ATTR 3369 – THERAPEUTIC INTERVENTIONS I Spring 2018

ATTR 3369 is a required course for the Bachelor of Science in Athletic Training Program. ATTR 3369 is a restricted elective for the Bachelor of Science in Kinesiology.

College of Health Sciences Department of Kinesiology

Instructor: Nicholas E. Grahovec, MS, LAT, ATC, CSCS

Office: HKC 214

Office Phone: 936-294-2648

Office Hours: Virtual office on Blackboard or by appointment – emailing to set an

appointment is always recommended.

E-mail: NGrahovec@shsu.edu

Text/Readings: Starkey, C. (2013). Therapeutic Modalities (4th ed.). F.A. Davis, ISBN: 9780803625938

Course Description: A study of the theories and principles involved in the use of therapeutic modalities in treating injuries to the physically active, providing students with the necessary skills in

theoretical knowledge to formulate plans for injuries. Prerequisite: None. Credit 3.

Students in the BS in Athletic Training Program must make a grade of "C" or better in this course to meet the program retention criteria. A complete list of program retention

criteria can be found: http://www.shsu.edu/academics/health-

sciences/kinesiology/undergraduate/athletic-training-admission-requirements.html

This course meets from 10:00-11:20am on Monday and Wednesday in TEC 00341

(January 17, 2018 – May 10, 2018)

Athletic Training Competencies (CAATE 5th ed):

Objectives/Learning Outcomes Upon completion of this course, the student will be able to:	Activities (* indicates field-based activity)	Performance Assessment	Standards: • CAATE Competencies
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.	Class Discussion/Lecture	Mid-Term Exam Final Exam	TI-1
Compare and contrast contemporary theories of pain perception and pain modulation, and differentiate between palliative and primary pain-control interventions.	Class Discussion/Lecture	Mid-Term Exam Final Exam	TI-2, TI-3
Explain the theory and principles relating to expected physiological response(s) during and following therapeutic interventions.	Class Discussion/Lecture	Mid-Term Exam Final Exam	TI-8

Describe the laws of physics that underlay the application of	Class Discussion/Lecture	Mid-Term Exam Final Exam	TI-9
thermal, mechanical,	Skills Activity	rillai Exalli	
electromagnetic, and acoustic	Skills Activity		
energy to the body, and form			
the foundation for the			
development of therapeutic			
interventions.			
Integrate self-treatment	Class Discussion/Lecture	Mid-Term Exam	TI-10
protocol into the intervention		Final Exam	
when appropriate, including	Skills Activity		
instructing the patient			
regarding self-treatment plans.			
Design therapeutic	Class Discussion/Lecture	Mid-Term Exam	TI-7, TI-11, EBP-10
interventions to meet specified		Final Exam	
treatment goals and determine	Skills Activity		
the effectiveness and efficacy	Billis Hellvily		
of those therapeutic			
intervention utilizing evidence-			
based concepts including			
patient and clinician-oriented			
outcomes.			
Use the results of on-going	Class Discussion/Lecture	Mid-Term Exam	TI-12
clinical examinations to		Final Exam	
determine when a therapeutic	Skills Activity		
intervention should be			
progressed, regressed or			
discontinued.			
Describe the relationship	Class Discussion/Lecture	Final Exam	TI-13
between the application of			
therapeutic modalities and the	Skills Activity		
incorporation of active and			
passive exercise and/or manual			
therapies, including therapeutic			
massage, myofascial			
techniques, and muscle energy			
techniques.	Cl. D	P' 1 P	TOT 14
Describe the use of joint	Class Discussion/Lecture	Final Exam	TI-14
mobilization in pain reduction	G1 '11 A		
and restoration of joint	Skills Activity		
mobility.			
Identify manufacturer,	Class Discussion/Lecture	Mid-Term Exam	TI-19
institutional, state, and/or		Final Exam	
federal standards that influence	Skills Activity		
approval, operation, inspection,	•		
maintenance and safe			
application of therapeutic			
modalities and rehabilitation			
equipment.			
Communicate foundational		Drogentation	EDD 10
		Presentation	EBP-10
knowledge of therapeutic			
interventions and synthesize			
current evidence for and			
against therapeutic intervention			
utilization.			

