

UNIVERSITY OF WISCONSIN – STEVENS POINT - ATHLETIC TRAINING
SCHOOL OF HEALTH CARE PROFESSIONS

Course Title: AT 712: Evaluation and Analysis of the Spine	Term: Spring '19	Credits: 2
Instructor: Holly Schmies, PhD, LAT		
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Time and Place: Tuesdays 10-11:50am HEC 147	Office hours: Tuesday – 12pm – 1pm	

Required Textbook(s): *Evaluation of Orthopedic and Athletic Injuries* by Starkey (purchase)
Therapeutic Exercise for Musculoskeletal Injuries by Houglum (3rd edition – provided)

Other readings: Will be available via Canvas

Course Description:

Orthopedic clinical evaluation and movement analysis of the cervical, thoracic, and lumbar spine. Learning outcomes include clinical decision making for injury prevention, assessment and treatment of spinal injuries.

Pre-requisite: AT 711

Course overview: This class is designed for instruction of evaluation techniques for injuries and illnesses related to the spine in the active population. Students will develop techniques and procedures based on orthopedic physical assessment and assessment techniques to evaluate medical conditions that may present as related to spinal injury or medical conditions in general that would affect the area of the head, neck, and thorax.

Enduring Understanding:

Athletic Training Students will understand that...

- Effective patient interaction and clinical decision making is essential to make proper assessments of injury or illness.
- Evidence based clinical-decision making is essential for providing quality patient care

Essential Questions:

- How does an athletic trainer evaluate and injury to the cervical, thoracic, and lumbar spine?
- How does an athletic trainer evaluate for potential illnesses related to the head, neck and thorax?
- What steps/techniques are important for injury/illness evaluation/assessment?
- How does proper injury/illness assessment lead to better treatment, referral, or rehabilitation?

Knowledge (Know):

Athletic training students will be able to/can...

- Understand and apply all the steps in injury evaluation
- Describe spinal anatomy, cardiopulmonary anatomy, integumentary anatomy and how it relates to injury and illness
- Perform and assess all neurological responses, physiological responses, range of motion, manual muscle tests and special tests that are needed to evaluate spine injuries
- Perform and assess the tests necessary to evaluate for cardiopulmonary issues, dermatological issues, and illness related to the head and face and thorax
- Analyze results of examination and clinical signs and symptoms of injuries/illness for proper assessment

Skills (Able to do):

Students will be able to/can...

- Perform a comprehensive clinical examination of injury athletic injury for each area of the spine with efficiency and confidence
- Perform a components of a clinical examination of systems related to the head, neck, face, and thorax
- Analyze and synthesize the results of the clinical examination to reach an accurate injury or illness assessment

Dispositions (Value/appreciate):

Students will be able to/can...

- Appreciate that each individual patient/body is unique when performing a clinical assessment
- Appreciate the effect injury/illness can have on the patient/athlete and the need to treat each person as an individual
- Value the importance of professionalism and ethical behavior when evaluating a patient

COURSE POLICY and OTHER CONSIDERATIONS**Attendance and Participation**

Attending class meetings is a requirement and professional expectation of the course/program. If you must miss class, please call the instructor before the missed class. Email or text is not acceptable – leave a voicemail if you do not get in touch with the instructor. The absence will be considered unexcused absence if contact is made via email or text. One excused absence is allowed with no loss of points, but for each absence after that the student will have the following consequences:

- A student's grade will be dropped a by 10 points for every unexcused absence after the one freebie.
- Tardiness is considered an unexcused absence.
- Students are solely responsible for obtaining any course material missed due to absence.
- At all times, you are to silence your cell phone and have it out of view. Using your phone during class is a direct violation of professional behavior and not accepted during this course.
- There will be times when you will be asked to use your personal device (phone, tablet, computer) to access the Internet for learning resources. During this time, it is expected you stay focused within the learning exercise and refrain from being involved with email, messaging or social media. Again, this type of behavior is a direct violation of professional behavior.

Communication:

One of the key components to your success in the AT program is communication. Communicate with your instructor. Communicate with your classmates. Ask questions. Get the information you need. You are here as a student, as a learner. Be that person! Ask for help. The only way anyone will know if you need help is when your learning assessments come back with a poor grade. At that point, you are behind. Stay ahead and keep up! Communicate (meaning TALK) with your instructor. Set up a time to meet and talk through it. Every AT faculty and staff will be willing to help – that is what we are here for.

