Course Number: ATTR 420  
Course Title: Research in Athletic Training  
Credit Hours: 3 hours  
Prerequisites: MATH 115 or 156, ENGL 101 or 115  
Semester: Fall 2015  
Time: T & R 10:00-11:15 pm  
Classroom: Schmidt Fieldhouse Classroom 2  
Office Hours: T 3:30-4:30 pm  
Office: Joseph Building 319  
Phone: 745-3902  
Email: juttel@xavier.edu

Catalogue Descriptions: A course designed to introduce students to the principles of scientific inquiry and research methods. Evaluation of published research and procedures for developing a research design are also emphasized. In addition, students will gain a basic understanding of statistics.

This course is part of the Xavier Core Curriculum, which aims to develop people of learning and reflection, integrity and achievement, in solidarity for and with others. It addresses the following core learning objectives at the introductory level:

1a: Students recognize and cogently discuss significant questions in the humanities, arts, and the natural and social sciences. (Scientific Prospective)

2a. Students find, evaluate, and logically convey information and ideas in written and oral presentations. (Oral Flag & Written Flag)

Oral Flag:

OCF SLO #1: Adapt messages in a variety of communication context.

Students in this course will create messages for large groups (group and individual speeches) and individuals (dialogue via poster presentations) and adapt these messages for delivery to professional colleagues and the general public.

OCF SLO #2: Organize information effectively.

Students in this course will synthesize information from a variety of peer-reviewed sources, create a structure for message delivery, and provide the appropriate context for their audience.

OCF SLO#3: Advocate a supported opinion on a complex topic.

Students in this course will use the best available healthcare evidence to advocate for clinical practice recommendation.

OCF SLO#4: Critique challenging messages with respect.

Students in this course will critically listen, respectfully respond to speakers through relevant questions, and provide constructive feedback to speakers.

OCF SLO#5: Present messages through a variety of modalities.

Students in this course will deliver messages effectively utilizing verbal, nonverbal, vocal, and visual methods of communication though the creation of a poster presentation; an individual Powerpoint (or Prezi) presentation, a group Powerpoint (or Prezi) presentation, and a group short report (elevator speech).

Written Flag:

Students in this course will learn about technical writing and most common citation style used in athletic training scholarship prior to submitting two abstracts (~1 page each), a poster presentation (3x4ft), and two critically apprised papers (~10 pages each). Draft writing assignments are required for each writing assignment. Students will receive at least instructor or peer feedback, if not both, on all drafts prior to final submission. Students are encouraged to attend office hours for additional feedback on all writing assignments and to use feedback on their first critically apprised topic paper to enhance their second critically apprised topic paper.
2b. Students evaluate problems using quantitative methods and arguments. (Scientific Prospective)

**Course Learning Objectives:**
After this course, I want and hope that students will be able to:
1. Explain and educate peers and professionals on the unique aspects of a clinical case report in both oral and written formats;
2. Develop clinical questions;
3. Understand where and how one may locate information related to their clinical questions;
4. Use a systematic approach to identify information to answer clinical questions;
5. Describe, contrast, and critically evaluate current literature and related sources of information;
6. Develop the necessary skills to analyze, interpret, and synthesize current research findings;
7. Hone their abilities to efficiently and effectively communicate in both oral and written forms;
8. Design a research study, collect pilot data, analyze the pilot data, and report the findings in both written and oral forms;
9. Appreciate how current literature should influence athletic training clinical practice.

**Required Text:**

**Grade Weighting:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
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<tbody>
<tr>
<td>A=100-90%</td>
<td>B= 82-80%</td>
<td>C=72-70%</td>
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<tr>
<td>B+=89-87%</td>
<td>C+= 79-77%</td>
<td>D+=69-67%</td>
</tr>
<tr>
<td>B=86-83%</td>
<td>C=76-73%</td>
<td>D=62-60%</td>
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**Course Requirements:**

<table>
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<th>Requirement</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams (2 @ 100 pts)</td>
<td>200 pts</td>
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<tr>
<td>Case Report Abstract</td>
<td>50 pts</td>
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<tr>
<td>Case Report Poster</td>
<td>50 pts</td>
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<tr>
<td>Case Report Poster Presentation</td>
<td>25 pts</td>
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<tr>
<td>Critically Appraised Topic I (1@ 50pts)</td>
<td>50 pts</td>
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<tr>
<td>Critically Appraised Topic I Presentation (1@ 25pts)</td>
<td>25 pts</td>
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<tr>
<td>Critically Appraised Topic II (1 @ 100pts)</td>
<td>100 pts</td>
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<tr>
<td>Critically Appraised Topic II Presentation (1@100pts)</td>
<td>100 pts</td>
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<tr>
<td>Pilot Research Project Proposal</td>
<td>50 pts</td>
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<tr>
<td>Research Abstract</td>
<td>50 pts</td>
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<td>Research Presentation</td>
<td>50 pts</td>
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<tr>
<td>Reflection Essays (2@ 20 pts)</td>
<td>40 pts</td>
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<tr>
<td>Attendance</td>
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<td>Quizzes</td>
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<tr>
<td>Additional Class Assignments</td>
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<tr>
<td>Total:</td>
<td>790+ pts</td>
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**Exams:**
Two written exams will be given during the semester. The types of questions found on exams may include any combination of the following: multiple choice, true/false, essay, matching, or short answer. You must take the exam during the period listed on the course schedule, failure to do so without prior arrangement will result in 0 points.
Case Report Abstract:
You will research a recent sports medicine related case and write a case report abstract following the National Athletic Trainers’ Association Research and Education Foundation’s (NATA-REF’s) free communication guidelines. You must obtain written permission from the patient before reviewing any medical records. Unless I give prior approval, I will not accept late class assignments and I will only accept assignments in the assigned format, ie. electronic v. hard copy. Detailed directions and the grading rubric can be found on Canvas.

