COURSES FOR HEALTH SCIENCE

Athletic Training Courses

**ATR500 Fundamentals of Professional Practice**
Hours 3
Study and discussion of topics and clinical skills related to the prevention; examination, assessment and diagnosis; immediate and emergency care; and therapeutic intervention of injuries and illnesses. Introduction to healthcare administration.
Prerequisite(s) with concurrency: ATR 503

**ATR503 Patient-Centered Care**
Hours 2
Study and discussion of topics related to the influence of cultural, environmental and intrapersonal factors on health; and the role of athletic trainers acting within their scope of practice to advocate for patients and incorporate outcomes measures in providing patient-centered care.
Prerequisite(s) with concurrency: ATR 500, ATR 505, ATR 507 & ATR 510

**ATR505 Examination & Diagnosis I: Lower Extremity**
Hours 3
Study of the lower extremity as it relates to the prevention; examination, assessment and diagnosis; immediate and emergency care; and therapeutic intervention of injuries and illnesses.
Prerequisite(s): ATR 500, ATR 503
Prerequisite(s) with concurrency: ATR 507, ATR 510

**ATR507 Examination and Diagnosis II: Medical Conditions**
Hours 2
Study of acute and chronic illnesses and medical conditions as they relate to the prevention; examination, assessment and diagnosis; immediate and emergency care; and therapeutic intervention of injuries and illnesses.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 510, & ATR 535
Prerequisite(s) with concurrency: ATR 509, ATR 511, ATR, 513, & ATR 520

**ATR509 Examination & Diagnosis III: Upper Extremity**
Hours 3
Study of the upper extremity as it relates to the prevention; examination, assessment and diagnosis; immediate and emergency care; and therapeutic intervention of injuries and illnesses.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 510, & ATR 535
Prerequisite(s) with concurrency: ATR 507, ATR 511, ATR 513, & ATR 520

**ATR510 Integration of Clinical Skills in Athletic Training I**
Hours 1
Acquisition, evaluation, synthesis and application of clinical skills in the prevention; examination, assessment and diagnosis; immediate care and emergency care and therapeutic intervention of injuries and illnesses, with an emphasis on the upper extremity and general body systems. Clinical experiences under the direct supervision of BOC Certified Athletic Trainers.
Prerequisite(s) with concurrency: ATR 500, ATR 503, ATR 505 & ATR 535

**ATR511 Examination & Diagnosis IV: Head, Spine, Thorax & Abdomen**
Hours 3
Study of the head, neck, face, lumbar and thoracic spines, thorax and abdomen as they relate to the prevention; examination, assessment and diagnosis; immediate and emergency care; and therapeutic intervention of injuries and illnesses.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 510, & ATR 535
Prerequisite(s) with concurrency: ATR 507, ATR 509, ATR 513, & ATR 520

**ATR513 Therapeutic Intervention I: Therapeutic Modalities**
Hours 2
Methods, theories and techniques in the application of therapeutic modalities during the therapeutic intervention for injuries and illnesses. The examination, assessment and diagnosis of injuries relative to therapeutic modalities.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 510, & ATR 535
Prerequisite(s) with concurrency: ATR 507, ATR 509, ATR 511, & ATR 520

**ATR517 Therapeutic Intervention II: Rehabilitation & Reconditioning**
Hours 2
Methods, theories and techniques in the rehabilitation of injuries. The examination, assessment and diagnosis of injuries relative to rehabilitation.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 511, ATR 513, ATR 510, ATR 520, & ATR 535

**ATR519 Advanced Trauma Management**
Hours 1
Study of the recognition, assessment, treatment and referral of advanced, acute emergent and traumatic injury and illness.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 520, ATR 530 & ATR 535
Prerequisite(s) with concurrency: ATR 521, ATR 525, ATR 531, ATR 533, ATR 540

**ATR520 Integration of Clinical Skills in Athletic Training II**
Hours 1
Acquisition, evaluation, synthesis and application of clinical skills in the prevention; examination, assessment and diagnosis; immediate care and therapeutic intervention of injuries and illnesses, with an emphasis on the upper extremity, head, spine, thorax & abdomen. Clinical experiences under the direct supervision of BOC Certified Athletic Trainers.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 510, & ATR 535

