**KINE 5420**

**Concepts in Athletic Training**

**(4 credit hours)**

SUMMER 2014

MW 8:00-9:50 AM (Lecture)

MW 10:30-12:30 (Lab)

**Instructors:** Matt Hjerstedt, MS, ATC, LAT Cindy Trowbridge, PhD, ATC, LAT

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**Office Hours:** By appointment By appointment

**Primary Texts:** Prentice W (2011). *Arnheim’s Principles of Athletic Training.* 15th

Edition.

NATA (2011). *Athletic Training Educational Competencies,* 5th ed.

NATA Reference Series: Position, Consensus, Official Support Statements

<http://www.nata.org/position-statements>

Competency Packet. Available at Bird’s Copies.

**Course Description**

Classroom and laboratory experiences that provide an introduction to the profession of Athletic Training and the role of Athletic Trainers in the overall health care environment. Specific topics will include evidence-based practice, emergency planning and care, superficial application of therapeutic modalities, sports nutrition, and environmental considerations.

**Course Objectives:**

1. Introduce students to the profession of athletic training and interprofessional collaboration.
2. Introduce students to the concepts of critical thinking and problem solving.
3. Provide students with an active learning environment (see definition on next page).
4. Provide students with foundational knowledge and skills in the identified NATA Competencies (see next page)

**Student Learning Outcomes**

After completing this course, students will be able to:

1. Describe athletic training and the role of athletic trainers in the allied health care field.
2. Explain the principles of evidence based medicine, outcome scales, and the disablement model in the context to prevention of injury.
3. Perform primary and secondary surveys and implement the required emergency management techniques including CPR, AED, rescue breathing, airway management, supplemental oxygen, and pulse oximetry.
4. Describe and perform the current first aid and emergency care procedures for managing acute skin and musculoskeletal injuries including injury to the cervical, thoracic, or lumbar spine.
5. Explain the basic principles of nutrition throughout the age span with particular emphasis on meal planning, supplements, and disordered eating within an active population.

**Student Learning Outcomes - continued**

1. Explain the proper procedures for preventing, evaluating, and treating exertional heat illnesses, lightning strikes, and cold injuries. Perform environmental assessments and treatments for heat and cold stress.
2. Explain the importance of ergodynamics in preventing injury at the work site or within sport performance. Perform ergodynamic assessments related to person’s work or sport techniques to determine areas of weaknesses. Provide correction for improper lifting, pushing, pulling, landing, and overhead activities.
3. Explain and perform the application of superficial modalities (heat and cold) for the care of acute and overuse musculoskeletal injuries.

**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. We will guide you in this process; however, in the end the **onus of learning** will be your responsibility.

Here are your **KEYS** to success:

* + **EFFORT** (*Work hard*)
  + **APPROACH** (*Work smart*)
  + **ATTITUDE** (*Think positively*)

Synthesize the information you are learning and apply it whenever you get the chance. Do not be afraid to ask questions or challenge the current medical or scientific assumptions. In fact, when you study the material, participate in class, ask thoughtful questions, and accept my help you will be able to apply your knowledge to any clinical situation. Your brain will only grow in response to how much it is challenged and used.

Become intrinsically motivated to improve yourself and your understanding of therapeutic modality treatments and techniques; if you do this you will succeed every time.

**Athletic Training Educational Competencies**

The following **Knowledge and Skills** will be addressed in this class:

Evidence Based Practice (EBP)

EBP1-3, EBP 8, 11, 12

Prevention and Health Promotion (PHP)

PHP 1-14, PHP 17 (d,e,i), PHP 18-19, PHP 32-41, PHP 46-47

Acute Care of Injuries and Illnesses

AC 1-17, AC 19-30, AC 36 (a, b, c, d, l, m), AC 37-43

Clinical Examination and Diagnosis

CE 16

Health Care Administration

HA-1, HA-16, HA-18

Clinical Integration

CIP-6

**Evaluation:** **Examination**

TEST 1 10%

 TEST 2 10%

TEST 3 10%

Comprehensive Final Exam 15%

**45%**

**Coursework**

Quizzes 10%

Evidence Based Group Project 10%

Worksheets OR Literature Reviews 10%

Laboratory Skills 20%

**50%**

**Professional Development**

Lecture/Laboratory activity participation AND

Notebook 5%

**100%**

**Grading Scale:**  A = 90%; B = 80%; C = 70%; D = 60%; F = 59% and below

As a policy of the University of Texas at Arlington (UTA) outlined in the official Graduate Catalog,  
graduate credit will be given for grades of A, B, or C for work done at UTA, subject to the following conditions.  
1.The student must maintain a B average in all work done in the major.  
2.The student must maintain a B average in all work done in the minor.  
3.The student must maintain a B average in all advanced work.

