MS Athletic Training
Program-Level Student Learning Outcomes
Adapted from CAATE Standards

Section IV  Curricular Content  Prerequisite Coursework and Foundational Knowledge

54 The professional program requires prerequisite classes in biology, chemistry, physics, psychology, anatomy, and physiology at the postsecondary level.

55 Students must gain foundational knowledge in statistics, research design, epidemiology, pathophysiology, biomechanics and pathomechanics, exercise physiology, nutrition, human anatomy, pharmacology, public health, and health care delivery and payor systems.

Core Competencies: Patient-Centered Care

56 Advocate for the health needs of clients, patients, communities, and populations.

57 Identify health care delivery strategies that account for health literacy and a variety of social determinants of health.

58 Incorporate patient education and self-care programs to engage patients and their families and friends to participate in their care and recovery.

59 Communicate effectively and appropriately with clients/patients, family members, coaches, administrators, other health care professionals, consumers, payors, policy makers, and others.

60 Use the International Classification of Functioning, Disability, and Health (ICF) as a framework for delivery of patient care and communication about patient care.

Core Competencies: Interprofessional Practice and Interprofessional Education

61 Practice in collaboration with other health care and wellness professionals.

Core Competencies: Evidence-Based Practice

62 Provide athletic training services in a manner that uses evidence to inform practice.
Core Competencies: Quality Improvement

63 Use systems of quality assurance and quality improvement to enhance client/patient care.

Core Competencies: Health Care Informatics

64 Apply contemporary principles and practices of health informatics to the administration and delivery of patient care, including (but not limited to) the ability to do the following:

- Use data to drive informed decisions
- Search, retrieve, and use information derived from online databases and internal databases for clinical decision support
- Maintain data privacy, protection, and data security
- Use medical classification systems (including International Classification of Disease codes) and terminology (including Current Procedural Terminology)
- Use an electronic health record to document, communicate, and manage health-related information; mitigate error; and support decision making.

Core Competencies: Professionalism

65 Practice in a manner that is congruent with the ethical standards of the profession.

66 Practice health care in a manner that is compliant with the BOC Standards of Professional Practice and applicable institutional/organizational, local, state, and federal laws, regulations, rules, and guidelines. Applicable laws and regulations include (but are not limited to) the following:

- Requirements for physician direction and collaboration
- Mandatory reporting obligations
- Health Insurance Portability and Accountability Act (HIPAA)
- Family Education Rights and Privacy Act (FERPA)
- Universal Precautions/OSHA Bloodborne Pathogen Standards
- Regulations pertaining to over-the-counter and prescription medications

67 Self-assess professional competence and create professional development plans according to personal and professional goals and requirements.

68 Advocate for the profession.

Patient/Client Care: Care Plan
Develop a care plan for each patient. The care plan includes (but is not limited to) the following:

- Assessment of the patient on an ongoing basis and adjustment of care accordingly
- Collection, analysis, and use of patient-reported and clinician-rated outcome measures to improve patient care
- Consideration of the patient’s goals and level of function in treatment decisions
- Discharge of the patient when goals are met or the patient is no longer making progress
- Referral when warranted

### Patient/Client Care: Examination, Diagnosis, and Intervention

Evaluate and manage patients with acute conditions, including triaging conditions that are life threatening or otherwise emergent. These include (but are not limited to) the following conditions:

- Cardiac compromise (including emergency cardiac care, supplemental oxygen, suction, adjunct airways, nitroglycerine, and low-dose aspirin)
- Respiratory compromise (including use of pulse oximetry, adjunct airways, supplemental oxygen, spirometry, meter-dosed inhalers, nebulizers, and bronchodilators)
- Conditions related to the environment: lightning, cold, heat (including use of rectal thermometry)
- Cervical spine compromise
- Traumatic brain injury
- Internal and external hemorrhage (including use of a tourniquet and hemostatic agents)
- Fractures and dislocations (including reduction of dislocation)
- Anaphylaxis (including administering epinephrine using automated injection device)
- Exertional sickling, rhabdomyolysis, and hyponatremia
- Diabetes (including use of glucometer, administering glucagon, insulin)
- Drug overdose (including administration of rescue medications such as naloxone)
- Wounds (including care and closure)
- Testicular injury
- Other musculoskeletal injuries

Perform an examination to formulate a diagnosis and plan of care for patients with health conditions commonly seen in athletic training practice. This exam includes the following:

- Obtaining a medical history from the patient or other individual
- Identifying comorbidities and patients with complex medical conditions
- Assessing function (including gait)
- Selecting and using tests and measures that assess the following, as relevant to the patient’s clinical presentation:
ASSESSMENT

- Cardiovascular system (including auscultation)
- Endocrine system
- Eyes, ears, nose, throat, mouth, and teeth
- Gastrointestinal system
- Genitourinary system
- Integumentary system
- Mental status
- Musculoskeletal system
- Neurological system
- Pain level
- Reproductive system
- Respiratory system (including auscultation)
- Specific functional tasks
  - Evaluating all results to determine a plan of care, including referral to the appropriate provider when indicated

72 Perform or obtain the necessary and appropriate diagnostic or laboratory tests—including (but not limited to) imaging, blood work, urinalysis, and electrocardiogram—to facilitate diagnosis, referral, and treatment planning.

