

# Department of Kinesiology ATR 102: Risk Management & Emergency Response

1 Unit

**FALL 2017** 

Meeting days: Online Course	Instructor: Nicole Cosby, Ph.D, ATC
Meeting times:	<b>Call phone:</b> 562-714-4302
Meeting location:	E-mail: nicolecosby@pointloma.edu
Any additional info:	Office hrs: By Appointment
Final Exam: Online	Canvas Login: canvas.pointloma.edu

#### **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 and AIM**

This course aims to provide you with in-depth study and eventual mastery of the knowledge and skills you will need as a health professional to perform treatment in emergency situations. Students will be prepared to act as first responders in health related situations and be prepared with the following skills:

✓ Cardiopulmonary Resuscitation

✓ Biohazardous Materials

✓ Triage

✓ Scene Assessment

✓ Wound Care

In the process, you will develop an emerging mastery of the Educational Competencies of the NATA's Educational Council (See Appendix D for details on these Competencies in preparation for the Board of Certification Examination for Athletic Trainers)

To be successful in this course, students must synthesize information presented in the lecture and laboratory and apply it to the clinical setting. Specifically, this means that studying for quizzes and tests should involve reviewing and integrating the essential ideas contained in both the lectures and the textbook. Where possible, we will do activities in class or have study sessions to improve your retention. Graded assignments (e.g., tests, quizzes, and group projects) will be used to help students identify, recall, synthesize and apply the key concepts in risk management and emergency response

### STUDENT LEARNING OUTCOMES

Upon completing this course, you should be able to:

- 1. Students will be able to define the role of a 1st responder and articulate what skills and responsibilities they should possess
- 2. Students will be able to demonstrate and explain a familiarization with various psychosocial responses to personal and professional encounters during an emergency crisis or situation
- 3. Students will be able to maintain CPR/AED certification standards and keep them up to date following graduation
- 4. Students will be able to identify and demonstrate basic emergency skills during lab sessions and lab practical sessions
- 5. Students will demonstrate understanding of general medical issues through application, testing and lab practicals
- 6. Student will demonstrate an understanding of emergency medical systems and processes by passing the Red Cross multiple choice exam by 80%
- 7. Student will be able to observe, recognize and inspect for the clinical signs/symptoms associated with injuries or illness to the human body systems

#### **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 1 unit class delivered over 16 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request.

#### REQUIRED TEXTS AND RECOMMENDED RESOURCES

Rosnander	Title	First Responder: A skills approach
	Author	Daniel Limmer, Keith Karren and Brent Hafen
	ISBN	9780130982728
Limber Karen Haries	Publisher	Brady
	<b>Publication Date</b>	September 6, 2006

#### 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.

#### 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 <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. 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 <u>Academic Policies</u> 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 <a href="mailto:DRC@pointloma.edu">DRC@pointloma.edu</a>. See <a href="mailto:Disability Resource Center">Disability Resource Center</a> 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 <a href="Academic Policies"><u>Academic Policies</u></a> in the Undergraduate Academic Catalog.

#### ACTIVE LEARNING AND EVIDENCE BASED MEDICINE

#### Active Learning

Your active participation in this class will be required. You will be responsible for your own learning by reviewing class material before and after class. I will guide you in this process; however, in the end the onus of learning will be your responsibility. **Become intrinsically motivated to improve yourself and your understanding of therapeutic modality treatments** and techniques; if you do this you will succeed every time.

Here are some KEYS to success:

- o EFFORT (Work hard)
- o APPROACH (Work smart)
- o ATTITUDE (Think positively)

#### Evidence Based Medicine

Evidence based medicine (EBM) is the integration of clinically relevant research, clinical skills and experience, and patient preferences and values (Sackett et al 2000). The increased awareness <u>and focus on the practice of Evidence Based Medicine comes from our daily need for valid information about diagnosis, prognosis, therapy, and prevention.</u> We want to ask local questions about the effectiveness of therapeutic modalities and design ways to find answers. The EBM portion of this course is <u>designed so students can explore therapeutic modalities commonly used in the athletic training setting</u> and determine what evidence is available to support their current uses.

