

**ATTR 4100 – LOWER EXTREMITY INJURIES LAB
SPRING 2018**

ATTR 4100 is a required laboratory course for the Bachelor of Science in Athletic Training Program which should be taken concurrently with ATTR 4300.

**College of Health Sciences
Department of Kinesiology**

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Office Hours: Monday and Wednesday 12:30pm-2:00pm (and by appointment). Emailing to set an appointment is always recommended.
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- Text/Readings:** Biel, A. (2014). *Trail Guide to the Body* (Rev 5th ed.). Books of Discovery, ISBN: 9780982978658
- Cook, C.E. and Hegedus, E.J. (2013). *Orthopedic Physical Examination Tests: An Evidence-Based Approach* (2nd ed.). Pearson, ISBN: 9780132544788
- Starkey, C. and Brown, S.D. (2015). *Examination of Orthopedic & Athletic Injuries* (4th ed.). F.A. Davis, ISBN: 9780803639188
- Course Description:** This course is designed to educate Athletic Training students regarding the anatomical lower extremity including the hip, thigh, knee, calf, ankle, and foot. Evaluation of injuries occurring in the athletic setting will be emphasized, as well as orthopedic tests to determine injury in joints and tissue of the lower body. Credit 3. *Prerequisites: ATTR 2300, 2310, 3300, BIOL 2401. Admittance to the Athletic Training Program, or Departmental Approval.* 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 9:00am-11:50am Tuesdays in HKC 248C (Jan 17 – 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 hands-on laboratory experience)	Performance Assessment	Standards: • CAATE Competencies

Obtain a medical history that includes pertinent past medical history, underlying systemic disease, use of medications, perceived pain, and history of present condition.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-13
Use techniques and procedures for the clinical examination of common musculoskeletal injuries in the lower extremities including history taking, inspection/observation, palpation, functional assessment, selective tissue testing techniques/special tests, circulatory, and neurological assessments.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-20
Demonstrate the ability to modify the diagnostic examination process according to the demands of the situation and patient responses.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-15
Apply clinical prediction rules and best evidence during clinical examination procedures.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-12
Differentiate between an initial injury evaluation and follow-up/reassessment as a means to evaluate and make modifications to the treatment plan.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-14
Recognize the signs and symptoms of catastrophic and emergent conditions and demonstrate appropriate referral decisions.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-16
Assess and interpret findings from a physical examination that is based on the patient's clinical presentation.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-21, CE-22

Utilize clinical reasoning skills to formulate an appropriate clinical diagnosis for common orthopedic injuries and conditions.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-17
Incorporate the concept of differential diagnosis into the examination process.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-18
Determine criteria and make decisions regarding return to activity/or participation based on the patient's current status.	Classroom Discussion Skills Lab	Lab Activities Practical Exams	CE-19

Course Format:

The content of this course is delivered in a traditional classroom setting, with Blackboard serving as an ancillary resource. In addition, course concepts are learned through self-study, classroom discussions, laboratory activities, and assignments. Evaluation consists of professor assessments of examinations, quizzes, and assignments.

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

Essential:

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.

Important:

1. Gaining factual knowledge (terminology, classifications, methods, trends).

Course Content (Tentative Course Schedule):**UNIT 1: FOUNDATIONS OF EXAMINATION**

January 23	Review the Course Syllabus, Complete the Syllabus Assignment, and Complete the Class Introduction. Biel, A. <i>Trail Guide to the Body</i> – Introduction to the Book, and Learning the skill of palpation
January 30	Biel, A. <i>Trail Guide to the Body</i> – Ch 7 Palpation of the Leg and Foot – Lab Activity Documentation and Administrative Responsibilities – Lab Activity
February 6	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 1 Examination Process Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 1 The Patient Interview and History – Lab Activity

	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 2 Decision Making and On-the-Field Evaluation
February 13	Cook & Hegedus. <i>Orthopedic Physical Exam Tests</i> – Evidence Based Practice in the Diagnostic Process – Tests for the Leg and Foot – Lab Activity
	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 6 & 7 Assessment of Posture and Gait - Lab Activity
February 20	Review and Clinical Scenarios
Scheduled Feb 19-23	Practical Exam

