

**Department of Athletic Training
Idaho State University
Learning Outcomes**

Course	Learning Outcomes
AT 6600 Foundations of Athletic Training	<ul style="list-style-type: none"> • Define evidence-based practice as it relates to athletic training clinical practice. • Describe and differentiate the types of quantitative and qualitative research; research components; and levels of research evidence. • Describe the mission of the NATA and BOC. • Identify the requirements for earning the ATC credential. • Explain and demonstrate the basic parameters of ethical conduct and standards of professional practice for athletic trainers. • Describe a team approach to the delivery of health care to athletes and physically active individuals, including production of outcome measures in practice. • State the principles used to design protective equipment. • Identify the different types of soft and hard materials used to make protective pads. • Explain the athletic trainer’s legal duty of care in selecting and fitting protective equipment. • List the agencies responsible for establishing material standards for protective devices. • Identify the information that should be documented to support an organization’s legal duty to provide safe equipment. • 14. Demonstrate proper selection and fitting of selected equipment (e.g., football helmets, mouthguards, and shoulder pads). • Identify and describe common protective equipment for the head and face, the torso, and the upper and lower body. • Differentiate between the HOPS and SOAP note format used to assess and manage musculoskeletal injuries. • Explain the general components to the history portion of an injury assessment. • Describe the processes involved in the visual observation and inspection of an injury. • Describe the basic principles that direct the palpation component of an injury assessment.

	<ul style="list-style-type: none"> • Identify the various types of tests included in the physical examination of an injury. • Explain and demonstrate the procedures used during an on-site injury assessment. • Identify emergency conditions that warrant immediate activation of the EMS system. • Describe the major mechanical forces that produce injury to biological tissues. • Explain the effect of the material constituents and structural organization of the skin, tendons, ligaments, muscles, and bone on their ability to withstand the mechanical loads to which each is subjected. • List common injuries of the skin, muscles, tendons, joints, and bone. • Explain wound care for both superficial and deep soft-tissue injuries. • Describe the appropriate immediate management of bone injuries. • Describe the activation of heat-regulating mechanisms in the body, including the methods used to generate heat via internal and external sources. • Demonstrate measurement of the heat stress index using a sling psychrometer. • Explain the methods used to prevent heat / cold illness. • Identify the signs and symptoms of heat-related / cold-related conditions. • Describe the appropriate management of heat-related / cold-related conditions. • Explain the impact of high altitude and poor air quality on exercise and sport performance. • Explain the dangers of lightning and list the lightning safety guidelines for sport and exercise participation. • Differentiate along the continuum of Sexual Exploitation and describe how to identify sexual harassment. • Identify where you are on the cultural competence spectrum.
<p>AT 6600L Foundations of Athletic Training Lab</p>	<ul style="list-style-type: none"> • Define evidence-based practice as it relates to athletic training clinical practice. • Describe and differentiate the types of quantitative and qualitative research; research components; and levels of research evidence.