73 Select and incorporate interventions (for pre-op patients, post-op patients, and patients with nonsurgical conditions) that align with the care plan. Interventions include (but are not limited to) the following:
  - Therapeutic and corrective exercise
  - Joint mobilization and manipulation
  - Soft tissue techniques
  - Movement training (including gait training)
  - Motor control/proprioceptive activities
  - Task-specific functional training
  - Therapeutic modalities
  - Home care management
  - Cardiovascular training

74 Educate patients regarding appropriate pharmacological agents for the management of their condition, including indications, contraindications, dosing, interactions, and adverse reactions.
75 Administer medications or other therapeutic agents by the appropriate route of administration upon the order of a physician or other provider with legal prescribing authority.

76 Evaluate and treat a patient who has sustained a concussion or other brain injury, with consideration of established guidelines:

- Performance of a comprehensive examination designed to recognize concussion or other brain injury, including (but not limited to) neurocognitive evaluation, assessment of the vestibular and vision systems, cervical spine involvement, mental health status, sleep assessment, exertional testing, nutritional status, and clinical interview
- Re-examination of the patient on an ongoing basis
- Recognition of an atypical response to brain injury
- Implementation of a plan of care (addressing vestibular and oculomotor disturbance, cervical spine pain, headache, vision, psychological needs, nutrition, sleep disturbance, exercise, academic and behavioral accommodations, and risk reduction)
- Return of the patient to activity/participation
- Referral to the appropriate provider when indicated

77 Identify, refer, and give support to patients with behavioral health conditions. Work with other health care professionals to monitor these patients’ treatment, compliance, progress, and readiness to participate.

78 Select, fabricate, and/or customize prophylactic, assistive, and restrictive devices, materials, and techniques for incorporation into the plan of care, including the following:

- Durable medical equipment
- Orthotic devices
- Taping, splinting, protective padding, and casting

Prevention, Health Promotion, and Wellness

79 Develop and implement strategies to mitigate the risk for long-term health conditions across the lifespan. These include (but are not limited to) the following conditions:

- Adrenal diseases
- Cardiovascular disease
- Diabetes
- Neurocognitive disease
- Obesity
- Osteoarthritis
80 Develop, implement, and assess the effectiveness of programs to reduce injury risk.

81 Plan and implement a comprehensive preparticipation examination process to affect health outcomes.

82 Develop, implement, and supervise comprehensive programs to maximize sport performance that are safe and specific to the client’s activity.

83 Educate and make recommendations to clients/patients on fluids and nutrients to ingest prior to activity, during activity, and during recovery for a variety of activities and environmental conditions.

84 Educate clients/patients about the effects, participation consequences, and risks of misuse and abuse of alcohol, tobacco, performance-enhancing drugs/substances, and over-the-counter, prescription, and recreational drugs.

85 Monitor and evaluate environmental conditions to make appropriate recommendations to start, stop, or modify activity in order to prevent environmental illness or injury.

86 Select, fit, and remove protective equipment to minimize the risk of injury or re-injury.

87 Select and use biometrics and physiological monitoring systems and translate the data into effective preventive measures, clinical interventions, and performance enhancement.

**Health Care Administration**

88 Perform administrative duties related to the management of physical, human, and financial resources in the delivery of health care services. These include (but are not limited to) the following duties:

- Strategic planning and assessment
- Managing a physical facility that is compliant with current standards and regulations
- Managing budgetary and fiscal processes
- Identifying and mitigating sources of risk to the individual, the organization, and the community
- Navigating multipayor insurance systems and classifications
- Implementing a model of delivery (for example, value-based care model)

89 Use a comprehensive patient-file management system (including diagnostic and procedural codes) for documentation of patient care and health insurance management.
Establish a working relationship with a directing or collaborating physician.

Develop, implement, and revise policies and procedures to guide the daily operation of athletic training services.

Develop, implement, and revise policies that pertain to prevention, preparedness, and response to medical emergencies and other critical incidents.

Develop and implement specific policies and procedures for individuals who have sustained concussions or other brain injuries, including the following:

- Education of all stakeholders
- Recognition, appraisal, and mitigation of risk factors
- Selection and interpretation of baseline testing
- Agreement on protocols to be followed, including immediate management, referral, and progressive return to activities of daily living, including school, sport, occupation, and recreation

Develop and implement specific policies and procedures for the purposes of identifying patients with behavioral health problems and referring patients in crisis to qualified providers.