Case Report Poster Presentation:
You will create a 3x4 ft poster presentation (50 points) for your Case Report following the NATA-REF Free Communication Guidelines. It will cost approximately $25 to print your poster in the Conaton Learning Commons Digital Media Lab. It will take 2 business days to print your poster, so plan ahead. You will present your poster to peers, other healthcare professionals, and Xavier community at a Class Poster Symposium held in the CLC, where you will be graded on your one-on-one (dialogue) communication skills (25 points). Detailed directions and the grading rubric can be found on Canvas.

Critically Apprised Topic (CAT):
You will complete two critically appraised topic projects throughout the semester. You will work in groups of two for each project. For each project you will be expected to develop a clinical question using the PICO format, search for the five strongest pieces of relevant evidence, evaluate that evidence, and summarize the findings. You will submit your CAT for review by peers, the writing center, and your instructor for feedback prior to submitting a final version. Unless I give prior approval, I will not accept late class assignments and I will only accept assignments in the assigned format, ie. electronic v. hard copy. Detailed directions and the grading rubric can be found on Canvas.

Critically Apprised Topic (CAT) I Presentation:
Your group will orally present the finding of your CAT I project to your classmates and invited guests. This presentation will be brief (~5 min). You and your classmate will present the need for your clinical question, present your question, and briefly summarize the evidence. Detailed directions and the grading rubric are on Canvas.

Critically Apprised Topic (CAT) II Presentation:
Your group will orally present the finding of your CAT II project to your classmates and invited guests. This presentation will be approximately 20 minutes. You and your classmate will present the need for your clinical question, present your question, give a detailed summary of the evidence, and provide a final clinical recommendation. Detailed directions and the grading rubric are on Canvas.

Pilot Research Project Proposal:
You will develop a research question and attempt to answer it by designing a pilot research study, collecting pilot data, analyzing your pilot data, and discussing your preliminary findings. During the course of this project you will submit a project proposal that will include your research question, a brief justification for the project, proposed research design, and an outline of your methods. Detailed directions and the grading rubric are on Canvas.

Pilot Research Project Abstract:
You will develop a research question and attempt to answer it by designing a pilot research study, collecting pilot data, analyzing your pilot data, and discussing your preliminary findings. During the course of this project you will write a research abstract using the NATA-REF’s free communication guidelines. Detailed directions and the grading rubric are on Canvas.
Pilot Research Project Presentation:

You will develop a research question and attempt to answer it by designing a pilot research study, collecting pilot data, analyzing your pilot data, and discussing your preliminary findings. During the course of this project you will deliver an oral presentation following the NATA-REF’s free communication format. Unless I give prior approval, I will not accept late class assignments and I will only accept assignments in the assigned format, ie. electronic v. hard copy. Detailed directions and the grading rubric are on Canvas.

Reflection Essays:

You will write a personal essay (approximately one-page) reflecting on the role evidence currently has and could have on your clinical athletic training practice.

Attendance:

Attendance is required and monitored. Each unexcused absence after the first offense results in a 30 point deduction from your total course points. Absences will only be excused for sport assignment travel, unavoidable and documented events, or with prior approval of the instructor. There will be no make-up exams or quizzes and late assignments will not be accepted unless the instructor has granted prior approval.

Quizzes:

Quizzes may or may not be announced and will be given as needed. They will cover the daily reading assignment or material covered during that class period. Unless prior approval is given, quizzes cannot be made-up due to absences.

Additional Class Assignments:

Additional assignments related to the class material may be assigned for course credit. Unless I give prior approval, I will not accept late class assignments and I will only accept assignments in the assigned format, ie. electronic v. hard copy.

Course Policies:

Academic Honesty:

Plagiarism and cheating will not be tolerated. Students suspected of academic dishonesty will be dealt with in accordance with University policy as outlined in the University catalog: http://catalog.xavier.edu/content.php?catooid=10&navoid=409#Academic_Honesty.

Course Evaluations:

Students’ course evaluations will be conducted online via Canvas during the last 2 weeks of the semester. Students are encouraged to complete the course evaluation.

Grade Grievance Policy:

Grade grievances will be address in accordance with University policy as outlined in the University catalog: http://catalog.xavier.edu/content.php?catooid=10&navoid=409#Grade_Grievance_Procedure.

Student Accommodations:

Anyone who feels he/she may need an academic accommodation based on the impact of a disability (e.g.: sensory, learning, psychological, medical, mobility) should contact me to arrange an appointment to discuss your needs as soon as possible. I rely on the Disability Services Office for assistance in verifying your eligibility for academic accommodations related to your disability. If you have not previously contacted Disability Services, I encourage you to do so at 513-745-3280 on the Fifth Floor of the Conaton Learning Commons, Room 514 or e-mail Cassandra Jones at jonesc20@xavier.edu, to coordinate reasonable accommodations.