ATHLETIC TRAINING (ATTR)

ATTR 6010 Clinical Applications I
[1 credit hour (0, 0, 1)]
Clinical skill experience is provided to develop autonomous athletic trainer and provide exposure to implementing evidence based practice in clinical practice.

ATTR 6020 Clinical Applications II
[1 credit hour (0, 0, 1)]
Continue to develop autonomous athletic training skills built upon in Clinical Applications I and continue to advance diagnosis, treatment and intervention skills.
Prerequisites: KINE 6010 with a minimum grade of D- or ATTR 6010 with a minimum grade of D-

ATTR 6030 Clinical Applications III
[2 credit hours (2, 0, 0)]
Advanced integration of clinical skills with the introduction of mentoring athletic training students in a clinical setting.
Prerequisites: KINE 6020 with a minimum grade of D- or EXSC 6020 with a minimum grade of D-

ATTR 6040 Clinical Applications IV
[2 credit hours (2, 0, 0)]
Preparation of autonomous athletic training care for the transition into an occupation in sports medicine.
Prerequisites: KINE 6030 with a minimum grade of D- or EXSC 6030 with a minimum grade of D-

ATTR 6120 Evaluation and Management of Lower Extremity Injury
[4 credit hours (3, 1, 0)]
The study of the pathology, etiology and presentation of lower extremity injuries. Subjective and objective components as well as orthopedic special testing will be introduced and serve as the foundation for the formulation of a systematic evaluation method. In addition, acute management techniques include first aid as well as immobilization methods will be introduced. Laboratory concepts include selection and implementation of appropriate evaluation and acute management techniques.
Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+

ATTR 6140 Functional Musculoskeletal Anatomy
[3 credit hours (1, 2, 0)]
A cadaver anatomy course focusing on foundation concepts of structural kinesiology and anatomy. In addition, the structure of various musculoskeletal tissues and functional joint complexes will be examined.

ATTR 6150 Foundations of Athletic Training Practice
[4 credit hours (3, 1, 0)]
Introduction to the profession of athletic training including history, regulation of practice, and the role of the profession in the sports medicine healthcare team. Additional concepts include risk management, injury recognition, systematic evaluation and acute management of injuries. Laboratory concepts include selection and application of appropriate prophylactic and protective taping, wrapping and bracing techniques as well as selection and application of appropriate first aid, ambulation aids and immobilization.

ATTR 6220 Evaluation and Management of Upper Extremity Injury
[4 credit hours (3, 1, 0)]
The study of the pathology, etiology and presentation of upper extremity injuries common in active populations. Subjective and objective components as well as orthopedic special testing will be introduced and serve as the foundation for the formulation of a systematic evaluation method. In addition, acute management techniques include first aid as well as immobilization methods will be introduced. Laboratory concepts include selection and implementation of appropriate evaluation and acute management techniques.
Prerequisites: (KINE 6210 with a minimum grade of C+ and KINE 6610 with a minimum grade of B-) or (ATTR 6210 with a minimum grade of C+ and ATTR 6610 with a minimum grade of B-)

ATTR 6310 Therapeutic Interventions I
[3 credit hours (2, 1, 0)]
The study of the physiological, mechanical and bio-electrical principles related to the application of thermal, electrical and mechanical modalities in the treatment of musculoskeletal injury. Laboratory concepts include selection and application of appropriate modality use specific to patient values and situation.
Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+

ATTR 6410 Clinical Biomechanics
[3 credit hours (3, 0, 0)]
The study of common kinematic and kinetic alterations that can occur following acute and chronic musculoskeletal injuries and the deleterious effects these changes can cause. In addition, students will be introduced to both laboratory and clinical techniques to assess and alter the kinematic and kinetic deficits associated with injury.
Prerequisites: KINE 6120 with a minimum grade of C+ and KINE 6610 with a minimum grade of C+ or ATTR 6120 with a minimum grade of C+ and ATTR 6610 with a minimum grade of C+

ATTR 6500 Biomechanics Of Posture And Balance
[3 credit hours (2, 1, 0)]
Focus on the mechanical and sensory-motor factors involved in the control of balance and posture. Emphasis on the theories, the influence of pathology and techniques for the assessment of balance.
Prerequisites: KINE 6130 with a minimum grade of D- or ATTR 6130 with a minimum grade of D-

ATTR 6510 Evaluation and Management of General Medical Conditions
[3 credit hours (2, 1, 0)]
The study of the pathology, etiology and presentation of common general medical conditions in active populations. Systems will include cardiovascular, respiratory, gastrointestinal, genitourinary, reproductive, dermatologic and neurologic systems and infectious diseases. For each system, subjective and objective components as well as common special tests will be introduced. In addition, concepts of pharmacology including pharmacokinetics, basic drug classifications and legal aspects of use will be covered. Specific focus will be placed on common therapeutic drugs used in sports medicine.
Prerequisites: KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-
ATTR 6520 Clinical Kinesiology
[3 credit hours (3, 0, 0)]
Kinesiological principles underlying the assessment and treatment of individuals with normal and pathological conditions. Emphasis will be placed on clinical applications of mechanical principles, motor control and muscle activity to improve performance and prevent further injury.