Web address for *CAATE competencies*: http://caate.net/wp-content/uploads/2014/06/5th-Edition-Competencies.pdf

Course Format:

The content of this course is delivered in a traditional classroom setting. Blackboard will be used regularly to post readings, lectures and assignments, and to communicate via e-mail. It is the student's responsibility to be registered and to become familiar with the system. In addition, course concepts are learned through self-study, classroom discussions, and assignments. Evaluation consists of professor assessments of examinations, quizzes, assignments, practical examinations, and skills lab activity participation.

In this course our focus will be on these major objectives (as assessed by the IDEA course evaluation system):

Essential:

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories).

Important:

- 1. Learning to apply course material (to improve thinking, problem solving, and decisions).
- 2. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course.

Course Content (Tentative Course Schedule):

Date	Topics/Content	Assigned Readings	Assignments Due	
1/17/2018	Course Overview/Resources			
1/22/2018	The Injury Response Process	Starkey Chapter 1	Personal Bio	
1/24/2018	The Injury Response Process		Quiz 1	
1/29/2018	The Physiology and Psychology of Pain	Starkey Chapter 2		
1/31/2018	The Physiology and Psychology of Pain			
2/5/2018	Development and Delivery of Intervention Strategies	Starkey Chapter 3		
2/7/2018	Administrative Considerations	Starkey Chapter 4	Quiz 2	
2/12/2018	Thermal Modalities	Starkey Chapter 5		
2/14/2018	Thermal Modalities			
2/19/2018	Clinical Application of Thermal Modalities	Starkey Chapter 6	Quiz 3	
2/21/2018	Therapeutic Ultrasound	Starkey Chapter 7	Discussion Board 1	
2/26/2018	Therapeutic Ultrasound			
2/28/2018	Clinical Application of Therapeutic Ultrasound	Starkey Chapter 8	Quiz 4	
3/5/2018	Mid-Term Examination Review			
3/7/2018	Mid-Term Examination			
3/12/2018	Spring Break			
3/14/2018	Spring Break			
3/19/2018	Principles of Electrical Stimulation	Starkey Chapter 11	Discussion Board 2	
3/21/2018	Electrical Stimulation Techniques	Starkey Chapter 12		
3/26/2018	Clinical Application of Electrical Agents	Starkey Chapter 13	Quiz 5	
3/28/2018	Intermittent Compression: Continuous Passive Motion	Starkey Chapters 14-15		
4/2/2018	Cervical & Lumbar Traction	Starkey Chapter 16		
4/4/2018	Electromyographic Biofeedback	Starkey Chapters 18	Discussion Board 3	
4/9/2018	Low Level Laser Therapy; Light Therapy	Starkey Chapters 19		
4/11/2018	Shortwave Diathermy	Starkey Chapters 9, 10	Quiz 6	
4/16/2018	Therapeutic Massage	Starkey Chapter 17		
4/18/2018	IASTM, Joint Mobilization, Muscle Energy Techniques	Blackboard Articles	Discussion Board 4	
4/23/2018	IASTM, Joint Mobilization, Muscle Energy Techniques		Quiz 7	
4/25/2018	Final Examination Review			
4/30/2018	Presentation Day 1		Therapeutic Intervention Presentation Submission	
5/2/2018	Presentation Day 2			
TBD	Final Exam			

Course Requirements and Expectations:

- 1. **Technical Requirements:** Students must have access to the Internet, Blackboard, and e-mail. Additional information about Blackboard can be found http://distance.shsu.edu/current-students/. Although not required, it is recommended that you install the Blackboard Learn App to your phone or tablet. This app will enable you to get notifications directly to your phone or tablet when announcements or assignments are posted, and when grades are made available. It is recommended that you log in and check Blackboard daily for updates. For any technical support issues with Blackboard, call 936-294-2780 or e-mail blackboard@shsu.edu.
- Communication and E-mail Etiquette: Questions about the course should be asked during or after
 class as appropriate. However, if a question does arise outside of class, it is advised that the student email the instructor directly at NGrahovec@shsu.edu. When e-mailing the course instructor, provide the
 following:
 - Include the course number in the subject line of your e-mail (please remember that the instructor may be teaching multiple courses during any given semester).
 - Following the course number, provide a meaningful subject to your e-mail. This helps to clarify
 what your message is about or pertaining to, and can help the instructor prioritize e-mails in an
 appropriate order.
 - Address your instructor professionally such as Mr. Grahovec. . . Beginning e-mail correspondence with phrases such as "Hey" is not professional, and will likely be returned to the sender.
 - Use standard spelling, punctuation, and capitalization. Do not write a professional e-mail in the same manner in which you would send a text message. Remember, this is professional correspondence. Avoid using all caps, abbreviations, and emoticons.
 - Write clear paragraphs that provide context and details so that the instructor has a clear picture of the question you are asking.
- 3. **Class Behavior:** Disruptive behavior will result in the student being asked to leave the classroom. A second violation and the student will be dropped from the class. Any distractive or disruptive behavior such as sleeping during class, use of cell phones, and side conversations disrupt those around you. Remember, this is a professional learning environment.
- 4. Usage of Electronic Devices in Class: Telephones, computers, and similar devices are part of everyday life. In the academic classroom, however, during class these devices can be a serious distraction and during tests they can be a serious problem. The use by students of electronic devices that perform the function of a telephone or text messages during class-time is prohibited as it is disruptive to the conduct of class. Laptop computers and other such note-taking devices are allowed provided they are being used for the purpose of taking notes or engaging in interactive content in class as a part of an exercise. If you are found to be using your computer for other purposes, you will be asked to discontinue use of your computer and/or leave the classroom. If you have a potential emergency situation that requires you to be available via text message or phone, you must notify the course instructor at the beginning of class. Failure to comply with this policy could result in confiscation of your device for the duration of class, expulsion from the classroom, or, with multiple offenses, failure of the course.

Any use of a telephone, text messaging device, or any other electronic device that performs these functions during a test period is **prohibited**. These devices should not be present during a test or should be stored securely in such a way that they cannot be seen or used by the student. Even the visible presence of such a device during the test period will result in a zero for that test. Use of these devices during a test is considered de facto evidence of cheating and could result in a charge of academic dishonesty (see student code of conduct; http://www.shsu.edu/students/guide/StudentGuidelines2010-2012.pdf#page=29).

5. Class Materials: You are responsible for reading the materials assigned in class. This can include readings from the book and handouts distributed in class or on Blackboard. In addition, material covered by any invited guest speakers may be included on an exam as well.

6. Intellectual Property: All materials distributed by the instructor of this course including but not limited to class notes, handouts, assignments, exam reviews, quizzes, and exams are given to the student to facilitate and enhance the learning process. However, all course materials distributed to students either in person or electronically is the property of the course instructor, a collaborative group of faculty, the textbook publisher, and/or Sam Houston State University. Therefore, any sharing, selling, or reproduction of course content will be considered a violation of intellectual property use, and could be considered academic dishonesty. Sharing course material includes but is not limited to the posting of course information on-line via YouTube, social media sites, and blogs. Course materials may only be shared, sold, or reproduced with the written permission of the faculty member teaching this course or the publisher of the textbook (whichever applies).

Recording any or part of the class presentation, discussion, or activities either in person or on-line is strictly prohibited in this class. Like course materials, presentations are the property of the presenter and should not be shared, sold, or reproduced. There will be zero tolerance for taking photos, screenshots, or video of class lecture, presentations, discussions, or course materials unless it is allowed in writing by the course instructor.

7. **Attendance** is expected in this course. Moreover, it is imperative that you not only attend, but also participate. Attendance will be taken on a regular basis. It is your, *the student's, responsibility to sign in each class day*. Signing in another classmate will not be tolerated and will result in 0 attendance points earned in the course. If you have an excused absence, it is your, the student's, responsibility to provide written documentation to the instructor. In additional to be in attendance and participating, it is equally important to be on-time. In this course, a tardy will be entering the class once the course instruction has begun. A tardy will be equivalent to an absence in the course.

If you receive more than two absent and/or tardy days, you will receive a five percentage point (5%) reduction in your final course grade. For example, if you have a 90% final grade in the class, and you have exceeded two absent and/or tardy days, you will receive a final course grade of 85%.