## Classroom Policies

**“*Life is what happens, while you are busy making other plans”*** *John Lennon*

Remember: Communication is the key.

## Cell Phone Policy

**No cell phones in class for verbal or text message conversations.** Please turn them off or silence them during our class period. If you actively perform or receive cell phone calls or text messaging during class, we will deduct points from your final grade.

**Attendance and Class Preparation**

Class attendance is **required**. Excused absences include university approved absences or those that I receive notification of (i.e. illness, doctor appointments, etc.) in a timely manner. Lecture class begins at 8:00 am and Lab class begins at 10:30 am. Tardiness is **NOT** acceptable. After three late arrivals you will be given one unexcused absence. **Three unexcused absences will automatically drop your grade by one letter (i.e., A to B, B to C, etc.).**

Each student is expected to prepare for class by reading the assigned chapter(s) and handouts **prior** to class. If you miss a class, you are responsible for obtaining all information presented. Remember: *Poor planning on your part is not an emergency on my part.*

**Expectations for Out-of-Class Study**

A general rule of thumb is this: for every credit hour earned, a student should spend 3 hours per week working outside of class. Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 12 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for quizzes, etc.

**Assignments**

Each student is expected to prepare for class by reading the assigned chapter(s) and handouts **prior** to class.

Assignments are **DUE** on the posted or announced date at the beginning of class. If an assignment is turned in late, points will be deducted from the assignment. Missed assignments can **only** be made up if absence was excused. All missed and late assignments **must** be made up within **one** week of original due date unless prior arrangements are made with instructor or you will receive a zero grade.

**Exams**

There will be three unit exams and one comprehensive final exam for this class. **The three (3) unit exams will be offered in class, via Blackboard, and/or through take home packets. Dates on syllabi are tentative, but will be officially announced 1 week prior to date.** Exams will be multifaceted with recall, application, and analysis questions throughout. Exams will include multiple choice, short answer, and problem solving questions. Use your lecture notes, textbooks, and assignments to prepare yourself for the exams.

Missed exams can **only** be made up if absence was excused. All missed and late exams **must** be made up within **one** week of original due date unless prior arrangements are made with instructor or you will receive a zero grade.

**Quizzes**

Quizzes will be given throughout the semester. These quizzes will be both **announced and unannounced**, so be prepared every lecture period. Quizzes will contain material from previous lectures and discussions. Be prepared for short answer, labeling, and multiple choice questions. Missed quizzes can **only** be made up if absence was excused. Same rules apply for make-ups.

**Evidence Based Group Project**

Groups of two (2) will be assigned a topic that involves providing evidence for the techniques we use to prevent, assess, manage, and treat musculoskeletal injuries, environmental injuries or illness, or disordered eating patterns.

**Worksheets/Literature Reviews/Problem Solving Exercises**

Throughout the semester there will be assignments posted on the Blackboard. Each assignment should be handed in according to due dates posted on Blackboard. **You may work together on these assignments; however, each student must turn in his/her own work to receive credit.**

**Class Notebook/Binder**

At the end of the semester, each student is required to turn in his/her course notebook for a grade. A three-ring notebook is expected to be neat and organized with section tabs and a table of contents **OR** you may submit a small 3-ring notebook with table of contents and returned assignments along with a “thumb drive” that is neatly organized and contains all lecture material. **The notebook should include lecture notes, articles, handouts, quizzes, tests, student presentations, worksheets, and evidence based projects.** When returned, this notebook should be saved and used as a reference point for future study.

