Department of Kinesiology

KIN 280: Introduction to Athletic Training (2)

Fall 2018

Tuesday, 10:00am - 11:40am (LSCC #205B)

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PLNU MISSION

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

COURSE DESCRIPTION

This course equips students to recognize and provide care for the most commonly occurring orthopedic injuries to active individuals. Students will become proficient in using an objective evaluation methodology to recognize and differentiate injury, to determine if referral to medical care is required, and to decide return-to-play status.

1. We will learn the systematic application of the H.I.P.S. and S.O.A.P. methods of assessment.
2. Clinical role-playing in the lab setting will allow students to practice and master injury/illness examination through the use of the differential diagnosis process.

Kinesiology Department Learning Outcomes

1. Students will engage and demonstrate competence in current knowledge in human movement, physical fitness and allied healthcare; evidenced by the ability to critically evaluate, creatively apply and effectively communicate essential information in their discipline.
2. Students will demonstrate an appreciation for the beauty and gift of the human body—and the benefits of optimal health and physical fitness—by actively pursuing a healthy lifestyle.
3. Students will apply their emerging knowledge for the benefit of their clients, patients and the community.
4. Students will serve others in clinical, educational and/or athletic settings as they live out their vocation & calling.

Athletic Training Education Program (ATEP) Learning Outcomes

1. Students will demonstrate cognitive and psychomotor competence in the 12 content areas of the Athletic Training Educational Competencies.
2. Students will exhibit advancing clinical proficiency in the practice of Athletic Training through development in knowledge, psychomotor skills and clinical reasoning, and through application of evidence-based decision making.
3. Students will be able to speak and write coherently on information in their discipline, and to communicate it effectively to a target audience.
4. Students will prepare to serve a diverse environment through experience with a variety of patient populations and clinical settings, and with various allied healthcare professionals.
5. Graduates will demonstrate the knowledge and skills required of an entry-level Certified Athletic Trainer.
6. Students and graduates will demonstrate the common values and behaviors of the Athletic Training profession in a distinctly moral and ethical manner, integrating the Christian faith with clinical practice.
7. Graduates will be prepared for careers that utilize Certified Athletic Trainers &/or graduate study or other employment in allied healthcare professions.

KIN 280 Learning Outcomes

Upon completing this course, students should be able to:

1. Delineate the realm of sports medicine and understand the profession of Athletic Training within the healthcare system.
2. Be conversant in the medical terminology related to Athletic Training and sports medicine.
3. Understand and utilize the components of the orthopedic examination process to identify the cause and signs & symptoms of the most common athletic injuries and illnesses.
4. Identify the methods for preventing, evaluating and treating injuries and illnesses that occur in the active population.

COURSE TEXTBOOK

Title	Essentials of Athletic Injury Management with ESims (9th ed)
Author	William E. Prentice; Daniel D. Arnheim
ISBN	ISBN: 978-0-07-738201-8 *May also buy 9th Edition: ~$40
Library Resource	Kinesiology Library Link

COURSE REQUIREMENTS

1. Pre-Class Quizzes	*10 @10-20 pts each*	*100-120 pts*
2. Article Critique	2 @ 15 pts each	30pts
3. Unit Exams	4 @100 pts each	400pts
4. Final Exam	120 pts	120 pts
5. Group Wiki project	1 @ 40 pts	1 @ 40 pts
	TOTAL	**700-720 points**

COURSE GRADING

A	Greater than 92	**C+**	77-79
A-	90-92	**C**	73-76
B+	87-89	**C-**	70-72
B	83-86	**D**	63-66
B-	80-82	**D-**	60-62

COURSE ASSIGNMENTS

- **Quizzes**- online (Canvas) quizzes will enable you to read and interact with concepts prior to discussion in class; therefore the quizzes are "open-book". You must complete each quiz corresponding to the material prior to the class where that topic is discussed. Due dates for each quiz are listed in Canvas. No provision will be made for make-up quizzes.

- ***Article Critiques****-you will have two experiences in reading, evaluating and communicating the scientific literature regarding two topics in sports medicine. These assignments will reinforce learning in two areas via an additional exposure to current topics using scientific based peer-reviewed journals (e.g., American J of Sports Medicine, Physician and Sports Medicine, J of Athletic Training, Physical Therapy, J of Orthopedic and Sports PT, J of Strength Training and Conditioning, Sports Health, JAMA)*

