



Course Syllabus: Research in Athletic Training Gunn College of Health and Human Services

ATRN 4423 Section x20
Spring 2025

Contact Information

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Course Description

Fully online courses will use D2L for posting syllabi, course communication, course schedule, attendance, and gradebook, as well as for course materials, office hours, and testing. This course is designed to help the student understand and use research in athletic training and then be able to apply it into their clinical practice. This course will meet once a week via Zoom to discuss course chapter readings and provide a scheduled meeting time to answer any questions and discussion the student may have about the course information

General Course Information

1. Prerequisites: a. ATRN 4903
2. Credit: Three semester hours
3. Intended Audience: ATRN majors
4. Days, Times, Place: Online, Zoom
5. Texts:
 - a. Rabb, Scot; Craig, Debbie: Evidence-Based Practice in Athletic Training, Human Kinetics, 2016

Course Objectives

Upon successful completion of this course, students should be able to meet the following criterion for the CAATE competencies:

EVIDENCE BASED PRACTICE:

EBP-1. Define evidence-based practice as it relates to athletic training clinical practice.

EBP-2. Explain the role of evidence in the clinical decision making process.

EBP-3. Describe and differentiate the types of quantitative and qualitative research, research components, and levels of research evidence.

EBP-4. Describe a systematic approach (eg, five step approach) to create and answer a clinical question through review and application of existing research.

EBP-5. Develop a relevant clinical question using a pre-defined question format (eg, PICO= Patients, Intervention, Comparison, Outcomes; PIO = Patients, Intervention, Outcomes).

EBP-6. Describe and contrast research and literature resources including databases and online critical appraisal libraries that can be used for conducting clinically-relevant searches.

EBP-7. Conduct a literature search using a clinical question relevant to athletic training practice using search techniques (eg, Boolean search, Medical Subject Headings) and resources appropriate for a specific clinical question.

EBP-8. Describe the differences between narrative reviews, systematic reviews, and meta-analyses.

EBP-9. Use standard criteria or developed scales (eg, Physiotherapy Evidence Database Scale [PEDro], Oxford Centre for Evidence Based Medicine Scale) to critically appraise the structure, rigor, and overall quality of research studies.

EBP-10. Determine the effectiveness and efficacy of an athletic training intervention utilizing evidence-based practice concepts.

EBP-11. Explain the theoretical foundation of clinical outcomes assessment (eg, disablement, health-related quality of life) and describe common methods of outcomes assessment in athletic training clinical practice (generic, disease-specific, region-specific, and dimension-specific outcomes instruments).

EBP-12. Describe the types of outcomes measures for clinical practice (patient-based and clinician-based) as well as types of evidence that are gathered through outcomes assessment (patient-oriented evidence versus disease-oriented evidence).

EBP-13. Understand the methods of assessing patient status and progress (eg, global rating of change, minimal clinically important difference, and minimal detectable difference) with clinical outcomes assessments.

EBP-14. Apply and interpret clinical outcomes to assess patient status, progress, and change using psychometrically sound outcome instruments.

HEALTHCARE ADMINISTRATION:

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CIP-9. Utilize documentation strategies to effectively communicate with patients, physicians, insurers, colleagues, administrators, and parents or family members while using appropriate terminology and complying with statutes that regulate privacy of medical records. This includes using a comprehensive patient-file management system (including diagnostic and procedural codes) for appropriate chart documentation, risk management, outcomes, and billing. © National Athletic Trainers' Association 12

