University of Mobile

SEMESTER: Fall 2017
COLLEGE: School of Health and Sports Science
DEPARTMENT: Kinesiology
FACULTY: Kristen C. Rather, PT, DPT, ATC
Adjunct Instructor- Office- OFF CAMPUS
251-675-3393 or 251-586-2700
krather@umobile.edu
Office hours: By appt. Please email

COURSE: KIN 365 THERAPEUTIC MODALITIES
CREDIT: 3 SEMESTER HOURS

DEFINITION OF CREDIT HOUR:
One credit hour is equivalent to fifteen hours of faculty instruction and a minimum of thirty hours of student reading and work on other assignments in addition to class time. Online classes involve equivalent amounts of time for instruction and coursework.

PREREQUISITE:
Admission into the Athletic Training Program

COURSE DESCRIPTION:
Surveys the theory and operation of the most commonly used physiological therapeutic modalities. Students will develop an understanding of indications for each modality and medical/legal parameters for their usage.

COURSE OBJECTIVES:
CATTE Competencies assigned to KIN 365 located under Appendix I

Upon successful completion of this course, each student will be expected to demonstrate knowledge of:

1. Appropriate, evidence-based protocols of therapeutic modalities as they pertain to musculoskeletal injuries due to sports and physical activity.
2. Proficient application of sports injury management care as it pertains to utilizing therapeutic modalities.
3. Safe and ethical protocols for utilizing modalities for the treatment of injuries due to sports and physical activities.
4. Demonstrate a working knowledge of appropriate, evidence-based protocols of therapeutic modalities as they pertain to musculoskeletal injuries.
5. Explain and identify the mechanism of injury of sports injuries and the proper protocols for utilizing modalities for specific stages of care.
6. Discuss the relationship of anatomical structures and functions as they pertain to the appropriate use of a specific modality.
7. Discuss the injury and healing process: tissue injury, inflammation, and repair.
8. Understand and explain the terminology dealing with pain and pain relief.
9. Explain the importance of understanding and dealing with the psychological aspects of sports injury and the rehabilitation process.
10. Demonstrate competency in the application of various modalities utilized in sport injury management.
11. Explain the importance of understanding the rationale of the indications and contra-indications of the use of modalities in the rehab process.
12. Discuss the safety issues while utilizing therapeutic modalities.

**TEXTBOOK:**

**REQUIRED ACTIVITIES:**
1. Each student will demonstrate a working knowledge of appropriate, evidence-based protocols of therapeutic modalities as they pertain to musculoskeletal injuries.
2. Each student is required to attend ALL lab sessions as this will constitute a percentage of your overall grade. The labs will require you to come dressed in shorts and t-shirt and tennis shoes.
3. Attendance to class and labs will contribute to your grade. Classroom and lab participation is encouraged.
4. LABS: Some labs will meet in the athletic training room as well as in the classroom – these dates will be specified but are subject to change based on availability.
5. Each student is required to take exams when scheduled. Make-up exams may be given if the occasion requires special consideration of the test time. The absence **MUST BE EXCUSED** and the professor should be notified PRIOR to the exam.
6. Practical Final: Each student will be paired up to complete a practical final that will be comprehensive and include scenarios to test decision making ability of use and proper set-up of equipment.

**EVALUATION:**

<table>
<thead>
<tr>
<th>Type of Evaluation</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams</td>
<td>300</td>
</tr>
<tr>
<td>Final (comprehensive)</td>
<td>150</td>
</tr>
<tr>
<td>Practical Final</td>
<td>100</td>
</tr>
<tr>
<td>5 Hands-on Labs (20pts/each)</td>
<td>100</td>
</tr>
<tr>
<td>Class Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>700</td>
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ATTENDANCE POLICY:

Quizzes are given within the first 10 minutes of class. If you are late you will not be able to make up the quiz.

Your attendance will be checked every class. Excused absences are given for physician’s appointments, intercollegiate sports travel, and UM related trips from other areas on campus. It is your responsibility to make up any missed work. You will have 1 week form the time of absence to make up any quiz or test that was missed. After that timeframe a grade of 0 will be given.

DROP DATE:

The last day courses may be dropped without the “F” penalty is November 7, 2017.

ADA STATEMENT:
It is the policy of the University of Mobile to provide reasonable accommodations for persons with disabilities as defined in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Eligibility for services requires prior documentation of the disability. The Academic Advisor and the Disability Services Coordinator, Mrs. Julia Lucy, coordinate support services for students with disabilities and are accommodation resources for faculty and administration.

ADA STATEMENT:
It is the policy of the University of Mobile to provide reasonable accommodations for persons with disabilities as defined in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Eligibility for services requires prior documentation of the disability. The Student Support Services Coordinator, Mrs. Julia Lucy (442-2284), coordinates services for students with disabilities and is an accommodation resource for faculty and administration.

ONLINE COURSE SITE:
A course site for this section can be found in MyUM on the Academic tab, either under My Courses or in Canvas. Faculty members may assign online tests that require identification verification measures. These measures may require additional fees. In order to comply with the Higher Education Act, which requires verification of student identity in online work, all online coursework submitted to the faculty member must be completed by secure login and passcode or sent from the student’s official University E-MAIL ACCOUNT.

