

Appalachian State University
Master of Science in Athletic Training
Plan of Study with Course Descriptions

Course Title and Description	Credit Hours (Total: 68)
Year 1 - Summer 1 (Credit hours: 6)	
<p><i>AT 5100 Gross Human Anatomy</i> A hands-on and laboratory-based course where students gain an advanced understanding of human anatomy. A systems-based and regional approach is complemented and reinforced by cadaver dissection. Emphasis is placed on musculoskeletal, articular, neurological and vascular systems, and surface palpation. Prerequisite: Acceptance into the MS- AT program. Corequisite: AT 5200.</p>	4
<p><i>AT 5200 Functional Human Anatomy</i> A seminar and laboratory-based course designed to provide students with an understanding of normal and aberrant patterns in human movement. Topics will include models of disablement; biomechanics, gait, and posture; measurement of joint motion; assessment of arthrokinematics; and assessment of muscle function. Prerequisite: Acceptance into the MS-AT program. Corequisite: AT 5100.</p>	2
Year 1 - Summer 2 (Credit hours: 5)	
<p><i>AT 5230 Principles of Injury Prevention</i> A comprehensive course focused on 1) injury prevention strategies and procedures, and 2) immediate emergent management and transportation. A systematic approach with position and consensus statements as guidelines will be utilized. Students will also be introduced to professional development and responsibilities and general athletic training facility protocols. Prerequisite: AT 5100.</p>	3
<p><i>AT 5290 Athletic Training Clinical Experience I</i> A guided, immersive clinical experience for the newly enrolled athletic training student. Students will gain introductory, practical experience in interdisciplinary and patient-centered care. Prerequisites: AT 5100, AT 5200.</p>	2
Year 1 - Fall Semester (Credit hours: 15)	
<p><i>AT 5300 Examination, Diagnosis, and Treatment I</i> A lecture and laboratory-based course that will instruct students on the clinical assessment, treatment, and rehabilitation of injuries to the spine, foot, ankle, knee, and hip. Using a patient-centered approach, students will identify activity limitations and underlying impairments, and develop interventions to maximize participation. Prerequisites: AT 5100, AT 5200. Corequisite: AT 5350.</p>	4
<p><i>AT 5350 Physiology of Injury</i> A lecture and laboratory-based course where students will develop an in-depth understanding of the physiology of health conditions. Using a patient-centered approach, students will apply this knowledge to the use of pharmacological, electromagnetic, acoustical, light and thermal modalities to facilitate the healing process and pain management for patients with both acute and chronic health conditions. Prerequisites: AT 5100, AT 5200. Corequisite: AT 5300.</p>	4

<p><i>AT 5370 Principles of Evidence Based Practice</i> An introduction to clinical research and evidence-based practice. Students will develop the skills necessary to locate, interpret, appraise, and apply the best available evidence in order to address questions arising in clinical practice. Research design, basic statistical analyses, and research interpretation and appraisal will be introduced.</p>	3
<p><i>AT 5380 Seminar in Clinical Reasoning I</i> A small-group, discussion-based course focused on an introduction to case- and inquiry-based learning. Students will navigate a series of facilitated case studies that will build on current and previous learning to develop clinical decision-making skills. Students will also be introduced to interprofessional practice as they engage in collaborative, patient-centered care. Cases will focus on prevention, examination, and treatment of injuries while reinforcing the principles of injury physiology and evidence-based practice. Prerequisite: Acceptance into the MS-AT Program or instructor approval.</p>	2
<p><i>AT 5390 Athletic Training Clinical Experience II</i> A guided, clinical experience for students enrolled in their initial fall semester. Students will gain practical experience in interdisciplinary and patient-centered care for injuries and illnesses with an introduction to evidenced-based practice. Practical experiences will emphasize application of previous and current learning. Prerequisite: AT 5290.</p>	2
<p>Year 1 - Spring Semester (Credit hours: 16)</p>	
<p><i>AT 5550 Manual Intervention Strategies</i> A clinical skills course designed to instruct students on intervention techniques capable of modifying joint motion and structural integrity of the musculoskeletal system throughout the healing process. These will include techniques to limit joint motion during the healing process, including casts, splints, and durable medical equipment; and those techniques to increase motion throughout the healing process, including joint mobilization and manipulation, muscular release techniques, and emerging therapies. Prerequisite: AT 5300.</p>	3
<p><i>AT 5570 Clinical Inquiry I</i> An applied research course during which students will develop a topic for their capstone or thesis project, construct a timeline, establish methods, and complete preparatory steps for their selected project. Regulatory and ethical standards for research will also be reviewed. Prerequisite: AT 5370.</p>	1
<p><i>AT 5600 Examination, Diagnosis, and Treatment II</i> A lecture and laboratory-based course that will instruct students on the clinical assessment, treatment, and rehabilitation of injuries to the head, face, and neck; shoulder; elbow; and wrist and hand. Students will learn the signs and symptoms of pathologies in this region, and gain practice in the assessment and intervention techniques for each injury. Prerequisite: AT 5300.</p>	4
<p><i>AT 5660 Clinical Medicine</i> A lecture and laboratory-based course that focuses on the application of anatomy and physiology to the pathogenesis of diseases and disorders as they relate to health professionals. Students will be able to systemically analyze contributing factors and evaluate signs and symptoms to make treatment and referral decisions including appropriate pharmacological options. Prerequisite: AT 5350.</p>	4
<p><i>AT 5680 Seminar in Clinical Reasoning II</i> A small-group, discussion-based course focused on advancement of case- and inquiry-based learning, interprofessional practice, and development of clinical decision-making skills and</p>	2

