An Introduction to Athletic Training

KIN 126   Fall 2007
An Introduction to Athletic Training

Instructor: Marge Taylor PT, ATC
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Office Phone: (517) 884-1398
Email: taylo644@msu.edu
Office Hours: Wednesdays 3:00 – 5:00 p.m. (or by appointment)

Required Text:

Course Description:
Basic knowledge for the recognition and prevention of athletic injuries

Course Goal:
The goal of Introduction to Athletic Training strives to provide students with knowledge and skills of:

- ATC Professional Development & Responsibilities
- Risk Management
- Pathology of Sports Injury
- Management of Skills

If class demonstrates the drive to work hard to demonstrate good proficiency of the above areas, then the class will learn knowledge of:

- Musculoskeletal Conditions
- Bonus Topics

Course Objectives:
1. Understand the history of the profession of athletic training, including the roles and structure of the National Athletic Trainers’ Association (NATA).
2. Understand the NATA code of professional practice and the NATABOC standards of professional practice.
3. Understand and identify physical and environmental risk factors associated with physical activity, and equipment and standards used to monitor environmental risk factors such as heat or lighting.
4. Understand the basic concepts of wellness screening, and various standards associated with them.
5. Understand the importance of administrative concepts such as record keeping and liability.
6. Understand personal safety issues and Occupational Safety and Health Administration (OSHA) regulations that apply to athletic trainers.
7. Understand basic medical nomenclature associated with athletic injury and illness and the use of such nomenclature in record keeping and communications with other medical professionals.
8. Understand basic anatomy and biomechanics principles and how they are applied to injury, recognition, prevention, and the use of wrapping and bracing techniques and equipment.
9. Understand fitting and usage of protective equipment.
10. Understand the basic principles of protective equipment, taping, wrapping, and bracing used in athletic training settings. This includes the regulations and standards associated with protective equipment.
11. Understand methods used in extrication and transportation of injured athletes including principles in splinting, immobilization, and spine board usage.
12. Understand the basic principles of administering to non-threatening injury such as the use of cryotherapy, elevation, and compression.
13. Understand where to seek assistance for disease control, notification, and epidemic prevention.
14. Understand symptoms and proper responses to life-threatening events such as shock, brain injury, and spinal cord injuries.
15. Understand the difference between injury recognition, assessment, and diagnosis.

Student Responsibilities

*Angel Web Site:* course management tool for each student, teaching assistant, faculty and administrators to cooperatively assist in the classroom learning experience. **Newsflash:** Angel Web Site contains green tabs saying – Activity at a Glance, Grades, Course Syllabus, Did you know?, Course Mail, and Google, etc.

You can access the site by going to the following site [http://angel.msu.edu](http://angel.msu.edu). You will need your pilot ID and password to login.

Visiting *Angel Website* is a requirement of class, but I also suspect that you will not want to miss what is happening there.

*Attendance & Participation:* Optimal learning environment requires active presence of each class member
Each unexcused absence will result in a 1% deduction from your FINAL GRADE. If the instructor marks you TARDY, each tardy counts as 1/2 absence (with 2 tardies resulting in a 1% deduction from your final grade)

Attendance Addendum: Requesting class time off for a special holiday or college sponsored athletic event must be given in writing to myself two weeks prior to the scheduled date in order to be considered an unexcused absence and being allowed to make up quizzes.

Readings: The classroom experience (adventure) begins with reading assignments. Daily quizzes/assignments will contain one question about the reading material.

NEW - Cell Phone Policy: Cell phones are the coolest invention since the weed whacker.

Newsflash: Each of us will at one time or another experience the uncomfortable and embarrassing emotions associated with our cell phone ringing or vibrating during class. Please extend each other, (including your humble instructor), the courtesy of quietly notifying the offending party. If repeat reminders are required for one individual, the individual is requested to apply one of their stronger transferable skills to solve this dilemma.