	<ul style="list-style-type: none">• Implement disinfectant procedures to prevent the spread of infectious diseases and to comply with OSHA and other federal regulations.• Explain and demonstrate the basic parameters of ethical conduct and standards of professional practice for athletic trainers.• Describe a team approach to the delivery of health care to athletes and physically active individuals. Including the use of the ICF and PCOM.• Demonstrate the ability to take vital signs and identify criteria used to denote abnormal vitals.• Identify the different types of soft and hard materials used to make protective pads.• Identify the information that should be documented to support an organization's legal duty to provide safe equipment.• Demonstrate proper selection and fitting of selected equipment (e.g., football helmets, mouthguards, and shoulder pads).• Identify and describe common protective equipment for the head and face, the torso, and the upper and lower body.• Differentiate between the HOPS and SOAP note format used to assess and manage musculoskeletal injuries.• Explain the general components to the history portion of an injury assessment.• Describe the processes involved in the visual observation and inspection of an injury.• Describe the basic principles that direct the palpation component of an injury assessment.• Identify the various types of tests included in the physical examination of an injury.• Explain and demonstrate the procedures used during an on-site injury assessment.• Identify emergency conditions that warrant immediate activation of the EMS system.• Demonstrate proper procedures for transporting an injured individual.• Describe the major mechanical forces that produce injury to biological tissues.• Demonstrate how to measure core body temperature with a thermistor and rectal thermometer.• Demonstrate measurement of the heat stress index using a sling psychrometer.
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	<ul style="list-style-type: none"> • Explain the dangers of lightning and list the lightning safety guidelines for sport and exercise participation. • Differentiate along the continuum of Sexual Exploitation and describe how to identify sexual harassment.
<p>AT 6602 Pathophysiology and General Medical Assessment</p>	<ul style="list-style-type: none"> • Describe congenital or acquired abnormalities, physical disabilities, and diseases. • Identify common illnesses and diseases of the body based on contemporary epidemiological studies. • Recognize and discuss the signs and symptoms for the following conditions and /or body parts: <ul style="list-style-type: none"> ○ Eye pathology ○ Ear pathology ○ Mouth, sinus, oropharynx, and nasopharynx ○ Respiratory infection ○ Asthma ○ Cardiopulmonary conditions ○ Internal organs (gall bladder, kidneys, bladder, etc.) ○ Male and female reproductive organs ○ Sexually transmitted disease ○ Skin lesions ○ Contagious viral diseases ○ Diabetes ○ Seizures ○ Sleep apnea ○ Cancer • Describe the regulation of pharmaceuticals, including the management of prescription and nonprescription medication in an athletic training facility. • List the basic drug categories in which drugs are classified, including mechanism of action, side effects, and adverse effects. • Describe the causes of sudden death syndrome in athletics. • Obtain and demonstrate the following clinical skills during the semester: <ul style="list-style-type: none"> ○ Use of otoscope to examine ears and nasal passages ○ Use and interpretation of urine diagnostics chemstrips ○ Use of a stethoscope for heart, lung, and bowel sounds

	<ul style="list-style-type: none"> ○ Use of a glucometer to observe blood sugar levels ○ Use of a tympanic and an oral thermometer
<p>AT 6604 Continuum of Care I: Foot, Ankle, Leg</p>	<ul style="list-style-type: none"> ● Apply evidence-based practice as it relates to athletic training clinical practice. ● Discuss specific steps in the proper evaluation and documentation and referral of sports injury. ● Demonstrate knowledge related to specific anatomical structures in the lower extremities. ● Identify normal range of motion expectations of the lower extremities. ● Differentiate etiology and signs & symptoms of injuries and pathologies to the foot, ankle, and leg. ● Demonstrates knowledge of ROM, manual muscle tests, neurological, and special tests for assessing injuries to the foot, ankle, and leg. ● Review and outline specific management procedures for specific sports injuries of the foot, ankle, and leg. ● The student will become confident in his/her ability to take an accurate patient history. ● The student will become confident in his/her visual observation and palpation during an evaluation of an athletic injury. ● The student will learn and confidently perform orthopedic and functional tests to aide in the prognosis of an injury. ● The student will identify and perform rehabilitation concepts and programs appropriate for the rehabilitation of injury to the foot, ankle, and leg. ● The student will demonstrate knowledge and competence in the process of collection and interpretation of clinical outcome measures. ● The student will identify and perform the use of therapeutic modalities appropriate for treatment of injury to the foot, ankle, and leg.
<p>AT 6606 Continuum of Care II: Knee, Hip, Pelvis, Lumbar Spine</p>	<ul style="list-style-type: none"> ● Apply evidence-based practice as it relates to athletic training clinical practice. ● Discuss specific steps in the proper evaluation and documentation and referral of sports injury. ● Demonstrate knowledge related to specific anatomical structures in the knee, hip, pelvis, and lumbar spine.