### **COURSE REQUIREMENTS**

\*Please Note: The PLNU Catalog states that 1 semester unit represents an hour of class per week, and 2 hours of preparation are normal for each hour of class. Therefore, if you spend about 6 hrs per week outside of class in preparation, you will significantly increase your chances of doing well!

### **Course Assignments**

# A. Discussion Boards (10 points each)

We will utilize the Discussion Board feature of canvas to expand upon topics raised during class and from your reading of the textbook and outside journals. You will have the opportunity, via the Discussion Boards, to interact with your fellow students and with me and to discuss topics of interest to you. You are invited to become engaged with others in this class as you debate issues raised in the questions, examine and analyze case studies related to the content, and respond to the comments of your classmates.

For each Discussion Board topic, you will be required to post one response of your own (must be at least 500 words) and to post a reply to at least 2 of your classmate's posts (Must be at least 300 words). Thus, you must respond at least **twice** to each Discussion Board topic on canvas. Your response to a classmate's post may include one or more of the following:

- Ask a probing question
- Share an insight from having read your classmate's post
- Offer and provide evidence to support an opinion
- Validate a classmate's idea with reference to your own experiences
- Make a suggestion for improvement
- Expand on your classmate's post.

To **receive full credit for your participation**, your posts **MUST** also be **MADE IN A TIMELY WAY**. Specifically, this means that you must post a response during the week after we first encounter a new chapter or topic. So, for instance, if we first start discussing the Ankle on March 1st, then you will need to make your posts on the Learning Discussion Board topic(s) by March 8th in order to receive full credit.

I will review the input that you have given to these Discussion Boards and will award up to 10 points for each Discussion Board posting that you have made. THE PROVISION OF 10 POINTS FOR YOUR POSTING WILL BE BASED ON THE QUALITY OF YOUR POST.

### B. Group Project (100 points each)

Students will be split up into groups of three. Each group will be assigned 3-4 skill(s) sections to cover. This project should include video which includes:

- (1) step by step instructions on how to perform their assigned skill(s); (one student will read the script as the other students are performing the task)
- (2) each student in the group MUST participate and contribute to the performance of the skill(s) and/or the writing of the script
- (3) Within each skill video please provide safety tips and/or precautions that first responders should take prior to performing skill or encountering a patient.

Please perform your assigned skill(s) as if you were trying to sell your video to online buyers. Once you have your videos complete please insert your videos and/or still shots into windows movie maker (pc) or iMovie (mac).

ONE STUDENT IN EACH GROUP <u>MUST CREATE A YOUTUBE ACCOUNT</u> AND UPLOAD THE VIDEO TO YOUTUBE. THIS LINK MUST BE SENT TO THE PROFESSOR BY THE DUE DATE (please see course schedule for due dates).

### C. Modular Projects (30 points for each Module)

Students will choose one project to complete and turn in at the end of each module. See tentative schedule for due dates. Students cannot chose the same option for every module.

### Module 1 - Responding to Emergency Project Choices: (30 points)

- <u>Reflection</u> Students will discuss a situation in their life where they have either been a victim or been a witness to an emergency situation. What was your 1<sup>st</sup> reaction, if others were around what was their reaction. How did EMS help?
- Stages of Kobler Ross Do you believe that the stages always occur in this order? Find a
  biblical verse that might provide some support to your patient for each of the stages. Please
  describe how this verse directly relates to each stage of the Kobler Ross
- o Recreate the chart is there anything missing? What piece of the chart do you feel is the most important? Should be on white sheet of paper. Maybe use colors to designate importance and reflection deletions/additions.
- Creation of pneumonic to remember people involved in the emergency response system
- Video What is a first responder and what is the importance of a first responder in an emergency? Video should be uploaded to youtube.com and the link should be posted in Canvas.