Tentative Course Schedule

Class	Topic	Reading
WK1- 1/21-26- 1/21	Introduction, Course syllabus, readings. Evidence based practice models, Evidence Base Medicine	Raab Chpt 1, Starkey chp3 PDF handouts
WK2- 1/27- 2/2/28	Data Bases, creating a PICO, searching DATA bases. Clinical question to PICO	Raab Chpt2
WK3- 2/3-2/9	Research Evaluation, Chapter 1-2 Quiz	Raab, Chpt 3
WK4- 2/10- 2/16	Research Evaluation- Article discussion and presentation PICO Questions Due 2/11/24/11PM	Raab Chpt 3 Due 2/10 11 PM
WK5 2/17- 2/23	Diagnostic Research, Article discussion and presentation	Raab, Chpt 4
WK6- 2/24-3/2	Prognostic Research, Chapter 3-4 Quiz, PICO CRAAP-QUAAD discussion Due	Raab, Chpt 5
WK7- 3/3-3/9	Systematic Review and Meta-analysis, Article discussion and presentation	Raab, Chpt 6
WK 8	Spring Break	
WK9- 3/17- 3/23	Systematic Review and Meta-analysis- Systematic Review Article Discussion Due 3/23	Raab, Chpt 6
WK10- 3/24- 3/30	EBP in Daily clinical Practice, Article discussion and presentation, Chapt 5-6 Quiz,	Raab Chpt 7
WK11- 3/31-4/6	Clinical Outcome Measures,	Raab, Chpt 8
WK12- 4/7-4/13	Clinical Outcome Measures,	Raab, Chpt 8
WK13- 4/14- 4/20	Quantitative Research, Article discussion and presentation, Outcome Measure review article Due 4/20	Raab, Chpt 9
WK14- 4/21- 4/27	Qualitative Research , Chapt 7-8 quiz	Raab, Chpt 10
WK15- 4/28-5/4	Research Ethics,	Raab, Chpt 11
WK16- 5/5-5/9	Research Ethics. Quantitative research article discussion due, 5/5	Raab Chpt 11
WK12- 5/10- 5/13	FINALS Quiz Chpts 9, 10, 11	

Course Evaluation

1. Course Requirements:
 - a. Completion of Quizzes'
 - b. Completion PICO Questions

- c. Completion of PICO-CRAAP QUAADS assignment
- d. Completion of discussion questions

2. Grading:

Assignments	Points
Quizzes	100-150
PICO ??	25 Points
PICO-CRAAP-QUAADS	50 Points
Article Discussions	150
Total Pts	325-375

3. Grading Scale:

Grade	Points
A	90 to 100% of total points
B	80 to 89% of total points
C	70 to 79% of total points
D	60 to 69% of total points
F	Less than 60 % of total points

PICO Questions

Students will form PICO questions from the assigned clinical questions. PICO Questions will be uploaded to D2L.

PICO CRAAP-QUAADS

Students complete the PICO discussion using the CRAAP-QUAADS format as presented in class.

Class Discussions

Students will upload discussion of articles from their PICO questions related to systematic review articles, outcome measures articles, and quantitative research articles.

ZOOM Lecture Policy

Zoom Lectures will be presented throughout the semester. It is the student's responsibility to view/download these for future discussion, presentations, and quizzes. Zoom lectures will be uploaded to the appropriate Unit on D2L.

Exams

There will be four chapter exams and a final exam as listed on the course syllabus. These exams will be given through D2L learning platform and are timed. The exams will cover the specific material listed in the course syllabus.

Please note all exams will be given through the lock down browser in D2L. Please read the instruction sheet on lock down browser before starting a quiz (located in the syllabus tab)

Academic Honesty/Dishonesty

Midwestern State University is built upon a strong foundation of integrity, respect, and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated.

Plagiarism is strictly forbidden on any course assignment. (This includes class notes and fellow students work!) All, work, besides your own, should be cited and a reference given. Do not misrepresent any of your efforts on any academic task for which you will receive a grade.

Student Honor Creed

"As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so."

As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception.

Thus, We, the Students of Midwestern State University, resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all university matters.

We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original work. We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests within each individual student.

We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed.

Written and adopted by the 2002-2003 MSU Student Senate.

DEFINITIONS.

A. ACADEMIC DISHONESTY. An action attempted or performed that misrepresents one's involvement in an academic endeavor in any way, or assists another student in misrepresenting his or her involvement in an academic endeavor. Examples of academic dishonesty include, but are not limited

- i. Plagiarism: presenting the work (i.e., ideas, data, creations) of another, wholly or in part, as one's own work without customary and proper acknowledgement of sources and extent of use, unless authorized by the instructor
- ii. Cheating: using information, study aids, notes, materials, devices, or collaboration not explicitly approved by the instructor. For example: doing a class assignment for someone else or allowing someone to copy one's assignment; copying from, or assisting, another student during an examination; or stealing, or otherwise improperly obtaining, copies of an examination before or after its administration.