Academic Dishonesty: The Michigan State University policy on academic dishonesty is as follows and can be found on page 81 of the student handbook and resource guide section 1.00-1.06. Any student who commits any form of academic dishonesty will be dealt with on an individual basis (from receiving a 0.0 on the assignment to receiving a 0.0 for the class). Additionally any form of academic dishonesty will be reported to the department, college, and the athletic training interview committee.

http://www.vps.msu.edu/SpLife/default.pdf

The office of the Ombudsman describes Academic dishonesty at Michigan State University as a conduct that violates the fundamental principles of truth, honesty, and integrity. The following conduct is specifically cited in the General Student Regulations 1.00-1.06 and can be found on page 81 of the student handbook.

http://www.vps.msu.edu/SpLife/default.pdf

- Supplying or using work or answers that are not one’s own.
- Providing or accepting assistance with completing assignments or examinations.
- Interfering through any means with another’s academic work
- Faking data or results.
Office Hours: Request of Mutual Respect: Before contacting the instructor by email or physically visiting for office hours, the student will do the following first:

- Work on the problem, question, or concern for 15 minutes.
- Contact at least one other classmate

Grading Criteria:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Scale</th>
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</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>92-100</td>
</tr>
<tr>
<td>Exam 2</td>
<td>85-91</td>
</tr>
<tr>
<td>Final Exam</td>
<td>80-84</td>
</tr>
<tr>
<td>Attendance/Signed Syllabus</td>
<td>75-79</td>
</tr>
<tr>
<td>Participation</td>
<td>70-74</td>
</tr>
<tr>
<td>Assignments/Quizzes</td>
<td>65-69</td>
</tr>
<tr>
<td>Abstracts</td>
<td>60-64</td>
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<tr>
<td>Total</td>
<td>&lt;60</td>
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Exams (400 total points)
There will be two exams and a final exam. Each exam is worth 100 points; the final will be worth 200 points. The final will consist of 50% new material and 50% cumulative.

Makeup Exams
Absolutely no makeup exam/quizzes will be given unless a valid medical excuse is presented and verified by me with your physician or unless notification of a conflict with religious observance, scheduled class field trip, or intercollegiate athletic participation is provided at least 2 weeks in advance of the date. Any makeup that is given must be taken within 48 hours of normally scheduled exam.

Assignments/Quizzes
There will be at least 12 assignments, each worth 10 points. The top ten will be used to form the assignment/quiz grade. Any at home assignments will be due at the beginning of class on the date due.

Abstracts
An abstract is a summary of an article. Students are to find an article/study from a refereed journal (see page 11 of your book for a list of acceptable journals). Articles/studies should be no earlier than 1999. Read the article/study and write an abstract of the article/study. Abstracts are due at the beginning of class. The abstract should be completed with the following information.

- Introduction to the topic of the article/study
- Summary of the information presented in the article/study
TENTATIVE COURSE OUTLINE