Course Requirements:

This course will include coursework and learning assessments specific to the CAATE Educational Competencies and the BOC Role Delineation Study to ensure we are working toward helping you become a competent athletic training professional. The specific competencies associated with the course and the assigned coursework and learning assessments will be fully communicated to you on the course schedule at the start of the course. The competencies associated with the course will also be provided in the AT Student Handbook under the curricular information.

SPECIFIC COURSE REQUIREMENTS

Quizzes (10% of grade): There will be quizzes on D2L throughout the semester to challenge student's ability to identify topics related to the text and lecture material. They will be targeted on the anatomy of the area we are studying. Quizzes will be allowed to be re-taken as many times as you wish as they are about learning and helping you learn the information.

Written Exams (30% of grade): There will be four written exams throughout the semester to challenge the student's ability to recall information given. This is important part of preparation for the athletic training board exam which is taken completely in a computer based format. The first 3 examinations will be focused on the body parts recently covered. The final examination is cumulative in nature.

Practical Exams (40% of grade): There will be a practical examination for injuries and conditions in each of the following areas: (1) cervical spine /head/face; (2) thoracic and lumbar; (3) cardiopulmonary and gastrointestinal. The practical examinations will be completed on a standardized patient who will be trained to portray a patient with clinical signs and symptoms of an injury. There will also be a portion of the practical examination dedicated to medical conditions if applicable. More detail of the practical examinations will be discussed in class. To be considered proficient in a practical examination – you must attain an 80% of the exam. If you do not attain an 80% - your first attempt score will be recorded as your grade and you must re-take the practical. You have the possibility for 2 re-takes. The re-take will be graded by two separate individuals to ensure fairness in grading. If you do not attain an 80% on the 3rd attempt, will need to remediate with the instructor and not be able to perform these clinical skills on patients in the clinical setting. You must pass the practical examination by the end of the course with an 80%. It is important to note that your grades on practical examinations will be a large component of your overall grade for this course.

Assignments: (30% of grade)

Case Studies – Spinal Grand Rounds and General Medical Grand Rounds: You will be assigned case studies for spinal patients and medical patients throughout the course. The case study will be presented to you and you will be asked to complete the evaluation or make an assessment based on EBP. (10pts each)

Peer-teaching pathology presentation – evidence-based research: There are not a lot of pathologies in the spine – so we need to be versed on their etiology and pathology to be sound clinicians. Create a class presentation on an assigned topic in the spine. You will be assigned a pathology to research and create a presentation to your classmates on: relevant anatomy, clinical presentation, clinical assessment/evaluation, goals of treatment and rehabilitation and clinical prediction rules or treatment based classifications. (Literature review and presentation - 60 points)

Grading scale: The grade will be awarded as follows:

A: 94-100%	B: 83-86%	C: 73-76%	D: 60-64%
A-: 90-93%	B-: 80-82%	C-: 70-72%	F: 59% or below
B+: 87-89%	C+: 77-79%	D+: 65-69%	

ADDITIONAL INFORMATION

Open Learning Environment and Professional Behavior:

In all AT courses, you will be expected to act professionally and ethically. The NATA Code of Ethics is a great reference to how you should model professional behavior – and it will start in the classroom and clinical education setting. As we talk about sensitive topics, you will have an open mind and actively listen. Our goal is to treat each individual in class fairly and listen to their opinion and thoughts. It doesn't mean you always have to agree – but you need to be willing to try to understand. **All** students in the AT program, **WILL respect** individuality and diversity in the learning environment. In many classes, you will be performing evaluation and touching each other as you will be doing in the AT profession. At all times, just like you would in the clinical setting, you will act professionally and properly communicate with your partner about what you will be doing. If at any time you feel uncomfortable with a certain skill or behavior, please talk to the instructor immediately.

Academic Honesty:

Academic honesty is a core principle of learning and scholarship. When you violate this principle, you cheat yourself of the confidence that comes from knowing you have mastered the targeted skills and knowledge. You also hurt all members of the learning community by falsely presenting yourself as having command of competencies with which you are credited, thus degrading the credibility of the college, the program, and your fellow learners who hold the same credential.