- iii. Fraud: altering or inventing data, research, or citations for an academic endeavor; fabricating, forging or otherwise misrepresenting to an instructor or an institution one's past or current academic or professional activities; impersonating someone or allowing oneself to be impersonated for an examination or other academic endeavor; using a ghost writer, commercial or otherwise, for any type of assignment.
- iv. Violation of Standards: violations against ethical and professional standards required by individual University programs, academic courses, and clinical programs that may result in qualification for entry into a profession that maintains standards of conduct.
- v. Multiple Submissions: submitting, wholly or in part, the same academic endeavor to earn credit in two or more courses without explicit approval by all concerned instructors.
- vi. Interference/Obstruction: interfering with academic efforts of other students to gain unfair advantage for personal academic advancement. Interference may include but is not limited to, sabotage, harassment, tampering, bribery, or intimidation of another student.
- vii. Complicity: assisting another person in any act of academic dishonesty as defined above.

B. ACADEMIC ENDEAVOR. Any student activity undertaken to earn University credit or meet some other University program requirement. Examples of academic endeavors include, but are not limited to:

- i. Course assignments (written/oral, projects, research, exhibitions of work)
- ii. Exams (written/oral, quizzes)
- iii. Clinical assignments (internships, rotations, practica)
- iv. Presentations (on and off campus)
- v. Publications
- vi. Independent study coursework
- vii. Plan B papers/projects, theses, dissertations
- viii. Student media associated with academic credit

Students are expected to do their own work at all times. This includes all tests, papers, quizzes, projects, reports, and notebooks. Plagiarism of any authors (even fellow classmates) work will not be tolerated.

Copying of materials using a previous student's work, notebook, etc. will not be tolerated. Students who miss class will need to get notes from other students. **HOWEVER, IT IS EXPECTED THAT THIS WORK WILL BE REDONE IN THEIR OWN WORDS.** Students using computers, word processors, etc. may not share discs or other materials between each other. To do so will be considered the same as copying of materials. In all cases students who allow for the copying of materials will be treated just like the student who does the copying.

STUDENTS WHO ARE FOUND TO BE IN VIOLATION OF THIS POLICY WILL HAVE A GRADE OF ZERO RECORDED FOR THE INVOLVED PAPER, TEST, QUIZ, PROJECT, REPORT OR NOTEBOOK. **FURTHERMORE THESE STUDENTS WILL**

BE REFERRED TO THE APPROPRIATE DEPARTMENT, COLLEGE, OR UNIVERSITY COMMITTEE FOR THE APPROPRIATE DISCIPLINARY ACTION

Students With Disabilities

Midwestern State University is committed to providing equal access for qualified students with disabilities to all university courses and programs, and by law all students with disabilities are guaranteed a learning environment that provides reasonable accommodation of their disability. This guarantee is provided through Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. The ADA reads: "No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subject to discrimination by any such entity." The Director of Disability Support Services serves as the ADA Coordinator and may be contacted at (940) 397.4140, TDD (940) 397.4515, or 3410 Taft Blvd., Clark Student Center 168.

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into [D2L](#) through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor. If you have problems while taking an exam, text me immediately. If it is during normal hours I can fix it quickly or if it is in the evening it may be the next day.

Emergency Exit Procedures

In the event of an emergency please evacuate the room in an orderly fashion through the nearest exit. The nearest exit is either through either set of doors at the front of the room. Follow the exit signs to the nearest available exit.

Once exiting the building, please meet your instructor at: across the street from D. L. Ligon in front of the tennis courts.

The fire extinguisher is located immediately outside of the classroom by the door to the left of the podium

MSU Alert

All students are encouraged to participate in the University's emergency warning system "MSU ALERT". Because of this your cell phone should be set to vibrate. If all of our phones go off at the same time we should take the appropriate action. If your cell phone vibrates by itself please ignore it and continue with class. .

College Policies

Campus Carry Rules/Policies

Refer to: [Campus Carry Rules and Policies](#)

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated-smoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.