Students who miss class will receive a 0% on in-class coursework, quizzes, and other assignments completed during class with no chance of making up the work. It is your responsibility to obtain notes, readings, and information about upcoming assignments/quizzes/tests that you may have missed due to any absences. If you miss class because of what you believe should be an excused absence (i.e. illness), it is your responsibility to provide the instructor with evidence for consideration of an excused absence. Whether an absence is excused or unexcused is solely the judgment of the professor.

Make-up exams, assignments, and quizzes will not be allowed unless you, the student, provide sufficient documentation to excuse the absence. If you, the student, know you are going to miss an exam, assignment, quiz or any other course work for an excusable reason, notification to the instructor is required via e-mail, voice mail, or other acceptable method. Students who do not communicate with the instructor prior to the exam and provide sufficient documentation, will not be allowed to make up the work.

8. **Two Examinations** will be given during the semester. There will be one mid-term exam and one final exam. The final exam will be a comprehensive final in which 50% of the exam will be new material and 50% of the exam will be comprehensive. The examinations will come from readings in the text, notes, handouts, assignments, and quizzes. Specific format will be discussed prior to each exam.

Exams are scheduled to be completed during the designated course time. You'll have scheduled class time to finish your exam. If you show up late, this will decrease the amount of time available to you to complete the exam. Therefore, make sure you arrive on-time or early in order to have the maximum amount of time for the exam. If you cannot make an exam, or if you have multiple exams on one day, you must tell the instructor at least one class day prior to the exam date and provide documentation to explain why you could not take the exam that day. If the absence is due to an emergency, illness, etc., the student must provide documentation. You may not use any notes or any other aids during the

exams. In addition, no electronic devices of any kind (i.e., cellular phones, tablets, etc.) are allowed to be in the student's possession during an exam. They must be placed at the front of the room with your books and other materials and must be powered off.

- 9. **Quizzes** will be given throughout the course. Students will complete these quizzes on Blackboard. Quizzes will included a variety of multiple choice, true/false, fill-in-the-blank, matching and short answer questions.
- 10. **Unit Summaries.** There will unit summaries due after each unit that will ask for knowledge learned as well as questions after reading the unit references including textbook readings, article readings, and ancillary materials. The purpose of the unit summaries is to reflect on the unit readings, and bring questions to light that will be answered during class time throughout the semester.
- 11. **Therapeutic Intervention Presentation** will be due during the end of the semester. This presentation will be given during class time.
- 12. **Four Modality Topics Discussion Posts** will be due during the semester. These posts will be moderated on Blackboard and additional instructions for the assignment can be found within each individual discussion board.

Remember: Make-up exams, assignments, labs, and quizzes will not be allowed unless you, the student, provide sufficient documentation to excuse the absence. If you, the student, know you are going to miss an exam, assignment, quiz or any other course work for an excusable reason, notification to the instructor is required via e-mail, voice mail, or other acceptable method. Students who do not communicate with the instructor *prior* to the exam and provide sufficient documentation, will not be allowed to make up the work.

Assessment and Evaluation:

Attendance:

- Attendance is expected!
- It is the student's responsibility to sign in each day.
- If you, the student, feel that you have an excusable absence, you must submit written documentation to the instructor within 1 week of the absence for it to be considered excused.
- More than two absent and/or tardy days, you will receive a five percentage point (5%) reduction in your final course grade.

Syllabus and Introduction Assignment: 10 points

- There is one syllabus acknowledgement assignment which is 5 points. This includes reading and understanding the syllabus and completing the syllabus acknowledgement form via Blackboard.
- There is one introduction assignment where students introduce themselves to each other via Blackboard Discussion, feel free to respond to peer's post. This assignment is 5 points.

Written Exams: 250 Points

- There are 2 written exams. The mid-term exam will be worth 100 points, and the final exam will be worth 150 points. The mid-term exam will go over material up to that point, and the final exam will be a comprehensive final in which 50% of the exam will be new material and 50% of the exam will be comprehensive. one of these will be a cumulative final exam which will be held on the final exam day per the SHSU final exam schedule.
- The format of the exams may vary depending on the content. The course instructor will notify students of the exam format prior to the exam either in class or via Blackboard.
- Any form of cheating or dishonesty will result in an automatic 0 points on the exam, and documentation will be sent to the Athletic Training Program Director and placed in your permanent program file.