**ATR521 Therapeutic Intervention III: Injury Care Planning**
Hours 3
Application methods of comprehensive therapeutic intervention for injuries & illnesses commonly sustained by the physically active.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 519 & ATR 520
Prerequisite(s) with concurrency: ATR 525 & ATR 530
ATR525 Research in Athletic Training
Hours 1
Introduction to research in athletic training with a focus on conducting a literature review, developing a PICO question, constructing testable hypotheses, selecting variables and identifying appropriate methodology to answer the question.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 520, ATR 530 & ATR 535
Prerequisite(s) with concurrency: ATR 519, ATR 521, ATR 531, ATR 533, & ATR 540

ATR530 Clinical Immersion I: Non-Sport Patient Care
Hours 2
Acquisition, evaluation, synthesis and application of clinical skills in the prevention; examination, assessment and diagnosis; immediate care and emergency care and therapeutic intervention of injuries and illnesses, with an emphasis on acute and chronic medical conditions and postsurgical rehabilitation. Clinical experiences under the direct supervision of trained preceptors.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 520, & ATR 535

ATR531 Therapeutic Intervention IV: Pharmacology & Behavioral Medicine
Hours 3
The study of behavioral health conditions and their management with pharmacologic and non-pharmacologic interventions, including referral for appropriate care. Discussion of agents used in the management of acute and chronic illnesses; their response to, and impact on, physical activity; and the impact of physical activity on acute and chronic illnesses.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 520, & ATR 535
Prerequisite(s) with concurrency: ATR 519, ATR 521, ATR 525, ATR 533, ATR 540

ATR533 Therapeutic Intervention V: Optimizing Patient Outcomes
Hours 2
The study of agents used in the prevention; examination, assessment and diagnosis; and intervention of acute and chronic illnesses and medical conditions.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, & ATR 520, ATR 530 & ATR 535
Prerequisite(s) with concurrency: ATR 519, ATR 521, ATR 525, ATR 531, & ATR 540

ATR535 Health Care Administration
Hours 3
Current theories, methods and techniques in the organization and administration of athletic training programs.
Prerequisite(s) with concurrency: ATR 500, ATR 503, ATR 505, ATR 510

ATR540 Integration of Clinical Skills in Athletic Training III
Hours 1
Acquisition, evaluation, synthesis and application of clinical skills in the prevention; examination, assessment and diagnosis; immediate care and emergency care and therapeutic intervention of injuries and illnesses, with an emphasis on behavioral health issues. Clinical experiences under the direct supervision of BOC Certified Athletic Trainers.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 520, ATR 530 & ATR 535
Prerequisite(s) with concurrency: ATR 519, ATR 521, ATR 525, ATR 531, & ATR 533

ATR541 Therapeutic Intervention VI: Manual Therapy
Hours 2
Current theories, methods, and techniques in the application of manual therapy during the therapeutic intervention for injuries and illnesses. Emphasis on the appropriate integration of manual therapy skills and traditional rehabilitation techniques into a comprehensive treatment plan. The examination, assessment and diagnosis of injuries relative to manual therapy.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 517, ATR 519, ATR 520, ATR 521, ATR 525, ATR 530, ATR 531, ATR 533, ATR 535, ATR 540
Prerequisite(s) with concurrency: ATR 545 & ATR 550

ATR545 Seminar in Athletic Training
Hours 2
Discussion of current issues in athletic training with an emphasis on the application of current research to the practice of athletic training.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 519, ATR 521, ATR 525, ATR 530, ATR 531, ATR 533, ATR 535 & ATR 540
Prerequisite(s) with concurrency: ATR 541 & ATR 550

ATR550 Clinical Immersion II: Culminating Experience
Hours 2
Acquisition, evaluation, synthesis and application of clinical skills in the prevention; examination, assessment and diagnosis; immediate care and emergency care and therapeutic intervention of injuries and illnesses. Clinical experiences under the direct supervision of trained preceptors.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 519, ATR 520, ATR 521, ATR 525, ATR 530, ATR 531, ATR 533, ATR 535 & ATR 540
Prerequisite(s) with concurrency: ATR 541 & ATR 545

ATR552 Seminar in Athl. Training
Hours 3
A review of historical developments in the field of athletic training with emphasis on current challenges in the profession.