All members of the learning community share an interest in protecting the value, integrity, and credibility of the outcomes of this learning experience. We also have the responsibility to censor behaviors that interfere with this effort. The following behaviors will be subject to disciplinary action:

Plagiarism - presenting someone else's words, ideas, or data as your own work.

Fabrication - using invented information or the falsifying research or other findings.

Cheating - misleading others to believe you have mastered competencies or other learning outcomes that you have not mastered.

Academic Misconduct: This includes academically dishonest acts such as tampering with grades, taking part in obtaining or distributing any part of an assessment, or selling or buying products such as papers, research, projects or other artifacts that document achievement of learning outcomes.

Academic dishonesty is NOT ACCEPTABLE. UWSP subscribes to the definitions of academic dishonesty provided by the National Association of Student Personnel Administrators. Academic misconduct in the University of Wisconsin System is defined by UWS Chapter 14. The complete text of the chapter is available to you from the Dean of Students or you can visit http://www.uwsp.edu/accreditation/docs/SA_PU_250.04.pdf for more information.

UWSP Policies

Learners with questions regarding affirmative action, equal opportunity, harassment, or information about any other college policies may refer to the current UWSP Course Catalog or Student Handbook.

ADA Statement

In compliance with the Americans with Disabilities Act, students are encouraged to register with UWSP Disability Services for assistance with accommodations. It is the student's responsibility to voluntarily and confidentially disclose information regarding the nature and extent of a disability. The college cannot assume responsibility for providing accommodations or services to students who have not identified themselves as having a qualifying disability. Disabilities Services is located on campus at 103 Student Services Center, 1108 Fremont Street, UW-Stevens Point, Stevens Point, WI 54481.

Course outline:

	Topic	
Week 1 1/22	Course Introduction Spinal Anatomy and Clinical Evaluation	Starkey Chapter 13 and 14
Week 2 1/29	Concussion Review – (be ready to do an evaluation) Neuro screen review – (be ready to do an evaluation) Spinal Clinical Evaluation	Starkey Chapter 13 and 14 Additional readings on Canvas
Week 3 2/5	Spinal Clinical Evaluation	Section 5 of Starkey Additional readings on Canvas
Week 4 2/12	Head and Face – Eyes and Mouth	Section 5 of Starkey Additional readings on Canvas
Week 5 2/19	Head and Face – Ear, Nose and Throat	Starkey Chapter 13 and 14
Practical Skill Check and Written Exams scheduled after 2/19 class -		
Week 6 2/26	Pathology Presentations Facet Dysfunction, Rib Dysfunction, Segmental Instability, and Muscle Strains	
Week 7 3/5	Pathology Presentations SI Dysfunction, Disc Pathology and Radiculopathy, Brachial Plexus and TOS, Anklosing spondylitis	
Week 8 3/12	Cervical Spine – specific evaluation and rehabilitation	Starkey Chapter 13 and 14 Houglum text
3/19	Spring Break	
Week 9 3/26	Cervical and Thoracic – specific evaluation and rehabilitation	Starkey Chapter 13 and 14 Houglum text
Practical Skill Check and Written Exams scheduled after 3/26 class -		
Week 10 4/2	Cervical and Thoracic - specific evaluation and rehabilitation	Starkey Chapter 13 and 14 Houglum text
Week 11 4/9	Cervical and Thoracic - specific evaluation and rehabilitation	Starkey Chapter 13 and 14 Houglum text
Week 12 4/16	Cervical and Thoracic - specific evaluation and rehabilitation	Starkey Chapter 13 and 14 Houglum text
Practical Skill Check and Written Exams scheduled after 4/16 class -		
Week 13 4/23	General Medical Conditions	Readings on Canvas
Week 14 4/30	General Medical Conditions	Readings on Canvas
Week 15 5/7	Spine rehabilitation -	Houglum Text
Week 16 Finals	Written Examination Practical examinations	

Assignments:

1. Facet Joint Dysfunction –
2. Disc pathology and radiculopathy (2)
3. Brachial plexus pathology and TOS
4. Muscle Strains –
5. Segmental Instability (include spondys)
6. SI joint dysfunction
7. Rib dysfunction
8. Anklosing spondylitis