UNIT 2: FOOT, TOE, ANKLE, AND LEG PATHOLOGIES

February 27	Biel, A. <i>Trail Guide to the Body</i> – Ch 7 In-Depth Anatomy & Palpation of the Leg and Foot – Lab Activity
	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 8 & 9 Practicing the Clinical Examination of the Leg and Foot – Lab Activity
March 6	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 8 & 9 Practicing the Clinical Examination of the Leg and Foot
	Cook & Hegedus. <i>Orthopedic Physical Exam Tests</i> – Ch 14 Tests and Clinical Prediction Rules for the Lower Leg, Ankle, and Foot – Lab Activity
March 13	Spring Break – No Classes
March 20	Cook & Hegedus. <i>Orthopedic Physical Exam Tests</i> – Ch 14 Tests and Clinical Prediction Rules for the Lower Leg, Ankle, and Foot
	Review and Clinical Scenarios
Scheduled Mar 19-23	Practical Exam

UNIT 3: KNEE AND PATELLOFEMORAL PATHOLOGIES

March 27	Biel, A. <i>Trail Guide to the Body</i> – Ch 7 In-Depth Anatomy & Palpation of the Knee and Patellofemoral Joint – Lab Activity
	Starkey & Brown. <i>Examination of Orthopedic</i> . . . Ch 10 & 11 Practicing the Clinical Examination of the Knee and Patellofemoral Joint – Lab Activity

April 3 Cook & Hegedus. *Orthopedic Physical Exam Tests* – Ch 13 Tests and Clinical Prediction Rules for the Knee and Patellofemoral Joint – **Lab Activity**

April 10 Cook & Hegedus. *Orthopedic Physical Exam Tests* – Ch 13 Tests and Clinical Prediction Rules for the Knee and Patellofemoral Joint

Review and Clinical Scenarios

Scheduled Apr 9-13 **Practical Exam**

UNIT 4: PELVIS, THIGH AND LUMBOSACRAL PATHOLOGIES

April 17 Biel, A. *Trail Guide to the Body* – Ch 4 & 6 In-Depth Anatomy & Palpation of the Knee and Patellofemoral Joint – **Lab Activity**

Starkey & Brown. *Examination of Orthopedic. . .* Ch 12 & 13
Practicing the Clinical Examination of the Knee and Patellofemoral Joint – **Lab Activity**

April 24 Cook & Hegedus. *Orthopedic Physical Exam Tests* – Ch 10-12 Tests and Clinical Prediction Rules for the Knee and Patellofemoral Joint – **Lab Activity**

May 1 Cook & Hegedus. *Orthopedic Physical Exam Tests* – Ch 10-12 Tests and Clinical Prediction Rules for the Knee and Patellofemoral Joint
Clinical Scenarios

Scheduled April 30 – May 4 **Practical 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 .
2. **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 e-mail the instructor directly at mary.williams@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 Dr. Williams. . . 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 and will count as a class absence. 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 or other devices, 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 and 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 ([Use of Telephones and Text Messengers in Academic Classrooms and Facilities AP 100728](#)).

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. *Make sure you keep up with the readings!*
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. **Self-Plagiarism [Department Policy]:** “Self-plagiarism represents a significant problem in academia as it serves to undermine the learning process and outcomes that are a key feature of each course that is offered as a part of a student’s curriculum. As a result, the Department of Kinesiology has a strict policy in place to prevent self-plagiarism in the classroom. Self-plagiarism is defined as the submission of any type of assignment that contains content that is recycled from other assignments or a prior publication that one submits for course credit in another course.