ATTR 6600 Issues And Management In Athletic Training
[3 credit hours (3, 0, 0)]
This course addresses current issues that affect the profession of Athletic Training. Topics cover issues that influence clinical practice as well as political issues related to the profession.
Term Offered: Spring, Fall

ATTR 6610 Clinical Skills I
[2 credit hours (2, 0, 0)]
The first of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a certified athletic trainer.
Prerequisites: KINE 6150 with a minimum grade of C+ and KINE 6140 with a minimum grade of C+ or ATTR 6150 with a minimum grade of C+

ATTR 6620 Clinical Skills II
[2 credit hours (2, 0, 0)]
The second of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athletic Trainer.
Prerequisites: KINE 6610 with a minimum grade of B- or ATTR 6610 with a minimum grade of B-
Term Offered: Spring

ATTR 6630 Clinical Skills III
[2 credit hours (2, 0, 0)]
The third of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athletic Trainer.
Prerequisites: KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-

ATTR 6640 Clinical Skills IV
[2 credit hours (2, 0, 0)]
The final of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athletic Trainer.
Prerequisites: KINE 6630 with a minimum grade of B- or ATTR 6630 with a minimum grade of B-

ATTR 6660 Evidence-Based Practice in Sports Medicine
[2 credit hours (2, 0, 0)]
This course will introduce the student to clinical epidemiology and the evaluation of the efficacy of prevention, diagnosis, and treatment strategies in athletic training and sports medicine.
Term Offered: Fall

ATTR 6670 Pathology of Orthopedic Injury
[3 credit hours (3, 0, 0)]
An in-depth investigation into the basic structure and mechanisms of injury of various musculoskeletal tissue applied to the recognition and prevention of specific orthopedic injuries and conditions.
Term Offered: Spring, Fall

ATTR 6680 Advanced Interventions I
[2 credit hours (2, 0, 0)]
Students will be introduced to advanced techniques that impact clinical practice in Athletic Training, including manual therapy, advanced orthopedic evaluations, and advanced management and planning related to emergency medicine.
Term Offered: Spring

ATTR 6690 Advanced Interventions II
[3 credit hours (2, 1, 0)]
Students will be introduced to advanced evaluation and assessment techniques that impact clinical practice, including general medical conditions, psychosocial, professionalism, and profession advocacy.
Prerequisites: KINE 6680 with a minimum grade of D- or ATTR 6680 with a minimum grade of D-

ATTR 6700 Therapeutic Interventions II
[3 credit hours (2, 1, 0)]
The study of the advanced techniques related to rehabilitation of musculoskeletal injuries. Concepts include development of an exercise program, exercise program progression, indication and contraindications for specific techniques as well as reconditioning, return to play and preventative programs. Laboratory concepts include selection and implementation of appropriate rehabilitation techniques specific to patient values and situation.
Prerequisites: KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-
Term Offered: Fall

ATTR 6710 Organization And Administration Of Athletic Training Programs
[3 credit hours (3, 0, 0)]
Administration of athletic training programs including legal issues, athletic training room management, budgeting, staffing, insurance, medical records, emergency care planning, preparticipation physical examinations, athletic training room design and public relations.

ATTR 6720 Advanced Clinical Anatomy
[2 credit hours (0, 2, 0)]
A cadaver anatomy course focusing on the extremities. Emphasis will be placed on the link between anatomical structure, orthopedic injuries, and clinical practice.
Term Offered: Fall
ATHLETIC TRAINING (ATTR)

ATTR 6730 Optimization of Performance and Wellness
[3 credit hours (3, 0, 0)]
An investigation into the nutritional and psychological components of optimal performance and wellness in active populations as well as recognition and appropriate referral of patients with suspected substance abuse and mental health disorders. In addition, concepts related to wellness and fitness assessment and weight management in a healthy population including prescription of strengthening and conditioning exercises will be discussed.

Prerequisites: KINE 6630 with a minimum grade of B- or ATTR 6630 with a minimum grade of B-

ATTR 6800 Foundations of Scholarly Practice
[3 credit hours (3, 0, 0)]
An introduction to the consumption and appraisal of research. Investigation of evidence-based practice concepts as well as introduction to literature databases and resources available to help translate research to clinical practice.

Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of B- or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of B-

Term Offered: Fall

ATTR 6810 Scholarly Project I
[1 credit hour (0, 1, 0)]
The first of sequential courses designed to provide students hands-on engagement in clinical research and scholarship related to the athletic training field. Students will work with course Instructor and or research advisor to develop a clinical question and begin to design a research project related to that question.

Prerequisites: KINE 6500 with a minimum grade of C+ and KINE 6610 with a minimum grade of B- or ATTR 6500 with a minimum grade of C+ and ATTR 6610 with a minimum grade of B-

ATTR 6820 Scholarly Project II
[1 credit hour (0, 1, 0)]
The second of sequential courses designed to provide students hands-on engagement in clinical research and scholarship related to the athletic training field. Students will work with course Instructor and or research advisor to carry out a research project including but not limited to recruitment of subjects, data collection and data analysis.

Prerequisites: KINE 6800 with a minimum grade of C+ and KINE 6620 with a minimum grade of B- or ATTR 6800 with a minimum grade of C+ and ATTR 6620 with a minimum grade of B-

ATTR 6910 Introduction to Sports Medicine Research I
[1 credit hour (1, 0, 0)]
Students will be introduced to sports medicine research with a focus on evaluating the literature, asking a clinically relevant research question, and developing experimental hypotheses.

ATTR 6920 Introduction to Sports Medicine Research II
[1 credit hour (1, 0, 0)]
Students will continue to develop the ability to critique research and will be introduced to developing research methods to address a clinically question related to sports medicine.

Prerequisites: KINE 6910 with a minimum grade of D- or ATTR 6910 with a minimum grade of D-

ATTR 6960 Masters Thesis In Exercise Science
[1-4 credit hours (0, 0, 0-3)]
Independence research in Exercise Science completed as part of the requirements for the Master of Science in Exercise Science degree.

Term Offered: Spring, Summer, Fall

ATTR 6990 Independent Study In Exercise Science
[1-4 credit hours (0, 0, 0-4)]
Faculty supervised independent reading, laboratory research, field experience and other activities not suited for class instruction.

Term Offered: Spring, Summer, Fall