	<ul style="list-style-type: none"> • Identify normal range of motion expectations of the knee, hip, pelvis, and lumbar spine. • Differentiate etiology and signs & symptoms of injuries and pathologies to the knee, hip, pelvis, and lumbar spine. • Demonstrates knowledge of ROM, manual muscle tests, neurological, and special tests for assessing injuries to the knee, hip, pelvis, and lumbar spine. • Review and outline specific management procedures for specific sports injuries of the knee, hip, pelvis, and lumbar spine. • The student will become confident in his/her ability to take an accurate patient history. • The student will become confident in his/her visual observation and palpation during an evaluation of an athletic injury. • The student will learn and confidently perform orthopedic and functional tests to aide in the prognosis of an injury. • Advise the patient on steps of rehabilitation of injury.
<p>AT 6608 Continuum of Care III: Upper Extremities</p>	<ul style="list-style-type: none"> • Apply evidence-based practice as it relates to athletic training clinical practice. • Discuss specific steps in the proper evaluation and documentation and referral of sports injury. • Demonstrate knowledge related to specific anatomical structures in the upper extremities. • Identify normal range of motion expectations of the upper extremities. • Differentiate etiology and signs & symptoms of injuries and pathologies to the upper extremities. • Demonstrates knowledge of ROM, manual muscle tests, neurological, and special tests for assessing injuries to the upper extremities. • Review and outline specific management procedures for specific sports injuries of the upper extremities. • Explore the components of both posture and gait analyses. • The student will become confident in his/her ability to take an accurate patient history. • The student will become confident in his/her visual observation and palpation during an evaluation of an athletic injury.

	<ul style="list-style-type: none"> • The student will learn and confidently perform orthopedic and functional tests to aide in the prognosis of an injury.
<p>AT 6612: Introduction to Therapeutic Modalities and Injury Rehabilitation Concepts</p>	<ul style="list-style-type: none"> • Illustrate and demonstrate understanding of the healing process. • Identify the proper use of common modalities used in the athletic training setting • Identify the selection of the proper modality for all stages of the healing process • Discuss the relationship between proper conditioning and the prevention of injuries. • Demonstrate proper technique for evaluation of all types of range of motion • Demonstrate the ability and describe the importance of joint mobility • Describe and demonstrate the differences between concentric, eccentric, isometric, isotonic and isokinetic exercise • Develop the psychomotor skills used in instructing the athlete as to rehabilitation and in evaluating progression throughout a rehabilitation program. • Illustrate the psychological aspects of injury and rehabilitation. • Perform and modify various techniques of therapeutic exercise. • Understand principles of regaining and maintaining neuromuscular control, range of motion, muscular strength, power, and endurance.
<p>At 6614 Professional Relationships and Issues in Athletic Training</p>	<ul style="list-style-type: none"> • Discuss aspects of orthopedic non-surgical procedures. • Develop, integrate, and discuss all aspects of an injury/condition observed while at PFC clinical education site. • Identify and discuss the psychological demands in the transgender population. • Discuss and utilize information regarding general aspects of pharmacology. • Identify the importance of understanding psychological aspects of injury • Discuss current topics in athletic training research and practice. • Describe the roles of athletic training in eating disorder recognition and referral. • Prepare to take and pass the BOC exam.

	<ul style="list-style-type: none"> • Identify how prosthetics are manufactured and specified for athletics use • Identify challenges of the first years of employment and how to minimize them • Identify different employment settings available to ATs. • Identify the importance of knowing the different roles within the NATA.
<p>AT 6640 Research Methods in Athletic Training</p>	<ul style="list-style-type: none"> • Find, Comprehend, and Synthesize scholarly research in the field of sport and physical activity (MSAT #3, CSAPa). • Describe and contrast research and literature resources including databases and online critical appraisal libraries that can be used for conducting clinically-relevant/applied searches. • Conduct a literature search using a clinical/applied question relevant to your specific field using search techniques and resources appropriate for specific questions in your field. • Describe and differentiate types of quantitative and qualitative research; research components; and levels of research evidence (MSAT #3, CSAPb) • Identify ethical issues related to the use of human subjects in social science research (MSAT #3). • Utilize and Integrate correct APA style in the body of a research proposal (CSAPb) • Construct an Introduction, Literature Review, and Methodology appropriate for a specific research question • Describe a systematic approach to create and answer a clinical or applied question through review and application of existing research. (MSAT#3, CSAPa,b) • Present a research proposal in a concise and professional manner (MSAT #3).
<p>AT 6645 Organization & Administration of AT Programs</p>	<ul style="list-style-type: none"> • Describe the composition of the sports medicine team, the roles of each member, the importance of communication amongst all team members and the appropriate role of the athletic trainer within the sports medicine team structure, including an understanding of physician supervision, as assessed through written examination and informal discussion.

