

University of Wisconsin – Stevens Point School of Physical Education & Athletic Training Athletic Training Program



Course Title: Athletic Training 382: Therapeutic Modalities

Semester: Spring 2016 Course Time: Tuesday & Thursday 8:00-9:50am

Classroom: HEC 147 Instructor: Beth Kinslow Office: 129 HEC

E-mail: <u>bkinslow@uwsp.edu</u> **Office Phone:** (715)346-2409 **Cell Phone:** (715)498-1068 **Office Hours:** 10:00-12:00 T & R and by appointment Available between 8am-8pm

Required Textbook— Therapeutic Modalities (2nd Ed.). Knight KL, Draper DO. Lippincott Williams & Wilkins. Philadelphia

Course Description: Principles of electromagnetic and acoustical treatment methods, indications and contraindications, and procedures for applying these treatments to athletic injuries

Introduction: The purpose of this course is to provide you with an introduction to therapeutic modalities for application to orthopedic injuries. The focus throughout this course will be on utilization of the best evidenced based practices related to therapeutic modalities and patient education. This course will serve as a foundation for the rehabilitation process you will participate in during your time in the UWSP Athletic Training Program.

• Prerequisites: Admission to ATP, Current CPR & First Aid Certification, AT 251

Through this course, students will demonstrate mastery of specific competencies and proficiencies outlined in the NATA *Athletic Training Educational Competencies and Clinical Proficiencies*, identified by the UWSP Athletic Training Program for AT 382. (http://www.uwsp.edu/peat/pages/athltraining/default.aspx)

Course Expectations:

• Instructor's Role

- o Come to class prepared to foster an environment of learning for all students.
- o Engage students in the learning outcomes associated with the course.
- o Respond to all phone calls and e-mails within 48 hours.
- o Make adjustments to the course schedule as necessary to enhance student learning.
- o Treat all students with integrity and respect.

• Student's Role

- Come to class prepared to engage in class activities and discussions by completing all readings and course preparation listed on the syllabus along with any other information seeking that may enhance individual understanding of course information.
- o Ask questions to help further understanding of prevention and care in athletic training.
- o Be open and respectful of others' ideas and challenge previous knowledge.

• Tips for Success

- Communicate early and often regarding class conflicts, assignments, and any questions regarding this course.
- o Take advantage of your resources.
 - Meet with your mentor on a regular basis.
 - Create study groups with your peers.
 - Utilize the Tutor & Learning Center (http://www.uwsp.edu/tlc/Pages/default.aspx)

Enduring Understandings

Students will understand that...

- The use of therapeutic modalities is only part of a complex rehabilitation process.
- Therapeutic modalities should be applied utilizing the principles of evidence based practice.
- It is important to understand the principles of therapeutic modalities to properly apply to patients.

Essential Questions (The heart of the course will answer...)

- What is the role of therapeutic modalities in the rehabilitation process?
- What are the indications/contraindications for specific modalities?
- How does an athletic trainer determine the correct therapeutic modality for each patient?
- What is the best method to determine if the treatment choice is effective?

Knowledge, Skills, and Dispositions

Knowledge (Know)

Students will/can...

- Understand the underlying physics, physiological effects, indications, and contraindications of the various therapeutic modalities that are used in the athletic training.
- Recognize legal considerations of the delivery of therapeutic modalities and administrative considerations such as documentation and facility maintenance.
- Understand the normal physiological response of the human body to trauma, physiological process of wound healing and tissue repair.
- Understand pain perception, pain assessment, and comprehend how pain control theories function physiologically.
- Comprehend the methods of heat transmission, the indications/contraindication of thermal therapies, and its therapeutic effects.
- Understand basic concepts of the electromagnetic (ampere, volts, watts, ohms, etc.) and acoustic spectra (frequency, wavelength, amplitude, etc.).

Skills (Able to do)

Students will/can...

- Identify the indications and contraindications for electromagnetic, ultrasonic, and mechanical modalities and their therapeutic effects throughout wound healing and tissue repair.
- Demonstrate the ability to effectively communicate clinician's rational for and the procedures for therapeutic modalities to both the patient and other allied health professionals.
- Utilize findings and knowledge from a physical examination in selecting the appropriate therapeutic modality in the course of treatment.
- Demonstrate the ability to apply therapeutic modalities with regard to: patient preparation, machine/equipment set-up, determination of dosage/intensity, and operational procedures.

Dispositions (Value/Appreciate)

Students will/can...

- Comprehend the professional, ethical, and legal parameters of a certified athletic trainer in the care of injured/ill patients.
- Know and understand the laws govern dispensing and storage of prescription and non-prescription drugs.
- Grasp the importance of patient education and appreciate its role in the rehabilitation process.

