**University of Wisconsin – Stevens Point - Athletic Training**

School of Health Care Professions

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| **Course Title: AT 712: Evaluation and Analysis of the Spine** | **Term: Spring 2024** | **Credits: 2** |
| **Instructor: Kelsey Quinnell, MS, ATC, LAT**  **Phone: 608-279-0194 (cell) Email: kquinnel@uwsp.edu Office: SCI B127** | |  |
| **Time and Place: Tuesdays: 9-10:50am SCI B130/140** | **Office hours: By appointment** | |

**Required Textbook(s):** *Starkey and Brown – Examination of Orthopedic and Athletic Injuries (4th Edition)*

*Biel – Trail Guild to the Body – 5th Ed (provided to you)*

**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.

**2020 Standards for Accreditation of Professional Athletic Training Programs:**

* Develop a care plan for each patient. (Standard 69)
* Evaluate and manage patients with acute conditions, including triaging conditions that are life threatening or otherwise emergent. (Standard 70)
* Perform an examination to formulate a diagnosis and plan of care for patients with health conditions commonly seen in athletic training practice. (Standard 71)

**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 and Exams:** There will be quizzes and exams throughout the semester to challenge student’s ability to identify topics related to the text and lecture material. Quizzes will have re-take options while exams will not. The final examination will be written.

**Practical Exams:** There will be skill check practical examinations for spinal evaluations - (1) cervical spine and thoracic spine and (2) the lumbar spine and pelvis. The final practical examination will be either a cervical spine or lumbar spine patient portrayed by a standardized patient. There will also be a skill check portion on medical conditions of the axial skeleton. 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:**

**Case Studies –** Throughout the instruction of the evaluation and diagnostic process for the spine, you will be assigned case studies to help reinforce clinical decision making.

**Clinical Prediction Rules and Treatment-Based Classification Assignment -** You will be assigned a case study for a spinal patient with a specific assessment. Using research articles provided to you or found via a relevant search, you will synthesize the information to find the best recommendations for treatment interventions. This case study will be presented in a form of a short research paper to present the best practices.

**Annotated Bibliography** – At the end of the semester we will be looking at different rehabilitation techniques that are prescribed for spinal pathologies. You will review articles related to the assigned technique or injury, create an annotated bibliography, and a short summary of the recommended treatment approach based on the current research.

**Grading scale:** The grade will be awarded as follows:

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| **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:**

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|  | Topic and Readings | Assignments |
| Week 1  1/23 | Course Introduction – Review of Evaluation Process  Neuro screen review  Spinal Anatomy – Commonalities through the spinal column |  |
| Week 2  1/30 | Spinal Anatomy and Clinical Evaluation – General Pathologies of the Spine  Readings: Starkey Chapter 13 | **Due: Pathology Worksheet** |
| Week 3  2/6 | Spinal Evaluation – Pelvis and Lumbar Anatomy  Readings: Starkey Chapter 13 | **Due: Lumbar/Pelvis Quiz** |
| Week 4  2/13 | Spinal Evaluation – Pelvis and Lumbar Evaluation  Readings: Starkey Chapter 13 | **Due: Case Studies** |
| Week 5  2/20 | Spinal Evaluation – Pelvis and Lumbar Evaluation  Readings: Starkey Chapter 13; Canvas Resources | **Due: Skill Checks** |
| Week 6  2/27 | Basics of Rehabilitation for the Spine –  Mobilization, Stabilization, or Specific Exercise  Readings: Canvas | **Due: SOAP note and Plan of Care – Lumbar/Pelvis** |
| Week 7  3/5 | Putting it all together – Evaluation and Treatment of the Lumbar Spine |  |
| Week 8  3/12 | Practical Skill Checks  Online Midterm Exam | **Due: Integrated Learning – Instability, Core, Mobility** |
|  | **Spring Break** |  |
| Week 9  3/26 | Spinal Anatomy – Cervical and Upper Thoracic  Readings: Starkey Chapter 14 | **Due: Anatomy Quiz** |
| Week 10  4/2 | Clinical Evaluation – Cervical and Upper Thoracic  Readings: Starkey Chapter 14 | **Due: Anatomy Quiz** |
| Week 11  4/9 | Clinical Evaluation – Cervical and Upper Thoracic  Readings: Canvas | **Due: Case Study** |
| Week 12  4/16 | Rehabilitation – Cervical and Upper Thoracic  Readings: Canvas Resources | **Due: Skill Checks** |
| Week 13  4/23 | Rehabilitation Techniques for the Spine  Readings: Rehabilitation Techniques for the Spine | **Due: Case Study – Plan of Care** |
| Week 14  4/30 | Rehabilitation Techniques for the Spine |  |
| Week 15  5/7 | Practical Examinations - |  |
| Week 16  Finals | Final Written Examination |  |