ESS 5315 Research Methods in Exercise and Sport Sciences

This course is intended for graduate students in the Department of Health, Exercise, and Sport Sciences.

Fall 2014

Faculty Information

- Professor Marc Lochbaum, Email: marc.lochbaum@ttu.edu, 806-535-8448
- Office: Exercise and Sport Sciences 137, Office hours – By appointment
- Class meeting time: Friday 9 – 11:50 AM

Website/classroom: Blackboard is used for the online classroom and is available at www.blackboard.ttu.edu. After going to this website, you will need to log in with your eraider name and password. Once you are logged in you can click on the link to this class (ESS 5315 Research Methods in Exercise and Sport Sciences) to access the class. If you have any questions about how to use Blackboard, you can get assistance by calling 742-HELP or by going to the Blackboard student support website at http://www.itc.ttu.edu/content/asp/blackboard/SupportStudent.asp.

Email instructions: Please note that my Texas Tech email account has a spam blocking feature that occasionally filters out student emails (especially those from “outside” email addresses such as Gmail or hotmail). Although I regularly check my Junk Email folder, it is not always easy to recognize student emails. If during the semester you sent me and email and find it odd that I didn’t respond, please check with me in person.

A note about online interactions: Netiquette – Like any environment, online assignments come with their own set of expectations regarding communication. Because online communicators cannot see one another to read facial expressions, etc., it is often useful to follow the guidelines for online netiquette. Avoid using all caps or bolded words in a message. This can come across as “yelling” in online communication. Be careful about using slang or jargon in your postings, etc. It is possible that some people in the class may not understand the reference, and as a result may feel confused or left out. Remember that we are all here to interact positively and provide insight and constructive comments regarding each other's comments. Avoid cursing, using derogatory names, etc. at all times.

A note about assignments and face-to-face classes: You will not have one error in your assignments. Not one red line of a misspelled word or green line of a grammatical issue that you did not attempt to solve. If you simply type into Blackboard and there are errors, you will receive zero points; period, end of story.

The most valuable outcome of this course will be growing into a mature and professional graduate student. You will not miss a face-to-face class. You won’t come in late. You won’t make up some excuse of something or another as a reason to miss face-to-face classes. You won’t use me because I am a nice guy. Nice guys (and gals) pretty much lose in our world. Get up, be in class, and be ready to interact.


General course objective: This course is designed to introduce students to the research process and to teach students to become good consumers and producers of research. There are a number of expected learning outcomes that are detailed below.
Expected learning outcomes and assessment methods:

Students will be able to learn how to use the library and other educational facilities.

**Here are examples of what will be learned.**

- Becoming familiar with the professional journals, books, and other research materials in the student's area of specialization
- Being able to use electronic databases and journals to obtain research articles
- Understanding the difference between the various types of publications (peer-reviewed, edited, etc.)

<table>
<thead>
<tr>
<th>Methods of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
</tr>
</tbody>
</table>

Students will gain an understanding of the basic research process and the techniques generally applicable to the student’s area of study.

**Here are examples of what will be learned.**

- Being able to evaluate research methodology to assess the validity of the research
- Becoming a knowledgeable consumer of professional research findings
- Identifying potential strengths and weaknesses of various research methodologies
- Understand, apply, and evaluate the various terminology associated with the research process

<table>
<thead>
<tr>
<th>Methods of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
</tr>
<tr>
<td>Quizzes</td>
</tr>
</tbody>
</table>

Students will attain reasonable skill in planning a research project and in writing a research proposal in accordance with accepted form.

**The following will occur to accomplish the above stated learning objective.**

- Conduct a literature review of a specific topic and write the results of the literature in an organized scientific manner
- Identify gaps and inconsistencies within the published research on a particular subject
- Develop the ability to select, define and analyze potential research questions
- Be able to design a research protocol to objectively and scientifically answer the identified research question(s)

<table>
<thead>
<tr>
<th>Methods of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
</tr>
<tr>
<td>Written Proposal</td>
</tr>
</tbody>
</table>

To acquire an understanding of the ethical principles involved in carrying out a research study and reporting the findings.

**The following will occur to accomplish the above stated learning objective.**

<table>
<thead>
<tr>
<th>Methods of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
</tr>
</tbody>
</table>
• Understand plagiarism and how to apply appropriate citations
• Understand the historical issues associated with scientific misconduct
• Understand the process for gaining approval to conduct research

| Attain an understanding of statistical methods for data analysis based on the type of research question. | Assignments Quizzes |

Assessment of expected learning outcomes by week:

See week by week schedule.

Final Grade:

- ≥ 90% - A
- ≥ 80% to 89.99% - B
- ≥ 70% to 79.99% - C
- ≥ 65% to 69.99% - D
- ≤ 64.99% - F

Students with Disabilities ADA Statement: Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make any necessary accommodations. Student should present appropriate verification from AccessTech. No requirement exists that accommodations be made prior to completion of this approved university procedure. Students with disabilities are encouraged to use AccessTech which publishes a Desk Reference for Faculty and Staff that is very helpful. You may call the AccessTech Office at 742-2092 to request a copy.

Ombudsman for Students: The Ombudsman for Students is available to assist students with any conflict or problem that has to do with being a student at Texas Tech University. You may visit the Ombudsman in 237 Student Union Building or call 742-4791.

Student Conduct: Responsible citizenship among college students includes honesty and integrity in class work; regard for the rights of others; and respect for local, state, and federal laws as well as campus standards. Specific standards concerning the rights and responsibilities of students and registered student organizations at Texas Tech are contained in the Code of Student Conduct and Student Handbook. Students are expected to become thoroughly familiar with and abide by these standards. The Code of Student Conduct and Student Handbook may be obtained from the Office of Student Judicial Programs, Student Union, (806) 742-1714, or online at www.studentaffairs.ttu.edu or www.depts.ttu.edu/studentjudicialprograms.

