



## **HPHA 441: Therapeutic Modalities**

Spring 2025

Tuesdays & Thursdays: 11a-12:15p/ NHS 160A

### **Instructor: Dr. Sarah M. Mitchell, PhD, ATC, LAT**

Office Location: Nursing & Health Sciences #116

Office Hours: By Appointment; T 1-2p; R 9-11a, 12:30-2:30p; or Virtual

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Preferred Form of Communication: Email

Communication Response Time: 24-48 hours

### **COURSE INFORMATION**

#### **Textbook(s) Required**

Required: Draper, D., Jutte, L., and Knight, K. (2021). *Therapeutic Modalities the Art and Science*, 3<sup>rd</sup> ed. Wolters Kluwer: Philadelphia, PA. **ISBN: 978-1-975121-32-7**

#### **Course Description**

A study of knowledge, skills and values an athletic trainer or health care provider must possess to plan, apply, document and evaluate the efficacy of therapeutic modalities. Scientific theories and application principles will be discussed. Content areas include: cold, heat, ultrasound, electrical stimulation, traction, and manual therapy techniques.

#### **Student Learning Outcomes**

- Identify indications, contraindication, and precautions applicable to electrophysical therapeutic modalities (i.e. thermal, acoustic, electrical, and manual therapeutic modalities).
- Understand the terminology, principles, and applications of electrophysical therapeutic modalities (i.e. ultrasound, electrical stimulation, laser, diathermy, etc.)
- Develop a treatment plan based on the results on an injury evaluation.
- Demonstrate the ability to appropriately document the treatment plan.
- Critically think and problem solve using the most recent evidence based medicine.

### **COURSE REQUIREMENTS**

#### **Minimal Technical Skills Needed**

Students must have working knowledge of and know how to use the MyLeo Online: D2L Brightspace learning management system, and Microsoft Word/Excel/PowerPoint. Students must utilize their University assigned email (Leo mail) for all course communications. All email communication from the instructor will be sent to the student's Leo mail.

*The syllabus/schedule are subject to change.*

## **Student Responsibilities or Tips for Success in the Course**

Students can expect to do well in this course when they attend class on-time, complete all assignments/quizzes/exams, participate in class discussions, and seek assistance when they do not understand course material. Students should also utilize the course resources provided through D2L, such as, course lecture notes, assignments, and course information. Some assignments, quizzes, and exams throughout this course will require using D2L. It is the students responsibly to have internet access, check this site frequently, and become familiar with how it works.

## **Grading**

Each assignment will be worth a pre-determined amount of points. Upon the completion of the course, grades will be calculated by adding up the total number of points each student has earned and dividing it by the total amount of points available in the course. This will produce a percentage of points earned (Ex. Student earned 850 points out a possible 1000 in the course:  $850/1000 = 85\%$  "B"). Grades will be assigned based upon the percentages below.

Quizzes: 100 pts

Class Participation Activities: 100 pts

Article Reviews: 2 @ 50 pts = 100 pts

Exams: 4 @ 100 pts each = 400 pts

Grading Scale:

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 0-50

Students are expected to earn points toward their final grade during the course of the semester with the assignments and tests that are scheduled. Extra Credit Assignments WILL NOT be given at the end of the semester. All students are graded based on the exact same criteria and no exceptions will be made for individual assignments, tests, or final point values.

Students will receive back all graded assignments in a timely manner (typically within 1 week of the due date). Students are encouraged to keep all graded assignments as well as keep up with their grades throughout the semester. Any questions or concerns about assignments/grades should be brought to the instructor's attention immediately (i.e. Do not wait until the end of the semester)

## **ASSESSMENTS**

### **Class Participation Activities**

These activities will be given throughout the semester over the reading assignments or material covered in previous lectures. Class participation activities will not be allowed for make-up unless the absence is excused.

### **Quizzes/Assignments**

Quizzes may be short answer, multiple choice, true/false, listing, etc, and will be online on D2L each week. Quizzes will be due Thursday at 11:59p each week. Quizzes must be completed during the specified dates each week. Make-ups will not be allowed.

### **Article Reviews**

Students will find peer-reviewed journal articles that are related to the course topics and will summarize the articles. More information will be given when assignments are made and will be posted on D2L. All assignments are due at 11:59p on the due date to receive credit.

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## **Exams**

Four written exams will be given. Final exam is comprehensive. The format shall include any of the following: short answer, essay, fill in the blank, multiple choice, true/false, and/or listing type questions. All exams will be given in-class or through D2L. Exams must be taken on the designated exam window. No make-up exams will be allowed unless prior arrangements have been made with the instructor. Under certain circumstances (situations out of your control), make-ups will be allowed at the instructor's discretion. Students are required to contact the instructor ASAP if they happen to miss an exam and may be required to provide written documentation.

## **TECHNOLOGY REQUIREMENTS**

### **LMS**

All course sections offered by East Texas A&M University have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

### **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: <https://community.brightspace.com/support/s/contactsupport>

### **Interaction with Instructor Statement**

Email is the best way to contact the instructor if you need assistance with any aspect of the course. Instructor will typically respond to emails within 24 hours (except on weekends). Students are also welcome to utilize instructor's office hours if they prefer a face to face conversation.

## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Course Specific Procedures/Policies**

*The syllabus/schedule are subject to change.*

## **Attendance**

Class attendance is **required**. Excused absences include university approved absences or those that I receive appropriate notification of (i.e. sudden/serious illness, death to immediate family member, etc.). It is the student's responsibility to be aware of assignment due dates as the dates are posted on D2L. In the case of missing deadlines due to unavoidable or emergency situations, or illness (including Covid), the student must promptly notify the instructor via email explaining the circumstances. Prompt notification (within three days) is required to have an absence excused; additionally, written documentation may be required to have the absence excused. Assignment deadlines may be modified for students with excused absences. Technical and/or computer problems associated with D2L are not a valid excuse for turning in an assignment late.

