ATHLETIC TRAINING (AT)

AT 5020 (s) Directed Study (1-16 credits, max 99) Credit arranged

AT 5040 (s) Special Topics (1-16 credits, max 99) Credit arranged

AT 5060 Clinical Anatomy I (3 credits)

Theory and practice of clinical anatomy as it pertains to the lower extremity through the thoracic spine.

AT 5070 Emergency Management and Care of Injuries and Illnesses (3 credits)

Theory and practice of recognition, treatment, and prevention of emergent and/or acute injuries and illnesses.

AT 5080 Evaluation and Diagnosis of Injuries and Illnesses I (4 credits)

Theory and practice of musculoskeletal evaluation and diagnosis as it pertains in the lower extremity through the thoracic spine.

AT 5090 Principles of Rehabilitation (3 credits)

Theory and practice of the scientific foundations of musculoskeletal rehabilitation.

AT 5100 Therapeutic Modalities (2 credits)

Theory and practice of therapeutic modalities including thermotherapy, cryotherapy, and mechanical modalities.

AT 5110 Ethics and Administration in Athletic Training (3 credits)

Theory and practice of ethics and administration in athletic training.

AT 5120 Research Methods & Statistics I (3 credits)

Theory and application of research methods for the health professions, including research design, research question development, ethical considerations, methods of measurement, and critical appraisal of the current literature

AT 5130 General Medicine for Athletic Trainers (3 credits)

Theory and practice of general medical conditions related to athletic training.

AT 5140 Psychology of Injury and Referral (3 credits)

Theory and practice of the psychology of injury and referral in athletic training.

AT 5160 Diagnostic Imaging and Testing in Athletic Training (1 credit)

This course is designed to familiarize the athletic training student with diagnostic testing and imaging techniques. Conventional radiography, magnetic resonance imaging (MRI) and computerized tomography (CT), as well as various selected clinical diagnostic and laboratory tests and with selected procedures as diagnostic tools with different purposes, clinical capabilities and limitations. Typically Offered: Summer. **Preregs:** AT 5080

AT 5200 Clinical Education I (2 credits)

Practice of athletic training clinical skills under the direct supervision of a preceptor with emphasis on the Level I clinical educational competencies.

AT 5210 Clinical Experience I (4 credits)

Clinical practice in athletic training under the direct supervision of a preceptor with emphasis on patient care and the safe and appropriate use of skills and techniques.

AT 5220 Clinical Education II (2 credits)

Practice of athletic training clinical skills under the direct supervision of a Preceptor with emphasis on the Level I clinical educational competencies.

AT 5230 Clinical Experience II (4 credits)

Clinical practice in athletic training under the direct supervision of a preceptor with emphasis on patient care and the safe and appropriate use of skills and techniques.

AT 5310 Clinical Anatomy II (3 credits)

Theory and practice of clinical anatomy as it pertains to the head, neck and upper extremity through the thoracic spine.

AT 5320 Evaluation and Diagnosis of Injuries and Illnesses II (4 credits)

Theory and practice of musculoskeletal evaluation and diagnosis as it pertains in the upper extremity through the thoracic spine.

AT 5330 Integrated Rehabilitation Techniques (3 credits)

Theory and practice of rehabilitation techniques as applied to individual physical pathologies.

AT 5340 Therapeutic Modalities II (2 credits)

Theory and practice of therapeutic modalities including electrotherapy.

AT 5350 Seminar in Athletic Training (1 credit)

Seminar addresses a year-one comprehensive exam process. All topics learned in the first year of the program are eligible for testing.

AT 5360 Research Methods & Statistics II (3 credits)

This course introduces quantitative research design, methods of measurement, and data analysis skills for health care professionals. Students will develop an understanding of quantitative design, while also developing skills to perform and interpret basic data analysis procedures relevant to athletic training.

AT 5400 Pharmacology for Athletic Trainers (3 credits)

Clinical pharmacology for athletic trainers as it relates to athletic training educational competencies.

AT 5410 Seminar in Athletic Training II (2 credits)

Seminar addresses a year-two comprehensive exam process. All topics learned in both years of the program are eligible for testing.

AT 5420 Scientific Inquiry and Research Presentation (3 credits)

This course will provide students with the foundational knowledge to evaluate scholarship and prepare works for scholarly dissemination. MSAT students will present their research findings to the group of faculty and students. All presentations will be graded by the faculty and be accepted or rejected.