This is a tentative course outline. The instructor reserves the right to alter this outline.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Assignments/Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introductory Activities</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>8/27 &amp; 8/29</td>
<td>The Athletic Trainer and Sports Medicine Team</td>
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<tr>
<td>2</td>
<td>M. 9/3: LABOR DAY – NO CLASS</td>
<td>Chapters 2 &amp; 3</td>
</tr>
<tr>
<td>9/5</td>
<td>W. 9/5: Health Care Administration in Athletic Training</td>
<td>Signed Syllabus Due by 9/5</td>
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<td></td>
<td>Legal Concerns and Insurance Issues</td>
<td>Homework #1 Due by 9/5</td>
</tr>
<tr>
<td>3</td>
<td>Finish Health Care Adm. Begin Legal Concerns.</td>
<td>Chapter 2 &amp; 3</td>
</tr>
<tr>
<td>9/10 &amp; 9/12</td>
<td>In-class Health Care Outline Group Assignment</td>
<td>Healthcare Outline Due 9/10</td>
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<tr>
<td></td>
<td>Finish Legal Concerns. Begin Training and Conditioning Techniques</td>
<td>Chapter 4</td>
</tr>
<tr>
<td></td>
<td>Abstract Topic Due 9/24</td>
<td>Homework #2 Due by 9/12</td>
</tr>
<tr>
<td>4</td>
<td>Finish Training and Conditioning</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>9/17 &amp; 9/19</td>
<td>Nutritional Concerns</td>
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<tr>
<td>5</td>
<td>First test review Chapters 1-5 Prentice.</td>
<td>Abstract Topic Due 9/24</td>
</tr>
<tr>
<td>9/24 &amp; 9/26</td>
<td>Test (Chapters 1-5) Environmental Considerations</td>
<td>Homework #3: Nutrition Log Due 9/24</td>
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<td></td>
<td>Test (Chapters 1-5) Environmental Considerations</td>
<td>Read Chapter 6. (Read and complete answers in Medical Terminology Chapter 1)</td>
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<tr>
<td>6</td>
<td>Finish Environmental Considerations. In-class Group Environment Assignment.</td>
<td>Abstract #1 Due 10/1</td>
</tr>
<tr>
<td>10/1 &amp; 10/3</td>
<td>Quiz: Medical Terminology. Chapter 1, Protective Gear and Sports Equipment</td>
<td>Chapter 6 &amp; 7</td>
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<td></td>
<td>Environment Assignment Due 10/3</td>
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<tr>
<td>7</td>
<td>Bandaging &amp; Taping</td>
<td>Chapter 8. (Read and complete answers in Medical Terminology Chapter 1)</td>
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<tr>
<td>Date</td>
<td>Assignment</td>
<td>Chapter(s)</td>
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<tr>
<td>10/10</td>
<td>Mechanism and Characteristics of Sport Trauma In-class Group Sport Trauma Assignment.</td>
<td>Terminology Chapter 10, Chapter 9.</td>
</tr>
<tr>
<td>10/17</td>
<td>Blood Borne Pathogens On-the-Field Acute Care and Emergency Procedures</td>
<td>Chapter 14 Chapter 12 Abstract #2 Due 10/24</td>
</tr>
<tr>
<td>10/22</td>
<td>Off-the-Field Evaluations Second Test Review Chapters 6-10, 12-14</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>11/5</td>
<td>Test (Chapters 6-10, 12-14) Modalities &amp; Therapeutic Exercise</td>
<td>Chapter 15 &amp; 16</td>
</tr>
<tr>
<td>11/19</td>
<td>Psychosocial Intervention for Sports Injuries and Illnesses Finish Psychosocial Intervention</td>
<td>Chapter 11. Abstract #3 Topic Due 11/19</td>
</tr>
<tr>
<td>11/26</td>
<td>Skin Disorders Additional General Medical Issues</td>
<td>Chapters 28 Chapter 29. Abstract #3 Due 11/28</td>
</tr>
<tr>
<td>11/28</td>
<td>Foot &amp; Ankle Final Exam</td>
<td>Chapters 18 &amp; 19 Wednesday, December 12 7:45a.m. – 9:45 p.m.</td>
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</tbody>
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Syllabus Agreement
Due by September 5, 2007

I have located, downloaded, and reviewed the syllabus for KIN 126 located at the course Angel Web Site (even possibly framed somewhere special to look at for inspiration). Any questions I have now and in the future regarding this syllabus can be directed to the instructor. I understand that any additional editorial changes of the syllabus will be communicated in class and on Angel Web Site.

Print Name: ___________________________________________________

Student’s Signature:_____________________________________________

Date:_________________
CAATE Competencies and proficiencies covered in this class:

AC-C1 Explain the legal, moral, and ethical parameters that define the scope of first aid and emergency care and identify the proper roles and responsibilities of the certified athletic trainer.

AC-C3 Determine what emergency care supplies and equipment are necessary for circumstances in which the athletic trainer is the responsible first responder.

AC-C4 Know and be able to use appropriately standard nomenclature of injuries and illnesses.

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-C15 Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.

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-C27a Different types of shock

AC-C28 Identify the signs and symptoms of serious communicable diseases and describe the appropriate steps to prevent disease transmission.