Assessment Evidence

Core Performance Task: Write an evidenced based research paper on the efficacy a specific modality for an injury or medical condition. Identify a therapeutic modality of interest or an injury of interest and determine the effectiveness of the therapeutic modality based on the current research.

Plan: Students will select a topic based on a therapeutic modality and write a evidence based research paper. Topics can range from the effects of heat on chronic injuries to the effectiveness of electrical stimulation on pain control. The topic should be of interest to the student. Students will develop a PICO question, perform a literature search and review the current research. Students will then be expected to write a paper reflecting their PICO question and the current research. Each student will present their research paper to the class at the end of the semester utilizing visual aids. Both the final draft of the paper and the presentation will be due the last week of classes.

Other Assessment Evidence

- Attendance and participation in class (2pts/week)
 - You will be expected to complete the assigned preparatory work prior to coming to class.
 - Readings, videos, or tasks will be listed in the syllabus for that week.
 - All readings and links to videos will be located in D2L under the title listed in the syllabus.
 - You should be prepared to participate in an in-class activity related to the question posed for the week per the course schedule.
- Written Laboratory assignments (~150pts)
 - o For each therapeutic modality you will complete a lab assignment.
 - o Lab assignments may be typed or handwritten.
 - You are expected to complete all lab activities unless indicated on the lab, or prior excuse from the instructor.
 - o Students may work in pairs or groups, but work must be completed on an individual basis.
 - Lab due dates will be given when labs are handed out and will not be listed in the course schedule.
- Journal article reviews (30pts)
 - You will write two article reviews related to peer-reviewed journal articles.
 - You will determine how the information can be applied to the athletic training profession.
 - The pre-selected articles will be posted on D2L.
- Proficiency Packet (40 pts.)
 - Each student will be asked to download the course's proficiency packet at the beginning of the semester.
 - Students will be required to be checked off on all proficiencies by a peer and an upperclassmen by the scheduled due date.
 - Students should utilize downtime appropriately during your clinical hours to complete these.
- Practical examination (50 pts.)
 - O Students will complete will complete one practical exam during finals week.
- Practical exams will consist of set-up, application, dosage, and patient communication of multiple therapeutic modalities.
- Possible additional assignments as deemed appropriate by instructor
- Written Exams (3 Exams)
 - o Unit 1 Exam-(50pts)
 - O Unit 2 Exam-(50pts)
 - o Final Cumulative Exam-(75pts)

Grading Procedures:

The following components of the course will count towards a percentage of your grade (point breakdown listed above):

| Class Participation | 10% |
|-------------------------------------|-----|
| Written Assignments | 35% |
| Proficiency Packet & Practical Exam | 20% |
| Written Exams | 35% |

Grading Scale:

Final letter grades will be awarded as follows: A: 94-100% C: 73-76%

C+: 77-79%

Additional Information

Class Policies

- Daily class attendance and **active participation** in class are required.
 - o For every 2 unexcused absences to class will result in the loss of a ½ letter grade. Excused absences must be approved prior to class with verbal approval from the instructor. No electronic communication is accepted. Exams may not be made up unless the instructor gives prior approval.
 - Students are solely responsible for obtaining any course material missed due to absence.
- Students shall come to class on time and prepared to engage in meaningful discussion. Reading and written assignments are to be completed prior to the beginning of each class. If student arrives late it will be counted as an unexcused absences. See above policy regarding unexcused absences.
- Students will be expected to complete all assignments on time based on the syllabus and due dates given by the instructor. Assignments turned in late will be dropped one letter grade per day. Students should expect additional assignments throughout the semester to facilitate learning.
- This course will use Desire 2 Learn (D2L) throughout the semester to distribute materials, conduct online quizzes/discussions, and inform students of syllabus changes become familiar with D2L and make it a point to check the course page on D2L regularly.
- The use of cell phones will not be accepted during class time. Any cell phones used during class will be confiscated until the class time.
- Computers and tablets may be used in class to take notes and as warranted during class activities. Computers may not be used for social media, personal email or other non-class related activities.
- Students are expected to treat everyone with respect and disrespect of any kind will not be tolerated. If anyone feels uncomfortable during class for any reason please feel free to discuss your concerns with the instructors.

University Policies:

- Academic Integrity
 - O The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions.

Attendance Policy

Attend all your classes regularly. We do not have a system of permitted "cuts."

If you decide to drop a class, please do so using myPoint or visit the Enrollment Services Center.

Changes in class enrollment will impact your tuition and fee balance, financial aid award and veterans educational benefit. During the first eight days of the regular 16 week term, your instructor will take attendance (see Attendance Roster Reporting). If you are not in attendance, you may be dropped from the class. You are responsible for dropping any of your enrolled classes.