• Demonstrate understanding of medical-legal implications of athletic training, including but not limited to the concepts of:

- Negligence
- Torts
- Standards of care (position statements, current literature, texts, practice standards, sport rules, etc.)
- Credentialing
- Record-keeping
- Pharmacology
- Modalities
- Infection-control
- Protective equipment
- Drug testing

as assessed through written examination and informal discussion.

- Describe the components of and the importance of an appropriate risk management/injury prevention program, as assessed through written examination, informal discussion, and practical application.
- Describe and compare the different components, advantages, and disadvantages of pre-participation physical examinations; design an appropriate pre-participation physical examination; and demonstrate an understanding of the disqualification process, as assessed through written examination, informal discussion, and practical application.
- Describe and compare the differences, advantages, and disadvantages of different budget models, and design an appropriate athletic training budget, as assessed through written examination, informal discussion, and practical application.
- Demonstrate knowledge of and the ability to access applicable human-resources information and statutes, including the hiring process, recruitment, interview techniques and limitations, acceptable hiring practices, and personnel management as assessed through written examination, informal discussion, and practical application.
- Describe and compare the advantages and disadvantages of different record-keeping models and software, and effectively develop

	<p>and utilize an appropriate record-keeping system, as assessed through written examination, informal discussion, and practical application.</p> <ul style="list-style-type: none"> • Describe and compare the differences in types of leadership/management styles and organizational structures, as assessed through written examination and informal discussion. • Develop an emergency plan, including such components as communication, transportation, referral policies, access to community-based emergent and non-emergent care centers, etc., and critically examine such plans for different venues utilizing appropriate standards, as assessed through written examination, informal discussion, and practical application. • Describe and compare the differences between the various types of insurance models and requirements and their impact on the delivery of athletic training services. • Describe the process of athletic training facility design, the various factors which must be considered when designing/renovating an athletic training facility, and design an appropriate athletic training facility, as assessed through written examination, informal discussion, and practical application. • Demonstrate knowledge of the process to obtain and maintain an athletic training credential, as assessed through written examination and informal discussion. • Analyze the strengths and weaknesses of a program and create and articulate vision and mission statements for a program, as assessed through written examination, informal discussion, and practical application. • Design and establish an outreach project in the community to educate others about the athletic training profession.
<p>AT 6651 Capstone Assessment</p>	<ul style="list-style-type: none"> • Find, comprehend, and critically evaluate scholarly research in the field of athletic training. • Identify, write, and critique components of a research study. • Design a research study in cooperation with their faculty mentor. • Conduct a thorough review of literature.

	<ul style="list-style-type: none"> • Utilize and integrate correct APA style within the research manuscript, proposal, and defense. • Prepare, propose, and defend a scholarly research study. • Create and present a poster of own research findings. • Submit an abstract to a scholarly presentation. • Submit a manuscript to a scholarly journal for publication.
<p>AT 6661 Clinical Experiences in Athletic Training I</p>	<ul style="list-style-type: none"> • Incorporate the concept of differential diagnosis into the examination process • Use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases, i.e. history taking, inspection/observation, palpation, functional assessment, selective tissue testing techniques, special tests, and neurological assessments. • Produce accurate clinical documentation • Incorporate the use of Patient Centered Outcomes into practice • Assess and interpret findings from a physical examination based on the patient’s clinical presentation. • Explain the creation and application of clinical prediction rules in the diagnosis and prognosis of various clinical conditions and apply the rules during the clinical examination process. • Initiate class discussions pertaining to clinical experiences. • Integrate didactic knowledge pertaining to joint injury management through the required clinical experiences.
<p>AT 6662 Clinical Experiences in Athletic Training I</p>	<ul style="list-style-type: none"> • Incorporate the concept of differential diagnosis into the examination process • Use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases, i.e. history taking, inspection/observation, palpation, functional assessment, selective tissue testing techniques, special tests, and neurological assessments. • Produce accurate clinical documentation • Incorporate the use of Patient Centered Outcomes into practice