### Module 2 - Assessment: (30 points)

- Role play Students will create a video using someone from class, roommate or friend.
   During this video students will act out what good communication and poor communication skills look like in an emergency situation.
- Steps of the assessment process Students will be responsible for diagraming the steps of the assessment process. You can use concept mapping...I will not accept just listing. Please draw arrows etc
- <u>Reflections</u> Discussion should include how you will use the assessment process during an
  emergency situation. This reflection should discuss all of the steps....maybe which ones you
  will be more apt to skip during an emergency situation. Please come up with a scenario or
  describe a real life event and how you have used this assessment.

### Module 4 - Cardiovascular Emergencies: (30 points)

- <u>Reflection</u> Students will discuss current dietary style and provide an analysis of how dietary style could lead to cardiovascular emergency. Discussion should also include the importance of the cardiovascular in the maintenance of the human body.
- <u>CPR Chart</u> Student will re-create the CPR chart. This will include hand positioning, chest compressions and breath ratios, 2 person vs 1 person CPR. This chart should also have list the order of assessment. How do we determine what we need to do...i.e. CPR, rescue breathing or choking.
- AED Drawing Students will draw and AED machine and pads, they will also draw a patient.
   Drawing should include pad placement and also should the steps that are required to set up an AED machine. This should be on construction paper at lease 11x17 if not larger.

### D. Individual Skills

These skills are designed to test the student's practical knowledge of the material. In order to participate in hands-on work and labs students should dress in or bring a change of comfortable clothes to class. Please do not wear excessive make-up or jewelry. A pocket mask and gloves to are required to participate in skill practice testing and in class labs. These materials will be provided by the professor.

### **Course Exams**

### Quizzes

Students can expect to have an in class quiz prior to the start of each weeks class.

### Midterm Exam (100 points each)

The material covered in class up to the point of the exam will be tested.

## Final Exam (100 points)

Cumulative exam comprised of written questions and practical skills testing.

# Lab Practicals (2@50 points each)

The exam will be comprised practical skills testing.

#### ASSESSMENT AND GRADING

A.	Discussion Boards		30
B.	Group Project		100
C.	Module project #1		30
D.	Module project #2		30
E.	Module Project #3		30
F.	Individual Skills		100
G.	quizzes (no more than 6@20 pts each)		120
Н.	Midterm Examination		100
I.	Final Examination		100
J.	Lab Practicals (2@50 pts each)		100
		TOTAL	640

All assignments are due at the beginning of the class period in which they were assigned. Classes missed due to athletic events, planned family functions or athletic training assignments must be planned and arranged with the professor before class.

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.

Module	Date	Topic	Assignments Due
1. Responding to Emergency		Chapter 1: Intro to the EMS/Syllabus	
		Chapter 3: Legal and Ethical Issues  Chapter 2: Well Being of the First Responder Chapter 10: Scene Size up	
2. Assessment		Chapter 11-12: Patient Assessment	Quiz 1 (in class)  Module 1 assignment due
		Skills Lab: Glove Removal Skills Lab: Initial Assessment Skills Lab: Physical Exam Skills Lab: S.A.M.P.L.E Chapters 30-31: Triaging Patients	Quiz 2 (in class)
3. Airway & Respiratory		Chapter 14: Respiratory emergencies Chapters 6-7; Airway care and management	Quiz 3 (in class) Module 2 assignment due
		Chapters 6-7; Airway care and management Skills Lab:  - Rescue Breathing  - Oxygen Administration Unconscious Choking/Conscious Choking	
4. Cardiovascular Emergencies		Chapter 14: Cardiovascular Emergency Chapters 8-9; CPR and AED	Quiz 4 (in class)
Patronery Ages Let Allowan Maler Union		Chapters 8-9; CPR and AED Skills Lab: CPR	DB#1-Changes to CPR Due (See Canvas)
And described the second secon		SPRING BREAK	
(Rigala Verroscole)		Skills Lab: CPR	Quiz 5 (in class)
5. General Emergencies		Chapter 4: Human Body Systems Chapters 15-16: Medical and Environmental Emergencies	Module 4 assignment due Jigsaw Activity #1
		Chapter 17: Psychological Emergencies Chapter 18: Bleeding and Shock	Quiz 6 (in class) DB#2 - Pulse Assessment Due (See Canvas)
6. Trauma Emergencies		Chapters 25: Skeletal Injuries Skills Lab: Splinting Chapter 19: Soft Tissue Injuries Skills Lab: Wound Care Chapters 20-21 Injuries to the Chest and Burn Emergencies	Midterm DUE!!! Video Script Due
		Chapters 23-24: Head, Neck, Spine Injuries Skills Lab: Lifting/Moving Skills Lab: Spine Boarding	Draft 1 of Video Due
7. Special Populations		Chapter 26: Childbirth  Skills Lab: Blood Pressure Chapters 27 - Infants and Children	Final Draft of Video Due
		Chapter 28 - Geriatric Patients FREE LAB	Quiz 7 (in class)
		FINAL EXAM	

