

# Department of Kinesiology KIN 280: Intro to Athletic Training Course Credit Hours: 2 Units

# **Spring 2017**

Meeting day(s): Tuesday	Instructor title and name: Ryan Nokes, MA, ATC
Meeting times: 11:35am – 1:15pm	Phone: N/A
Meeting location: LBRT 207	E-mail: rnokes@pointloma.edu
Additional info: N/A	Office location and hours: By Appointment Only.
<b>Final Exam:</b> May 1st, 1:30-4:00pm	Additional info: N/A

# 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.

### STUDENT LEARNING OUTCOMES

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 CREDIT HOUR INFORMATION**

In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 2-unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

## REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Prentice, W. Essentials of Athletic Injury Management, 10<sup>th</sup> Edition. ISBN: 0079022752
 \*\*\*May Also Buy 9<sup>th</sup> Edition\*\*\*

### **USE OF TECHNOLOGY**

Point Loma Nazarene University encourages the use of technology for learning, communication, and collaboration. In this course, we will rely on Canvas for accessing course materials, submitting assignments, and collaborating in discussion boards and blogs. We will also use cell phone polling when it enhances our in-class activities. You'll

want to make sure you are comfortable with these tools, so take advantage of our computer LabTechs to answer questions and help you with any technology issues. You may also call the Help Desk at x2222.

You are welcome to bring your laptop, tablet, and/or cell phone to class—but please make sure you use them appropriately and responsibly. *If a tech tool becomes a distraction or disruption while class is in session, I will ask you to put it away or invite you to no longer bring it to class.* 

### ACADEMIC HONESTY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As explained in the university catalog, academic <u>dis</u>honesty 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. Violations of university academic honesty include cheating, plagiarism, falsification, aiding the academic dishonesty of others, or malicious misuse of university resources. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course following the procedure in the university catalog. Students may appeal also using the procedure in the university catalog. See <u>Academic Policies</u> for further information.

### ACADEMIC ACCOMMODATIONS

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may request academic accommodations. At Point Loma Nazarene University, students must request that academic accommodations by filing documentation with the <u>Disability Resource Center</u> (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. See <u>Academic Policies</u> in the (undergrad/graduate as appropriate) academic catalog.

### **FERPA POLICY**

In compliance with federal law, neither PLNU student ID nor social security number should be used in publicly posted grades or returned sets of assignments without student written permission. This class will meet the federal requirements by (Note: each faculty member should choose one strategy to use: distributing all grades and papers individually; requesting and filing written student permission; or assigning each student a unique class ID number not identifiable on the alphabetic roster.). Also in compliance with FERPA, you will be the only person given information about your progress in this class unless you have designated others to receive it in the "Information Release" section of the student portal. See <a href="Policy Statements">Policy Statements</a> in the (undergrad/ graduate as appropriate) academic catalog.

### **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.

### ATTENDANCE AND PARTICIPATION

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 has the option of filing a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice. If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF consistent with university policy in the grading section of the catalog. See <a href="Academic Policies">Academic Policies</a> in the (undergrad/graduate as appropriate) academic catalog.

### FINAL EXAMINATION POLICY

Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the <u>Class Schedules</u> site. No requests for early examinations or alternative days will be approved.

### **COURSE REQUIREMENTS**

### • **Quizzes**

Online (Canvas) quizzes will enable you to read and interact with concepts after discussion in class; therefore, the quizzes are "open-book". You must complete each quiz corresponding to the material discussed in class. Due dates for each quiz are listed in Canvas. No provision will be made for make-up quizzes.

### • Discussion Board Posts

You will complete three discussion board posts throughout the semester. You will be required to post one original post and respond to your peers' posts. Discussion boards are intended to facilitate meaningful conversations with your classmates to enhance your understanding of the material.

### • 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 <u>may be asked to share</u> 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. <u>Bibliographic information (e.g., author, title, journal, volume, pgs, yr)</u>
- 2. <u>Key points</u> 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. <u>Critique</u>: Identify the major *Strengths & Weaknesses* of the article.
- 4. <u>Synthesis</u>: 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?)

