining to strength, flexibility and endurance programs or routines, home, school workplace ergonomics and helps construct and educate patient/ athletes home exercise programs and self treatment plans. The student will be able to define, describe and interpret components of functional progressions of a therapeutic exercise program form the result of an injury assessment. Describes the mechanical forces applied to design and use of rehabilitation or reconditioning exercise equipment and will be able to inspect therapeutic exercise equipment to ensure safe operating conditions.

D. Recommends and describes the appropriate selection, application, and evaluation of a therapeutic exercise plan by determination of goals and objectives based upon initial assessment, reassessment and goal setting. The student will be able to demonstrate proper techniques and will take in consideration all indications, contraindications, theory, principles and incorporation and application of various therapeutic exercises including: A. isometric, isotonic, isokinetic; B. concentric vs. eccentric; C. open vs. closed kinetic chain; D. Elastic, mechanical and manual resistance exercise, joint mobilizations, plyometrics- dynamic reactive exercise, PNF for muscle endurance, strength and stretching. The student will also describe the physiological responses of the human body to trauma and will be able to revise goals and objectives, progressions of activity, return to play based on functional outcomes and proper

assessment and interpretation of rehabilitation and reconditioning programs. The student will be able to perform a functional assessment for safe return to play. The student will be able to interpret physician notes, post operative notes, medical prescription for rehabilitation programs and will be able to describe and record rehabilitation, functional rehabilitation and reconditioning with follow up notes, SOAP notes, progress notes etc.

E. The student will accept the professional ethical and legal parameters that define the proper role of the certified athletic trainer in the treatment and rehabilitation and reconditioning of athletes and others involved in physical activity. Accepts the moral and ethical obligations to provide rehabilitation and reconditioning and social support to athletes and active persons. The student will respect and appreciate the proper role of attending physicians and paramedical personnel in the treatment and rehabilitation and reconditioning of athletes. The student will also respect protocols regarding confidentiality of medical information, therapeutic prescription and health care referral.

F. The student will be able to formulate a plan for appropriate psychological intervention and referral will all parties involved. The student will be able to describe and use motivational techniques that certified athletic trainers must use during rehabilitation and reconditioning. The student will be able to develop and implement stress reduction techniques and mental imagery techniques for athletes and others involved in physical activity. The student will be able to identify the stress response model and how it parallels injury.

The primary mission of the School of Education is to prepare leaders in education and human services fields. As stated in the School Code

> Within the University, the School of Education serves Kansas, the nation, and the world by (1) preparing individuals to be leaders and practitioners in education and related human service fields, (2) expanding and deepening understanding of education as a fundamental human endeavor, and (3) helping society define and respond to its educational responsibilities and challenges.

The components that frame this mission for our initial and advanced programs are Research and Best Practice, Content Knowledge, and Professionalism. These interlocking themes build our Conceptual Framework.