patient-centered practice. Students will navigate a series of facilitated case studies that will build on current and previous learning. Topics will include prevention, examination and treatment of various injuries and illnesses, therapeutic interventions, and evidence-based practice. Prerequisite: Acceptance into the MS-AT Program or instructor approval.	
<i>AT 5690 Athletic Training Clinical Experience III</i> A guided, clinical experience for students enrolled in their initial spring semester. Students will gain practical experience in interdisciplinary, patient centered and evidenced-based care for injuries and illnesses. Practical experiences will emphasize application of previous and current learning. Prerequisite: AT 5390.	2
Year 2 - Summer 3 (Credit hours: 3)	
<i>AT 5720 Behavioral Health</i> A course where students will develop an understanding of basic screening tools for behavioral health conditions and learn management strategies that utilize contemporary behavioral change theories to facilitate patient centered-care. The potential effects of social, environmental, and personal contextual factors on an individual's and community's health will be emphasized.	3
Non-credit internship opportunities	N/A
Year 2 - Summer 4 (Credit hours: 0)	
Non-credit internship opportunities	N/A
Year 2 - Fall Semester (Credit hours: 9)	
<i>AT 5790 Athletic Training Clinical Experience IV</i> A guided, immersive, clinical experience for athletic training students in their second year. Students will be fully immersed in on- or off-campus clinical sites and be fully engaged in interdisciplinary, patient-centered and evidenced-based care. Prerequisite: AT 5690; Successful completion with a passing grade of the year one comprehensive exam.	6
<i>AT 5810 Healthcare Administration and Information Management for Clinicians</i> A lecture-based course exploring contemporary healthcare delivery and administration as it relates to practicing athletic trainers. Healthcare management concepts, to be addressed with respect to the various settings in which athletic trainers practice, include the following: quality assurance and improvement, risk management, data driven decision making, strategic planning, facilities management and regulation, health informatics and electronic records management and coding.	3
Year 2 - Spring Semester (Credit hours: 14)	
<i>AT 5830 Applied Health & Prevention Strategies</i> A lecture and laboratory-based course to prepare graduate students in the application of nutrition, strength, and conditioning principles towards the prevention of injury. Topics will include weight management in physically active populations, sports nutrition, and the application of strength training principles towards preventing common athletic injuries. Students will develop and implement an exercise program designed to optimize health and performance and/or prevent injury in a physically active population.	3
<i>AT 5870 Implementation of Patient-Centered Care</i> A lecture-based course where students will examine the integration of evidence-based practice principles with the International Classification of Functioning (ICF) Model of Health to provide patient-centered care. Public health concepts, including but not limited to, epidemiological data analysis and interpretation and social determinants of health, will be applied to providing care and planning prevention programs. Prerequisites: AT 5370, AT 5810.	3

<p><i>AT 5880 Seminar in Clinical Reasoning III</i> A culminating seminar course focused on inquiry-based learning and interprofessional practice. Students will navigate a series of facilitated, complex case studies that will require synthesis of patient-centered care and reflection on previous learning. Prerequisite: Acceptance into the MS-AT Program or instructor approval.</p>	<p>2</p>
<p><i>AT 5970 Clinical Inquiry II</i> A research capstone course during which students will work in collaboration with their faculty research mentor to complete the project proposed in AT 5570 and prepare it for dissemination to both peers and the broader athletic training and medical community. Prerequisite: AT 5570. or <i>AT 5999 Thesis</i></p>	<p>3 or 3</p>
<p><i>AT 5990 Athletic Training Clinical Experience V</i> A guided, culminating, clinical experience for athletic training students in their final semester. Students will engage in interdisciplinary, patient-centered and evidenced-based care of injuries and illnesses while communicating, enhancing, and reflecting on their clinical reasoning as they prepare to transition into clinical practice. Prerequisite: AT 5790. Corequisite: AT 5870.</p>	<p>3</p>