### • 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 Exam

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.

### ASSESSMENT AND GRADING

Assignments will be turned in via Canvas on their respective due date. Assignments submitted after the deadline **will not be accepted**.

Α	>93%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
В	83-86%	D	63-66%
B-	80-82%	D-	60-66%
C+	77-79%	F	0-59%

# **COURSE REQUIREMENT WEIGHTING**

Total	850 points
Final Examination	200 points
Examinations (3x100)	300 points
Article Critiques (2x50)	100 points
Discussion Board Posts (1x10, 2x20)	50 points
Quizzes (8x10, 1x20)	100 points
Clinical Attendance and Participation	100 points

<sup>\*\*\*</sup>Points are subject to modification\*\*\*

NOTE: It is your responsibility to maintain your class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), you have responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor.

# **TENTATIVE COURSE OUTLINE**

Date	Description	Readings	Due
Week 1:	***ONLINE***	None	"About Me" DB
January 10 <sup>th</sup>	Syllabus/Course Introduction		
Week 2:	The Athletic Training Profession	Ch. 1, 4, 25	Quiz 1
January 17 <sup>th</sup>	Physical Conditioning and Injury	Appendix A, B	
	Prevention	,	
Week 3:	Classification of Injury: The	Ch. 13	Quiz 2
January 24th	Language of Sports Medicine		
Week 4:	Evidence-Based Practice	Ch. 8	Quiz 3
January 31st	Introduction to Injury Evaluation		
	Primary/Secondary Survey		
Week 5:	Injury Evaluation Cont.	Ch. 7	Quiz 4
February 7 <sup>th</sup>	Environmental Threats to Health	NATA Statement	Heat Illness DB
Week 6:	***ONLINE CLASS***	Ch. 9	Exam 1 Online
February 14th	Mini-Lecture: Acute Injury Care,		
	Pain-Spasm Cycle - Online		
Week 7:	Foot & Toe Anatomy/Pathologies	Ch. 14	Quiz 5
February 21st			
Week 8:	Ankle & Lower Leg	Ch. 15	Quiz 6
February 28th	Anatomy/Pathologies		Article Critique 1
March 7 <sup>th</sup>	SPRING BREAK		
Week 9:	Knee Anatomy/Pathologies	Ch. 16	Quiz 7
March 14 <sup>th</sup>			
Week 10:	Exam 2: Foot, Ankle. Knee		
March 21st			
Week 11:	Hip, Pelvis, Abdomen, Thorax	Ch. 17, 21	
March 28 <sup>th</sup>	Anatomy/Pathologies		
Week 12:	Spine & Rib Anatomy/Pathologies	Ch. 20, 21	Hip & Spine
April 4 <sup>th</sup>			Super Quiz
Week 13:	Brain/MTBI	Ch. 22	Quiz 8
April 11 <sup>th</sup>	NATA Position Statement		Concussion DB
Week 14:	Shoulder Anatomy/Pathologies	Ch. 18	Exam 3 Online
April 18 <sup>th</sup>			
Week 15:	Elbow, Wrist, Hand	Ch. 19	Article Critique 2
April 25 <sup>th</sup>	Anatomy/Pathologies	NATA Statement	
Week 16:	FINAL EXAMINATION		1:30 - 4:00pm
May 1st			•

# **Course Competencies**

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.

Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and NU-C14 psychological consequences, referral systems). Describe organization and administration of preparticipation physical examinations and screening including, but not limited to, developing assessment and record-keeping AD-C1 forms that include the minimum recommendations from recognized health and medical organizations, scheduling of appropriate health and medical personnel, and efficient 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; AD-C16 (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. 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 AD-C20 activity and describe the necessary communication skills for effectively interacting with these professionals. Identify and access available educational materials and programs in health-related PD-C11 subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars). Interpret the current research in athletic training and other related medical and health PD-C14 areas and apply the results to the daily practice of athletic training.