• Drop/Add/Withdrawal Policy

You are expected to complete the courses for which you register. If you decide you do not want to take a course, you MUST follow the procedures established by the university to OFFICIALLY DROP the course. If you never attend or stop attending a course and fail to officially drop, you will receive an F in the course at end of the semester.

• Incomplete Policy

o If you are unable to complete your work in a course due to extenuating circumstances or if you need to extend your research or performance beyond the normal limits of a term, you may ask the instructor for an "incomplete" in the course. You will have until the end of the next semester (excluding summer session) to complete the work unless your instructor gives you an earlier deadline. Failure to complete the work prior to the appropriate deadline will result in a grade of F.

• Students' Rights and Responsibilities

The Office of Student Rights and Responsibilities protects your rights as a student. If you believe that your rights have been violated, or if you have questions concerning your rights, write or visit the office in Room 139 Delzell Hall, or call 715-346-2611.

• Academic Accommodation Policy

o Individuals seeking accommodations are expected to demonstrate initiative in obtaining and arranging assistance. The Accommodation Request Form needs to be completed for each qualified student with a disability on a one-to-one basis. Students are encouraged to meet with the Disability & Assistive Technology Center staff early in the semester to discuss which accommodations are appropriate (based on disability and documentation) and what accommodations are needed.

• Emergency Procedures

- o "In the event of a medical emergency, call 911 or use red emergency phone. Offer assistance if trained and willing to do so. Guide emergency responders to victim.
- In the event of a tornado warning, proceed to the lowest level interior room without window exposure
 in the athletic training facility. Avoid wide-span rooms and buildings.
- o In the event of a fire alarm, evacuate the building in a calm manner. Meet outside the Quandt Gym entrance. Notify instructor or emergency command personnel of any missing individuals.
- Active Shooter Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.
- See UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgt for details on all emergency response at UW-Stevens Point."
- All University Policies can be found in the University Handbook http://www.uwsp.edu/acadaff/Pages/handbook.aspx

Course Schedule Spring 2016

| Date | Topic and Question of Week | Preparatory Tasks/ |
|------|---|---|
| 1/24 | V/l-4 - 1-1/4 - 0 | Assignments Due |
| 1/24 | Introduction—What are therapeutic modalities? | Readings: Ch.1 |
| 1/26 | Rehab & Modalities | Readings: Ch. 1 |
| 1/31 | Application & Evidence | Readings:Ch.2 (20-24) Ch. 3 |
| 2/2 | Understanding Pain | Readings: Ch. 8/Video D2L |
| 2/7 | Injury Response | Readings: Ch. 5 Due: PICO Question |
| 2/9 | Healing Process | Readings: Ch. 7 |
| 2/14 | Modalities with Injuries | Readings: Ch. 6 & 9 |
| | | Due: Article Review 1 (Cryotherapy) |
| 2/16 | Cryotherapy-GUEST Lecturer | Readings: Ch. 12 & 13 |
| 2/21 | Cryotherapy | Readings: Ch. 12 & 13 |
| 2/23 | Thermotherapy | Readings: Ch. 10 & 11 |
| 2/28 | Thermotherapy | Readings: Ch. 10 & 11 |
| 3/2 | Diathermy | Readings: Ch. 15 |
| 3/7 | EXAM 1 | Due: Proficiencies |
| 3/9 | Electrotherapy | Readings: Ch. 16 & 17 |
| 3/14 | Electrotherapy | Readings: Ch. 16 & 17 |
| 3/16 | Electrotherapy | Readings: Ch. 16 & 17 |
| | | Due: Article Review 2 (Electrotherapy) |
| 3/21 | SPRING BREAK | |
| 3/23 | SPRING BREAK | |
| 3/28 | Electrotherapy | Readings: Ch. 16 & 17 |
| 3/30 | Electrotherapy | Readings: Ch. 16 & 17 |
| | | Due: Research Paper Peer Review |
| 4/4 | Ultrasound | Readings: Ch. 14 |
| 4/6 | Ultrasound | Readings: Ch. 14 |
| 4/11 | Ultrasound | Readings: Ch. 14 |
| 4/13 | Review-WATA | Due: Research Paper Draft |
| 4/18 | Exam 2 | Due: Proficiencies |
| 4/20 | Manual Therapies | |
| 4/25 | Massage/Cupping | Readings: Ch. 18 |
| 4/27 | Traction | Readings: Ch. 19 |
| 5/2 | Light Therapy/Lasers | Readings: Ch. 20/ Readings: Ch. 21 |
| 5/4 | Review/Catch-up | |
| 5/9 | Presentations | Research Presentations |
| 5/11 | Presentations | Research Presentations |
| 5/18 | FINAL CUMMULATIVE EXAM | 2:45-4:45 |
| | | Due: Proficiencies |