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LEVEL II — Category D: Non-Approved Provider Programs

<table>
<thead>
<tr>
<th>Possible Activities by non-BOC Approved Providers</th>
<th>Number of CEUs</th>
<th>Required Documentation</th>
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<tr>
<td>This category includes attendance at a professional program that presents educational content at or above entry level</td>
<td>1 CEU per contact hour (Maximum - 28 CEUs if 50 CEUs due; 14 CEU maximum if 25 CEUs due)</td>
<td>Verification of attendance including number of contact hours, event date and a copy of the event program that includes a description and objectives</td>
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According to the education levels described by the BOC, the following continuing education course is considered to be Advanced Level.

**Contact Hours = 12**

**LEARNING OBJECTIVES**

*Friday May 11, 2018*

**The NCAA and Student-Athlete Wellness**

Presented by: Brian Hainline, MD, NCAA Chief Medical Officer

Learning Objectives:
1. Review the mission and vision of the NCAA.
2. Outline strategic priorities including cardiac health, concussion, doping & substance abuse, mental health, nutrition, sleep & performance, overuse injuries and periodization, sexual assault and interpersonal violence, athletics healthcare administration and data-driven decisions.
3. Discuss Unified Standards of Care.

**Health and Wellness: Assessing Student-Athlete Health and Performance**

Presented by: Matthew McQueen, ScD, University of Colorado

Learning Objectives:
1. Discuss the comprehensive approach to optimize the academic, athletic, health, and wellness experience of student-athletes.
2. Assess important indicators of student-athlete health and wellness, specifically information within the Pac 12 SIRMAP and implement best practices for sustainable student-athlete training and performance throughout the Pac 12.

**Overuse Injuries/Injury Prevention: A Prospective Study to Improve Bone Health**

Presented by: Aurelia Nattiv, MD, UCLA; Michael Fredericson, MD, Stanford University

Learning Objectives:
1. Review data collection that assesses risk factors of bone stress injuries in female collegiate distance runners.
2. Discuss strategies to improve the health, reduce the incidence and severity of bone stress injuries, and shorten recovery time in this population.

**Overuse Injuries/Injury Prevention: Integration of Biomechanics-based Informatics for Prevention of Stress Fractures**

Presented by: Mike Hahn, PhD, University of Oregon

Learning Objectives:
1. Discuss data collection of runners’ biomechanical information such as foot motion patterns, foot-to-ground contact patterns, and accelerations and tracking of stress fracture development over a three-year period to see which biomechanical patterns are associated with development of stress fractures.
2. Identify what biomechanics-based information can be integrated with already known risk factors such as nutrition status and training volume/intensity to predict runners who are at a higher risk of stress fracture.

**Injury Prevention: Simple Motion Capture Technology for Readiness of Return to Sport Assessment and Injury Risk Prediction**

Presented by: Christopher Kweon, MD, University of Washington; Albert Gee, MD, University of Washington

Learning Objectives:
1. Discuss the comparison of a low cost simple motion capture technology to the gold standard motion capture technology.
2. Review data collection of functional movement data collected in health volunteers used in both systems and review results to determine which system is the better option to measure abnormal joint movements and help facilitate safe return to sports after injury.

**Thermal Management for Athletes: Problems and Opportunities**

Presented by: Craig Heller, PhD, Stanford University

Learning Objectives:
1. Review data collection that assesses telemetric changes in body temperature of athletes during practice and competition as a function of environmental conditions.
2. Discuss comparative studies of methods to achieve rapid recovery from hyperthermia and studies the benefits of heat extraction in physical conditioning of female athletes.

**Cardiovascular Screening in the Pac 12 Conference: Establishing Best Practices**

Presented by: Kim Harmon, MD, University of Washington

Learning Objectives:
1. Answer critical questions regarding screening for cardiovascular conditions that predispose athletes to sudden death by comparing the schools that screen with history and a physical to those that add a screen with history and a physical to those that add an electrocardiogram.
2. Compare conditions identified, total costs, costs per diagnosis, time lost from competition, and any adverse outcomes related to screening with each strategy.