Each instructor is provided the discretion to evaluate whether a student has engaged in self-plagiarism on a course assignment. If a student is unsure whether use of prior content would constitute self-plagiarism, they must consult with the instructor of the course within a reasonable period of time prior to the due date of the assignment. In most cases, this consultation should take place a minimum of 10 business days prior to submission. Following submission of the assignment, if the instructor deems that the student has engaged in self-plagiarism, he or she has the right to state that the student has violated Section 5.3 of The Texas State University Rules and Regulations dealing with Academic Honesty and the student is thereafter subject to any and all penalties and punishments present in the policy. This may include failure of the assignment and/or failure of the course. Additionally, the student may be referred to the Department Chair of Health and Kinesiology, the Dean of the

College of Health Sciences, the Dean of Students, and/or the Provost and Vice-President for Academic Affairs for further academic review.”

8. **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 addition to being 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. Two tardy days will be equivalent to an absence in the course. Please notice that this lab class meets only one day per week, so it is critically that you are in class every scheduled day.

If you receive more than one absence and/or two 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 one absence and/or two 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.

9. **Four Practical Examinations** will be given during the semester. There will be four unit practical exams. Each student will be evaluated on their ability to evaluate a patient and simulated injury using a model. Students will be evaluated on these exams using a rubric to evaluate their clinical examination skills. There will be a debriefing period following each exam where the instructor provides the student with feedback on their performance.

It is important for students to practice skills learned in this class with peers and preceptors outside of scheduled class time to adequately prepare for practical exams.

10. **Clinical Skills (AT Student Handbook):** are taught and evaluated in laboratory courses. Students are to practice their skills with peers and preceptors prior to being evaluated via a practical exam. It is up to each individual student to inform their preceptors of the clinical skills they are learning and practicing, and asking their preceptor to assist them with mock practice of those skills prior to exam. It is the student's responsibility to come prepared to their assigned lab practical exams. All students must pass their practical exam with a grade of 75% or higher to be deemed proficient. If a student scores below 75%, they must retake the

practical exam until they meet this mark, keeping in mind that their subsequent practical exam may include a different patient case/scenario.

11. **Lab Activities** will align with topics presented in class, and will ask the student to *apply* the information learned in the course readings, discussion, and lecture. Application of knowledge is an important skill, and is the aim of these assignments. Students are expected to read and reference the textbooks when completing lab activity assignments.
12. **Clinical Scenarios.** Clinical scenario days precede practical exams and give students the opportunity to utilize all resources to solve simulated clinical scenarios. Students are encouraged to work together in groups for these assignments. Points will be given based on a rubric which includes individual participation.

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 one absence and/or two tardy days, you will receive a five percentage point (5%) reduction in your final course grade.**

Syllabus Acknowledgement Assignment: 5 points

- There is one syllabus acknowledgement assignment which is 5 points. This includes reading the syllabus, noting important dates, and submitting a signed syllabus acknowledgement form.

Practical Exams: 400 Points

- There are 4 unit exams which will be 100 points each.
- The format of the exams is practical in nature. Each individual student will be presented with a mock clinical situation using a model patient.
- Any form of cheating or dishonesty will result in an automatic 0 points on the exam. For students in the BS in Athletic Training Program, documentation will be sent to the Athletic Training Program Director and placed in your permanent student file.

Assignments and Quizzes: 100 points

- There will be 10 lab activity assignments and/or quizzes.
- All assignments must be turned in either in class or on Blackboard no later than the assigned due date. **Late assignments will not be accepted without proper documentation, and with the permission of the course instructor.**
- All assignments must have page number citations from assigned textbook reading (p. #).

Clinical Scenarios: 200 Points

- There will be 4 Clinical Scenarios (50 points each).
- Students are encouraged to use class resources and working groups to solve clinical scenarios.
- SOAP notes will be graded using a rubric.

Estimated Total Course Points = 705**Final Grade:** (grades will not be curved)

100% to 90%	=	A
80% to 89.99%	=	B
70% to 79.99%	=	C
60% to 69.99%	=	D
59.99% and below	=	F

SHSU Policies (see also: <http://www.shsu.edu/syllabus/>):

- 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 Honesty: The subject of academic honesty is addressed in paragraph 5.3, Chapter VI, of the *Rules and Regulations*, Board of Regents, The Texas State University System, and Sam Houston State University *Student Guidelines* published by the Office of Student Life to wit:

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.

2. 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.