**Department of Kinesiology – Drop Policy:**  It is the responsibility of the student to add or drop classes or withdraw from school within the appropriate time frame established by the University Registrar.  (The departments are not allowed nor obligated to add or drop students from classes.) Deadlines can be found in the current Schedule of Classes.    
 

**Master of Science in Athletic Training Program Grade Requirement**: For both admission and continuance, UT Arlington ATEP students must meet the following academic requirements to remain in good standing in the program:

1. The student must maintain a B average in all work done in the major.  
2.  A**thletic training courses with an earned grade of C or lower must be repeated**    \* If a student fails to maintain a cumulative GPA of 2.5 or an athletic training GPA of 3.0, the   
student will be placed on probation. A student will be afforded one semester, at most, to satisfy   
the GPA requirements. During the first probationary semester, the student will be allowed to   
continue accruing clinical experience hours; however, he/she will be required to attend   
mandatory study hall (approximately 4-6 hrs/week). Should the student fail to   
raise their GPA during the second probationary semester, he/she will be removed from the   
ATEP.

## UNIVERSITY POLICIES

**Grade Grievances:**

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate / graduate catalog. For undergraduate courses, see http://wweb.uta.edu/catalog/content/general/academic\_regulations.aspx#19; for graduate courses, see http://grad.pci.uta.edu/about/catalog/current/general/regulations/#gradegrievances.

**Drop Policy:**

Students may drop or swap (adding and dropping a class concurrently) classes through self- service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two- thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

**Americans with Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity**:

Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Student Support Services:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Electronic Communication:**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

**Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located by accessing the outdoor patio and using stairs to descend to outdoor basketball courts or by using the internal stairway and exiting via the emergency exit door. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Librarian to Contact**

For assistance with your library needs in this course, please consult:

Suzanne Beckett (sbeckett@uta.edu); **Central Library, Room 21**2; **817.272.0923.**

The following web links are provided to help you navigate the library system.

* Find a journal: <http://liblink.uta.edu/UTAlink/az>
* Interlibrary Loan: <https://illiad.uta.edu/illiad/>