Quizzes: 70 Points

• Quizzes will be administered on Blackboard consisting of material following last quiz or test. Quizzes will be available on Blackboard for a limited time.

Unit Summaries: 90 Points

- Students will need to complete the unit summary assignment following each unit and submit via Blackboard.
- Each summary will be worth 5 points.

Therapeutic Intervention Presentation: 75 points

- Presentations will be given at the end of the semester during class time.
- Presentations will go over one of the therapeutic interventions discussed during the semester.
- Presentation details will be available on Blackboard with corresponding rubric.

Modality Topics Discussion Posts: 80 Points

- There will be 4 modality topics discussion posts required during the semester.
- Each student will be required to read the assigned article, and post on each article. Instructions for each discussion post will be available on Blackboard with corresponding rubric.

Total Course Points = 575

Final Grade: (grades will not be curved)

100% to 90%	=	575	-	517.5	=	A
89.99% to 80%	=	517.4	-	460	=	В
79.99% to 70%	=	459.9	-	402.5	=	\mathbf{C}
69.99% to 60%	=	402.4	-	345	=	D
59.99% and below	=	344.9	-	0	=	\mathbf{F}

S SHSU Academic Policies (http://www.shsu.edu/dept/academic-affairs/aps/aps-students.html):

- a. SHSU Class Attendance policy AP 800401
- b. Procedures in cases of Academic Dishonesty AP 810213
- c. Academic Grievance Procedures for Students AP 900823
- d. Students with Disabilities AP 811006
- e. Student Absences on Religious Holy Days AP 861001
- f. Use of Telephones and Text Messengers in Academic Classrooms and Facilities AP 100728

Academic Dishonesty:

- 5.3 Academic Honesty. The University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action.
 - 5.31 The University and its official representatives, acting in accordance with Subsection 5.32, may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating, plagiarism, collusion, and the abuse of resource materials.

"Cheating" includes the following and similar actions:

- (1) Copying from another student's test paper, laboratory report, other report, or computer files, data listings, and/or programs.
- (2) Using, during a test, materials not authorized by the person giving the test.
- (3) Collaborating, without authorization, with another student during an examination or in preparing academic work.
- (4) Knowingly, and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the contents of an unadministered test.
- (5) Substituting for another student, permitting any other person, or otherwise assisting any other person to substitute for oneself or for another student in the taking of an

- examination or test or the preparation of academic work to be submitted for academic credit.
- (6) Bribing another person to obtain an unadministered test or information about an unadministered test.
- (7) Purchasing, or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of the rough and/or final versions of an assignment by a professional typist.
- 5.32 "Plagiarism" means the appropriation and the unacknowledged incorporation of another's work or idea into one's own work offered for credit.
- 5.33 "Collusion" means the unauthorized collaboration with another person in preparing work offered for credit.
- 5.34 "Abuse of resource materials" means the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course materials.
- 5.35 "Academic work" means the preparation of an essay, dissertation, thesis, report, problem, assignment, or other project that the student submits as a course requirement or for a grade.

Procedures in Cases of Alleged Academic Dishonesty:

- 2.01 Procedures for discipline due to academic dishonesty shall be the same as in disciplinary actions specified in The Texas State University System Rules and Regulations and Sam Houston State University Student Guidelines except that all academic dishonesty actions shall be first considered and reviewed by the faculty member teaching the class. The faculty member may impose failure or reduction of a grade in a test or the course, and/or performing additional academic work not required of other students in the course. If the faculty member believes that additional disciplinary action is necessary, as in the case of flagrant or repeated violations, the case may be referred to the Dean of Student Life or a designated appointee for further action. If the student involved does not accept the decision of the faculty member, the student may appeal to the chair of the appropriate academic department/school, seeking reversal of the faculty member's decision. Sam Houston State University Academic Policy Statement 810213 Procedures in Cases of Academic Dishonesty Page 3 of 3 Revised January 16, 2006
- 2.02 If the student does not accept the decision of the chair of the academic department/school, he/she may appeal to the appropriate academic dean. The chair of the academic department/school may also refer the case directly to the academic dean if the case so warrants.