AT 5430 Neuroscience for Athletic Trainers (3 credits)

This course will provide students foundational knowledge of neuroscience and how its application for common neuromuscular conditions (e. g. acute and chronic pain, somatic dysfunction, and motor neuron disorders) can be utilized in the clinical practice of athletic training to improve therapeutic outcomes. Students will examine and synthesize current research and case studies based on neuroscience principles and applications to ascertain the most appropriate therapeutic interventions to be utilized to improve patient healing and satisfaction.

AT 5470 Critical Issues in Athletic Training Clinical Practice (3 credits)

This course prepares students to recognize challenges and develop strategies for solving issues common in AT clinical practice.

AT 5500 Clinical Education III (2 credits)

Practice of athletic training clinical skills under the direct supervision of a preceptor with emphasis on the Level II clinical educational competencies.

AT 5510 Clinical Experience III (4 credits)

Clinical practice in athletic training under the direct supervision of a preceptor with emphasis on patient care and the safe and appropriate use of skills and techniques.

AT 5520 Clinical Education IV (2 credits)

Practice of athletic training clinical skills under the direct supervision of a preceptor with emphasis on the Level II clinical educational competencies.

AT 5530 Clinical Experience IV (4 credits)

Clinical practice in athletic training under the direct supervision of a preceptor with emphasis on patient care and the safe and appropriate use of skills and techniques.

AT 5870 Prevention and Health Promotion in Athletic Training (3 credits)

This course prepares AT students to develop and implement strategies to prevent the incidence and/or severity of injuries and illnesses and optimize patients overall health quality of life.

AT 6000 Doctoral Research and Dissertation (1-45 credits, max 99)

AT 6040 (s) Special Topics (1-16 credits, max 99)

Credit arranged

AT 6060 Professional and Post-Professional Education in Athletic Training (3 credits)

This course is designed to introduce historical background of professional and post-professional education for health care professions. Theoretical foundations and models of health care education will be compared and contrasted. The impact of educational models to health care will be explored. Development of criteria to govern the practicing professional in their chosen residency will be accomplished.

Preregs: Permission

AT 6070 Leadership & Mentoring in AT Clinical Practice (3 credits)

This course has been designed to initiate leadership and mentoring in AT clinical practice. Topics relating to leadership and mentoring will be discussed.

AT 6100 Advances in Manual Therapy (3 credits)

Selected readings from peer-reviewed articles will be examined and discussed. Translation of research findings to current clinical practice will be emphasized.

Prereqs: Permission

AT 6110 Integrative Manual Therapy (3 credits)

Translation of research findings to current clinical practice will be emphasized. Novel intervention theories, techniques, and strategies will be presented, discussed, and practiced as related to patient care and practice based evidence.

Prereqs: Permission

AT 6200 Research Methods and Evidence Based Practice in Patient Care (3 credits)

This course introduces common research performed in patient care. Development of in-depth understanding in areas and types of research underlying quantitative research design will be explored. Introduction to critiquing literature for the purpose of developing a theoretical framework will be included.

Preregs: Permission

AT 6210 Action Research in Patient Care (2 credits)

This course sets the foundation for action research in clinical practice. Development of a research question and justification with literature review will be employed. Purpose and methods of institutional review will be evaluated. Further discussion will elucidate the importance of becoming a scholarly practitioner.

Prereqs: Permission

AT 6220 Designing and Conducting Applied Research in Patient Care (2 credits)

This continues the process of applied research in clinical practice.

Development of methods to test a chosen hypothesis will be created.

Exploration of statistical methods to test the clinician's hypothesis will be compared. Dissertation proposal will developed.

Prereqs: AT 6200 and AT 6210

AT 6230 Introduction to Survey and Qualitative Research Design in Patient Care (3 credits)

This course introduces common qualitative methodologies and survey research design in patient care.

Preregs: AT 6200, AT 6210, and AT 6220

AT 6240 Advanced Quantitative Data Analysis and Interpretation in Patient Care (3 credits)

This course provides an in-depth analysis of quantitative research design and data analysis for health care professionals. The goal is to prepare health care students to apply quantitative research design and data analysis skills in patient care. Students will develop sound understanding of research design and be able to utilize regression, factor analysis, and multivariate data analysis skills to answer important research questions in patient care. Students will learn to interpret and disseminate their findings to other health care professionals.