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-P3g Normalize body temperature in situations of severe/life-threatening heat or cold stress

AC-P3i Administer an EpiPen for anaphylactic shock

AC-P4a Open and closed wounds (using universal precautions)

AC-P4c Environmental illness

AC-P4e Acute asthma attack
Different types of shock

Explain consequences of improper fluid replacement.

Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).

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.

Explain typical administrative policies and procedures that govern first aid and emergency care (e.g., informed consent and incident reports).

Develop risk management plans, including facility design, for safe and efficient health care facilities.

Describe the current professional development requirements for the continuing education of athletic trainers and how to locate available, approved continuing education opportunities.

Describe the role and function of the governing structures of the National Athletic Trainers' Association.

Describe the role and function of the professional organizations and credentialing agencies that impact the athletic training profession.

Identify the objectives, scope of practice and professional activities of other health and medical organizations and professions and the roles and responsibilities of these professionals in providing services to patients.

Identify the components of, and the techniques for constructing, a professional resume.

Summarize the history and development of the athletic training profession.

Identify and explain the recommended or required components of a preparticipation examination based on appropriate authorities’ rules, guidelines, and/or recommendations.

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-C12  Explain the components and purpose of periodization within a physical conditioning program

RM-C13  Identify and explain the various types of flexibility, strength training, and cardiovascular conditioning programs. This should include the expected effects (the body’s anatomical and physiological adaptation), safety precautions, hazards, and contraindications of each.

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

RM-CP3  Demonstrate the ability to develop, implement, and communicate effective policies and procedures to allow safe and efficient physical activity in a variety of environmental conditions. This will include obtaining, interpreting, and recognizing potentially hazardous environmental conditions and making the appropriate recommendations for the patient and/or activity. Effective lines of communication shall be established with the patient, coaches and/or appropriate officials to elicit and convey information about the potential hazard of the environmental condition and the importance of implementing appropriate strategies to prevent injury.

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-C7  Explain the relationship of injury assessment to the systematic observation of the person as a whole.

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.

MC-C1 Describe and know when to refer common congenital or acquired abnormalities, physical disabilities, and diseases affecting people who engage in physical activity throughout their life span (e.g., arthritis, diabetes).

MC-C2 Understand the effects of common illnesses and diseases in physical activity.

MC-C3 Describe common techniques and procedures for evaluating common medical conditions and disabilities including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques (e.g., assessing heart, lung and bowel sounds), and neurological and circulatory tests.

MC-C15 Describe and know when to refer common and/or contagious skin lesions from trauma, infection, stress, drug reaction, and immune responses (e.g., wounds, bacteria lesions, fungal lesions, viral lesions, bites, acne, eczema dermatitis, ringworm).

MC-C16 Describe and know when to refer common medical conditions of the immune system from infection, congenital and acquired disease, and unhealthy lifestyle. (e.g., arthritis, gout, upper respiratory tract infection [URTI], influenza, pneumonia, myocarditis, gastrointestinal infection, urinary tract infection [UTI], sexually transmitted diseases [STDs], pelvic inflammatory disease, meningitis, osteomyelitis, septic arthritis, chronic fatigue and overtraining, infectious mononucleosis, human immunodeficiency virus (HIV) infection and AIDS, hepatitis B virus infection, allergic reaction and anaphylaxis, childhood infectious diseases [measles, mumps, chickenpox]).

MC-C19 Describe a plan to access appropriate medical assistance on disease control, notify medical authorities, and prevent disease epidemics.

MC-CP1.1 Derma

PS-C10 Identify the symptoms and clinical signs of common eating disorders and the psychological and sociocultural factors associated with these disorders.

AD-P1 Develop risk management plans, including facility design, for safe and efficient health care facilities.

PD-C2 Describe the process of attaining and maintaining national and state athletic training professional credentials.
AD-C15 Explain typical administrative policies and procedures that govern first aid and emergency care (e.g., informed consent and incident reports).

EX-C8 Explain the effectiveness of taping, wrapping, bracing, and other supportive/protective methods for facilitation of safe progression to advanced therapeutic exercises and functional activities.

EX-C7g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a therapeutic exercise program.