Academic Integrity: It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work that they have not honestly performed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension. The instructor in a course is responsible for initiating action for dishonesty or plagiarism that occurs in his or her class. In cases of convincing evidence of or admitted academic dishonesty or plagiarism, an instructor should take appropriate action. Before taking such action, however, the instructor should attempt to discuss the matter with the student. If cheating is suspected on a final exam, the instructor should not submit a grade until a reasonable attempt can be made to contact the student, preferably within one month after the end of the semester. See the section on “Academic Conduct” in the Code of Student Conduct for details of this policy.

“Scholastic dishonesty” includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not
limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

“Cheating” includes, but is not limited to, the following:

1. Copying from another student’s test paper.

2. Using materials during a test that have not been authorized by the person giving the test.

3. Failing to comply with instructions given by the person administering the test.

4. Possessing materials during a test that are not authorized by the person giving the test, such as class notes or specifically designed “crib notes.” The presence of textbooks constitutes a violation only if they have been specifically prohibited by the person administering the test.

5. Using, buying, stealing, transporting, or soliciting in whole or part the contents of a test, test key, homework solution, or computer program.

6. Collaborating with or seeking aid or receiving assistance from another student or individual during a test or in conjunction with an assignment without authority.

7. Discussing the contents of an examination with another student who will take the examination.

8. Divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructor has designated that the examination is not to be removed from the examination room or not to be returned to or kept by the student.

9. Substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course related assignment.

10. Paying or offering money or other valuable thing to, or coercing another person to obtain a test, test key, homework solution, or computer program, or information about a test, test key, homework solution, or computer program.

11. Falsifying research data, laboratory reports, and/or other academic work offered for credit.

12. Taking, keeping, misplacing, or damaging the property of the university, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct.

“Plagiarism” includes, but is not limited to, the appropriation of, buying, receiving as a gift, or obtaining by any means material that is attributable in whole or in part to another source, including words, ideas, illustrations, structure, computer code, other expression and media, and presenting that material as one’s own academic work being offered for credit. Any student who fails to give credit for quotations or for an essentially identical expression of material taken from books, encyclopedias, magazines, Internet documents, reference works or from the themes, reports, or other writings of a fellow student is guilty of plagiarism.

“Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.

“Falsifying academic records” includes, but is not limited to, altering or assisting in the altering of any official record of the university, and/or submitting false information or omitting requested information that is required for or related to any academic record of the university. Academic records include, but are not limited to, applications
for admission, the awarding of a degree, grade reports, test papers, registration materials, grade change forms, and reporting forms used by the Office of the Registrar. A former student who engages in such conduct is subject to a bar against readmission, revocation of a degree, and withdrawal of a diploma.

"Misrepresenting facts" to the university or an agent of the university includes, but is not limited to, providing false grades or resumes; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual; or providing false or misleading information in an effort to injure another student academically or financially.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Activities, Chapter</th>
<th>Assignment Category</th>
<th>Where is Class?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 29</td>
<td>Introductions, personal essay, go over class structure, come up with class data ideas, identify personal project, Chapter 1</td>
<td>Written</td>
<td>Face-to-face 1</td>
</tr>
<tr>
<td>2</td>
<td>Sept 5</td>
<td>Chapters 2-5, presentation of personal project, explanation of meta-analysis (Chapter 14)</td>
<td>Presentation</td>
<td>Face-to-face 2</td>
</tr>
<tr>
<td>3</td>
<td>Sept 12</td>
<td>Quiz Chapters 1-5, Data due for personal project</td>
<td>Test; Written</td>
<td>Online 1</td>
</tr>
<tr>
<td>4</td>
<td>Sept 19</td>
<td>Class work on class data, personal work on personal project, making sure we understand Chapter 14</td>
<td>Face-to-face 3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sept 26</td>
<td>Moving on – Chapter 18, design small group experiments; design personal experiment</td>
<td>Written</td>
<td>Face-to-face 4</td>
</tr>
<tr>
<td>6</td>
<td>Oct 3</td>
<td>Personal project due (noon on Oct 3rd), Quiz on Chapter 18, work via Blackboard/meetings on small group experiments</td>
<td>Written; Test</td>
<td>Online 2</td>
</tr>
<tr>
<td>7</td>
<td>Oct 10</td>
<td>Chapters 15, 19</td>
<td></td>
<td>Face-to-face 5</td>
</tr>
<tr>
<td>8</td>
<td>Oct 17</td>
<td>Surveys in my field</td>
<td>Presentation</td>
<td>Face-to-face 6</td>
</tr>
<tr>
<td>9</td>
<td>Oct 24</td>
<td>Quiz on chapters x-x, group experiment, personal experiment</td>
<td>Test; Written; Written</td>
<td>Online 4</td>
</tr>
<tr>
<td>10</td>
<td>Oct 31</td>
<td>Summary of qualitative research in your area</td>
<td>Written</td>
<td>Online 4</td>
</tr>
<tr>
<td>11</td>
<td>Nov 7</td>
<td>Chapters 12, 13, 16, 17</td>
<td></td>
<td>Face-to-face 7</td>
</tr>
<tr>
<td>12</td>
<td>Nov 14</td>
<td>Blackboard assignments</td>
<td>Written</td>
<td>Online 5</td>
</tr>
<tr>
<td>13</td>
<td>Nov 21</td>
<td>Blackboard assignments, Quiz on all chapters covered</td>
<td>Written, Test</td>
<td>Online 6</td>
</tr>
</tbody>
</table>

**Percent breakdown of areas**

Written = 30%
Tests = 50%
Presentations = 20%