Prereqs: AT 6200, AT 6210, AT 6220, and AT 6230

AT 6250 Scientific Writing for Publication in Patient (3 credits)

This course is a continuation of clinical research in healthcare and the completion of the Culminating Clinical Project (CCP).

Prereqs: AT 6200, AT 6210, AT 6220, AT 6230, and AT 6240 AT 6300 Holistic Foundations of Pain in Patient Care (2 credits)

This course explores current topics in clinical practice, related to the foundations of pain in the human body that influence quality care and methods of measurement and evaluation for quality assessment. Exploration to common instrumentation utilized by clinicians will be discussed and compared to literature utilizing the instruments for research purposes.

Prereqs: Permission

AT 6310 Theory and Application of Current and Novel Paradigms in Patient Care (2 credits)

Building on foundation of AT 6300, this course illustrates the implications of holistic theories of pain by exploring and integrating appropriate novel interventions within efficacious patient care.

Prereqs: Permission

AT 6320 Integrative Patient Care for the Spine and Pelvic Girdle (3 credits)

This course explores current topics and causes of musculoskeletal injuries to the spine and pelvis. An in-depth look at epidemiology, biomechanics, and other topics related to musculoskeletal injuries of the lumbar spine and pelvis will be emphasized.

Prereqs: Permission

AT 6330 Application of Advanced Practice Skills: A Practice-Based Approach (3 credits)

This course explores current topics of interest areas of practicing professionals. An in-depth look at theory, research, and art of the chosen interest area will be explored. Focus will be in critically analyzing areas such as anatomy, pathophysiology, biomechanics, theoretical framework, or ethical principles to explain the student's chosen topic.

Preregs: Permission

AT 6340 Introduction to Quantitative Data Analysis and Interpretation in Patient Care (2 credits)

This course introduces quantitative research design, methods of measurement, and introductory data analysis skills for health care professionals. The goals are for students to develop an introductory understanding of quantitative design, develop skills to perform basic data analysis procedures, and begin to develop the skills to interpret findings from quantitative data analysis research projects.

Preregs: Permission

AT 6350 Intermediate Quantitative Data Analysis and Interpretation in Patient Care (2 credits)

This course provides an in-depth analysis of quantitative research design and data analysis for health care professionals. The goal is to prepare health care students to apply quantitative research design and data analysis skills in patient care. The goals are for students to develop sound understanding of research design and be able to utilize correlational, reliability, and univariate data analysis skills to answer important research questions in patient care. Students will learn to interpret and disseminate their findings to other health care professionals.

Preregs: Permission

AT 6400 Clinical Residency and Analysis of Patient Care I (6 credits)

This course is designed to critically assess clinical skills and improve patient care of the practicing healthcare professional in a mentor guided model. Improvement in selected areas of clinical practice will be measured via formative and summative assessment that employs quantitative measures. Impact of the skill improvement to the organization and profession will be demonstrated.

Prereqs: Permission

AT 6410 Clinical Residency and Analysis of Patient Care II (6 credits)

This course is designed to critically assess clinical skills and improve patient care of the practicing healthcare professional in a mentor guided model. Improvement in selected areas of clinical practice will be measured via formative and summative assessment that employs quantitative measures. Impact of the skill improvement to the organization and profession will be demonstrated.

Prereqs: Permission

AT 6420 Clinical Residency and Analysis of Patient Care III (6 credits)

This course is designed to critically assess clinical skills and improve patient care of the practicing healthcare professional in a mentor guided model. Improvement in selected areas of clinical practice will be measured via formative and summative assessment that employs quantitative measures. Impact of the skill improvement to the organization and profession will be demonstrated.

Preregs: Permission

AT 6430 Clinical Residency and Analysis of Patient Care IV (6 credits)

This course is designed to critically assess clinical skills and improve patient care of the practicing healthcare professional in a mentor guided model. Improvement in selected areas of clinical practice will be measured via formative and summative assessment that employs quantitative measures do demonstrate improved patient care. Impact of the skill improvement to the organization and profession will be demonstrated. Summary of all impact of clinical residencies will be presented to the participant's organization

Prereqs: Permission