    - **Details:** To supplement the textbook and our in-class discussions, you will be asked to read 2 research articles published recently in sports medicine journals and write a reaction/critique paper in AMA style. The topics of the articles will be of your choosing and must coincide with topics covered in class lecture. The intent of this assignment is for the student to be exposed to recent advances in the assessment, treatment, and/or rehabilitations of athletic injuries. **You may be asked to share key findings with the class and contribute to a brief discussion while we cover the material in lecture.
    - **Format:** each critique should be no longer than 2 double-spaced pages, 12pt font, 1 inch margins. No title page, abstract or references are necessary.
    - **Specific content requirements**: you should write your paper using these four components:

        1. Bibliographic information (e.g., author, title, journal, volume, pgs, yr)
        2. Key points of article: Provide a brief overview of the major points of the article: *focus on new information and any new perspective that you learned.*)
        3. Critique: Identify the major *Strengths & Weaknesses* of the article.
        4. Synthesis: Provide a practical application of the information. (This is a crucial component where you cite the 'take-home' lesson you learned. How will this affect or change your future practice as a professional?)

- **Group Video Public Service Announcement:** -students will be assigned to groups in order to accomplish in-depth analysis of one of the following topics. The finished product should thoroughly present the topic and should be aimed at educating the general public. More information will be handed out in class

    - **Possible Topics Include:**

        1. Sports Nutrition: Fueling Optimal Athletic Performance
        2. Addressing Disordered Eating: Strategies for health weight loss and weight gain

3. Managing traumatic injuries in sports

- **Unit exams-** you will have exams at the completion of each specific unit of study, generally about 4-5 weeks apart. The professor understands the travel schedule of student athletes and Athletic Training Students; however, no provision is made for make-up exams other than those outlined in the Handbook. All students must arrange with professor to complete exams before any scheduled athletic competition.

FINAL EXAMINATION POLICY

a comprehensive exam will be given. Please arrange any travel plans according to our final exam date since no provision is made for a make-up final. Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved.

NOTE: The following policies are to be used without changes:

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See Academic Policies for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See Disability Resource Center for additional information.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences

exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See Academic Policies in the Undergraduate Academic Catalog.

Introduction to Athletic Training: Jeff Sullivan, PhD, ATC

KIN 280

Code	Competency/Proficiency
RM-C3	Identify and explain the epidemiology data related to the risk of injury and illness related to participation in physical activity.
RM-C4	Identify and explain the recommended or required components of a preparticipation examination based on appropriate authorities' rules, guidelines, and/or recommendations.
RM-C8	Explain the principles of effective heat loss and heat illness prevention programs. Principles include, but are not limited to, knowledge of the body's thermoregulatory mechanisms, acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.
RM-C9	Explain the accepted guidelines, recommendations, and policy and position statements of applicable governing agencies related to activity during extreme weather conditions.
RM-C10	Interpret data obtained from a wet bulb globe temperature (WGBT) or other similar device that measures heat and humidity to determine the scheduling, type, and duration of activity.
RM-C12	Explain the components and purpose of periodization within a physical conditioning program
RM-C16	Explain the basic principles associated with the use of protective equipment, including standards for the design, construction, fit, maintenance and reconditioning of protective equipment; and rules and regulations established by the associations that govern the use of protective equipment; and material composition.
RM-C17	Explain the principles and concepts related to prophylactic taping, wrapping, bracing, and protective pad fabrication
RM-C18	Explain the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints. This includes, but is not limited to, evaluating or identifying the need, selecting the appropriate manufacturing material, manufacturing the orthosis or splint, and fitting the orthosis or splint.
RM-C20	Recognize the clinical signs and symptoms of environmental stress.
RM-P6	Obtain, interpret, and make decisions regarding environmental data. This includes, but is not limited to the ability to:
RM-P6.1	Operate a sling psychrometer and/or wet bulb globe index
RM-P6.2	Formulate and implement a comprehensive, proactive emergency action plan specific to lightening safety
RM-P6.3	Access local weather/environmental information
RM-P6.4	Assess hydration status using weight charts, urine color charts, or specific gravity measurements
DI-C4	Explain directional terms and cardinal planes used to describe the body and the relationship of its parts.