TUTORING AND WRITING ASSISTANCE:
Tutoring in a variety of areas and writing assistance are available free of charge to UM students through UM’s Student Success (located behind Weaver Hall). Utilize the link below to schedule an appointment with a tutor online or call Student Success at 251-442-2377. Walk-Ins will be served if tutors are available. https://umportal.umobile.edu/ICS/Campus_Life/Tutoring/ (Go to MyUM>Student Success.) Tutor.com (online tutoring service) is available to students enrolled in online sections within the online course sites.
TENTATIVE COURSE OUTLINE:

Week 1
Syllabi and Course expectations
Chapter 1- Injury Response

Week 2
Chapter 2- Physiology and Psychology of Pain
Chapter 2- continue

Week 3
Chapter 3- Intervention strategies
Chapter 3- continued

Week 4
Chapter 4- Administrative considerations
Test Chapter 1-4

Week 5
Chapter 5- Thermal Modalities
Chapter 5- continued

Week 6
Chapter 6- Clinical applications thermal modalities
Lab- cold and heat modalities

Week 7
Chapter 7- Ultrasound
Chapter 8- Clinical applications of ultrasound

Week 8
Test Chapters 5-8
Thursday- NO class- Fall break
Week 9
Chapter 9- Diathermy/ Chapter 10- Clinical applications of diathermy
Chapter 11- Principles of electrical stimulation

Week 10
Chapter 12- E-stim techniques
Chapter 13- Clinical applications of E-stim

Week 11
Lab Estim
Lab ultrasound

Week 12
Test Chapter 9-13
Chapter 14- Intermittent Compression

Week 13
Chapter 15- Continuous passive motion
Chapter 16- Cervical and Lumbar traction

Week 14
Thanksgiving Break

Week 15-
Lab- IC/ CPM/ Traction
Chapter 17- Therapeutic massage

Week 16
Chapter 18- Biofeedback- Lab
Chapter 19- Laser- Lab
Comprehensive Final exam- No finals are given early.

FINAL EXAM SCHEDULING:
Students are expected to take the final exam on the schedule exam date. Students enrolled in face to face classes need to make all travel arrangements to accommodate the date of the final exam. The final exam should not be given early. The scheduled date for HPES activity classes will have to be the last meeting date prior to the final exam week.

OTHER:
Students will be required to adhere to the academic integrity policy and the dress code, which can be found in the Student Handbook. Please practice common courtesy by silencing and storing away cell phones during class periods.

CLASSROOM ETIQUETTE:
Students will be required to adhere to the academic integrity policy and the dress code, which can be found in the Student Handbook. Please also practice common courtesy by silencing and storing away cell phones during class.

COURSE TIMES:
Tuesday and Thursday 8:00-9:20 Weaver 205/ LAB
Appendix I

CIP-4

Perform a comprehensive clinical examination of a patient with an upper extremity, lower extremity, head, neck, thorax, and/or spine injury or condition. This exam should incorporate clinical reasoning in the selection of assessment procedures and interpretation of findings in order to formulate a differential diagnosis and/or diagnosis, determine underlying impairments, and identify activity limitations and participation restrictions. Based on the assessment data and consideration of the patient's goals, provide the appropriate initial care and establish overall treatment goals. Create and implement a therapeutic intervention that targets these treatment goals to include, as appropriate, therapeutic modalities, medications (with physician involvement as necessary), and rehabilitative techniques and procedures. Integrate and interpret various forms of standardized documentation including both patient-oriented and clinician-oriented outcomes measures to recommend activity level, make return to play decisions, and maximize patient outcomes and progress in the treatment plan.

PS-9

Describe the psychosocial factors that affect persistent pain sensation and perception (eg, emotional state, locus of control, psychodynamic issues, sociocultural factors, personal values and beliefs) and identify multidisciplinary approaches for assisting patients with persistent pain.

TI-1

Describe and differentiate the physiological and pathophysiological responses to inflammatory and non-inflammatory conditions and the influence of these responses on the design, implementation, and progression of a therapeutic intervention.

TI-2

Compare and contrast contemporary theories of pain perception and pain modulation.

TI-3

Differentiate between palliative and primary pain-control interventions.

TI-8

Explain the theory and principles relating to expected physiological response(s) during and following therapeutic interventions.

TI-9

Describe the laws of physics that (1) underlay the application of thermal, mechanical, electromagnetic, and acoustic energy to the body and (2) form the foundation for the development of therapeutic interventions (eg, stress-strain, leverage, thermodynamics, energy transmission and attenuation, electricity).

TI-11

Design therapeutic interventions to meet specified treatment goals.

TI-11a

Assess the patient to identify indications, contraindications, and precautions applicable to the intended intervention.
TI-11b
Position and prepare the patient for various therapeutic interventions.

TI-11c
Describe the expected effects and potential adverse reactions to the patient.

TI-11e
Apply the intervention, using parameters appropriate to the intended outcome.

TI-11f
Reassess the patient to determine the immediate impact of the intervention.

TI-12
Use the results of on-going clinical examinations to determine when a therapeutic intervention should be progressed, regressed or discontinued.

TI-13
Describe the relationship between the application of therapeutic modalities and the incorporation of active and passive exercise and/or manual therapies, including, therapeutic massage, myofascial techniques, and muscle energy techniques.

TI-19
Identify manufacturer, institutional, state, and/or federal standards that influence approval, operation, inspection, maintenance and safe application of therapeutic modalities and rehabilitation equipment.

TI-20
Inspect therapeutic equipment and the treatment environment for potential safety hazards.