## **Late Work**

All assignments are due as assigned and must be turned in on or before the due date to receive full credit. This includes assignments that are due when you have an absence. Assignments turned in beyond class time on the due date will receive zero (0) points. It is the student's responsibility to be aware of assignment due dates as the dates are included on the course schedule and posted on D2L.

## **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **University Specific Procedures**

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

Students are expected to prepare for, participate in, and attend each scheduled class.

Failure to do so may/will lead to a decline in the student's overall grade. In order to succeed in this class, students should read each chapter prior to beginning that section in the course. Forming study groups to prepare for class and tests will also greatly benefit students throughout the semester. Students are also expected to behave appropriately in class and avoid being a distraction to their fellow students and the instructor. Appropriate behavior involves paying attention, actively participating, and following instructions. Cell phones (including text messaging), music, inappropriate language/gestures, and any other behavior determined to be a distraction will not be tolerated. Students who are considered to be a disturbance in class will be asked to leave.

### **ETAMU Attendance**

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

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<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

### **Academic Integrity**

Students at East Texas A&M University are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.03UndergraduateAcademicDishonestyForm.pdf)

[Undergraduate Student Academic Dishonesty Form](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/document/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/document/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

### **AI Tools**

East Texas A&M University acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course. Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Like an encyclopedia or a dictionary or Wikipedia, AI tools can be used to begin the process of writing; in other words, it is a tool for preliminary research, not a reliable source. Preliminary research assists writers in learning the basics about a topic so that they can research the specifics using credible, academic sources which can be cited in the assignment. Thus, AI is used to generate ideas in the same way that a brainstorm or a Freewrite is used in the prewriting stage of the writing process. While no one would drop a brainstorm into a formal document, the ideas that are generated from the brainstorm can be developed as part of a writing assignment. The same is true of AI. In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

### **Students with Disabilities-- ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact: **Office of Student Disability Resources and Services**, Velma K. Waters Library Rm 162, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

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**Nondiscrimination Notice**

East Texas A&M University will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

**Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M University buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and East Texas A&M University Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer. Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M University campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

**Mental Health and Well-Being**

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.

**Department or Accrediting Agency Required Content****Assumption of Risk**

I hereby waive any claim I may have as a result of my participation in the above mentioned course. I hereby agree to indemnify, defend, and hold harmless the State of Texas, the Texas A&M University System, East Texas A&M University, and the Department of Health and Human Performance, and all of the officers, trustees, directors, agents, representatives, and employees of the foregoing entities against any and all claims, including attorneys' fees and costs, which may be brought against any of them by anyone claiming to have been injured as a result of my participation in the this course.

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## COURSE OUTLINE / CALENDAR

		Class Lecture	Reading Assignment	Assignments: Due on Thursdays at 11:59p
Tues	1/14	Intro & Syllabus		
Thurs	1/16	Therapeutic Modalities	Ch 1	
Tues	1/21	Therapeutic Modalities	Ch 1	Online Quiz
Thurs	1/23	Evidence-Based Practice	Ch 2	Intro Discussion
Tues	1/28	General Application Procedures	Ch 3	
Thurs	1/30	No in-person class - D2L assignment		Online Quiz
Tues	2/4	Injury Record Keeping	Ch 4	
Thurs	2/6	Tissue Response to Injury	Ch 5	Online Quiz
Tues	2/11	Tissue Response to Injury	Ch 5	
Thurs	2/13	Immediate Care of Acute Orthopedic Injuries	Ch 6	Online Quiz
Tues	2/18	Exam 1 (Chapters 1-6)	Ch 7	
Thurs	2/20	The Healing Process; No in-person class	Ch 7	Online Quiz
Tues	2/25	Understanding Pain	Ch 8	
Thurs	2/27	Understanding Pain	Ch 8	Online Quiz
Tues	3/4	Relieving Orthopedic Injury Pain	Ch 9	Article Review: Thermo- or Cryotherapy
Thurs	3/6	Principles of Heat for Thermotherapy	Ch 10	Online Quiz
Tues	3/11	Spring break		
Thurs	3/13	Spring break		
Tues	3/18	Superficial Thermotherapy Application	Ch 11	
Thurs	3/20	Exam #2 (chapters 7-11)		
Tues	3/25	Cryotherapy Beyond Immediate Care	Ch 12	
Thurs	3/27	Cryotherapy for Post-Immediate Care	Ch 13	Online Quiz
Tues	4/1	Therapeutic Ultrasound	Ch 14	
Thurs	4/3	Therapeutic Ultrasound	Ch 14	Online Quiz
Tues	4/8	Diathermy	Ch 15	Article Review: Electrotherapy or Ultrasound
Thurs	4/10	Principles of Electricity for Electrotherapy	Ch 16	Online Quiz
Tues	4/15	Application procedures: Electrotherapy	Ch 17	
Thurs	4/17	Exam #3 (chapters 12-17)		
Tues	4/22	Therapeutic Massage	Ch 18	
Thurs	4/24	Spinal Traction	Ch 19	Online Quiz
Tues	4/29	Laser & Light Therapy	Ch 21	
Thurs	5/1	Nitrogen Vapor & Cryotherapy	Ch 22	Online Quiz
Tues	5/6	Final Exam (Chapters 18, 19, 21, 22 & Comprehensive)		

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