Code	Description			
ATR 102	Risk Management & Emergency Response			
AC-1	Explain the legal, moral, and ethical parameters that define the athletic trainer's scope of acute and emergency care.			
AC-2	Differentiate the roles and responsibilities of the athletic trainer from other pre-hospital care and hospital-based providers, including emergency medical technicians/paramedics, nurses, physician assistants, and physicians.			
AC-3	Describe the hospital trauma level system and its role in the transportation decision-making process.			
AC-4	Demonstrate the ability to perform scene, primary, and secondary surveys.			
AC-5	Obtain a medical history appropriate for the patient's ability to respond.			
AC-6	When appropriate, obtain and monitor signs of basic body functions including: pulse, blood pressure, respiration, pulse oximetry, pain, and core temperature. Relate changes in vital signs to the patient's status.			
AC-7	Differentiate between normal and abnormal physical findings (eg, pulse, blood pressure, heart and lung sounds, oxygen saturation, pain, core temperature) and the associated pathophysiology.			
AC-8	Explain the indications, guidelines, proper techniques, and necessary supplies for removing equipment and clothing in order to access the airway, evaluate and/or stabilize an athlete's injured body part.			
AC-9	Differentiate the types of airway adjuncts (oropharygneal airways [OPA], nasopharyngeal airways [NPA] and supraglottic airways [King LT-D or Combitube]) and their use in maintaining a patent airway in adult respiratory and/or cardiac arrest.			
AC-10	Establish and maintain an airway, including the use of oro- and nasopharygneal airways, and neutral spine alignment in an athlete with a suspected spine injury who may be wearing shoulder pads, a helmet with and without a face guard, or other protective equipment.			
AC-10a	oropharyngeal airway			
AC-10b	nasopharyngeal airway			
AC-11	Determine when suction for airway maintenance is indicated and use according to accepted practice protocols.			
AC-12	Identify cases when rescue breathing, CPR, and/or AED use is indicated according to current accepted practice protocols.			
AC-13	Utilize an automated external defibrillator (AED) according to current accepted practice protocols.			
AC-14	Perform one- and two- person CPR on an infant, child and adult.			
AC-15	Utilize a bag valve and pocket mask on a child and adult using supplemental oxygen.			
AC-16	Explain the indications, application, and treatment parameters for supplemental oxygen administration for emergency situations.			
AC-17	Administer supplemental oxygen with adjuncts (eg, non-rebreather mask, nasal cannula).			
AC-18	Assess oxygen saturation using a pulse oximeter and interpret the results to guide decision making.			
AC-19	Explain the proper procedures for managing external hemorrhage (eg, direct pressure, pressure points, tourniquets) and the rationale for use of each.			
AC-20	Select and use the appropriate procedure for managing external hemorrhage.			
AC-21	Explain aseptic or sterile techniques, approved sanitation methods, and universal precautions used in the cleaning, closure, and dressing of wounds.			
AC-22	Select and use appropriate procedures for the cleaning, closure, and dressing of wounds, identifying when referral is necessary.			
AC-23	Use cervical stabilization devices and techniques that are appropriate to the circumstances of an injury.			