	<ul style="list-style-type: none"> • Assess and interpret findings from a physical examination based on the patient’s clinical presentation. • Explain the creation and application of clinical prediction rules in the diagnosis and prognosis of various clinical conditions and apply the rules during the clinical examination process. • Initiate class discussions pertaining to clinical experiences. • Integrate didactic knowledge pertaining to joint injury management through the required clinical experiences.
<p>AT 6664 Clinical Experiences in Athletic Training IV</p>	<ul style="list-style-type: none"> • Apply standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases including, but not limited to: history taking, inspection/ observation, palpation, functional assessment, selective tissue testing techniques/ special tests, and neurological assessments. • Incorporate the concept of differential diagnosis into the examination process. • Assess and interpret finding from a physical examination that is based on the patient’s clinical presentation. • Explain the creation and application of clinical prediction rules in the diagnosis and prognosis of various clinical conditions and apply the rules during clinical examination procedures. • Analyze gait and select appropriate instruction and correction strategies to facilitate safe progression to functional gait pattern. • Extrapolate and integrate didactic knowledge pertaining to joint injury management through the required clinical experiences. • Evaluate experiences that have been presented during the semester and analyze the actions of him / herself, as well as his / her preceptor.
<p>AT 6665 Clinical Experiences in Athletic Training V</p>	<ul style="list-style-type: none"> • Apply standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases including, but not limited to: history taking, inspection/ observation, palpation, functional assessment, selective tissue testing techniques/ special tests, and neurological assessments. • Apply knowledge from previous courses to discuss general medical conditions observed clinically.

	<ul style="list-style-type: none"> • Assess and interpret finding from a physical examination that is based on the patient’s clinical presentation. • Extrapolate and integrate didactic knowledge pertaining to joint injury management through the required clinical experiences. • Create a study plan to prepare for the BOC exam. • Evaluate experiences that have been presented during the semester and analyze the actions of him/herself, as well as his/her preceptor.
<p>HPSS 5514 Athletic Performance Nutrition</p>	<p>Review:</p> <ul style="list-style-type: none"> • Carbohydrate, fat, protein, mineral, and vitamin metabolism and function • Popular ergogenic aids and sports performance • Nutrition quackery in health and sports • Current nutritional recommendations for improved physical performance • Fluid and electrolyte needs, use, function, and loss during sport performance • Calculation of energy intake, expenditure, and needs for athletes • Thermoregulation, fluid balance, and rehydration
<p>AT 6699 Traumatic Brain Injury and Neurological Assessment</p>	<ul style="list-style-type: none"> • Apply evidence-based practice as it relates to athletic training clinical practice. • Discuss specific steps in the proper evaluation and documentation and referral of sports injury. • Demonstrate knowledge related to specific anatomical structures in the head, neck, and spine. • Identify normal range of motion expectations of the head, neck, and spine. • Differentiate etiology and signs & symptoms of injuries and pathologies to the head, neck, and spine. • Demonstrates knowledge of ROM, manual muscle tests, neurological, and special tests for assessing injuries to the head, neck, and spine. • Review and outline specific management procedures for specific sports injuries of the head, neck, and spine. • The student will become confident in his/her ability to take an accurate patient history.

	<ul style="list-style-type: none">• The student will become confident in his/her visual observation and palpation during an evaluation of an athletic injury.• The student will learn and confidently perform orthopedic and functional tests to aide in the prognosis of an injury.
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