###### KINE 5420

**Summer 2014**

|  | **Date** | **Instructor** | **Topic** | **Reading Material** |
| --- | --- | --- | --- | --- |
| Week 1 | M 6/2  Lecture | CT | Syllabus, Competencies, Class Procedures  Athletic Training Profession  Orientation | Chap 1 |
| M 6/2  Lab | CT | Athletic Training Profession –  Where do we fit in healthcare?  Sports Medicine Team | Chap 1 |
| W 6/4  Lecture | CT | Interprofessional Education &  Multidisciplinary Care  Evidence Based Practice | Haynes et al,  Steves et al, 2004  Chap 1: pp 20-24 |
| W 6/4  Lab | CT | Evidence Based Practice  Types of Evidence – Literature searching | The Evidence of Clinical Practice  (JSR editorial) |
| Week 2 | M 6/9  Lecture | CT | Evidence Based Practice – Outcome Scales & Disablement Model | Synder et al. Part I  Valovich-McLeod et al. Part II, 2008  Jette, 2009 |
| M 6/9  Lab | CT | Evidence Based Practice  Using Outcome Scales | Hankemeier et al, McCarty et al, 2013  Valovich-McLeod et al, 2009, Lam et al, 2013 |
| W 6/11  Lecture | CT | Superficial Modalities  Self-treatment and home care | Chap 15:pp 388-397 |
| W 6/11  Lab | CT | P.R.I.C.E.  Superficial Hot Modalities | van der Bekerom et al, 2012 |
| Week 3 | M 6/16  Lecture | MH | Sports Trauma/Epidemiology  Risk factors | Chap 2:pp 67-70. |
| M 6/16  Lab | MH/CT | Universal Precautions (BBP Pathogens)  Wound Care (gloves, mock wounds, cleaning, dressing, steri-strips) | Chap 14  Chap 28: pp 886-888 |
| W 6/18  Lecture | MH | Ergonomics/Biomechanics of preventing acute and overuse injuries | Chap 13: pp 368-369  Chap 2: pp 52-53 |
| W 6/18  Lab | MH/CT | Lifting and moving techniques  LESS scale  Star Excursion/Hop tests | Class Handouts |
| Week 4 | M 6/23  Lecture | MH | Sudden Death in Athletics  Primary Survey and Secondary Survey – triaging on field acute injuries | NATA Position Statements  “Preventing Sudden Death in Sports”  Chap 12 & 13 |
| M 6/23  Lab | MH | Practicing triaging and assessing vital signs (scenarios)  Airways  Wrap-up / Test Review-up | Chap 12 &13 |
| W 6/25  Lecture | TBD | **Test #1** |  |
| W 6/25  Lab | TBD | Crutch and Cane Fitting  CPR/AED practice | Chap 12:pp 338-339  Chap 12:pp 312-321 |
| Week 5 | M 6/30  Lecture | MH | Preparticipation Physical Examinations Overview  Emergency Action Plan | NATA Position Statements  “Emergency Action Planning in Athletics”  Chap 12:pp 307-309 |
| M 6/30  Lab | CT/MH | Splinting fractures/dislocations  Transport of noncritical injuries  Supplemental Oxygen & Pulse Oximeter | Chap 7: pp 204-207  Chap 12: pp 320, 329-331, 333-336, 366 |
| W 7/2  Lecture | CT | Legal concerns (finish)  Spine Boarding theory | Chap 3: pp 74-76  NATA Position Statement  “Acute Management of the Cervical Spine Injured Athlete”  Chap 12: pp 331-333 |
| W 7/2  Lab | CT | Spine Boarding techniques and practice  (non-football equipment) | NATA Position Statement  “Acute Management of the Cervical Spine Injured Athlete” |
| Week 6 | M 7/7  Lecture | CT | Nutritional Considerations | Chap 5 |
| M 7/7  Lab | CT | Spine Boarding techniques and practice  (football equipment – helmet removal etc…) | NATA Position Statement  “Acute Management of the Cervical Spine Injured Athlete” |
| W 7/9  Lecture | CT | Nutritional Considerations | Chap 5 |
| W 7/9  Lab | CT | Reading food labels  Planning pre game and post game meals | Chap 5 |
| Week 7 | M 7/14  Lecture | CT | Safe Weight Loss and Maintenance  Disordered Eating and Eating Disorders | NATA Position Statement  “Safe Weight Loss and Maintenance Practices in Sport and Exercise”  NATA Position Statement  “Preventing, Detecting, and Managing Disordered Eating in Athletes” |
| M 7/14  Lab |  | ***Review of skills for emergency management*** |  |
| W 7/16  Lecture | MH | Nutritional Considerations - Supplementation | NATA Position Statements  “Evaluation of Dietary Supplements for Performance Nutrition”  “Anabolic and Adrogenic Steroids” |
| W 7/16  Lab | MH | Dietary analysis and General dietary recommendations for different athletes |  |
| Week 8 | M 7/21  Lecture |  | **Test #2** |  |
| M 7/21  Lab | MH | Measuring and Monitoring the environment  (sling psychrometer, heat index charts, WBGT, specific gravity, & hydration status) | Chap 6 |
| W 7/23  Lecture | MH | Heat Illness and Hydration  Lightning Safety | Chap 6  NATA Position Statement  “Lightning Safety for Athletics and Recreation”  NATA Position Statements  “Exertional Heat Illnesses”  “Fluid Replacement for Athletes” |
| W 7/23  Lab | MH | Rectal temperature  Treatment techniques for Heat Illness  Rehydrating athletes | Chap 6 |
| Week 9 | M 7/28  Lecture | MH | Cold Injuries  Windchill charts | Chap 6  NATA Position Statement  “Environmental Cold Injuries |
| M 7/28  Lab | CT/MH | Wrap-up/Test Review |  |
| W 7/30  Lecture |  | **Test #3** |  |
| W 7/30  Lab |  |  |  |
| Week 10 | M 8/4  Lecture |  | Clinical Applications |  |
| M 8/4  Lab |  | Clinical Applications |  |
| W 8/6  Lecture |  | Clinical Applications |  |
| W 8/6  Lab |  | Clinical Applications |  |
| Week 11 | M 8/11  Lecture |  | Final Exam 8am – 10 am | Final Lab Practical 10:30 am – 12:30 pm |
|  |  |  |  |