**Bridging the Gap: An Analysis of Meeting Relational Challenges of Inter-generational Populations**

Presented by: Duncan Simpson, PhD, IMG Academy

Learning Objectives:
1. Identify challenges of personal interactions across generations.
2. Understand the characteristics of different generations.
3. Discuss strategies on how to connect to student-athletes.

**Sleep Essentials for Optimizing Performance in Elite Athletes**

Presented by: Amy Athey, PhD, University of Arizona

Learning Objectives:
1. Discuss the medical physiology of sleep
2. Understand the effects of sleep on mental health.

**Performance Psychology: Helping Athletes Return from Injury**

Presented by: Christina Fink, PhD, HP Sports/Philadelphia Union

Learning Objectives:
1. Discuss the Injury Performance Model and discuss the implications of injury on mental health.
2. Review the role of motivation during injury.
3. Identify coping strategies to manage the stress responses to injury.
Learning Objectives:
1. Depict the current organization and application of mental health support and policies for student athletes across the NCAA Power 5 Conferences athletic departments.
2. Identify the perception of mental health from a student athlete perspective to understand their individual and team perceptions, help-seeking behavior, and preferences for preventative interventions.
3. Utilize current research on universal and targeted prevention for depression, anxiety, and stress outcomes to determine best practices and future directions for implementation of programs in collegiate student-athlete settings.

Mental Health and Head Trauma: Brain Health in Male and Female Basketball Players at the University of Utah
Presented by: Deborah Yurgelun-Todd, PhD, University of Utah; Charlie Hicks-Little, PhD, University of Utah
Learning Objectives:
1. Discuss the association between concussive symptoms, mood states, cognitive performance, and brain changes in female and male basketball student-athletes and football student-athletes.

Targeting in Football
Presented by: David Coleman, Head of Pac 12 Officiating
Learning Objectives:
1. Review targeting rules in NCAA football.
2. Discuss safety concerns and consequences of reckless contact between football players.

Understanding Concussion Pathobiology; Balancing Risk and Benefit
Presented by: Christopher Giza, MD, UCLA
Learning Objectives:
1. Review pathobiology of concussion.
2. Discuss issues relevant to sport concussion and the risk vs benefit of participation in sport.

What is the Role of Sex in Sports-Related Concussion?
Presented by: Meeryo Choe, MD, UCLA
Learning Objectives:
1. Discuss the physiology of concussion as it relates to sex differences.
2. Review return-to-play protocols and the implications of sex in concussion management.

Concussion Clinical Profiles: Emerging Evidence
Presented by: Anthony Kontos, PhD, University of Pittsburgh
Learning Objectives:
1. Discuss varying profiles of concussion presentation.
2. Discuss varying profiles of concussion presentation.

Treatment of Concussion with Sub Threshold Exercise
Presented by: Barry Willer, PhD, University of Buffalo
Learning Objectives:
1. Review return-to-play management of concussion and the role of sub threshold exercise.
2. Discuss the autonomic nervous system dysfunctions associated with concussion.
3. Outline the effects of exercise on the autonomic nervous system.

Concussion Management and the Effectiveness of Rehabilitation Techniques
Presented by: Randy Cohen, ATC, PT, University of Arizona
Learning Objectives:
1. Review current management of concussion and return-to-play protocols.
2. Discuss the effectiveness of the utilization of rehabilitation in post-concussion cases.

Supplements for Return to Play/Injury Protocols
Presented by: Becci Twombly, RD, University of Southern California
Learning Objectives:
1. Identify macronutrients required for growth and recovery.
2. Understand the effects of nutrient timing on the administration of modalities and rehabilitation techniques.
3. Provide resources for practical application of nutrient delivery in the student-athlete population.

Head Trauma: Roles of Nutritive Support and Supplementation
Presented by: Ryan Cobb, ATC, University of California, Berkeley
Learning Objectives:
1. Review the findings that patients with traumatic brain injury (TBI) are often undernourished, meaning the brain has less fuel sources to use for healing.
2. Discuss whether or not supplementation with lactate on the background of adequate nutrition will improve TBI recovery by giving the brain an extra fuel source.

