Curriculum

The Emergency & Primary Care in Athletic Training Practice (EPCAT) certificate prepares certified athletic trainers a streamlined evidence-based approach to the most current emergency/primary care literature and skills for athletic trainers to practice in a dynamic healthcare society. This post-professional certificate integrates advanced didactic knowledge and clinical skills through case based methods focusing on the synthesis and analysis of diseases across the lifespan, concussion and neuroplasticity, environmental conditions, catastrophic injury management, skin closures, IV implementation, and orthopedic casting and splinting. Integration of diagnostic tests and instrumentation used in the evaluation and assessment of musculoskeletal, neurological, circulatory and general bodily system conditions such as blood testing, MRI, CT, diagnostic ultrasound and Doppler are included. Evidence based patient centered care and advanced management is the focus of this certificate.

For educators who are seeking ways to teach emergency and primary care didactic and clinical skills, the courses in the certificate include an educator’s pathway to learn instructional designs, methods, delivery and assessment accumulating into focused lesson plans.

This certificate is completed in a hybrid approach to maximize online education dialogue and a robust immersion experience. Course engagement will be highlighted through interaction with peers and instructors using state of the art technology. Discussion boards will provide for a rich dialogue focusing on evidence based approaches to current medical advancements.

Program Outcomes
At the completion of the Emergency & Primary Care in Athletic Training Practice certificate program the certified athletic trainer is expected to:
   1. Orchestrate, manage and treat catastrophic injuries using appropriate emergency response procedures
2. Examine, prescribe and construct orthopedic devices to best treat and manage orthopedic injuries
3. Analyze and create care plans based on findings from appropriate diagnostic biometric testing/instruments
4. Analyze the impact lifespan diseases and injuries have on the physically active populations.
5. Distribute and administer oral, intravenous, and injectable medications for a variety of conditions across the lifespan under the auspices of a qualified medical professional.
6. Interpret appropriate biomedical lab test for a variety of conditions across the lifespan to create appropriate treatment and management plans in collaboration with a variety of healthcare professionals.
7. Articulate prevention measures grounded in evidence-based medicine for contemporary prevention topics such as mild brain injury, environmental illnesses, and musculoskeletal injuries.
8. Examine how external factors such as nutrition, hydration, prophylactic taping and bracing, and others influence the incidence, management and prevention of injuries associated with physically active populations.
9. Research and review healthcare technology applications used for emergency and primary care in athletic training practice.

**Admission Requirements**
1. Current BOC certification or state licensed.
2. Possess information technology skills sufficient to participate effectively in an online learning management system, such as, Web Study, Blackboard, Angel, and Canvas.

Students do not have to take courses in a certain sequence. Students are expected to complete the program in a 12 month period. Courses are offered in 10 and 12 week terms.
## Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Delivery Format</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATH 710</td>
<td>Preventative Practices</td>
<td>2</td>
<td>Online</td>
<td>Fall</td>
</tr>
<tr>
<td>ATH 720</td>
<td>Orthopedic Applications &amp; Procedures</td>
<td>2</td>
<td>Online</td>
<td>Winter</td>
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<tr>
<td>ATH 720L</td>
<td>Orthopedic Applications &amp; Procedures Lab</td>
<td>1</td>
<td>Blended With onsite summer immersion session*</td>
<td>Summer</td>
</tr>
<tr>
<td>ATH 730</td>
<td>Emergency Procedures &amp; Care</td>
<td>2</td>
<td>Online</td>
<td>Summer</td>
</tr>
<tr>
<td>ATH 730L</td>
<td>Emergency Procedures &amp; Care Lab</td>
<td>1</td>
<td>Blended With onsite summer immersion session*</td>
<td>Summer</td>
</tr>
<tr>
<td>ATH 740</td>
<td>Biomedical Testing &amp; Imaging</td>
<td>2</td>
<td>Online</td>
<td>Summer</td>
</tr>
</tbody>
</table>

**Total Program Required Credits: 10**

*Immersion onsite session for ATH 720 Orthopedic Applications & Procedures will correspond with the scheduled onsite dates for ATH 730 Emergency Primary Care Procedures. Students will only be required to travel to campus for one onsite session. Onsite immersion experience is 3 days and will be held over a weekend (i.e. Friday through Sunday or Thursday through Saturday) to support the employed athletic trainer's lifestyle.

**NOTE:** Due to the covid-19 pandemic, the on-site summer immersion session during the Summer 2020 semester has been cancelled. Students will be able to attend the on-site session in the Summer 2021 semester, dates TBD.

## Course Descriptions

**ATH 710 Preventative Practices** *(2 credits; Online)*

This course is focused on the care of the physical active person with chronic disease including asthma, diabetes, sickle cell anemia and other comorbidities. Students will be exposed to analysis contemporary topics in athletic training clinical practice such as mild brain injury, environmental illness and musculoskeletal injuries analyzing best preventative practices. Care plans will be evaluated and protocols will be created. Technological advances in injury prevention measures such as clothing, concussion equipment, protective devices and disease triggers are evaluated. This course is delivered totally online.

Content and dates are subject to change
ATH 720  Orthopedic Applications & Procedures  (2 credits; Online)
The use of a joint immobilization is indicated for a wide variety of orthopedic injuries that include fractures, sprains, and post-operative care. This course emphasizes casting and splinting techniques, assessment and treatment of casting complications, application of specialty casts, and interventions used during immobilization to address movement dysfunctions. In addition, proper fracture and joint dislocation reduction/relocation techniques are addressed. This course is associated with an onsite immersion experience (ATH 720L).

ATH 720L  Orthopedic Applications & Procedures Lab  (1 credit; On-site Immersion)
Onsite applications include assessment, preparation of a patient for orthopedic dysfunction care. Various fractures will be assessed and prepared for appropriate care. The selection, fabrication and removal of orthopedic casts and splints, as well as the skills associated with providing patient instructions and home care. Joint dislocations are evaluated and treated with appropriate orthopedic techniques. Simulated patient encounters are included.

ATH 730  Emergency Procedures & Care  (2 credits; Online)
This course is designed to provide an intensive study of emergency care skills in the area of ambulatory medicine. This comprehensive course provides the learner exposure to urgent and emergent medical procedures in catastrophic settings. Contemporary medical emergencies include chemical and biological exposure and mass casualty. Students have opportunities to participate in learning labs focusing on catastrophic wound care, skin closures, advanced cardiovascular support and administering intravenous fluids/medications. This course is associated with an onsite immersion experience (ATH 730L).

ATH 730L  Emergency Procedures & Care Lab  (1 credit; On-site Immersion)
The onsite immersion prepares the student to respond to catastrophic events with advance medical procedures to treat chemical and biological exposures. Advanced wound care and cardiovascular procedures is applied to simulated learning.

ATH 740  Biomedical Testing & Imaging  (2 credits; Online)
This course is designed to develop a functional understanding of the appropriate uses and interpretations of clinical diagnostic testing commonly used to address musculoskeletal injuries and illnesses. Discussion of blood analysis, CT, MRI, X-Ray, and Diagnostic Ultrasound is stressed along with interpretation of results. Anatomical structures and sectional anatomy are emphasized as well as joint and tissue injection. This course is delivered totally online.