ATR554 Advanced Clin Eval Diag
Hours 3
Advanced clinical evaluation and diagnosis of structural and functional soft tissue and skeletal injuries through the acquisition, application and integration of clinical skills. Focus on consideration of the entire kinetic chain in the examination and diagnostic process.
ATR555 Pharmacology in Athl. Trng
Hours 3
The study of pharmacologic agents used in the management of acute and chronic illnesses and their response to and impact on physical activity. Discussion of acute and chronic illnesses.

ATR556 Manual Therapy
Hours 3
Advanced evaluation of the structure and function of soft tissues and articulations. Focus on the acquisition and application of clinical skills in manual therapy with emphasis on the integration of manual therapy into the overall treatment plan.
Prerequisite(s): ATR 554 or HAT 554

ATR557 EBP Ther Modalities
Hours 3
A review of current theories, methods and techniques in the application of therapeutic modalities and a critical review of the evidence in support of these clinical practices.

Hours 3
The acquisition and application of advanced literature search and scientific literature interpretation skills. The refinement of scientific writing skills as they relate to the development and completion of a literature review paper.

ATR598 Non-Thesis Research
Hours 2
Experimental or analytical investigation of athletic training research-related research question.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 519, ATR 520, ATR 521, ATR 525, ATR 530, ATR 531, ATR 533, ATR 535 & ATR 540
Prerequisite(s) with concurrency: ATR 541, ATR 545 & ATR 550

ATR599 Thesis Research
Hours 3
Thesis research focusing on experimental or analytical investigation of athletic training research-related research question.
Prerequisite(s): ATR 500, ATR 503, ATR 505, ATR 507, ATR 509, ATR 510, ATR 511, ATR 513, ATR 517, ATR 519 & ATR 520
Prerequisite(s) with concurrency: ATR 521, ATR 525 & ATR 530

Health Studies Courses

HHE506 Tech Research In Health
Hours 3
Designed to acquaint the student with the types of research and the methods and materials necessary for scientific inquiry; includes development of a research proposal, with emphasis on form and style.

HHE512 Advanced Foundations of Public Health
Hours 3
This course provides foundational knowledge in the profession and science of public health. Course content also addresses factors related to human health, examines public health and health care systems, and explores emerging research and application areas in the field.

HHE515 Advanced Foundations of Health Promotion
Hours 3
Open to graduate students in all divisions of the University. Designed to provide understanding pertaining to advances in the health sciences.

HHE520 Theories of Health Behavior
Hours 3
Designed to review research literature regarding health behavior and to analyze various models developed to explain health behavior.
Prerequisite(s): HHE 515
Prerequisite(s) with concurrency: HHE 515

HHE521 Basic Epidemiology
Hours 3
A course for students in health-related fields. The basic epidemiologic approach is developed; principles and methods are learned through readings (text and published studies), lectures, discussions, and the preparation of a research design by each student.

HHE526 Biostatistics
Hours 3
A course in statistical methods and concepts particularly appropriate for biomedical research and health-related subjects. Topics include descriptive statistics, probability, parametric and nonparametric procedures for one-group and two-group problems, contingency tables, and computer applications.

HHE530 Health Promotion Techniques
Hours 3
Study of current health promotion techniques and programs, designed to facilitate health behavioral change. Emphasis on review of scientific literature concerning the development, implementation, and evaluation of health promotion schemes.
Prerequisite(s): HHE 515
Prerequisite(s) with concurrency: HHE 515 and HHE 565 and HHE 520

HHE565 Planning Health Promotion Programs
Hours 3
Study of planning and evaluation methods and procedures for health education and promotion programs; emphasis on review of current scientific literature.

HHE566 Program Evaluation in Health Promotion
Hours 3
Process, impact and outcome evaluation methods used to effectively evaluate health education/health promotion programs in the community, medical care, school and work site are reviewed.
Prerequisite(s): HHE 515 HHE 520 HHE 530
Prerequisite(s) with concurrency: HHE 506 and HHE 565

HHE580 Applied Practice Experience I
Hours 1
Coordination and proposal of field experience in an external agency or organization (government, not-for-profit, for-profit) under the direction of a site supervisor and health science faculty member.
Prerequisite(s): HHE 512, HHE 515
Prerequisite(s) with concurrency: HHE 520, HHE 530, HHE 565
HHE581 Applied Practice Experience II  
Hours 2  
Supervised field experience in an external agency or organization (government, not-for-profit, for-profit) under the direction of a site supervisor and health science faculty member.  
Prerequisite(s): HHE 580

HHE584 Worksite Health Promotion Programs  
Hours 3  
Workplace health promotion program design, implementation, and evaluation that is grounded in health theory, evidence-based, and promotes health equity while addressing health care cost concerns.