DI-C6	Describe common techniques and procedures for evaluating common injuries including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques, and neurological and circulatory tests.
DI-C10	Explain the roles of special tests in injury assessment.
DI-C12	Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.
DI-C14	Describe the clinical signs and symptoms of environmental stress.
DI-C16	Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals
DI-C17	Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).
DI-P1	Obtain a medical history of the patient that includes a previous history and a history of the present injury.
DI-P2	Perform inspection/observation of the clinical signs associated with common injuries including deformity, posturing and guarding, edema/swelling, hemarthrosis, and discoloration.
DI-P3	Perform inspection/observation of postural, structural, and biomechanical abnormalities.
DI-P4	Palpate the bones and soft tissues to determine normal or pathological characteristics.
DI-P5	Measure the active and passive joint range of motion using commonly accepted techniques, including the use of a goniometer and inclinometer.
DI-P6	Grade the resisted joint range of motion/manual muscle testing and break tests.
DI-P7	Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.
DI-P8	Apply appropriate special tests for injuries to the specific areas of the body as listed above.
MC-P4a	Vital signs including respiration (including asthma), pulse and circulation, and blood pressure
AC-C4	Know and be able to use appropriately standard nomenclature of injuries and illnesses.
AC-C6	Differentiate the components of a secondary assessment to determine the type and severity of the injury or illness sustained.
AC-C7	Identify the normal ranges for vital signs.
AC-C9	Describe the current standards of first aid, emergency care, rescue breathing, and cardiopulmonary resuscitation for the professional rescuer.
AC-C12	Describe the characteristics of common life-threatening conditions that can occur either spontaneously or as the result of direct trauma to the throat, thorax and viscera, and identify the management of these conditions.

AC-C13	Describe the proper management of external hemorrhage, including the location of pressure points, use of universal precautions, and proper disposal of biohazardous materials.
AC-C14	Identify the signs and symptoms associated with internal hemorrhaging.
AC-C15	Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.
AC-C16	Describe the injuries and illnesses that require medical referral.
AC-C17	Explain the application principles of rest, cold application, elevation, and compression in the treatment of acute injuries.
AC-C18	Describe the signs, symptoms, and pathology of acute inflammation.
AC-C19	Identify the signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological function, cranial nerve assessment, and other symptoms that indicate underlying trauma.
AC-C20	Explain the importance of monitoring a patient following a head injury, including obtaining clearance from a physician before further patient participation.
AC-C21	Define cerebral concussion, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return-to-participation of a patient who sustains a concussion.
AC-C22	Identify the signs and symptoms of trauma to the cervical, thoracic and lumbar spines, the spinal cord, and spinal nerve roots, including neurological signs, referred symptoms, and other symptoms that indicate underlying trauma and pathology.
AC-C29	Identify the signs, symptoms, and treatment of patients suffering from adverse reactions to environmental conditions.
AC-C30	Identify information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention.
AC-P2	Perform an initial assessment to assess the following, but not limited to:
AC-P2a	Airway
AC-P2b	Breathing
AC-P2c	Circulation
AC-P2d	Level of consciousness
AC-P2e	Other life-threatening conditions
AC-P3	Implement appropriate emergency treatment strategies, including but not limited to:
AC-P3a	Activate an emergency action plan

AC-P4	Perform a secondary assessment and employ the appropriate management techniques for non-life-threatening situations, including but not limited to:
PS-C5	Describe the basic principles of general personality traits, associated trait anxiety, locus of control, and patient and social environment interactions.
PS-C10	Identify the symptoms and clinical signs of common eating disorders and the psychological and sociocultural factors associated with these disorders.
NU-C7	Explain principles of nutrition as they relate to the dietary and nutritional needs of the patient (e.g., role of fluids, electrolytes, vitamins, minerals, carbohydrates, protein, fat, and others).
NU-C8	Explain the physiological processes and time factors involved in the digestion, absorption, and assimilation of food, fluids, and nutritional supplements. Further, relate these processes and time factors to the design and planning of preactivity and postactivity meals, menu content, scheduling, and the effect of other nonexercise stresses before activity.
NU-C11	Identify and interpret pertinent scientific nutritional comments or position papers (e.g., healthy weight loss, fluid replacement, pre-event meals, and others).
NU-C12	Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control.
NU-C13	Explain consequences of improper fluid replacement.
NU-C14	Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).
AD-C1	Describe organization and administration of preparticipation physical examinations and screening including, but not limited to, developing assessment and record-keeping forms that include the minimum recommendations from recognized health and medical organizations, scheduling of appropriate health and medical personnel, and efficient site use.
AD-C16	Identify and describe basic components of a comprehensive emergency plan for the care of acutely injured or ill patients, which include (1) emergency action plans for each setting or venue; (2) personnel education and rehearsal; (2) emergency care supplies and equipment appropriate for each venue; (3) availability of emergency care facilities; (4) communication with onsite personnel and notification of EMS; (5) the availability, capabilities, and policies of community-based emergency care facilities and community-based managed care systems; (6) transportation; (7) location of exit and evacuation routes; (8) activity or event coverage; and (9) record keeping.
AD-C20	Differentiate the roles and responsibilities of the athletic trainer from those of other medical and allied health personnel who provide care to patients involved in physical activity and describe the necessary communication skills for effectively interacting with these professionals.
PD-C11	Identify and access available educational materials and programs in health-related subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars).
PD-C14	Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.