

# **University of Texas at Arlington**

## KINE 3325 – Undergraduate Research Methods

## Spring 2015

**Instructor Information:**

 *Name*: Priscila Caçola, Ph.D.

 *Office*: 226 MAC

*Profile:* www.priscilacacola.com

 E*-mail***:** cacola@uta.edu *Phone***:** 817-272-6320

 *Office hrs:* By appointment

**Course content:**

*[Catalog Description]* Current practices in the conduct of quantitative research, measurement, and evaluation processes applied to programs related to exercise science, pedagogical kinesiology, athletic training and related fields will be examined. Enrolled students will develop and conduct a research project based on their declared discipline. Prerequisite: KINE 1400, KINE 3315, MATH 1302, MATH 1308, or permission of department.

**Course Information:**

*Class meeting:* MWF 1pm – 1:50pm, SH 331

*Texts (not required): Research Methods in Kinesiology and the Health Sciences, by Susan Hall and Nancy Getchell*

*Website: Blackboard*

**Course Objectives**:

This course has several objectives. By the completion of this course, you should:

1. Be able to read published research and evaluate article contents within one or several areas of Kinesiology
2. Explain the role of research methodology in informing practices in Kinesiology
3. Understand the different types of research (qualitative, quantitative) within the field of Kinesiology
4. Understand IRB procedures
5. Develop a logical, testable research problem.
6. Create hypotheses based on the research problem
7. Identify and select appropriate research designs for different research questions.
8. Understand and perform basic statistics
9. *To provide athletic training students with the knowledge of techniques related to evidence based practice that are necessary for effective performance as an athletic trainer (Athletic Training Education Competencies [5th ed.] – EBP 4.0, 5.0, 6.0, 7.0, and 8.0).*
* *EBP-4.0 - Describe a systematic approach (e.g., five step approach) to create and answer a clinical question through review and application of existing research*
* *EBP-5.0 - Develop a relevant clinical question using a pre-defined question format (e.g., PICO= Patients, Intervention, Comparison, Outcomes; PIO = Patients, Intervention, Outcomes)*
* *EBP-6.0 - Describe and contrast research and literature resources including databases and online critical appraisal libraries that can be used for conducting clinically-relevant searches.*
* *EBP-7.0 - Conduct a literature search using a clinical question relevant to ...athletic training practice using search techniques (e.g., 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.*

Several assignments will be used to meet these objectives. Your semester project consists of a well-crafted **research study**. Throughout the semester you will deliver key components including several rough drafts and the final proposal. You will deliver components of the project on specified dates to ensure satisfactory progress and so that you may get feedback at each important stage. To enhance the quality and reality of your proposal, you will be guided by round-table discussions and reflective writing assignments to apply this knowledge to your proposals and gain a broader perspective on research as it might apply to your professional development. ***The due dates for all assignments are firm. Plan accordingly. Late projects are not accepted.***

Class Attendance is EXPECTED. You will be working individually and with peers. There will be several in class assignments that require that you are present. Class participation IS a major part of your learning experience. Be prepared to contribute so that your peers have an opportunity to learn from your ideas.

Exams: There will be two exams that comprise 30% of the final grade. There will be no make-ups for missed major exams, except for university excused absences that must be turned in one week prior to the exam. However, in cases of extreme emergencies contact the instructor before the exam and your situation will be *considered* for approval or denial. Without notification, your absence on exam day gives you a zero grade for the exam. Unless you have a university excused absence, even with notification there is no guarantee that you will be allowed to make up the exam. You will need your UTA ID, a Scantron (882-E) and a #2 pencil for each of the major exams.

Plagiarism tutorial: Because this class will involve a major research study, it is most important to understand how to cite/acknowledge sources. Please take the UTA library tutorial on the topic (found on <http://library.uta.edu/plagiarism/>), print your results, and turn it in on the assigned date.

**Important Information:**

E-Mail Policy: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

You may email me at any time if you need information. I will communicate with you through class email. You are responsible for all the content and messages that I send through your UTA e-mail account, even if you don’t check it. NOTE: I will not respond to emails sent after 5:00 pm on the day before an assignment is due.

Drop policy:Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/ses/fao>).

Americans with disabilities act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

“I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.”

Student Support Services Available: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting [www.uta.edu/resources](http://www.uta.edu/resources).

Student Feedback Survey:At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.

Timeline for grade grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate catalog. The student has one calendar year from the date a grade is assigned to initiate a grievance. The normal academic channels are 1) Department Chair, 2) Academic Dean, and 3) the Provost.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located [insert a description of the nearest exit/emergency exit]. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911.