HHE585 Public Health Practice  
Hours 1-3  
Supervised field experience in an external agency or organization (government, not-for-profit, for-profit) under the direction of a site supervisor and health science faculty member.  
Prerequisite(s): HHE 512 and HHE 515 and HHE 521 and HHE 526 and HHE 586

HHE586 Environmental Health Promotion  
Hours 3  
This course provides a careful study of the physical and human environment and its influence on health and disease. The course also examines implications for environmental health promotion.

HHE587 Health Disparities  
Hours 3  
The purpose of this project is to examine a case study detailing a unique cultural view/experience of the American health system. It also serves to provide health education and promotion strategies to engage diverse populations in interventions.

HHE588 Sexuality Education: Theory and Practice  
Hours 3  
Sexuality Education: Theory and Practice deals with contemporary issues in sexuality education in all settings. Issues include how sexuality education should be handled by parents, teachers, and community leaders; controversies surrounding sexuality education; pros and cons of various forms of sexuality education; and, the importance of understanding your own sexuality.

HHE589 Women and Health  
Hours 3  
The purpose of this course is to emphasize the importance of understanding women's experiences and life circumstances when planning, implementing and evaluating health programs or interventions.

HHE590 Cert Hlth Ed Specialist Study  
Hours 3  
Course is designed to help students develop and/or refine skills related to the planning, implementation, and evaluation of health education programs in various settings. Completion of the course is also intended to prepare students for the Certified Health Education Specialist examination.

HHE596 Independent Study  
Hours 1-6  
Designed to provide the opportunity for independent research in any area of health education.

HHE597 Clin Health Prom  
Hours 3  
Integration and application of the principles of health education and health promotion in the patient care setting.  
Prerequisite(s): HHE 515 and HHE 520 and HHE 530 and and HHE 566 and HHE 565  
Prerequisite(s) with concurrency: HHE 566

HHE598 Non-Thesis Research  
Hours 3  
Experimental or analytical investigation of health promotion problems.

HHE599 Thesis Research  
Hours 1-6  
Research study in a selected area of health promotion.

HHE602 Readings In Health  
Hours 3  
An independent readings course for doctoral students.

HHE603 Spec Projects In Hlth  
Hours 3  
Experimental or analytical investigations of problems in health education. Arranged on an independent basis for doctoral students.

HHE604 Seminar In Health  
Hours 1-3  
Critical and emerging issues in health education and health promotion.

HHE605 Theor Sci Basis Hlth Edu  
Hours 3  
Examination of theoretical, scientific, historical, and philosophical issues that serve as a basis for health education and health promotion.

HHE606 Plan Admin Hlth Ed Prog  
Hours 3  
A comprehensive examination of models for planning health education and health promotion programs.

HHE626 Advanced Biostatistics in Health Research  
Hours 3  
To assist the student in understanding and applying basic statistical concepts and procedures in health-related research.

HHE627 Multivariate Methods in Health Statistics  
Hours 3  
This courses will examine the appropriate use and implementation of multivariate methods for the analysis of data with multiple dependent and independent measures.  
Prerequisite(s): HHE 626

HHE628 Qualitative Research Methods in Health Promotion  
Hours 3  
Approaches to designing qualitative research studies for the development and evaluation of public health programs. Emphasis is on the practice of collecting and analyzing data from individual interviews, focus group discussions, and observations.
HHE667 Advanced Evaluation In Health Education and Health Promotion
Hours 3
This course provides an indepth analysis of evaluation and measurement
techniques applied in health promotion and health education programs
(HPE).

HHE685 Field & Lab Experience
Hours 3-6
Arranged on an independent basis for doctoral students. Participation
and research in schools, communities, or work site settings.

HHE698 Research
Hours 3
Experimental or analytical investigation of problems in health.

HHE699 Dissertation Research
Hours 1-12
Design, research, and/or analytical investigation of a problem in the area
of health to satisfy the dissertation requirement for the doctoral degree.