AC-24	Demonstrate proper positioning and immobilization of a patient with a suspected spinal cord injury.
AC-25	Perform patient transfer techniques for suspected head and spine injuries utilizing
AC-25	supine log roll, prone log roll with push, prone log roll with pull, and lift-and-slide techniques.
AC-25a	supine log roll
AC-25b	prone log roll with push
AC-25c	prone log roll with pull
AC-25d	lift-and-slide
AC-26	Select the appropriate spine board, including long board or short board, and use appropriate immobilization techniques based on the circumstance of the patient's injury.
AC-27	Explain the role of core body temperature in differentiating between exertional heat stroke, hyponatremia, and head injury.
AC-30	Explain the role of rapid full body cooling in the emergency management of exertional heat stroke.
AC-36	Identify the signs, symptoms, interventions and, when appropriate, the return-to-participation criteria for:
AC-36a	sudden cardiac arrest
AC-36d	heat illness including heat cramps, heat exhaustion, exertional heat stroke, and hyponatremia
AC-36g	internal hemorrhage
AC-36h	diabetic emergencies including hypoglycemia and ketoacidosis
AC-36j	systemic allergic reaction, including anaphylactic shock
AC-36k	epileptic and non- epileptic seizures
AC-361	shock
AC-36m	hypothermia, frostbite
AC-37	Select and apply appropriate splinting material to stabilize an injured body area.
AC-38	Apply appropriate immediate treatment to protect the injured area and minimize the effects of hypoxic and enzymatic injury.
AC-39	Select and implement the appropriate ambulatory aid based on the patient's injury and activity and participation restrictions.
AC-40	Determine the proper transportation technique based on the patient's condition and findings of the immediate examination.
AC-41	Identify the criteria used in the decision-making process to transport the injured patient for further medical examination.
AC-42	Select and use the appropriate short-distance transportation methods, such as: the log roll or lift and slide, for an injured patient in different situations.
AC-43	Instruct the patient in home care and self-treatment plans for acute conditions.
CE-16	Recognize the signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions.
CE-20	Use standard techniques and procedures for the clinical examination of common injuries, conditions, illnesses, and diseases including, but not limited to:
CE-20h	circulatory assessments (pulse, blood pressure, auscultation)
CE-20i	abdominal assessments (percussion, palpation, auscultation)
CIP-6	Clinically evaluate and manage a patient with an emergency injury or condition to include the assessment of: vital signs and level of consciousness, activation of emergency action plan, secondary assessment, diagnosis, and provision of the appropriate emergency care (eg, CPR, AED, supplemental oxygen, airway adjunct, splinting, spinal stabilization, control of bleeding).
НА-16	Describe federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases and discuss how they apply to the practicing of athletic training.
HA-17	Identify key regulatory agencies that impact healthcare facilities, and describe their function in the regulation and overall delivery of healthcare.

HA-20	Create a risk management plan and develop associated policies and procedures to guide the operation of athletic training services within a healthcare facility to include issues related to security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.
HA-21	Develop comprehensive, venue-specific emergency action plans for the care of acutely injured or ill individuals.
HA-22	Develop specific plans of care for common potential emergent conditions (eg, asthma attack, diabetic emergency).
HA-24	Describe a plan to access appropriate medical assistance on disease control, notify medical authorities, and prevent disease epidemics.
HA-29	Explain typical administrative policies and procedures that govern first aid and emergency care.
PHP-10	Explain the principles of the body's thermoregulatory mechanisms as they relate to heat gain and heat loss.
PHP-12	Summarize current practice guidelines related to physical activity during extreme weather conditions (eg, heat, cold, lightning, wind).
PHP-17	Explain the etiology and prevention guidelines associated with the leading causes of sudden death during physical activity, including but not limited to:
PHP-17a	Cardiac arrhythmia or arrest
PHP-17d	Exertional heat stroke
PHP-17g	Anaphylactic shock
PHP-17h	Cervical spine injury
PHP-17i	Lightning strike
PHP-21	Summarize the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints.
PHP-36	Describe current guidelines for proper hydration and explain the consequences of improper fluid/electrolyte replacement.
PS-17	Describe the psychological and emotional responses to a catastrophic event, the potential need for a psychological intervention and a referral plan for all parties affected by the event.