Pac 12 and NCAA Collaboration-CARE (Concussion Assessment, Research & Education) Consortium Data Collection: Establishing a Research Infrastructure and Framework & Pac 12 Equipment Grant Implementation
Presented by: Doug Aukerman, MD, Oregon State University; Matthew McQueen, ScD, University of Colorado; Theresa Hernandez, PhD, University of Colorado; Adam Bohr, PhD, University of Colorado
Learning Objectives:
1. Discuss the first full-conference regional research hub of the landmark CARE Consortium, which is a multi-site, longitudinal investigation of concussion and repetitive head impacts in NCAA athletes and military service academy cadets that addresses major gaps in the understanding of concussion.

Pac 12 Student-Athlete Project on Developing Coach Education
Presented by: Emily Kroshus, ScD, University of Washington; Sara Chrisman, MD, University of Washington
Learning Objectives:
1. Review the evidence-based, easily scalable educational programs for college coaches about

Saturday May 12, 2018

Air Quality and Event Management
Presented by: Sunday Henry, MD, Washington State University
Learning Objectives:
1. Review safety concerns of participation in outside sporting events during inclement weather conditions with poor air quality.
2. Suggest best practices for management of hazardous environmental situations and policies for activity restriction.

Mental Health: Screening Student-Athletes
Presented by: Kelli Moran-Miller, PhD, Stanford University; Kate Geiger, PhD, Washington State University
Learning Objectives:
1. Review best practices concerning screening for mental health conditions in student-athletes.
2. Discuss current policies and procedures in the Pac 12 conference regarding screening type and screening frequency.

Management of a Student-Athlete Death
Presented by: Christopher Bader, PhD, University of Colorado; Fernando Frias, PhD, Oregon State University; Kate Geiger, PhD, Washington State University
Learning Objectives:
1. Discuss the implications of a student-athlete death on an athletic department.
2. Review policies and procedures for response management.

Food Tracking and Technology: Benefits and Pitfalls
Presented by: Lauren Pananos, RD, UCLA
Learning Objectives:
1. Examine the benefits and downsides of using technology that can have on student athletes.
2. Identify the best procedures and methods for utilizing food technology in practice.

Diagnostic Ultrasound vs MRI for Soft Tissue Imaging and RTP Decisions
Presented by: Daniel Vigil, MD, UCLA; Jeremy Vail, PT, ATC, UCLA
Learning Objectives:
1. Review best practices for diagnosis of soft tissue injuries and return-to-play protocols.
2. Discuss the diagnostic tools available and alternative strategies for utilization of ultrasound for return to sport.
Femoral Acetabular Impingement in Collegiate Athletes
Presented by: Steven Aoki, MD, University of Utah
Learning Objectives:
1. Review etiology of hip injuries and biomechanical considerations, specifically femoral acetabular impingement.
2. Discuss treatment strategies including injury prevention and conservative management.

Cannabidiol (CBD) Oil and Current Uses
Presented by: Ema Thake, RD, University of Washington
Learning Objectives:
1. Review the chemical profile and pharmacology of CBD Oil.
2. Discuss current utilization and positive/negative effects of use as it pertains to student-athletes.

Current Approaches to Cartilage Repair and Restoration in High Demand Athletes
Presented by: Kris Jones, MD, UCLA
Learning Objectives:
1. Discuss current research and approaches to management of cartilage injuries in athletes.
2. Review alternative surgical procedures and effective management of cartilage repair.

Femoral Acetabular Impingement: Evidence Based Rehabilitation
Presented by: Jill McVey PT, ATC, University of Puget Sound
Learning Objectives:
1. Review current practices in the rehabilitation concepts for femoral acetabular impingement.
2. Discuss appropriate management and return to play protocols post-injury.

USADA Drug Education
Presented by: Stacy Michael Miller, USA Swimming
Learning Objectives:
1. Review USADA drug testing procedures.
2. Discuss prescription medication management and potential risks for consumption by student-athletes as it related to USADA rules and regulations.

Mental Health De-stigmatization: Challenges, Strategies & Successes
Presented by: Jonathan Ravarino, PhD, University of Utah; David Mikula, PhD, University of Oregon; Kelli Moran-Miller, PhD, Stanford University; Melinda Kirschner, PhD, UCLA; Fernando Frias, PhD, Oregon State University
Learning Objectives:
1. Identify sources of mental health stigma in the general population and the athlete population.
2. Discuss strategies to normalize mental health care.