

Eastern Illinois University  
Department of Kinesiology and Sports Studies  
KSS 3143 Therapeutic Modalities

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**Office Hours:** M/W 8:30-9:30; T/R 9:00-10:00 or by appointment

Class Time: Monday/Friday 10:00 – 10:50 Lantz 3409  
Lab, Wednesday 10:00 – 10:50 Lantz 1541

Textbooks: *Therapeutic Modalities, 3<sup>rd</sup> edition*, Starkey.

Course Description: This course studies the physical principles, physiological effects, indications, contraindications, and standard operating procedures of all therapeutic modalities commonly used in athletic training.

Course Objectives: By the end of the semester the student will be able to:

- Demonstrate an understanding of the human body's normal physiological response to trauma and the process of wound healing/tissue repair.
- Compare & contrast the prevailing pain control theories.
- Demonstrate an understanding of the principles of electrophysics and biophysics, specific physiological effects, and therapeutic indications and contraindications associated with the use of:
  1. Electrotherapy
  2. Hydrotherapy
  3. Cryotherapy
  4. Radiant energy
  5. Paraffin
  6. Intermittent compression units
  7. Cervical/lumbar traction
  8. Massage
- Demonstrate an understanding of the application of contemporary therapeutic modalities including patient preparation, set-up, treatment, parameters, and operational procedures.
- Discuss the federal and state regulations pertaining to safety standards for health care facilities and the installation and maintenance of therapeutic equipment.
- Demonstrate an understanding for the role and function of commonly used prescription and non-prescription pharmacological agents in the medical treatment of common athletic injuries/illnesses as related to therapeutic modalities.

Mon	Jan 7	Introduction to Class/Therapeutic Modalities	Chapter 1
Wed	Jan 9	Inflammatory Process	Chapter 1
Fri	Jan 11	Inflammation/Pain	Chapter 2
Mon	Jan 14	MLK Day – No Class	
Wed	Jan 16	Pain	Chapter 2
Fri	Jan 18	Problem Solving/Administrative Concern	Chapter 3/4
Mon	Jan 21	Administrative Concerns	Chapter 4
Wed	Jan 23	Thermal Agents	Chapter 5
Fri	Jan 25	Thermal Agents	Chapter 5
Mon	Jan 28	Exam 1	
Wed	Jan 30	Lab 1	
Fri	Feb 1	Application of Thermal Agents	Chapter 6
Mon	Feb 4	Application of Thermal Agents	Chapter 6
Wed	Feb 6	Lab 2	
Fri	Feb 8	Electrical Stimulating Techniques	Chapter 11/12
Mon	Feb 11	Electrical Stimulating Techniques	Chapter 11/12
Wed	Feb 13	Lab 3	
Fri	Feb 15	Electrical Stimulating Techniques	Chapter 13
Mon	Feb 18	Electrical Stimulating Techniques	Chapter 13
Wed	Feb 20	Exam 2	
Fri	Feb 22	Ultrasound	Chapter 7
Mon	Feb 25	Ultrasound	Chapter 7
Wed	Feb 27	Lab 4	
Fri	March 1	Ultrasound	Chapter 7/8
Mon	March 4	Ultrasound	Chapter 7/8
Wed	March 6	Lab 5	
Fri	March 8	Ultrasound	Chapter 7/8
Mon	March 11	Spring Break	
Wed	March 13	Spring Break	
Fri	March 15	Spring Break	
Mon	March 18	Diathermy	Chapter 9/10
Wed	March 20	Lab 6	
Fri	March 22	Diathermy	Chapter 9/10
Mon	March 25	Intermittent Compression	Chapter 14
Wed	March 26	Lab 7	
Fri	March 29	Intermittent Compression	Chapter 14
Mon	April 1	Therapeutic Massage	Chapter 16
Wed	April 3	Lab 8	
Fri	April 5	Therapeutic Massage	Chapter 16
Mon	April 8	Traction	Chapter 17
Wed	April 10	Lab 9	
Fri	April 12	Light Modalities	Chapter 19
Mon	April 15	Case Reports	

Wed	April 17	Case Reports	
Fri	April 19	Case Reports	
Mon	April 22	Case Reports	
Wed	April 24	Case Reports	
Fri	April 26	Case Reports	
Tuesday	April 30	Final Exam 10:15 – 12:15	

**\*Schedule subject to change at instructor's discretion\***

Methods for assessing student's achievement of learning objectives:

Your final grade will be determined by a combination of classroom scores, lab and clinical education scores.

Classroom	70%
Lab	30%
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	100%

Classroom Assignments:

1. Case Study
2. Written examinations
3. Quizzes
4. Exams

Lab Assignments:

All labs are mandatory and must not be missed. Any missed lab must be made up within a one week timeframe. All labs are worth 10 points. *\*\*Labs are learning experiences – good effort must be evident when lab assignments are turned in, if little effort is given ½ credit will be given.*

**\*\*\*ALL CLINICAL PROFICIENCIES & COMPETENCIES MUST BE COMPLETED OR YOU WILL NOT BE PERMITTED TO SUCCESSFULLY COMPLET THE ATEP.**

General Information:

Attendance is expected and will reflect your didactic grade as participation is vital to the success in this course. There will be a 3 point quiz given at the end of every lecture period. Attendance in the clinical setting is also expected.

You are expected to be thoroughly prepared for each class. Thoroughly prepared is defined as:

1. Having all materials, including assignments, needed for class before entering the class.
2. Having sufficiently read the assigned readings before class to verbally discuss the content and participate in class.
3. Having formulated questions and presenting these questions in class when information from readings and assignments is unclear.

Use of electronic devices such as iPods, MP3 players, and cell phones, etc is prohibited during class. This includes texting. All phones must be turned off or silenced and placed in your backpack or on the desk in front of you. If your phone rings, I reserve the right to answer the phone and speak to or text the person trying to contact you. If your phone rings a 2<sup>nd</sup> time, your overall grade will be reduced by 5%. Should the pattern continue, it will be recommended that you drop the course.

Students who are having difficulty achieving their academic goals are encouraged to contact the Student Success Center ([www.eiu.edu/~success](http://www.eiu.edu/~success)) for assistance with time management, test taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call 217-581-6696 or go to 9<sup>th</sup> Street Hall, Room 1302.

Disability Statement: If you have a documented disability and wish to receive academic accommodations, please contact the Coordinator of the Office of Disability Services (217-581-6583).

### Case Study

There will be a case study on an athlete from your sport. You will analyze the therapeutic modality program and its effectiveness in treating the injury. The case study will be due on April 13. Late case studies will receive an automatic **75%** reduction in grade. The following structure will be used in the case study:

- a) Personal Data/Pertinent Medical history (age, sex, sport, primary complaint, and pertinent aspects of his/her medical history)
- b) Physical Signs and Symptoms (chronology of the physical findings and objective measures)
- c) Differential Diagnosis (array of possible injuries/conditions)
- d) Results of Diagnostic Imaging/Laboratory Tests
- e) Clinical Course (e.g., diagnosis, treatment, surgical technique, short-term and long-term goals, modalities and rehabilitation program, final outcome)
- f) Deviation from the expected (a brief description of what makes this case unique)
- g) Medical literature supporting the use of your therapy modality program and potential outcome
- h) Overall impression of clinical modality program (did it work, could it have been more effective, role in return to play, etc.)

An example case study will be made available to you.