**Assignments/Grading Policy:**

|  |  |  |
| --- | --- | --- |
| Item | Description | Points |
| Final paper | Introduction, literature review, experimental methods, results, discussion, references | 30 |
| Exams (2@15 pts each) | All class content up to exam day | 30 |
| Provisional Title / Question/ Background | Preliminary ideas for research proposal | 5 |
| Method  | Methodology and experimental design | 5 |
| Intro + Method | Introduction, problem statement, hypotheses, literature review, method | 5 |
| Results + Discussion | Results, discussion | 5 |
| Poster | Poster and presentation | 10 |
| Group Participation, In-class participation, assignments, engagement | Participation in lectures/discussions/group discussions | 10 |
| **Total** | **100** |

***Grading Scale (in Percent)****:*

|  |  |  |
| --- | --- | --- |
| **Grade** | **Points** | **Descriptor** |
|  **A** | 100 – 94 | Superior |
|  **A-** | 93.9 – 90.0 | Excellent |
|  **B+** | 89.9 – 87.0  | Very good |
|  **B** | 86.9 – 84.0 | Good |
|  **B-** | 83.9 – 80.0 |  Above average |
|  **C+** | 79.9 – 77.0 | Average + |
|  **C** | 76.9 – 74.0 | Average  |
|  **C-** | 73.9 – 70.0 | Average - |
|  **D** | 69.9-65.0 | Below average |
|  **F** | 64.9 and below | Unsatisfactory work |

**Notes: *The grades of A and A- are reserved for overall work of the very highest quality*. Completed work does not automatically constitute an A grade.**

**SPRING 2015 – KINE 3325**

**TENTATIVE LECTURE SCHEDULE**

|  |  |  |
| --- | --- | --- |
| **Date** | **Topic** | **Assignment due****(before class)** |
| 1/21 | Syllabus/ Introduction |  |
| 1/23 | Group work day: Details of research project. Selection of groups and general topic areas |  |
| 1/26 | Intro to Research Methods | Plagiarism tutorial |
| 1/28 | Intro to Research Methods/ Research Methods in Kine |  |
| 1/30 | Research Methods in Kine |  |
| 2/2 | Literature review |  |
| 2/4 | Using the library |  |
| **2/6** | **No class – Group work on literature review** |  |
| 2/9 | Presenting the problem | Provisional Title / Question/ Background DUE |
| 2/11 | Formulating the method  |  |
| 2/13 | Formulating the method |  |
| 2/16 | **No class – Group work on method** |  |
| 2/18 | Ethical Issues and the IRB | Method DUE |
| 2/20 | Review |  |
| **2/23** | **Test 1** |  |
| 2/25 | **No class – Group work on data collection** |  |
| 2/27 | Introduction to Statistics |  |
| 3/2 | Descriptive statistics |  |
| 3/4 | Descriptive statistics |  |
| 3/6 | No class – Group work on data collection/management |  |
| 3/16 | Ch. 5 (Inferential Statistics) |  |
| 3/18 | **No class** |  |
| 3/20 | **No class** |  |
| 3/23 | Criterion-referenced standards |  |
| 3/25 | Norm-referenced standards | Intro + Method DUE |
| 3/27 | Correlation  |  |
| 3/30 | Prediction |  |
| 4/1 | T-tests |  |
| 4/3 | Analysis of variance |  |
| 4/6 | Statistics review |  |
| 4/8 | Statistics review |  |
| 4/10 | Statistics review |  |
| **4/13** | **Test 2** |  |
| 4/15 | Group Work: Meetings with Dr. Caçola | *NOTE: NO CLASS – Meetings are held in 226 MAC* |
| 4/17 | Group Work: Meetings with Dr. Caçola | *NOTE: NO CLASS – Meetings are held in 226 MAC* |
| 4/20 | Group Work: Meetings with Dr. Caçola | *NOTE: NO CLASS – Meetings are held in 226 MAC* |
| 4/22 | Group Work: Meetings with Dr. Caçola | *NOTE: NO CLASS – Meetings are held in 226 MAC* |
| 4/24 | Group Work: Meetings with Dr. Caçola | *NOTE: NO CLASS – Meetings are held in 226 MAC* |
| 4/27 | Group Presentations | Results + Discussion DUE |
| 4/29 | Group Presentations |  |
| 5/1 | Group Presentations |  |
| 5/4 | POSTER DUE in class, practice | Poster DUE |
| 5/6 | 12:00 – 2:30pmResearch Day – Poster presentations |  |
| 5/8 | Final considerations | Final paper DUE |

***“As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course”. – Priscila M. Caçola, Ph.D.***